Native Languages of California

WILLIAM F. SHIPLEY

Presumably, at one time it was common for a great many highly divergent languages to be spoken within a modest geographical area. Such a situation still obtains in various parts of the world—in the Caucasus, in West Africa, in New Guinea, in the mountains and gorges at the convergence of Upper Burma, Thailand, and southwestern China. Another such tangle of languages, perhaps in some ways the most complex of all, was found in the California culture area until the European conquest, which began just two centuries ago. Over the mountains, valleys, and deserts of the area were spread no fewer than 64—and perhaps as many as 80—mutually unintelligible tongues, further differentiated into an unknowably large number of dialects. Miraculously, something more than two dozen of these languages have survived through the middle of the twentieth century—as terminal cases, it is true, and spoken only by a few elderly persons. These languages have provided the modern researcher with a glimpse, however faded, of a marvelous linguistic diversity with its origins lying millennia in the past.

The orderliness of Darwinian theorists inspired nineteenth-century linguists to reach certain conclusions about the mechanisms of diachronic or historical change in languages. Thus a detailed study of the historical development of the Indo-European family of languages, the principal pastime of nineteenth-century linguists, led to the formulation of clear-cut tenets with regard to the dynamisms of linguistic change. The maturation of this understanding about language was much abetted by the nature of the data from which such understanding was derived. Not only are there dozens of modern Indo-European languages to which anyone may have massive access, but also there are extensive records of older languages—Sanskrit, Greek, Hittite, Latin—sometimes going back as far as 3,500 years. The analysis of this ocean of material provided insights of vast importance to the study of language: that, for example, sound-change in language is regular, recurrent, and predictable and that apparent exceptions are always due to special circumstances about which individual statements may be made, given sufficient information. One of the most important types of special circumstance is that in which words have been borrowed by one language from another. Such words, of course, do not reflect the historical development of the borrowing language prior to the time of their adoption.

It is only in the light of these principles that the situation with regard to the languages of California can really be understood. A basic system of recurrent sound correspondences is the only known certain diagnostic for validating a genetic relationship among any group of languages. Such a validation is possible in California for small families of languages; in fact, it has been done for Miwokan (Broadbent and Callaghan 1960), Yokutsan (Golla 1964), Palaihnihan (Olmsted 1964), Pomoan (McLendon 1973; Moshinsky 1974), Maiduan (Ultan 1964), and Yuman (Langdon 1968, 1975; Wares 1968). Those California languages belonging to the three relevant exterior stocks—Algic (Algonquian-Wiyot-Yurok), Na-Dene, and Uto-Aztecan—have been genetically identified in the very process of discovering their exterior relationships, a simple and obvious task in the case of the Uto-Aztecan and Athapaskan languages but much more difficult in the case of Wiyot and Yurok (Sapir 1913, 1915, 1915a; Michelson 1914, 1915; Haas 1958).

An example from the Miwokan languages will make the nature of this validation clear (Broadbent and Callaghan 1960; Callaghan 1970).

	'heart'	*'swim'*	*'fly' (verb)*	*'eye'*
Southern Sierra Miwok	*wihki*	*ʔipih*	*hile·t*	*hinti*
Central Sierra Miwok	*wiṣki*	*ʔipiṣ*	*ṣile·t*	*ṣinti*
Plains Miwok	*wáski*	*ʔəpə́h*	*silé·t*	——
Bodega Miwok	*wúṣki*	*ʔupúh*	——	*ṣút*

It will be noted that wherever Southern Sierra Miwok has an *h*, Central Sierra Miwok has an *ṣ*. This recurrent correspondence, along with the various obvious identities (*i* to *i*, for instance), validates the genetic relationship between the Southern and Central Sierra languages. Matching this *h* : *ṣ* correspondence, Plains Miwok has *s* in the words for 'fly' and 'heart' but *h* in the word for 'swim'. A parallel pattern with *ṣ* and *h* obtains in Bodega Miwok. These *h* variants in Plains and Bodega Miwok are due to the occurrence of the sound in final position. The correspondence, then, is *h* in Southern Sierra Miwok, *ṣ* in Central Sierra Miwok, *h* finally and otherwise *s* in

Plains Miwok, and *h* finally and otherwise *ṣ* in Bodega Miwok. The genetic relationship of these four languages is certified by the marshaling of such evidence in as much detail as possible.

For the two great language stocks—Hokan and Penutian—that have been proposed as subsuming a majority of the California languages, there is as yet no demonstrable evidence of the type presented for Miwokan. There are many provocative resemblant forms among the languages, particularly among the Penutian ones, as well as certain general grammatical features that may be labeled Penutian or Hokan. In short, the terms Penutian stock and Hokan stock are names for unverified hypotheses. It is likely that both theories will eventually be validated, probably with minor, possibly with major alterations and rearrangements.

Various factors complicate the situation. One of the major difficulties has to do with linguistic diffusion, the borrowing of language material—speech sounds, words, grammatical constructions—by one language from another. The freedom and ease with which most of the California languages borrowed terms from Spanish is a case in point (Shipley 1962). Hundreds of Spanish words, linked with diffused elements of Spanish culture, invaded the aboriginal tongues in the nineteenth century, very probably representing an old continuing tradition of linguistic borrowing. Bilingualism and multilingualism were common among the California Indians, undoubtedly accompanied, over the centuries, by a steady process of acculturation and exchange of linguistic material in all directions. Many animal, bird, and plant names are widespread, crisscrossing all known boundaries between linguistic families. Some of these, like words for 'goose', 'crane', and 'frog' are scattered over the whole continent. Indeed, the word for 'bluejay'—Karok *ka·y* 'sound of a bluejay', Maidu *ǩáy,* Nisenan *čayit,* Wappo *čay,* Chukchansi Yokuts *čayčay,* Barbareño Chumash *cay*—is reflected even by Latin *gaius* and English *jay.* To say that these words are onomatopoetic is simply to name the phenomenon without explaining it. The fact that some linguistic diffusion is global, some continental, and some areal is directly involved with the problem of elucidating prehistory in California as well as elsewhere.

Quite apart from the correspondence of sounds as an attestation of genetic connections among languages, there is the equally important but much more complex matter of grammatical evidence for the historical relationship of one language to another. Such evidence may be inflectional or derivational (such as the noun cases in Latin, Greek, Sanskrit, German, and Russian, which reflect the common Indo-European origin of these languages) or syntactic, (that is, having to do with the structures of sentences). Inflexional and derivational elements have been explored to some extent for the California languages. The validating criteria involved in syntactic comparisons are, as yet, very poorly characterized. The difficulties come in separating the genetic similarities between two grammars from those that are due to chance or sporadic diffusion. For example, English is, in some ways, grammatically closer to Chinese (by chance) than it is to German (to which it is closely related genetically).

In order to make a realistic assessment of what can be known about interrelationships among the languages of California, the complications and difficulties described above must be kept clearly in view. All sorts of things are very possible: that Esselen, for example, is not Hokan but Penutian, or that it is neither Hokan nor Penutian but the single remnant of a language family that has long since vanished.

With all these caveats in mind, what deductions can be made from the distribution of the California languages, based on the current views regarding their provenience?

The oldest language group still more or less in situ in California would seem to be Hokan. Perhaps these languages were spoken over most of the area, very likely along with speech families of which no trace remains. They were then disrupted by the incursion of Penutian, which, spreading through the great central valley, forced Hokan to the periphery. A later Uto-Aztecan thrust in

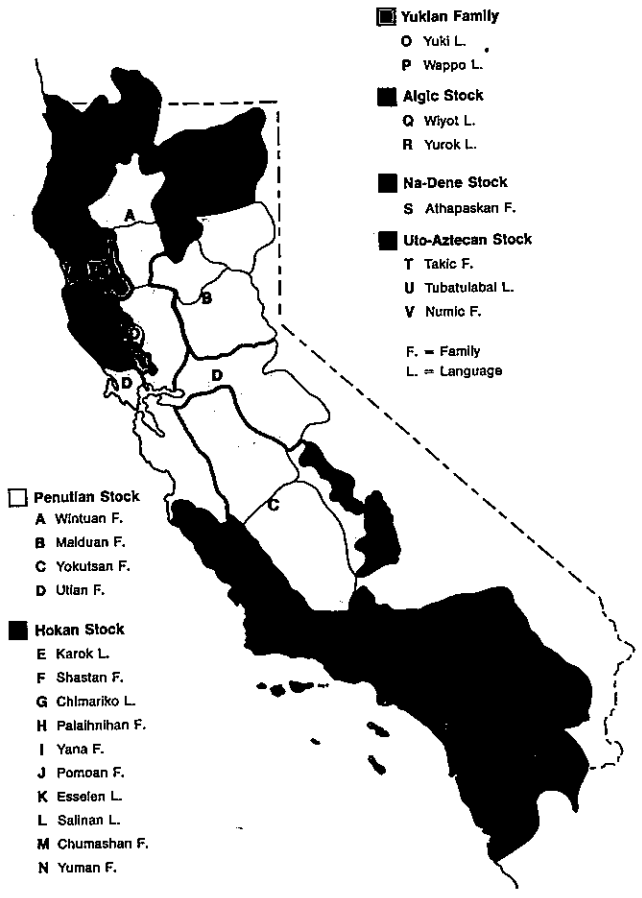

Fig. 1. Language stocks and families of the California culture area.

southern California may have pushed the Yuman languages still farther away from their Hokan congeners.

Somewhat earlier than this, the ancient forms of Yurok and Wiyot speech were brought into the northwest, though not necessarily at the same time. The common ancestral form from which Wiyot, Yurok, and Proto-Algonquian sprang was certainly never spoken in California, so that ancient Yurok and ancient Wiyot must have been separate languages while they were still somewhere to the east or north.

The latest arrivals were probably the Athapaskans, whose ancestors may have drifted down the rivers and coast from Oregon.

The Yukians present the greatest uncertainty. If, as Elmendorf (1963, 1964) suggests, they are related to Siouan, then the circumstance of their presence in California parallels that of Wiyot and Yurok. This is based on the assumption that Wappo is Yukian, for Wappo and Northern Yukian are very remotely related. Such speculation is very tenuous without further research. It is even conceivable that Yukian speech is older in California than Hokan.

In the delineation that follows, languages, language families, and language stocks are organized provisionally, based on the current consensus of researchers. Estimates of numbers of speakers in the various groups are based largely on Kroeber (1925; see also "Historical Demography," this vol.).

Penutian Stock

The Penutian stock was first identified and named by Dixon and Kroeber (1913, 1919). Further attempts to elucidate and define Penutian have been made by many scholars over the years (Sapir 1921–1923, 1921b, 1929; Shafer 1947, 1952; Hymes 1957a, 1964, 1964a; Pitkin and Shipley 1958; Shipley 1957, 1966; Broadbent and Pitkin 1964; Callaghan 1967). The name is a compound of the word for 'two' in Maiduan (Proto-Maiduan **pé·ne*) and Costanoan (Proto-Costanoan **ṭṭxi*).

The relationship among the Penutian languages is a very old one. Validation of the group as a "true" linguistic stock has been difficult to achieve, though evidence adduced by Hymes (1964) and Shipley (1966) would seem to be conservative and reliable enough to carry conviction. The situation has been complicated by the efforts of various scholars to add languages and language groups outside California to the inventory of Penutian tongues (Sapir 1929a; Freeland 1931; J.A. Mason 1940; F. Johnson 1940; Sapir and Swadesh 1953; Swadesh 1954, 1956; Hymes 1957a, 1964, 1964a; Newman 1964, Shipley 1966, 1969, 1970). It would be irresponsible to say that California Penutian has been established as a genetic group in the sense that Indo-European is so established. However, there seems to be little doubt that further research will eventually certify the relationship. Reviews of the history of Penutian research have been published by Callaghan (1958) and Shipley (1973).

The characteristics of the protolanguage from which the Penutian languages are descended may be adumbrated to some extent. The sound system was of moderate complexity with two series of voiceless stops (plain and aspirated), probably a labiovelar k^w, perhaps no more than the two spirants *s* and *h*, and very likely the sonorants *m, n, r, l, w* and *y*. Most of the languages are not so simple as this (though the Utian group is actually simpler), but the evidence points to a diffused origin for the glottalized consonants so commonly found, while the proliferation of spirants and affricates in Wintuan, Yokutsan, and Costanoan may be due to defunct systems of consonantal symbolism. There were five vowels: *i, u, e, o, a*. The typical stem-morpheme shape proposed long ago by Sapir (1921–1923) has been borne out by subsequent research. In its modern version, the formula may be stated as a disyllabic stem with a single initial and single medial consonant, with or without a final consonant: CVCV(C). As Sapir pointed out, the vowels in the two syllables are often the same.

Certain aspects of the grammar of Proto-Penutian are fairly clear. There was probably a rather complex system of postfixed case markers on nouns and pronouns. The pronoun system was particularly elaborate, with markers not only for case but also for singular, dual, and plural numbers. In addition to subject, object, and possessive cases, the nouns and pronouns were almost certainly marked for the locative and instrumental.

Verbs were marked with suffixes denoting various aspects, modes, and tenses but probably not for person. It is possible that there were instrumental prefixes, though the evidence for this is unreliable. Prefixing in general was minimal or lacking.

There were four families in the Penutian stock: Wintuan, Maiduan, Yokutsan, and Utian. All these names are derived from terms meaning 'person' or 'human being' except Utian, which is based on the Miwok-Costanoan word for 'two'.

Wintuan Family

The three languages in the Wintuan family are Wintu, Nomlaki, and Patwin. Wintu and Nomlaki are quite similar; Patwin is clearly more remote. Harvey Pitkin (personal communication 1962) has suggested that many of the resemblances between Patwin and Wintu may be the result of diffusion and that the genetic relationship is, perhaps, more distant than a superficial inspection of the data would indicate. Kroeber (1925:883) estimated the number of Wintuan speakers at 12,000 in preinvasion times, of which probably at least half were speakers of Patwin.

These Wintuan languages, particularly Wintu, are much more complex phonologically than Proto-Penu-

tian. There were four series of stops: plain, aspirated, glottalized, and voiced; in addition, Wintu had several extra spirants as well as a two-way velar contrast between fronted and backed stops and spirants (*k* and *q* as well as *x* and *x̣*). This last feature may very well have been in Proto-Penutian though no other California Penutian language retains it.

Wintu was the northernmost language of the family, with nine known dialects (Pitkin 1963): McCloud River, Trinity County, Shasta County, Upper Sacramento, Bald Hill, Hayfork, Keswick, Stillwater, and French Gulch.

Closely related to Wintu is Nomlaki (*nom* 'west', *laki* 'speech'?), spoken just to the south in the upper end of the Sacramento Valley. Nomlaki is the least known of the Wintuan languages and probably had no more than 1,000 or so speakers, with at least two dialects and perhaps as many as six.

The area of Patwin speech extended southward to the delta of the Sacramento-San Joaquin river system. There were perhaps 6,000 speakers of Patwin, with many dialects, some of which are known: Hill, River, Cache Creek, Lake, Tebti, Dahcinci, and Suisun. The Patwin (*patwin* 'person') played a dominant cultural role in Central California. Many Patwin words were diffused into the neighboring languages.

Maiduan Family

The Maiduan languages exhibit three phonological innovations of particular interest when compared with the postulated system for Proto-Penutian: there is a glottalized stop series; there are two voiced imploded stops, *b* and *d*; and there is a sixth vowel, the high central unrounded *i̇*. Konkow and Nisenan have yet a seventh vowel, a mid-central unrounded *ə*. The origins of these two extra vowels are obscure. The high vowel is found in some Miwokan and Yokutsan languages as well as in Maiduan, specifically in those languages that are contiguous to or near the Uto-Aztecan languages to the east and south of the Sierra Nevada, all of which have such a vowel. Silverstein (1970) has shown that *i̇* may very well have developed from *u* under the influence of a neighboring *y*.

Maiduan stems tend to be monosyllabic. The Proto-Penutian stem type CVCV(C) has often been reduced by the loss of the medial consonant or of the second syllable.

There are three languages in the family: Maidu (Northeastern Maidu, Mountain Maidu), Konkow (Concow, Northwestern Maidu), and Nisenan (Southern Maidu). Although they share a large inventory of near-identical stem morphemes, they are quite different from one another grammatically and are not mutually intelligible. Phonological and lexical reconstructions have been made (Shipley 1961; Ultan 1964). According to Kroeber (1925:883) there were some 9,000 speakers in aboriginal times, Nisenan being probably the largest group.

Maidu was spoken entirely in the high mountains to the east and south of Mount Lassen. There is little reliable evidence for dialect differentiation though it seems reasonable to assume that there were different dialects originally in the four major areas of Maidu settlement: Susanville, Big Meadows, Indian Valley, and American Valley. Grammars, texts, and a dictionary of the language are available (Dixon 1911, 1912; Shipley 1963, 1964).

Southwest of the Maidu, along the Feather River and its tributaries and in the adjacent Sacramento Valley, were the Konkows, who spoke a large number of dialects: Otaki, Metsupda, Nemsu, and Eskewi near Chico; Pulga, Feather Falls, Challenge, and others near Oroville and in the Feather River Canyon; and doubtless other dialects in the region around the Marysville Buttes.

Nisenan was also spoken in various dialects. Those that can be identified are: Valley Nisenan, Oregon House, Auburn, Clipper Gap, Nevada City, Colfax, and Placerville. Although no Nisenan grammar has been written there is a partial description in manuscript of the Auburn (Uldall 1940) and Clipper Gap (R. Smith 1964) dialects. A dictionary and collection of texts are available for Auburn Nisenan (Uldall and Shipley 1966).

Yokutsan Family

The Yokutsan-speaking people, some 18,000 in number (Kroeber 1925:883), occupied the San Joaquin valley from the delta to Tehachapi, including the contiguous foothills of the Sierra and the Coast Range. There were 40 to 50 small tribes in this area, each with a distinctive dialect (Kroeber 1925:474), a state of affairs unlike any other in California. Kroeber (1963) classified these dialects into 12 groups belonging to two divisions; his arrangement was based on lexical material collected for 21 of the dialects.

These facts make it very difficult to say how many Yokutsan languages there were—indeed, the very notion of language becomes blurred in such a context. Linguists have called two forms of speech two languages if they are mutually unintelligible. This is an extremely unreliable practice if only for the reason that the term "mutually unintelligible" cannot be defined. Probably any Yokutsan dialect was intelligible to the speakers of immediately neighboring dialects with only some minor adjustments; on the other hand, speakers of two widely divergent dialects were almost certainly incapable of understanding each other. Perhaps there were two Yokutsan languages (corresponding to the two divisions) or 12 (corresponding to the 12 groups). It is not possible to decide nor is it important to attempt to do so, given the circumstances.

Yokutsan is much more complex phonologically than Proto-Penutian. No only is there a series of glottalized voiceless stops as in Maiduan and Wintuan, but there is also a set of glottalized continuants: *m̓*, *n̓*, *ŋ̓*, *w̓*, *y̓*, and *l̓*. There are extra stops and spirants in the palatal area,