# The Numic Expansion in Great Basin Oral Tradition

MARK Q. SUTTON, Dept. of Sociology and Anthropology, California State Univ., Bakersfield, 9001 Stockdale Hwy., Bakersfield, CA 93311-1099.

In 1958, Sydney Lamb (1958) proposed that the distribution of Numic languages in the Great Basin and its fringes (Fig. 1) was the result of a population expansion originating in southeast Using glottochronology, Lamb California. dated this expansion as beginning circa A.D. 1000. Although there had been an awareness of the unique distribution of the Numic languages prior to the work of Lamb (e.g., Kroeber 1907; Zingg 1933, 1938; Steward 1940) and even some discussion about population movements to account for that distribution (Zingg 1933), it was the Lamb hypothesis that generated the real interest in gaining an understanding of what has become known as "The Numic Problem."

Perhaps the lack of interest in the earlier observations was due partly to the absence of a clear theoretical background on the prehistory of the Great Basin. Until the idea of the "Desert Culture" was proposed (Jennings 1953, 1957; Jennings and Norbeck 1955), there was no theoretical framework in which to place prehistoric population movements and their archaeological implications. Once it was proposed that the Great Basin had been inhabited with little evident change during the Holocene, prehistoric population movements and their expected reflections in the archaeological record generated attention. This probably was due to the fact that the Desert Culture concept served as a baseline to compare data and develop competing models (cf. Jennings 1973).

During the 1960s, a number of researchers suggested alternatives to the Lamb hypothesis. These alternatives ranged from the denial of a

Numic population movement to changing the direction of the proposed movement. Views of where a "homeland" of the Numic groups might have been also changed.

While linguists now generally accept the "reality" of the Numic expansion (Michael J. P. Nichols, personal communication 1985), archaeologists are still skeptical since such a spread does not appear to be clearly reflected in the archaeological record (e.g., Euler 1964; Butler 1981). Archaeologists do not agree on what kinds of archaeological patterns and/or artifacts can clearly be viewed as "Numic," since the ethnicity of artifacts or patterns of artifacts is very difficult to demonstrate.

Of equal importance is a lack of understanding of why and how Numic populations would have occupied the Great Basin. vironmental factors and population pressures have been variously suggested as causal factors. A model of a replacement mechanism was proposed by Bettinger and Baumhoff (1982) based on dietary cost and competition. Another model was presented by Sutton (1984, 1987) emphasizing a contrast in long- and short-term adaptive strategies. Sutton (1986) suggested that recent (proto-historic/historic) expansions of peoples speaking a Numic language were effected partly by military means and that this method may have been used during the prehistoric period as well.

Three major hypotheses regarding the "Numic Problem" are considered herein: the null, or *in situ* hypothesis (that no Numic spread took place), the Lamb (1958) hypothesis that

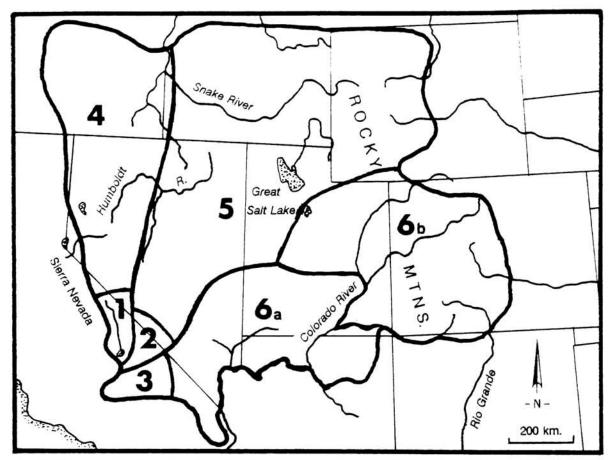


Fig. 1. Ethnographic distribution of the Numic languages (not including Comanche): (1) Mono; (2) Panamint; (3) Kawaiisu; (4) Northern Paiute; (5) Shoshoni; (6) Southern Paiute/Ute.

Numic peoples spread across the Great Basin about A.D. 1000 from a homeland in south-eastern California, and the Aikens and Witherspoon (1986) hypothesis that Numic peoples spread east and west from a homeland in central Nevada at various times, including the recent past.

# LINES OF INQUIRY IN MIGRATION STUDIES

Perhaps the most convincing evidence for a migration is historical records. However, archaeologists generally lack such records and must rely on other sources of evidence. Harding (1974:8) listed seven categories of data by which to identify population movements: (1) new physical type; (2) new language; (3) his-

torical records; (4) new burial patterns; (5) new settlement types; (6) new artifact types; and (7) new settlement patterns. In essence, the major lines of evidence used in migration studies are linguistic, archaeological, physical anthropological, and historical. Rouse (1986) outlined a similar approach (also see Thompson 1958; Sutton 1991).

A variety of types of linguistic evidence apply to migration research and were outlined by Sapir (1916), Dyen (1956), and Kinkade and Powell (1976:84-85). These include language distributions, original homelands, loan-word patterns, lexical reconstructions, placenames, and legends. Oral tradition is herein considered to constitute a form of linguistic data, albeit indirect and subject to various problems (e.g.,

recordation in English, memory, regional alteration of stories, etc.). Miller (1986:103-104) briefly reviewed the linguistic evidence of the movement of Numic groups *vis-à-vis* the Lamb model.

#### ORAL TRADITION

Vansina (1985:3) defined oral tradition as being both a "process" and "its products," the result being oral messages passed from generation to generation. Thus, oral tradition consists of messages and includes oral history, mythology, legends, folktales, personal narratives, jokes and riddles, and songs. Oral tradition can contain considerable information on a variety of subjects, though most specific data tend to reflect the recent past, within a century or so (Vansina 1985:197). Even though the quantity and quality of data lessen considerably after that point, some information still remains. Data on placenames, sacred areas, relations with other groups, etc., are still present in oral tradition, and their interpretation could serve as a form of "history."

The use of oral tradition as an indicator of the movements of groups speaking Numic languages was used first by Goss (1968:28-32) in his study of the Ute. Goss used those data as one line of evidence in tracing the timing and direction of Ute movements (coupled with various kinds of linguistic, archaeological, and historic evidence). The effort was fruitful and is expanded upon below.

#### General Analysis

A broad view of the overall pattern of Great Basin oral tradition might be expected to reveal some internal consistencies, perhaps within and between the three Numic language branches. Such consistencies should be less with neighboring (non-Numic) groups. If a Numic spread had taken place late in time, differences with neighboring, non-Numic groups should be much greater in the northern and eastern portion of

the Great Basin, owing to a presumably shorter period of contact and diffusion of traits. Steward (1936:361) noted very close similarity between several myths from Owens Valley Paiute and the Paviotso from Fallon and Lovelock, while noting that Southern Paiute versions of those myths were substantially different.

A general analysis of Great Basin myth was conducted by Smith (1940). She analyzed 736 tales (mostly from Great Basin groups but including the Washo and some Californian and Southwestern groups as well), representing all of the major Great Basin subdivisions except the Kawaiisu (discussed by Zigmond [1980]). Smith noted at least one aspect of Great Basin myth that sets it apart from neighboring groups. Earth Diver, a common element in the myth of much of western North America, was mentioned in the oral tradition of only three Numic groups; once by the Owens Valley Paiute (Smith 1940: 16; see Steward [1933:323] for the example), once in Kawaiisu myth (Zigmond 1980:27-28), and also in Western Mono myth (Gayton and Newman 1940). (A fourth group may be the Northern Shoshoni where Earth Diver was recorded by Wick Miller [personal communication 19921.)

Smith (1940) divided the Great Basin into three subareas, Eastern, Western, and Southern, based on tale type, frequency of general subject matter, and certain specific elements or characters (e.g., primeval water, cannibals). There were not enough data from the central Great Basin to assign it to one of the three subareas (Smith 1940:197-198).

The Western area included the Northern Paiute (Harney Valley Paiute, Surprise Valley Paiute, and Paviotso), the Owens Valley Paiute, and the Washo (Smith 1940:195). Characteristic of this area was a relative abundance of origin tales (there being few in the Great Basin in general), no cannibal bird, the presence of cannibal giants, the presence of the "Theft of Pine Nuts" tale, and animals other than Coyote

being popular characters. The Western area also shared some tales with bordering California groups (e.g., Two Brothers and The Contest with Cannibal; Smith 1940:196).

The Eastern area included the Wind River Shoshoni, Northern Shoshoni, and the Northern and Southern Ute (Smith 1940:195). Characteristic of this area was an absence of origin tales, the absence of primeval water, few novelistic tales, and cannibals as humans rather than giants (Smith 1940:195). Coyote was the most popular character.

The Southern area included the Southern Paiute (Moapa, Shivwits, and Kaibab) and the Walapai (Smith 1940:197). In the Southern area, more localization of the myth was evident, magic devices were used more often, and cannibals were both humans and giants.

Several non-Numic groups, the Washo and Walapai, were included in Smith's myth subareas in the Great Basin. These two groups fall within the geographic boundaries of the Great Basin and were both placed in the subarea corresponding to their geographic location.

For Numic groups, Smith's Western area coincides rather neatly with the distribution of the Western Numic languages. The Southern area contains only the Southern Paiute (Southern Numic languages). However, the Eastern area includes groups from both the Central and Southern Numic language groups. The implications of this currently are unclear, although it may be related to the paucity of data from the central Great Basin creating a "gap" in the record.

# Origin of Humans Myths

Smith noted that there were relatively few origin of humans myths from the Great Basin. She then (1940:17-18; perhaps following Gayton [1935:593]) identified two general types of origin myths that did exist. In Type I, a woman is pursued by several characters, is rescued, marries a man, and has children who constantly

fight. The children scatter to become the various tribes. In Type II, Coyote is lured to an island by a girl, and after some difficulty, has children with the girl. The children are put into a jug and when Coyote opens the jug, the various tribes emerge and scatter. Smith (1940:20) viewed Type II as being older and having a wider distribution than Type I.

Owens Valley Paiute. In the several origin myths recorded by Steward (1936) for the Owens Valley Paiute, Black Mountain (in the White Mountains, on the east side of the valley; Steward 1936:364), Round Valley (just north of Owens Valley; Steward 1936:365), and Long Valley (just north of Long Valley; Steward 1936:366) are mentioned as the place where the people were conceived. "All the Indian tribes" (Steward 1936:366) were thus created, but the Miwok, Shoshoni, and Modoc were mentioned by name. There is no indication of any movement of Shoshoni groups to different places.

Northern Paiute. In one version of a Paviotso origin of humans myth (Type I following Smith 1940), a woman came to a man from out of "the [Pacific?] ocean to the south" (Lowie 1924:200). After the flood, the man and woman reached "Job Mountain," where they were married and people were created.

In another Type I version (Lowie 1924: 204), a man was living south of Job's (or Fox) Peak (called *Waŋikudak<sup>wa</sup>*). A woman came to him from the south and they were married and had children (two boys and two girls). The boys began to fight and the father took them to the top of Job's Peak and "sent one boy and one girl to Lovelocks [sic] Valley [to the north], the others he sent to Stillwater [to the west]" (Lowie 1924:205). The people that went to Lovelock "were a different tribe, but the Paviotso were stronger and repelled them" (Lowie 1924:205). Job's Peak is located in the Stillwater Range, some 30 miles east of Fallon, Nevada.

In a third Type I version (Lowie 1924:205-

209), Stillwater, Lovelock, and Job's Peak are mentioned, along with Chalk Mountain, Westgate, Middlegate, and Eastgate. These latter places are all located in southeastern Churchill County, Nevada. Westgate, Middlegate, and Eastgate are small passes in the hills along Route 50 and were named by Euroamericans. Their importance to the Paviotso is unclear.

In a Type II version of the origin myth, "Coyote Begets Indians" (Lowie 1924:209-212), only the Paviotso remained in the jug that Coyote had opened. Coyote "raised the Paviotso and Bannock together" and the "Bannock went off north while the Paviotso remained" (Lowie 1924:211). Coyote apparently raised the two groups "south of here [Fallon, Nevada]" (Lowie 1924:211), indicating, perhaps, that the people had moved from the south with the Paviotso, stopping in west-central Nevada with the Bannock moving further north.

In one version (Type I) recorded by Kelly (1938:366), the Northern Paiute were created somewhere south of Fallon, along with the "Pit Rivers." The Northern Paiute were put "at Doyle [in California, south of Honey Lake] and the Pit Rivers [presumably Achumawi] over at Humboldt . . . That's where the Paiute and Pit Rivers start" (Kelly 1938:368).

The Paviotso tale of "The Theft of Fire" (Lowie 1924:228-229) begins like an origin tale. The entire world was underwater "except one mountain south of Walker River" (Lowie 1924: 228). This mountain later was identified as Job's Peak, northeast of the Walker drainage. The placename appears to have been transferred from one place to the other, either south to north or north to south.

Summary. There seems to be a fairly clear trend of people coming from the south and moving north, the Bannock tale (Lowie 1924:211) being an explicit example. There are no real suggestions of movements in other directions. As a cautionary note, it should be remembered that the recorded direction of

movements may have been influenced by the tellers of these stories and that they may not represent actual movements in prehistory.

Shoshoni. A number of origin myths for the Western Shoshoni was presented by Steward (1943), all of which would fall into the Type II tale of Smith (1940). In the Death Valley Shoshoni version, Coyote is at the "ocean" (Steward [1943:262] felt that this term may refer to a lake) and starts homeward, going first to the Owens Valley and then to Death Valley. In the Beatty, Nevada, Shoshoni version, the home of the girl and her mother was in the east (Steward 1943:263). Coyote was given the jug full of people and went west towards home. Coyote let some people out at Saline Valley and more at Owens River (Steward 1943:265). Owens River, however, was only "half way" home, implying a "home" in California.

In the Ash Meadows, Nevada, Shoshoni version, Coyote was given instructions on where to let people out of the jug.

When you come to Saline Valley, open the stopper just a little way, then replace it quickly. When you come to Death Valley, open it a little more. At Tin Mountain (Charleston Peak [Nevada, although there also is a Tin Mountain in the north end of the Panamint Range but also see Steward (1943:295)]) open it half way. When you are in Moapa, take the stopper out all the way [Steward 1943:266].

And so Coyote let out both the "Paiute and Shoshoni" in a specific west-to-east progression.

In the Saline Valley Shoshoni version (Steward 1943:270-272), Coyote arrived in his own country (Saline Valley?) with the jug full of people, where he opened it.

The first to come out were fine looking, but they had no bows and arrows. They started off toward the north, running and raising a big dust. Coyote shouted, "Wait! I want to pick some of the best ones for my people." Fine looking people without bows and arrows also ran across the mountains to the west [the Sierra Nevada?]. Those that went toward the east (suvu watu

numu) were scrubby people, and carried bows and quivers full of arrows. Those who went south were also scrubby, and had bows and arrows. These were Coyote's people, the Shoshoni. Those who went to the north, settled at different places along Owen's [sic] Valley. They were the Northern Paiute [Steward 1943:272].

In the Skull Valley, Utah, Gosiute story of "The Origin of the People" (Steward 1943:267-268), the girl's island was in the Great Salt Lake and Sinav was told to go south. He let out people on several occasions, and they became "the Shoshoni, Ute, Paiute, and other tribes" (Steward 1943:268). A different version of this story related to Wick Miller (personal communication 1992) does not offer any direction.

Summary. The Shoshoni origin of humans stories do not show any clear and consistent pattern, with people being dispersed in all of the cardinal directions. However, most of the Shoshoni data are limited to the southern portion of Shoshoni territory where their homeland may have been.

Kawaiisu/Southern Paiute. In a Kawaiisu tale of "Coyote and the Basket" (Zigmond 1980:139), Coyote was carrying a basket full of children. He started out in "South Fork" (Tubatulabal territory), heading north into Inyo County, on his way to Mono Lake. He got tired before he got there and all of the Indians got out and scattered.

A Shivwits Southern Paiute origin of humans myth, "The Origin of the Paiute" (Lowie 1924:103-104), related that "a long time ago" there were no people living except one woman and her daughter, both in California. The daughter met and slept with Coyote (in a derivation of a Type II origin of humans myth), having children that Coyote took back to his "own country" (the Shivwits area). Coyote accidentally let most of the people out of the bag and they became the other tribes (a common element in variations of this tale). Coyote first stopped at Moapa, then at Shivwits, then at

Kaibab (near Buckskin Mountain), letting out the various groups of Southern Paiute at each location. Coyote then returned to the Shivwits area. This tale shows a clear west-to-east progression of the dispersal of the Southern Paiute, beginning in California.

Sapir (1930:358-359) recorded a Kaibab Paiute origin myth (Type II) in which the girl and her mother lived "way down to the west." Coyote opened the sack containing the people who scattered "in different directions" (Sapir 1930:359).

One might expect that this trend would continue in the origin myth of the Southern Ute. However, the three such myths recorded by Lowie (1924:1-5) already had been Christianized. Only one mentions direction of dispersal, the Whites to the east, the Apache to the west, and other Indians to the north and south (Lowie 1924:3).

In the Kaibab Paiute tale of "How the 'Cry' Originated" (Sapir 1930:347), the animals had assembled in "the far western country" to have the first cry (mourning ceremony), and then dispersed (presumably to the east) back to their homes. A Kaibab Paiute tale of "Wolf and His Brother" (Sapir 1930:340) showed "enemies" coming from the west, the direction in which the Shivwits lived.

In a Type II (following Smith 1940) Chemehuevi origin of humans tale (Laird 1984:39-44), Coyote was living at "Snow Having (Nivaganti)" (Charleston Peak) with his elder brother Wolf. Coyote opened the basket full of people at the coast. "These will be the Coast Indiansaikya, no matter what tribe names they may have-aikya" (Laird 1984:43). All escaped but the "worst" people. Coyote then returned to Snow Having. These people became the groups in the vicinity of the Chemehuevi and there is no mention of migration. In a similar Chemehuevi tale (Kroeber 1908), enemies came from the east to kill Coyote's brother, after which Coyote traveled east seeking revenge.

Summary. A seemingly clear west-to-east progression is present in Southern Paiute origin of humans myth, especially the detailed account in Lowie (1924:103-104). There is mention of an enemy to the west (rather than to the east; Sapir 1930:340) that slightly confuses the picture.

**Discussion**. The relatively few origin of humans myth data support the idea of people dispersing from south to north (Northern Paiute) or from west to east (Southern Paiute). The Shoshoni data are equivocal.

# **Migration Legends**

Explicit migration legends are conspicuously absent among the various Numic groups (Lowie 1909:233). Lowie noted (1909:233, citing Culin), however, that the "Washakie Snakes" (probably a band of Eastern Shoshoni following Washakie) may have had a tradition that they had come from the south.

Evidence of migration or population movements sometimes is present in other kinds of myths. For example, the Southern Paiute tales of the "Origin of the Paiute" (Lowie 1924:103-104; discussed above) and "Cottontail and the Sun" (Lowie 1924:142-147; discussed below) contain information on the direction the people came from, which direction they moved, and where the various groups stopped and lived.

Owens Valley Paiute/Northern Paiute. In the Northern Paiute tale of "The Ice Barrier" (Steward 1943:299), Wolf and Coyote "went to the north to fight. Many people went with them" towards the Snake River. A wall of ice barred their way, but Raven broke it and all the people ran across (towards the north).

An Owens Valley Paiute tale of "Wolf and Roadrunner" (Steward 1936:417-422) told of Wolf, who once lived in Deep Springs Valley (just east of Owens Valley), gathering his warriors together (after an altercation with Roadrunner), and moving away from Deep Springs Valley.

He [Wolf] took them away to the east. Each day, they stopped to hunt and then moved on to the next ridge to the east. They continued in this way to the Rocky mountains [Roadrunner was following] . . . But after a while Wolf and his men had gone so far east that the [daily roundtrip] trip was too great for Roadrunner [Steward 1936:422].

Wolf eventually had his men turn into animals and "went far off to the east to become a wolf and live alone by the shores of a great ocean [Great Salt Lake?]" (Steward 1936:422).

**Shoshoni**. The Elko Shoshoni "The Theft of Pine Nuts" story told of traveling north to obtain the nuts.

All the people started from somewhere south of Beowawee [Beowawe, southwest of Elko, Nevadal and traveled toward the north. They went past Owyhee [the town of Owyhee is in northwestern Elko County, Nevada, while the Owyhee River flows from Nevada, through Idaho, and into Oregon] and could smell the pine nuts to the north. On their way, they planned how they would get them. They traveled and traveled, many days. Some of the people got tired and stopped. Frog, Rattlesnake, and several others got tired and could not go any further. But the long-legged persons kept on going towards the north into what is now Idaho [Steward 1943:258].

Although it is not clear how far south of the Elko area they started, it does appear that the people migrated north, going into Idaho, and that some groups stopped and settled along the way.

The Comanche are known to have migrated south onto the Plains after A.D. 1700 (e.g., Wallace and Hoebel 1952). Yet even with that recent and rapid movement, migration tales are lacking (cf. St. Clair 1909).

Kawaiisu/Ute. According to a Kawaiisu tale recorded by Stephen Cappannari (in Zigmond 1980:38), "all the Indians first came from this [the eastern?] side of Santa Maria," a city located in the Coast Range of California. Cappannari thought this quite unusual (Zigmond 1980:38, note 6). The Kawaiisu origin of

humans site, however, appears to be located in the southern Sierra Nevada (Sutton 1982).

A Uintah Ute tale (untitled) depicts a man (a cannibal) and his two wives living in an area apparently having no game and wishing to move (Kroeber 1901:281).

Let us go Eastward again. I am tired of eating [only] this grass-seed. I am tired of seeing no tracks, and of seeing no game; therefore I wish to go east.

The movement eastward appears consistent but the cannibal traveled into areas already occupied by good people (Ute) and not enemies, who eventually killed him.

A Chemehuevi tale (Laird 1984:49-58) recorded the movement of a group of Sandhill Cranes (perhaps a band name?) moving to the south from the general vicinity of Snow Having (Charleston Peak). The Cranes traveled south, scouted, and found "many people" whom they promptly attacked and killed. They then moved further south.

**Discussion**. Although the data are somewhat limited, they are fairly consistent in depicting movements in the directions in which the Numic Spread is thought to have taken place.

## Placenames and Sacred Areas

The geographic identification of placenames and sacred areas in oral tradition could provide clues to territories formerly occupied by various groups. For instance, if sacred areas are not within the territory occupied by a group in ethnographic times, it may indicate that the group had come from that area. Placenames that fall outside of the area occupied during the ethnographic period are less instructive since traders and travelers could have gained such knowledge. Additionally, considerable data on movements of people can be obtained using placenames. The ability to analyze placenames may give clues to the length of time a group has been in an area (see Miller 1986:103). For

example, if the placenames are unanalyzable or opaque, it would indicate that the group had been in place a long time and that the names had lost some of their meaning, while a group just recently in an area would have more easily translatable placenames.

The use of nonspecific places in mythological times is common, using terms such as "someplace" or "a certain place," or even more general references such as "camped together," "had a house," and "lived together." The implications of such nonspecific descriptions are unknown. In addition, many of the placenames in Basin oral tradition are in English, perhaps confusing their interpretation.

Placenames. Owens Valley Paiute. Two Owens Valley "Origin of Fire" myths (Steward 1936:369-371) note that fire first was observed "Way back west of the Sierra Nevada there used to be a big tule fire [in the San Joaquin Valley?]" and that people went west to get the fire and returned.

Northern Paiute. In a Paviotso version of "Cottontail and the Sun" (Lowie 1924:225-228), the tale of movement and killing is roughly the same as with the Southern Paiute version, although Cottontail traveled to fight North Wind (Lowie 1924:225) and then was later identified as having "come from the west" (Lowie 1924:226). In a different version, Cottontail "traveled to the east" but in the next passage, Cottontail "is from the south" (Kelly 1938:425).

The north wind again was mentioned in a Northern Paiute tale of "The Theft of Pine Nuts" (Steward 1943:260). The "north wind" brought the smell of pine nuts to the people who went north to obtain them. In the Northern Paiute versions of "The Theft of Pine Nuts" recorded by Kelly (1938:395-403), the smell came from the north with the Austin Mountains (to the east) and Lovelock being mentioned. However, in one tale (from an informant from Beatty, south-central Oregon), the smell came

from the south (Kelly 1938:399-400). That same informant had observed that pine nuts "grew on Yamsi [or Yamsay] mountain and Gearhart mountain" (Kelly 1938:401), both located well north of the current range of pinyon (*Pinus monophylla*). In a Mono Lake Paiute version of "The Theft of Pine Nuts" (Steward 1936:431-433), the smell came from the east, where strangers lived.

Shoshoni. In two similar Western Shoshoni "Theft of Fire" tales (Steward 1943), the Saline Valley Shoshoni went to the south to steal fire (Steward 1943:254) while the Panamint went to the west (Steward 1943:255; Zigmond 1980: 222). In another Panamint version, Rat took the fire to his home near Lida (Nevada, north of Death Valley) where he spread it "all over the country" (Steward 1943:255).

Lida was again mentioned in the Saline Valley Shoshoni tale of "The Theft of Pine Nuts" (Steward 1943:257) as the place "to the northeast" (Steward 1943:256) where the people stole pine nuts. In a Death Valley Shoshoni version of "The Theft of Pinyons" (Zigmond 1980:225-227), the smell came from the north.

In the Smith Valley, Nevada, Shoshoni tale of "The Origin of People" (actually a Theft of Pine Nuts tale), the pine nuts were to the north, perhaps north of the Humboldt River, since "There are no pine nuts on the mountains up north where Coyote's people stole them. Only junipers grow there now" (Steward 1943:258). This also could refer to areas denuded of pinyon as a result of historic deforestation.

In another Saline Valley Shoshoni tale, "Coyote Learns to Fly; Coyote Becomes a Mother," Coyote traveled west, crossed the Saline Valley, the Inyo Mountains, and the Sierra Nevada (Steward 1943:272-273). On the shore of the "ocean" (west of the Sierra Nevada), Coyote rescued a baby and returned home with her. A similar tale, mentioning the Sierra Nevada, was told at Lida, Nevada (Steward 1943:274-277).

Both the Saline Valley, California, Shoshoni and Elko, Nevada, Shoshoni versions of "Cottontail Shoots the Sun" (Steward 1943:277-281) have Cottontail traveling east. However, neither tale is violent in the sense that Cottontail killed people along the way.

Coso Hot Springs is an important place to the Indians of eastern California. Coso Hot Springs is located south of Owens Valley, and is mentioned in several versions of "The Race to Koso Hot Springs," by the Death Valley Shoshoni (Steward 1943:268-269), the Saline Valley Shoshoni (Steward 1943:269-270), the Owens Valley Paiute (Steward 1936:411-417), the Kawaiisu (Zigmond 1980:141-148), and the Panamint Shoshoni (Zigmond 1980:231-232). The Kawaiisu version (Zigmond 1980:141) had the race from Victorville (a city in the central Mojave Desert) to Coso. A similar tale (a race, burning the losers, although Coso was not mentioned) was told by the Mono Lake Paiute (Steward 1936:429-431).

In one of the Coyote tales of the Northern Shoshoni (Lowie 1909:278), Teton Basin was mentioned. This area is located in northwestern Wyoming, within the ethnographic range of the Northern Shoshoni. In another version of the same tale, no specific placename is mentioned (Lowie 1909:278). In another Northern Shoshoni tale, a version of Lodge-Boy and Throw-Away (Lowie 1909:282), the boys traveled westward where they came to the "big sea." This indicates that the Northern Shoshoni had some knowledge of the Pacific Ocean. However, in the next tale "The Boy's Travels and the Water-Youths" (Lowie 1909:284), the "big sea" was located to the east.

In a Gosiute story (An Early Traveler Kills and Eats an Indian), the Indian in question had a house on *Waahkai*, Pilot Peak (Miller 1972: 35). This peak is located in Elko County, Nevada, northwest of the Salt Lake Desert. It served as an important marker for early Euroamerican travelers. Of equal importance is

the fact that this is the only unanalyzable Gosiute placename recorded by Miller (see Miller 1986:103), suggesting that the Gosiute were rather recent arrivals in the region.

The Pine Nut Mountains, in western Nevada, were mentioned several times in Paviotso myth (Lowie 1924:217, 239). Hawthorne, Nevada, also was noted in one myth (Lowie 1924:236).

Kawaiisu/Southern Paiute. The Kawaiisu theft-of-fire tales identified a place in the Panamint Range (noted as being toward the "east" in text, but the Panamint Mountains are within the ethnographic range of the Kawaiisu) as the place where fire was stolen (Zigmond 1980:43-44). In one version, the Kawaiisu apparently had to fight the Panamint Shoshoni for the fire (Zigmond 1980:44).

Several Kawaiisu theft-of-pinyon tales identified pinyon as being to the north, in the Owens Valley (Zigmond 1980:45-46). Some of the northern people (Owens Valley Paiute?) pursued the (mythological) Kawaiisu when they took the nuts.

In a Moapa story (*Cu"na wab<sup>i</sup>*), pine nuts won by gambling were taken "to the other side [west from Moapa] of Las Vegas, where there is a big mountain" (Lowie 1924:160). This mountain was not named but may be Charleston Peak, often named in other stories. In another story, *Cu"na wab<sup>i</sup>* lived near Moapa (Lowie 1924:177).

Another Moapa story told that "The Indians were living on the other side of Las Vegas" where Cu"na"ab" was chief (Lowie 1924:181). This probably refers to the west side of Las Vegas (since Moapa is to the east), in the ethnographic territory of the Las Vegas band of Southern Paiute. In the Moapa story of "Fox," Fox wanted to go to "the west, where the people were gathering pinenuts" (Lowie 1924: 183), but was worried about being killed, not because of the people being hostile, but because of his greed.

In the Shivwits Southern Paiute version of "The Theft of Fire" (Lowie 1924:117-119), Fish flew into the air, looking for fire. When he returned, he observed that "Not very far from here are flames of fire, by no:wa" ant [the Valley of Fire is located in southern Nevada, fairly near Charleston Peak]" (Lowie 1924: 118). Fire was stolen, and Coyote and his group raced back to Shivwits country, pursued by the owners of the fire.

A Kaibab "Theft of Fire" tale is similar (Sapir 1930:390-393), in that the fire was observed in the direction of the "setting sun" (southwest, or west-southwest, depending on the time of year). A Uintah Ute tale of the theft of fire (Kroeber 1901:252-260) also identified the origin of the fire as very far to the west (as in the Southern Paiute versions).

In the Shivwits tale of "Eagle," Eagle lived with his mother "at No"wa'ant, a peak near Las Vegas, that is generally covered with snow" (Lowie 1924:151). Eagle went to the east to find a woman. In the "Eagle's Myth Recitative" of the Kaibab Paiute (Sapir 1930:479), Eagle lived far in the west, apparently with his mother, and asked his mother to go to the east, "to the country of the Sibit [Shivwits] Indians."

This "snow-topped peak" no doubt refers to Charleston Peak, that the Chemehuevi call *Nivaganti*, "Having Snow" (Laird 1976:122). This identification indicates a Shivwits connection with the Las Vegas area, as do the Chemehuevi (see below).

In the Shivwits story of "Cottontail and the Sun" (Lowie 1924:142-147), Cottontail decided to "have a war with the sun" (Lowie 1924: 143). He started from near the Pacific Ocean, traveled eastward, and first arrived at Moapa, where he killed some people living there. Cottontail then killed a man in his lodge (to the east of Moapa?). Cottontail then went to Bunkerville (in southeastern Nevada) where a woman had heard that Cottontail was "coming up this creek [the Virgin River], killing people"

(Lowie 1924:144). Cottontail killed the woman. Cottontail then killed some girls by a cliff. He then arrived at St. George, Utah, where a large Indian village with agricultural fields was located. Cottontail destroyed the crops and killed all the people (Lowie 1924:144-145). He went further east where he killed Bear. Finally, he encountered and fought Sun. St. George, Utah (within Shivwits territory), also is mentioned in the Shivwits tale of "Iron Man" (Lowie 1924:122). The version of the same tale told to Powell (1881:52-56) is quite similar, as is the Moapa version (Lowie 1924:198).

In the Powell (1881:52) version, Cottontail started near the Pacific Ocean (identified as Moapa) and traveled progressively east, killing people and destroying one large village along The progression is clearly with their crops. west to east and the Indians that Cottontail encountered and killed were probably other (non-Southern Paiute) groups since he would (presumably) not kill his own people. The most violent of these encounters was at St. George, at the large village of agriculturalists (location not identified). The Powell version contained a notable point. Cottontail had never seen corn before and "raided" the fields of the agriculturalists.

It is possible that these agriculturalists were either Fremont or Anasazi (the *Muwitch*), as there are other indications of Southern Paiute contact (perhaps violent) with those people (Pendergast and Meighan 1959; Sutton 1986). Fowler and Fowler (1981:138, 154) noted the possibility that the Southern Paiute had raided the fields of the *Muwitch*. In the Chemehuevi version (How Cottontail Rabbit Hit the Sun; Laird 1984:210-211), few details are present. However, it is clear that Cottontail traveled east.

In Chemehuevi oral tradition, Charleston Peak (or perhaps the entire Spring Mountains, Laird 1984:59) often is mentioned as the place where Coyote and Wolf lived and is a starting point for many adventures and stories (see Laird 1984:Chapter 4). A bank of the Colorado River also is noted as a starting place for Coyote's trip south to eat saguaro fruit (Laird 1984:174-175).

In several Chemehuevi tales, Whipple Mountain (*Wiyaatu*<sup>w</sup><u>a</u>) was the home of Southern Fox. In one tale (Laird 1984:187-190), Southern Fox went north to visit a cousin, traveling to the Paiute Hills and Pahrump.

In another Chemehuevi tale (Laird 1984:192-195), Southern Fox traveled south and met an enemy whom he killed. Then Southern Fox "went from there down into the desert" (Laird 1984:192). From there Southern Fox went north into "Fire Valley," identified as Death Valley (Laird 1984:195).

In an account of a Chemehuevi origin of humans myth (Kroeber 1908), Charleston Peak in southern Nevada (north of Chemehuevi territory) was mentioned as an important place. The same place probably was mentioned by Laird (1976:147) as being in the "Storied Land," "the place where stories start and end."

There was some confusion over the location of one of the mountains (Nivaganti "Having Snow"; Laird 1976:122). George Laird identified it as being the highest peak in the Panamint Mountains in California (or possibly Mt. Whitney), although Laird (1976:122) reported that it was positively identified as Charleston Peak by other Chemehuevi. Laird (1976:139-140) reported that the Chemehuevi formerly "ranged freely over the Tehachapi Mountains," in Kawaiisu territory, although the Kawaiisu were not specifically identified.

Discussion. There are numerous references to specific places in the various myths. More importantly, there are numerous indications of movements, either by mythological characters or by people. These directions are consistently south to north or west to east. These data are concordant with the other oral tradition data on direction of movements.

Reference to Natural Events. If Numic peoples recently had spread from eastern

California, one might expect some "ties" to the homeland in the form of the retention of placenames for former important sites or landmarks, and retention of the names of "sacred" areas.

In the case of the Northern Paiute, presumably having come from the Owens Valley area, references to volcanism (since the area was active within the last 1500 years) might be expected to be present. No references to such events were found in the oral tradition of the Owens Valley Paiute or Northern Paiute. This could indicate, among other things, that either volcanism in eastern California occurred too long ago to have been retained in Northern Paiute oral tradition or that the Northern Paiute did not come from that area.

# **Ethnobiological Inferences**

One indication that the Northern Paiute of Oregon had recently moved into that area is the retention of references to pine nuts in their oral tradition (Kelly 1938:401-402), a point also noted by Nichols (1981:10). This assumes, however, that the pine nuts under consideration are those of pinyon (*Pinus monophylla*) and not that of another edible species.

# Myth as History

Perhaps one of the best known Great Basin myths is a Northern Paiute tale about the Sai-i, an apparent pre-Northern Paiute people inhabiting the Humboldt Sink area of western Nevada. Hopkins (1883:72-75) related a tale in which the Northern Paiute killed the Sai-i, the last battle apparently being fought at Lovelock Cave. In a version of a Paviotso origin of humans myth, the people

who went to Lovelocks were a different tribe, but the Paviotso were stronger and repelled them. The enemy lived in a hole [Lovelock Cave?]. The Paviotso made a fire in the hole and killed most of them easily. Very few escaped and live in California. This hostile people were called Sai'ru'qa'a. The people now at Lovelocks are all Paviotso [Lowie 1924:205].

The Sai-i usually are identified as Achumawi, speaking a Hokan language (e.g., Lowie 1924: 242; Loud 1929:162; Steward 1938:271, 1941: 440-441). In the tale of "The Giant" (Lowie 1924:241), an "old giant from Pitt River" used to come into Nevada and created problems among the Paviotso, who, in turn, "all got together and shot him."

Loud (1929) reported that archaeological materials of which the Northern Paiute denied knowledge were attributed to the "Pit River." This ethnic assignment was apparently widespread and included sites other than Lovelock Cave (Loud and Harrington 1929:Plate 68; Nos. 10 and 11). Loud (1929:162) believed that this identification was the Northern Paiute attempt to explain the archaeological record. Heizer (1966:245) believed that the tradition could have been based on historical events but was noncommittal. If based on an actual event, this tradition could record the movement of a Northern Paiute group into the Humboldt Sink (from which direction is not stated), actively replacing an existing group through warfare.

There is an interesting passage in J. P. Harrington's Great Basin ethnographic notes (Harrington 1986:Rl. 171, Frs. 640-647) that mimics the Hopkins' (1883) account of the Sai-i conflict. The passage, "Science Verifies Indian Tradition," is rather detailed, and deals with some of the archaeological materials recovered from Lovelock Cave. One is left with the impression that a newspaper reporter either interviewed Harrington or corresponded with him, wrote an article, and sent Harrington a copy for his files, and that copy got incorporated into Harrington's notes.

The presence of Penutian groups in the western Great Basin has been postulated (Hattori 1982; Aikens and Witherspoon 1986). If the Northern Paiute identification of the *Sai-i* as Achumawi (a Hokan group) is correct, it may be that the Californian groups postulated by Hattori (1982) were linguistically Hokan and not

Penutian. This is supported by the creation of "Pit Rivers" Indians in at least one Northern Paiute origin of humans tale (Kelly 1938:368).

A "big cave near Humboldt" (possibly Lovelock Cave?) was noted in several versions of the Northern Paiute "Coyote and Wolf" tale (Kelly 1938:378-386). Wolf kept all of the animals penned up in the cave, ensuring himself successful hunting. A similar tale is present among the Owens Valley Paiute where Wolf kept deer in a cave on the eastern side of the Sierra Nevada (Steward 1936:372).

In the Paviotso tale of "Crane" (Lowie 1924:235-236), Crane and Frog were both chiefs (of the Paviotso?) and were going to have a fight (with other non-Paviotso?). They set out (from where was not stated) and camped at Pogwaha'bin (Lowie 1924:235). A person sent from the camp to get fish went to several places including a lake (possibly Walker Lake since Walker River is mentioned later in the same tale), where there already were fishermen present, presumably of a different tribe. The person was attacked by the fishermen but escaped and returned to Crane's camp with few Crane and his people then set out to fish. avenge the attack and moved "far above [to the north of?] the enemy" (Lowie 1924:235). Crane attacked, but did not kill, the enemy.

Then Crane's people started towards this valley [possibly the Carson Sink area, as the informant lived in Fallon] from the south. They camped on this side of Walker River by Allen Spring (O"ru"'to"ru"-baisa, Warm Water) [south of Fallon] [Lowie 1924:236].

Another battle with another tribe was reported later in the same story (Lowie 1924:236); Sinclair Lake (location unknown) was noted in that portion of the story.

This tale may record a movement of Paviotso into the Walker River/Carson Sink area from the south, although there is no mention of displacing the other peoples. However, it seems fairly clear that at the time of the tale, the Paviotso were south of the area with hostile groups to their north.

The Owens Valley tale of "Wi'nudumuh" (Steward 1936:373) may record a battle between the Owens Valley Paiute and "Diggers" (Yokuts?). The Paiute were defeated and driven "toward the east." A Mono Lake Paiute tale also mentioned the "Diggers" killing the people, usually as the result of gambling (Steward 1936:429). These "Diggers" were called So'qo", and were reported to have lived in the Coast Range (Steward 1936:430).

The possibility that Numic peoples (Southern Paiute) had displaced Pueblo (or Fremont) groups and that such an event might be reflected in oral tradition was examined by Pendergast and Meighan (1959). They looked at the issue from several aspects, including material culture, physical appearance, and current relationships between the two groups (also see Fowler and Fowler 1981:138; Ambler and Sutton 1989). Pendergast and Meighan (1959:128) concluded that the Southern Paiute had contacted the Pueblo groups, called *Mukwitch*, some 800 years ago and that historical data were preserved in the oral tradition of the Southern Paiute.

In the Moapa story "The Creation of The Indians," it was noted that the " $M^{\mu}$ 'qwits tribe used to live here [Moapa, Virgin River area] and moved away a long time ago" (Lowie 1924:159). This may be a reference to the Virgin Anasazi, the Mukwitch.

Lowie (1924) had noted several instances of hostility toward Pueblo groups recorded in Numa oral tradition. In one Southern Ute story, a Pueblo Indian was killed and thrown out "like a dog" (Lowie 1924:82), and in a Southern Paiute story it was noted that enemies of the Southern Paiute were located south of the Colorado River (Lowie 1924:96-97).

In the Shivwits story of "The Sky Brothers," the two brothers are told that Moon was killing the Moapa (Lowie 1924:156). The

two brothers went to find Moon, so they could kill him. They succeeded in doing this and revived the dead Moapa (Lowie 1924:157). This may be an example of some military cooperation between bands of Southern Paiute, such as apparently happened between the Las Vegas band and the Chemehuevi (Kroeber 1959:262).

**Discussion**. The best, but not unequivocal, data on "myth as history" is the Northern Paiute tale of invading the Humboldt Sink area. There are similar hints from other groups but they do not form such convincing arguments.

#### CONCLUSIONS

In the over 30 years since its proposal, the Numic Spread hypothesis of Lamb has been the subject of a great deal of interest and debate. Several alternative ideas, including the *in situ* and the Aikens and Witherspoon hypotheses, have been proposed. While data have been offered in support of the various hypotheses, the historical linguistic data seemed difficult to explain in a way other than the Lamb hypothesis, and the archaeological data were confusing. The Numic Spread concept remained nebulous, seemingly beyond the realm of testing.

Viewed individually, the lines of evidence heretofore offered in support of the various hypotheses generated to explain the distribution of the Numic languages in the Great Basin are not compelling. The archaeological data have been used to support several different hypotheses but do not exclude other explanations. The ethnobiological data are meager but tend to support the Lamb hypothesis (e.g., Fowler 1972, 1983). The ethnohistoric evidence (Sutton 1986) also supports the Lamb hypothesis but remains controversial.

A number of aspects of oral tradition are reviewed here. These include origin myth, evidence of population movements, retention of placenames and/or sacred areas from (presumably) former territories, reference to natural events, and ethnobiological data, all of which are intermingled. The latter three categories (placenames and/or sacred areas, natural events, and ethnobiological data) provide little support that the subject populations had come from other places.

However, the former two categories, origin myth and population movements, suggest that the general tenet (e.g., homeland, direction, and timing) of the Lamb hypothesis is correct. Several of the tales are quite specific regarding the direction the original people came from, where they were placed, in what order, and who they became: the Northern Paiute and Bannock moving north; the Shoshoni from the south moving north into Idaho; the Southern Paiute from the west moving east into Utah.

The data on population movements (Fig. 2) are quite consistent in the directions assumed under the Lamb hypothesis. The Ute/Southern Paiute mythological characters consistently moved east, the Western Shoshoni north or east, and the Northern Paiute to the north. Other directions are only occasionally mentioned.

The data from the oral tradition appear to form a plausible line of evidence that Numic populations did move north and east from the southwestern Great Basin. The extant indications of direction of movements are quite consistent with the directions postulated by Lamb. Such population movements would likely have taken place fairly late in time for these indications to still be present in the oral tradition. There are very few oral tradition data to support either of the two competing hypotheses.

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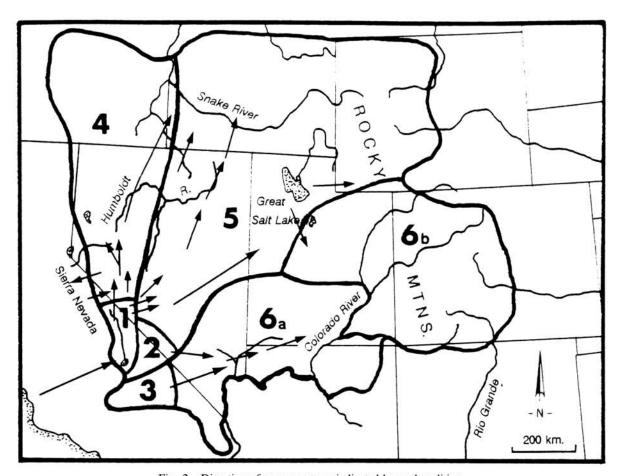


Fig. 2. Direction of movements as indicated by oral tradition.

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# REFERENCES

Aikens, C. Melvin, and Younger T. Witherspoon 1986 Great Basin Prehistory: Linguistics, Archaeology, and Environment. In: Anthropology of the Desert West: Papers in Honor of Jesse D. Jennings, Carol Condie and Don D. Fowler, eds., pp. 7-20. University of Utah Anthropological Papers No. 110.

Ambler, J. Richard, and Mark Q. Sutton 1989 The Anasazi Abandonment of the San Juan Drainage and the Numic Expansion. North American Archaeologist 10(1):39-55.

Bettinger, Robert L., and Martin A. Baumhoff 1982 The Numic Spread: Great Basin Cultures in Competition. American Antiquity 47(3):485-503.

Butler, B. Robert

1981 When did the Shoshoni Begin to Occupy Southern Idaho? Pocatello: Occasional Papers of the Idaho Museum of Natural History No. 32.

Dyen, Isidore

1956 Language Distribution and Migration Theory. Language 32(4):611-626.

Euler, Robert C.

1964 Southern Paiute Archaeology. American Antiquity 29(3):379-381. Fowler, Catherine S.

1972 Some Ecological Clues to Proto-Numic Homelands. In: Great Basin Cultural Ecology: A Symposium, Don D. Fowler, ed., pp. 105-122. Reno: Desert Research Institute Publications in the Social Sciences No. 8.

1983 Some Lexical Clues to Uto-Aztecan Prehistory. International Journal of American Linguistics 49(3):224-257.

Fowler, Don D., and Catherine S. Fowler

1981 The Southern Paiute: A.D. 1400-1776.
In: The Protohistoric Period in the North American Southwest, AD 1450-1700, David R. Wilcox and W. Bruce Masse, eds., pp. 129-162. Arizona State University Anthropological Research Papers No. 24.

Gayton, Anna H.

1935 Areal Affiliations of California Folktales. American Anthropologist 37(4):582-599.

Gayton, Anna H., and Stanley S. Newman

1940 Yokuts and Western Mono Myths. University of California Anthropological Records 5(1).

Goss, James A.

1968 Culture-Historian Inference from Utaztecan Linguistic Evidence. In: Utaztecan Prehistory, Earl H. Swanson, ed., pp. 1-42. Occasional Papers of the Idaho State University Museum No. 22.

Harding, D. W.

1974 The Iron Age in Lowland Britain. London: Routledge and Kegan Paul.

Harrington, John P.

John P. Harrington Papers, Vol. 3: Southern California/Basin. Washington: Smithsonian Institution, National Anthropological Archives. [Microfilm edition, Millwood, N.Y.: Kraus International Publications.]

Hattori, Eugene M.

The Archaeology of Falcon Hill, Winnemucca Lake, Washoe County, Nevada.

Carson City: Nevada State Museum Anthropological Papers No. 18.

Heizer, Robert F.

1966 General Comments. In: The Current Status of Anthropological Research in the Great Basin, Warren L. d'Azevedo, Wilbur A. Davis, Don D. Fowler, and Wayne Suttles, eds., pp. 239-247. Reno: Desert Research Institute Social Sciences and Humanities Publication No. 1.

Hopkins, Sarah Winnemucca

1883 Life Among the Paiutes: Their Wrongs and Claims. New York: G. P. Putnam.

Jennings, Jesse D.

1953 Danger Cave: A Progress Summary. El Palacio 60(5):179-213.

1957 Danger Cave. University of Utah Anthropological Papers No. 27.

1973 The Short Useful Life of a Simple Hypothesis. Tebiwa 16(1):1-11.

Jennings, Jesse D., and Edward Norbeck

1955 Prehistoric Man in the New World. Chicago: University of Chicago Press.

Kelly, Isabel T.

1938 Northern Paiute Tales. Journal of American Folklore 51(202):364-438.

Kinkade, M. Dale, and J. V. Powell

1976 Language and the Prehistory of North America. World Archaeology 8(1):83-100.

Kroeber, Alfred L.

1901 Ute Tales. Journal of American Folklore 14:252-285.

1907 Shoshonean Dialects of California. University of California Publications in American Archaeology and Ethnology 4(3).

1908 Origin Tradition of the Chemehuevi Indians. Journal of American Folklore 21:240-242.

1959 Ethnographic Interpretations 7-11. University of California Publications in American Archaeology and Ethnology 47(3).

Laird, Carobeth

1976 The Chemehuevis. Banning: Malki Museum Press.

1984 Mirror and Pattern. Banning: Malki Museum Press.

Lamb, Sydney

1958 Linguistic Prehistory in the Great Basin. International Journal of American Linguistics 25:95-100.

Loud, Llewellyn L.

Notes on the Northern Paiute. Appendix
 In: Lovelock Cave by Llewellyn L.
 Loud and Mark R. Harrington. University of California Publications in

American Archaeology and Ethnology 25(1).

Loud, Llewellyn L., and Mark R. Harrington
1929 Lovelock Cave. University of California
Publications in American Archaeology
and Ethnology 25(1).

#### Lowie, Robert H.

- 1909 The Northern Shoshone. Anthropological Papers of the American Museum of Natural History 2(2):165-306.
- 1924 Shoshonean Tales. Journal of American Folklore 37(143-144):1-242.

#### Miller, Wick R.

- 1972 Newe Natekwinappeh: Shoshoni Stories and Dictionary. University of Utah Anthropological Papers No. 94.
- 1986 Numic Languages. In: Handbook of North American Indians, Vol. 11, Great Basin, Warren L. d'Azevedo, ed., pp. 98-106. Washington: Smithsonian Institution.

#### Nichols, Michael J. P.

1981 Old Californian Uto-Aztecan. Reports from the Survey of California and Other Indian Languages 1:5-41.

Pendergast, David M., and Clement W. Meighan 1959 Folk Traditions as Historical Fact: A Paiute Example. Journal of American Folklore 72(294):128-133.

#### Powell, John Wesley

1881 Sketch of the Mythology of the North American Indians. First Annual Report of the Bureau of American Ethnology for the Years 1879-1880, pp. 19-56. Washington: Government Printing Office.

#### Rouse, Irving

1986 Migrations in Prehistory: Inferring Population Movement from Cultural Remains. New Haven: Yale University Press.

#### Sapir, Edward

- 1916 Time Perspective in Aboriginal American Culture: A Study in Method. Ottawa: Anthropological Series 13. Canada Department of Mines, Geological Survey Memoir 90.
- 1930 Texts of the Kaibab Paiutes and Uintah Utes. Proceedings of the American Academy of Arts and Sciences 65(2).

#### Smith, Anne S.

1940 An Analysis of Basin Mythology. Ph.D.

dissertation, Yale University (2 Vols.).

#### St. Clair, H. H.

1909 Shoshone and Comanche Tales. Journal of American Folklore 22(85):265-282.

#### Steward, Julian H.

- 1933 Ethnography of the Owens Valley Paiute. University of California Publications in American Archaeology and Ethnology 33(3).
- 1936 Myths of the Owens Valley Paiute. University of California Publications in American Archaeology and Ethnology 34(5).
- 1938 Basin-Plateau Aboriginal Sociopolitical Groups. Bureau of American Ethnology Bulletin 120.
- 1940 Native Cultures of the Intermountain (Great Basin) Area. Smithsonian Miscellaneous Collections 100:445-502.
- 1941 Culture Element Distributions: XIII, Nevada Shoshoni. University of California Anthropological Records 4(2).
- 1943 Some Western Shoshoni Myths. Bureau of American Ethnology Bulletin 136, Anthropological Paper No. 31.

#### Sutton, Mark Q.

- 1982 Kawaiisu Mythology and Rock Art: One Example. Journal of California and Great Basin Anthropology 4(1):148-154.
- 1984 Short-Term and Long-Term Optimal Foraging Strategies: A Mechanism of Numic Expansion in the Great Basin. Paper presented at the Great Basin Anthropological Conference, Boise.
- 1986 Warfare and Expansion: An Ethnohistoric Perspective on the Numic Spread.
  Journal of California and Great Basin
  Anthropology 8(1):65-82.
- 1987 A Consideration of the Numic Spread. Ph.D. dissertation, University of California, Riverside.
- 1991 Approaches to Linguistic Prehistory. North American Archaeologist 12(4):303-324.

## Thompson, Raymond H. (ed.)

1958 Migrations in New World Culture History. University of Arizona Social Science Bulletin No. 27.

#### Vansina, Jan

1985 Oral Tradition as History. Madison: The University of Wisconsin Press. Wallace, Ernest, and E. Adamson Hoebel

1952 The Comanches: Lords of the South Plains. Norman: University of Oklahoma Press.

Zigmond, Maurice L.

1980 Kawaiisu Mythology: An Oral Tradition of South-Central California. Ballena Press Anthropological Papers No. 18.

Zingg, Robert M.

1933 A Reconstruction of Uto-Aztecan History. Ph.D. dissertation, University of Chicago.

1938 The Ute Indians in Historical Relation to Proto-Azteco-Tanoan Culture. The Colorado Magazine, July:148-156.

