

## ***Pomoan***

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Pomoan is a well-defined family of seven languages in northern California. Their territories are adjacent or in close proximity, but they are surrounded by languages of several different families. The Pomoan languages are similar in many aspects of sound, word, and sentence structure, yet also have enough diversity to serve as an excellent case study in language change over time, as well as the effects of contact among related and unrelated languages. Notable properties in all or most of the languages are large inventories of consonants; complex verb structure including a system of instrumental prefixes; person marking with independent pronouns rather than on the verb itself; case-marking that permits relatively free word order; and switch reference suffixes for the tracking of reference among clauses.

### **1 Introduction**

The Pomoan family consists of seven languages spoken in northern California. They were named by Barrett (1908) according to their relative location. Six contiguous languages are located in Sonoma, Mendocino, and Lake counties: Eastern and Southeastern Pomo around Clear Lake; and Northern, Central, Southern, and Southwestern Pomo along the coast. Northeastern Pomo, an outlier in many ways, is separated from the rest of the family by the unrelated Yuki and Patwin languages. The original term Southwestern Pomo has been replaced by the indigenous word *Kashaya* (Oswalt 1961: 1); no similar term is in widespread use for the other languages (as opposed to tribal groups), but Salt Pomo has sometimes been used for Northeastern, a translation of a native term (Walker 2016a). The name Pomo itself is based on a confusion of two distinct Northern Pomo words; it was adopted to describe all the related languages (McLendon & Oswald 1978: 277).

This survey focuses on linguistic properties of the languages, which are notable for large consonant inventories and agglutinative verb morphology that can involve sequences of multiple suffixes to create complex words. Brief treatments of the family include Mithun (1999: 473–476) and McLendon (2006); longer discussions, with more details about geography and placenames, can be found in McLendon & Oswald (1978) and Golla (2011: 105–111).

Book-length grammatical overviews are available for five of the languages: Southern (Walker 2020), *Kashaya* (Oswalt 1961), Northern (O'Connor 1992), Eastern (McLendon 1975),

and Southeastern (Moshinsky 1974). More specific treatment of particular topics can be found for Central in Mithun (1988a, b and many later works) and for Northeastern in Walker (2016a). The only large collection of published texts is in Kashaya (Oswalt 1964a). No dictionary of a Pomoan language has been published, but Oswalt prepared manuscript dictionaries of Kashaya, Central, and Southern (available at the California Language Archive in Berkeley); an edited and expanded version of the Kashaya dictionary prepared by this author is available online ([www.webonary.org/kashaya](http://www.webonary.org/kashaya)). Walker (2016b) is a significant lexicon of Northeastern.

Most of the Pomoan languages are dormant, but there is increasing interest in language revival and revitalization; see §7. At this writing, there are a few native speakers of Central, and perhaps a dozen native speakers of Kashaya.

## **2 Diachrony**

The full Pomoan family was first clearly recognized by Barrett (1908). Other work has suggested membership in the broader and controversial Hokan stock, which ranges from north of Pomoan through California to northern Mexico, and beyond, in some analyses (Dixon & Kroeber 1913; Sapir 1917; Campbell 1997; Kaufman 2006). The link to the Yuman family, at the southern end of the core Hokan region, is the most promising (Crawford 1973; Langdon 1979). The Pomoan family likely originated around Clear Lake (Oswalt 1964c; Basgall 1982; Whistler 1988). The most important work on the history of the family is McLendon (1973); other sources discuss internal relations (Oswalt 1964c; Halpern 1964), sound changes (Webb 1971, which has unreliable transcriptions; Moshinsky 1976), and language contact (Oswalt 1958; McLendon 1969; Mithun 2007; Walker 2016a).

It is widely agreed that Southeastern and Eastern Pomo are the most distinct from the rest of the family; the main point of uncertainty is where Northeastern fits with the other languages. Oswalt (1964c, 1976) gives the following internal structure, which has become a standard point of reference (as in Mithun 1999: 473). The term Proto-Pomo is used for the common ancestor of all seven languages, whose properties can be inferred from comparison of the modern languages.

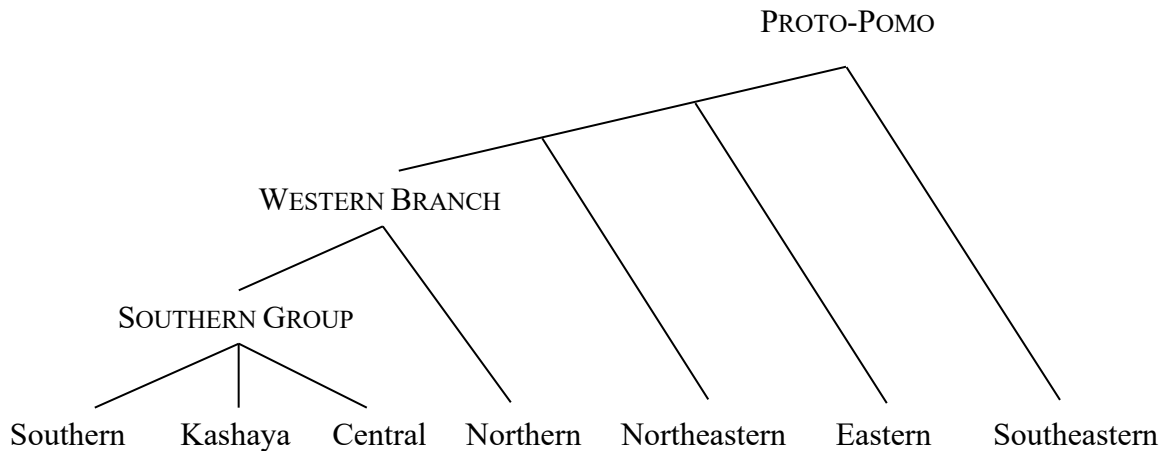


Figure 1. Pomoan family tree

At the higher nodes, I follow Halpern (1964) in showing first Southeastern and then Eastern splitting off from the other five, which he calls Proto-Russian River Pomo (named after the river that runs through the territories of all but distant Northeastern); Oswalt (1976) endorses a similar cline of relatedness. Halpern is uncertain whether Northern might be grouped with either Central or Northeastern; see Walker (2016a) for difficulties in the classification of Northeastern. In later work, Halpern (1984) posits that Southern branched off before Northeastern, based on the retention in Southern of what he takes to be archaic features; and he places Kashaya and Northern together.

### 3 Phonology

#### 3.1 Vowel inventory

All the Pomoan languages have a five-vowel inventory, /a e i o u/, that is relatively stable from the proto-language to modern times.

##### (1) Pomoan vowels

	front	central	back
high	i		u
mid	e		o
low		a	

A minor complication is that Southeastern Pomo has frequent insertion of short vowels in the stem-initial consonant clusters that result from historical loss of a vowel in this position; the quality

of the inserted vowel is dependent on the adjacent consonants, and this introduces additional central vowels such as [ə] and [i]. For instance, /xya/ ‘head’ can be realized as [xya], [xəya], or [xiya]. Moshinsky (1974: 21) treats these processes as optional but, it seems, phonologically real; it is possible, however, that this is a variable phonetic rule of vowel insertion, or excrescence. Certainly, the inserted vowel is ignored for the regular placement of stress on the first syllable, although it “infrequently” shifts onto the inserted vowel across a glottal stop (Moshinsky 1974: 26). The vowel insertion, called epenthesis, that occurs in sequences of suffixes appears to be fully phonological; it consists of /i/ in most cases, but /a/ after the consonants /m/ and /q/ (Moshinsky 1974: 26–27; Goodman 1992). This distribution of /a/ is an old feature of Pomoan since it occurs widely in the family. For example, Southeastern /tsa-l-q-m-q-t/ surfaces as *tsalqamqat* ‘many are rolling it along the ground’; and Kashaya /kel-m-w/ becomes *kelmaw* ‘peer directly down at’ (Oswalt 1964: 158; Buckley 1994: 104).

Limited vowel harmony has occurred historically in some of the languages (McLendon 1973: 41–44). The lowering of prefixal \*/u/ to \*/o/ when \*/o/ occurs in the following syllable can be reconstructed to the proto-language, since it survives in all four languages that have maintained these distinctions in the prefixes (Oswalt 1976). Examples are Eastern /do:-qo-/ ‘identify by touching’ vs. /du:-da-/ ‘cut finger accidentally’; and Kashaya /šo-kot-/ ‘drag’ vs. /šu-kel-/ ‘pull straight’. Parallel vowel lowering has been extended to prefixal /i/ before /e/ in Southern, as part of a process that operated quite generally within words: *\*bihše* > *behše* ‘deer’. Eastern has a similar lowering of /i/ but only across a laryngeal consonant, as in /di:-he-:l/ becoming *de:he:l* ‘dig’ (McLendon 1975: 34).

### 3.2 Vowel length

All the languages have distinctive vowel length, again with a proviso for Southeastern. This language has lost vowel length that would otherwise have been inherited from the proto-language, and overwhelmingly shows short vowels in its vocabulary. It has reintroduced some long vowels in borrowed words, apparently only (but not always) where the source language has a stressed vowel in the initial syllable; compare *tsí:tsala* ‘peas’ and *kápoṭe* ‘coat’ from Spanish *chícharo* /‘čičaro/ and *capote* /ka‘pote/ ‘cloak’ (Moshinsky 1974: 6, 19).

New vowel length also arises in initial syllables in Eastern and Southern. In Eastern Pomo, most initial syllables contain long vowels. This results partly from the loss of historical laryngeal increments; that is, /h ʔ/ preceding a restricted set of consonants in the coda of the first syllable (see §3.4). The increment is replaced by vowel length, as in *\*biʔdu* > *bi:du* ‘acorn’ and *\*qahqo* > *qa:qo* ‘valley, clearing’, but the resulting pattern was generalized to other words with initial open syllables preceding a regular stress on the second syllable, such as *\*q<sup>h</sup>ale* > *xa:le* ‘tree’. A more

limited version of the same pattern is found in Central Pomo; this language has lost most pre-tonic vowels (i.e. those preceding the stressed syllable) but has often preserved /a/ in this position. It too is long, at least utterance-initially and optionally elsewhere (Oswalt 1964b: 156), though mainly in the coastal dialect (Marianne Mithun, p.c.).

In every Southern Pomo word of two or more syllables, the initial syllable is either closed by a consonant or contains a long vowel. Walker (2020: 115) treats length /:/ as a laryngeal increment along with /ʔ/ and /h/, so this pattern (including *k<sup>h</sup>a:le* ‘tree’) can similarly be seen as a generalization of the increments in that syllable – or a principle that all initial syllables are heavy (i.e. containing a long vowel or a coda consonant), with vowel lengthening when a coda consonant is not present.

McLendon (1973) reconstructs ‘tree’ and similar words with a long vowel, \**q<sup>h</sup>a:le*, but the evidence for this appears to be from Eastern and Southern Pomo, where the length can be attributed to the innovations described.<sup>1</sup> For example, Kashaya preserves increments and distinctive vowel length but does not have a long vowel in *q<sup>h</sup>ale* ‘tree’; that vowel is similarly short in Northern *xale* (also reported as *k<sup>h</sup>ale*) and Northeastern *k<sup>h</sup>ali*, although Northern has lost increments entirely. In both Eastern and Southern, the systematic absence of historically pre-tonic short consonant-vowel (CV) syllables suggests regular sound changes have applied in those languages.

Long vowels also arise by iambic lengthening in Kashaya (Oswalt 1961; Buckley 1994) and Central Pomo (Mithun 1999: 474). This process lengthens a vowel in the head of an iambic (right-headed) foot, and leads to common alternating short and long vowels in words such as Kashaya *momú:lič’e:duče:du* ‘keep running all the way around’.

A number of languages have suffixes that cause lengthening of a preceding vowel. A suffix may consist exclusively of lengthening, such as the Eastern stative and the Kashaya and Southern locative.

### 3.3 Consonant inventory

The greatest diversity in consonants among the Pomoan languages is found in the voiceless stops, where we find six places of articulation and three manners among them, specifically plain, aspirated, and ejective. The following consonants are found in the family, but no language has every consonant listed.

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<sup>1</sup> McLendon (1973: 51) hints at a similar analysis but was hampered at the time by a few Southern Pomo words that were transcribed by Halpern with initial short open syllables. Oswalt’s later notes show all of these words with an increment of one kind or another, so that they fit the general pattern and permit this analysis.

(2) Pomoan consonants

	labial	lamino-dental	apico-alveolar	palato-alveolar	velar	uvular	glottal
voiceless	p	t̥	t̥ ts	č	k	q	ʔ
aspirated	p <sup>h</sup>	t̥ <sup>h</sup>	t̥ <sup>h</sup> ts <sup>h</sup>	č <sup>h</sup>	k <sup>h</sup>	q <sup>h</sup>	
ejective	pʼ	t̥ʼ	t̥ʼ tsʼ	čʼ	kʼ	qʼ	
voiced stops	b		d				
fricatives	f		s	š	x	χ	h
nasals	m		n				
approximants	w		l, r	y			

The palato-alveolars are phonetically affricates [tʃ], but pattern phonologically as stops in at least some of the languages. All the languages have the first three places listed in their inventory of stop consonants, as well as the glottals, but the remaining obstruent consonants are lacking from some languages, and these present a more complex situation.<sup>2</sup>

McLendon (1973) and Moshinsky (1976) derive the palato-alveolars \*/č č<sup>h</sup> čʼ/ from the proto-velar series \*/k k<sup>h</sup> kʼ/; Oswald (1976) reconstructs palato-alveolars directly, distinct from velars, but McLendon is less certain whether a full palatal series is motivated. The best evidence is for the ejective, which most often continues as /sʼ/ or /tsʼ/, so an alveolar fricative or affricate may be the simplest reconstruction. Potential \*/č/ is not strongly motivated, and McLendon does not reconstruct \*/č<sup>h</sup>/; Moshinsky reconstructs only \*/čʼ/. An alveolar affricate /ts/, always alongside ejective /tsʼ/ and for some languages aspirated /ts<sup>h</sup>/ as well, is found in Southern, Northern, and Eastern (where it contrasts with /č/) as well as Southeastern (which lacks contrastive /č/). For McLendon, these series derive from \*/č/ (as noted, perhaps this is just \*/sʼ/) and \*/k/ in various contexts.

Among the labial stops, only \*/p<sup>h</sup>/ is well motivated, and this is the only one that Moshinsky reconstructs. McLendon also has \*/pʼ/ but acknowledges the limited evidence; she does not reconstruct \*/p/.

All the languages support the reconstruction of two voiced stops, \*/b d/. In some languages they show affinities to the glottal /ʔ/ or the nasals /m n/. Buckley (1994) argues that the voiced stops in Kashaya are underlyingly glottalized nasals, /mʔ nʔ/.

<sup>2</sup> I do not use plain *c* here because it has different values (/č/ or /ts/) in the usual transcriptions of the different languages. Similarly, I avoid plain *t* since some sources reserve this for the dental, others for the alveolar. See §7 for discussion of practical orthographies.

Only Eastern and Southeastern fully maintain the original uvular class. Southern, Northern, and Northeastern entirely eliminate uvulars by \*/q/ > /k/. In Kashaya and Central, \*/q/ fronts to /k/ before the vowels /i e/, but remains uvular before /o a/ as well as before consonants and word-finally.<sup>3</sup> The resulting distribution of /q/ remains a solid generalization in Kashaya and Central, although at least for some older Kashaya speakers /q/ could be retained before /i/ or /e/ in certain suffixes (Oswalt 1961: 37; see also McLendon 1973: 16). The sequences /ka/ and /ko/ were reintroduced into these languages by borrowings; in adjacent Southern and Northern Pomo, they are of course the outcome of \*/qa/ and \*/qo/, and they occur freely in Spanish borrowings such as *kawa:yu* ‘horse’ in both Kashaya and Central.

The Russian River languages (perhaps as a single speech community after Southeastern and Eastern split off) show the change \*/k/ > /č/. A notable secondary development is that Northeastern has dental /t/ as the reflex of plain \*/k/. The change \*/č/ > /t/ occurs in the adjacent Patwin language, and therefore is very likely a contact effect in Northeastern, where the change is more limited: in Patwin it includes the aspirate and ejective. In Northeastern those remain palato-alveolar, so that \*/k k<sup>h</sup> k’/ > /t č<sup>h</sup> č’/ (Walker 2016a: 84–85).

Most of the languages preserve three manners for the voiceless stops – plain, aspirated, and ejective. The main exception is that the aspirates in Southeastern have become fricatives: \*/p<sup>h</sup> t<sup>h</sup> q<sup>h</sup>/ > /f š x/, plus \*/k<sup>h</sup>/ > /š/ or /x/ depending on context. Limited evidence, however, suggests that \*/t<sup>h</sup>/ simply lost its aspiration to become /t/. Other languages have sporadic changes to a fricative: Northeastern \*/p<sup>h</sup>/ > /f/, Eastern \*/q<sup>h</sup>/ > /x/, and Northern \*/k<sup>h</sup>/ > /č<sup>h</sup>/ > /š/.

I follow Oswalt (1964c) and Moshinsky (1976) in reconstructing \*/š/ for the category that has this reflex in all the languages except Southeastern, which has /x/; McLendon (1973) chooses \*/x/. However, since the six other languages formed a single group after Southeastern split off, it is possible that \*/x/ > /š/ was an early shared change. McLendon (1973) also reconstructs \*/x/ distinct from \*/h/ to account for correspondence sets with Eastern /x/ and Southeastern /x/, but Moshinsky (1976: 65) suggests this may be attributable to conditioned sound change; note that exactly these two languages introduce fricatives (/x/ or /x/) from \*/q<sup>h</sup>/ as well. (Both \*/h/ and proposed \*/x/ are uniformly /h/ in the other five languages.)

Eastern, Southeastern, and Northeastern have developed a rhotic consonant, typically written as /r/ in the literature but often realized as the tap [ɾ]; it is a reflex (descendent sound) variously of the stops \*/t/ and \*/d/. Northeastern is unique in having merged /s/ and /š/ into a single phoneme /š/; its pronunciation seems to have been intermediate between the canonical values of these fricatives, a retracted [ʂ] characteristic of many California languages (Bright 1978), and

<sup>3</sup> Earlier descriptions of Central Pomo (see McLendon 1973: 24) include only /k/, but later work recognizes that both /q/ and /k/ are present in the language (Oswalt 1976: 15; Mithun 1988a et seq.). No doubt the limited distribution of /q/ impeded the recognition of the contrast before /o/ and /a/.

shared with the neighboring Wintuan languages Nomlaki and Patwin (Walker 2016a). Northeastern has the voiceless lateral fricative [ɬ] as a variant of /š/, also likely due to the presence of /h/ in Wintuan.

### 3.4 Laryngeal increments

This term refers to the segments /h ʔ/ that occur before another consonant, and partly depend on its features (Halpern 1984; Oswald 1998). Though reconstructed for the proto-language, they survive only in Southern, Kashaya, and Northeastern. Southern has developed an especially complex set of increment alternations, which include vowel and consonant length (Walker 2020); otherwise geminate (or long) consonants are rare across the family.

Evidence for the former presence of the /h/ increment does, however, come from Eastern Pomo. This language has the voiceless sonorants /m̥ n̥ l̥ w̥ y̥/, which derive historically from the /h/ increment preceding a voiced sonorant. Since these sounds now pattern as single segments – they frequently occur initially, as in /l̥oqʔa/ ‘one thing to fall’, or with a preceding long vowel, /ka:ṇu/ ‘word’ – they can no longer be treated as sequences. Compare these words to their Kashaya cognates /hloq-/ and /čahno/, with the same meanings.

### 3.5 Syllable structure

The Pomoan languages have obligatory onsets, with optional coda consonants and vowel length; the most common syllable types are therefore /CV/, /CVC/, and /CV:/. Onset clusters of two consonants are common word-initially in Southeastern and Central, due to the loss of pretonic vowels; in Southeastern, at least, a transitional vowel is optionally inserted in these clusters (§3.1).

Three-consonant clusters can be found in Southern, as in /hiṭ:ank<sup>hč</sup>ʔin/ ‘thinking’, which Walker (2020: 59) analyzes as a simple coda followed by a complex onset /k<sup>hč</sup>ʔ/. Word-final clusters occur regularly in Kashaya when the /a/ of an evidential suffix is deleted, as in /sinamq<sup>h</sup>/ ‘he must have drowned’ with the circumstantial evidential suffix /-qa/.

Changes to consonants are especially common in the syllable coda, or before another consonant. Here I mention examples of consonant deletion. In Southern, most consonants become vowel length when preceding another consonant by affixation, as in /mi:-mač-ba/ → *mi:ma:ba* ‘having cried’ (Walker 2020: 66). In Southeastern, the consonants /d/ and /h/ are deleted before another consonant, as in /bṭed-lay/ → *bṭelay* ‘women’ (Moshinsky 1974: 26). In Kashaya, the glides /w y/ change to vowel length before another consonant, including across a word boundary, as in /ʔahay ʔanaw ʔahsiy/ → *ʔaha: ʔana: ʔahsiy* ‘very hard wood’ (Oswald 1961: 107).

A common source of consonant clusters in Southern is syncope (deletion of a vowel), which creates closed syllables. Here consonant deletion does not apply, as in /ha-ht̚-alokočʔ-in/ →



*haṭ:alokč'in* ‘take your foot up out of (it)!’ (Walker 2020: 94–95). Syncope is also found in Southeastern, as in /ʔo-mal-ay/ → *ʔomlay* ‘they (non-displaced)’ (Moshinsky 1974: 37).

### 3.6 Stress

Primary stress can be reconstructed on the second syllable of most words (McLendon 1973: 34). It falls on the initial syllable where the root is just one syllable in length; essentially, the stress does not move off the root of the word. It is likely that this pattern arose from a strictly morphological root-initial pattern; given the frequency of words containing an instrumental prefix (§5.1), this would most often correlate with the second syllable, and that generalization was extended to unprefixated roots of at least two syllables, such as *\*bih 'še* ‘deer’ and *\*šiʔ'ba* ‘body’ (Moshinsky 1976; Buckley 2014).

Continuing with these words, the pretonic syllable was deleted in Southeastern *bxe*, *xba* and Central *p'še*, *šba*; but it remains in the other languages, such as Northern *bi'še*, *ši'ba* and Eastern *bi: 'še*, *ši: 'ba*; the last two languages largely maintain the original second-syllable stresses. Southeastern has regular initial stress, since all pretonic vowels were deleted; in Central, stress is initial in words that have lost the first vowel, but remains on the second syllable when the first vowel is preserved (as in the case of /a/): *\*bah 'ša* ‘buckeye’ > *ba: 'ša* compared to Southeastern *bxa*. In Northeastern the stress has often moved to the first syllable, but in other cases remains on the second, as in *'behše* versus *šiʔ'ba*. The conditioning factors for this shift have not been determined.

Kashaya stress is the most complex of the family (Oswalt 1961, 1988). By default, stress falls on the second syllable if it is heavy, otherwise on the third syllable, and alternating (light) syllables undergo lengthening. This indicates a classic iambic foot pattern combined with extrametricality of the first syllable, which excludes it from being incorporated into a foot (Buckley 1994). This extrametricality is blocked if the root is unprefixated and monosyllabic (i.e. one syllable without a prefix, such as *mo-* ‘run’), which is a variant of the proto pattern that keeps stress on such roots. The pitch accent that realizes the main stress may further shift to a following foot, depending on the location of underlying long vowels. In all, accent can fall on any of the first five syllables.

According to Vihman (1976), the realization of accent in Northern Pomo as a particular pitch depends on whether the accented syllable contains a short or long vowel, and what sort of consonant (if any) occurs in the coda of the accented syllable. More recent work using recordings collected by Cathy O'Connor gives a somewhat different view. Shepardson (2008) finds that stress is on the second syllable by default but moves to a long vowel elsewhere in the word – an apparent unbounded pattern not attested in the other Pomoan languages. She also does not find evidence for

Vihman’s claim of a rising pitch on certain syllables containing a short vowel. Dailey (2020), working with a larger corpus, confirms a falling pitch on a CV: syllable in words that contain one. But in words that lack long vowels, there is a “default-to-opposite” pattern: the pitch peak (High tone) falls on the leftmost closed (CVC) syllable, otherwise on the final syllable of the word. The overall evidence suggests that Northern Pomo may have been developing a tonal contrast between Low and High tones.

The most striking outlier among the Pomoan stress systems is Southern, which has abandoned the left-orientation of the proto-language for a penultimate pattern, with stress regularly on the second syllable from the end of a word or phrase (Walker 2020). This is the dominant pattern in neighboring Coast Miwok, so the change is likely the result of contact (Buckley 2014).

### **3.7 Intonation**

Some descriptive grammars give basic information about sentence-level intonation; for example, Oswalt (1961) identifies three phrase-final contours in Kashaya (falling, level, and rising). An interesting feature of the rising contour in Kashaya is that it is associated not only with questions but also certain morphemes, in particular the responsive *-em* that indicates the speaker is responding to a previous utterance or action. Little instrumental work has been done on this topic in Pomoan, but Mithun (1993a, 2020b) analyzes the relation between constituent order and intonational patterns in Central. In particular, she argues that the reset of pitch level sentence-initially is the basis for the pragmatic role of initial versus final position in the sentence.

## **4 Noun morphology**

### **4.1 Pronouns**

The internal structure of nominals is considerably simpler than that of verbs in Pomoan. Participants in an event are expressed by independent pronouns rather than verb affixes, and these pronouns are not obligatory. They distinguish number in all persons, and gender in the third person singular. Case marking (§6.2) includes agent (the main person in control), patient (the one who undergoes some change), and oblique forms (for possessive or benefactive meanings) (McLendon 1976). This set from Northern Pomo is typical.

(3) Northern Pomo (O'Connor 1992: 170)

	AGENT	PATIENT	OBLIQUE
1ST SING.	<i>ʔa:</i>	<i>to:</i>	<i>toʔ / k<sup>h</sup>e</i>
1ST PLUR.	<i>ya</i>	<i>yal</i>	<i>yaʔ</i>
2ND SING.	<i>ma</i>	<i>miʔo</i>	<i>miʔ</i>
2ND PLUR.	<i>ma:</i>	<i>ma:l</i>	<i>maʔ</i>
3RD SING. MASC.	<i>mo:w</i>	<i>mo:wal</i>	<i>mo:waʔ</i>
3RD SING. FEM.	<i>ma:n</i>	<i>ma:dal</i>	<i>ma:daʔ</i>
3RD PLUR.	<i>p<sup>h</sup>ow</i>	<i>p<sup>h</sup>owal</i>	<i>p<sup>h</sup>owaʔ</i>

The third-person pronouns are often derived from demonstratives such as ‘that one’ and vary considerably across the languages (see especially Mithun 1990a). There is no dual number in pronouns, for exactly two persons (though Southeastern has dual vs. plural in motion verbs). Nor is there an inclusive/exclusive distinction in the first person, which would depend on whether ‘we’ includes the person addressed. Southeastern marks proximity (nearness) and displacement (non-visibility) in the third person (Moshinsky 1974: 99).

Case marking and especially number marking are often not required on nouns, but can be expressed by suffixes or enclitics, and are more common with animate or human referents. The languages have postpositions that follow the noun, unlike the prepositions of English and similar languages.

## 4.2 Possession

All the languages except for Northeastern<sup>4</sup> have a distinction between alienable and inalienable possession; this distinguishes relations that come and go, such as a house, versus those that are true throughout one’s life, such as an arm or mother. The oblique pronouns that mark alienable possession may overlap in function with a benefactive (‘for’) or other oblique meaning, and those that mark inalienable possession are the same (or similar) in form as the patient pronouns. Languages may differ in how relations such as ‘child’ are classified.

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<sup>4</sup> It shares this lack with the adjacent languages Yuki and Patwin, suggesting another effect of contact (Walker 2016a: 87).

(4) Southern Pomo (Walker 2020)

<i>ʔa:ʔo</i> <i>yaʔč<sup>h</sup>owa</i>	‘I do not want it’	(PAT)
<i>ʔa:ʔo</i> <i>ʔi:ʃan</i>	‘my arm’	inalienable possession (PAT)
<i>ʔawi:k<sup>h</sup>e</i> <i>ka:wiyā</i>	‘my children’	alienable possession (BEN)

In Eastern Pomo (McLendon 1975), the cognates of the inalienable possessives (her “Set I”) are restricted to certain kinship terms but are distinct from the inherited possessives for core kin vocabulary (§4.3).

(5) Eastern Pomo (McLendon 1975)

<i>wi</i> <i>q’a:lalmaya</i>	‘I got sick’	(PAT)
<i>wi</i> - <i>bayle</i>	‘my husband’	“inalienable” possession (PAT)
<i>wa-x</i> <i>ka</i>	‘my house’	“alienable” possession (GEN)

O’Connor (1996, 2007) gives a detailed discussion of possessor ascension (also called “external possession”) in Northern Pomo, whereby a body part receives patient rather than oblique marking under specific semantic and pragmatic conditions. In particular, the oblique possessive is typical when the body part is considered separate from the person, whereas patient case is preferred when the possessor is primary.

(6) Northern Pomo (O’Connor 1992: 268)

- a. *miʔ*      *ʔe:-nam*      *k’edi*      *p<sup>h</sup>iʔ’a*  
you.OBL    hair-SPEC    good    appear  
‘your hair looks nice’
- b. *miʔo*      *ʔe:-nam*      *k’edi*      *p<sup>h</sup>iʔ’a*  
you.PAT    hair-SPEC    good    appear  
‘you look nice with that hairstyle’

Mithun (2020c) argues that benefactive and patient-case pronouns in Central Pomo primarily mark the affectedness of a participant, and from which possession can be inferred. Thus, a sentence that would often be translated as ‘it stung his mouth’ is better seen as ‘it stung him in the mouth’.

In Southeastern Pomo, /-iṭ/ is ‘inalienable possession’ and /-iṭ-baq/ is ‘alienable possession’; it seems likely that the latter sequence of suffixes is related to /-iṭib/ ‘benefactive’ (Moshinsky 1974: 99). Note that in Eastern Pomo, the genitive takes the forms /-bax/ and /-x/, so that in both languages the /ba/ element may historically be separate from a /q/ or /x/ marking (alienable) possession, and may also be related to the /b/ in the Southeastern benefactive.

### 4.3 Kinship terms

McLendon (1973) reconstructs 20 roots in a special class of kinship terms, which stand out among nouns in their highly structured morphology. For example, in Kashaya ‘father’s father’ has the root /ba:/ and occurs in forms such as *ba:-s'e-ṭo* ‘my/our grandfather (PAT)’, *mi-ba:-s'e-ṭna* ‘where your (sg./pl.) grandfather is’, and *ma-ba:-s'e-yi* ‘with his/her/their own grandfather’. Note the lack of distinction for number or gender. Like other terms for older relatives, it has a reduplicated stem for informal first-person possession: *ba:ba-ṭo* ‘my grampa (PAT)’, *ba:ba-ṭo-ṭna* ‘where my grampa is’, and vocative *'ba:ba* without a suffix but with the first-syllable stress that characterizes vocatives in many languages.

In most of the languages, these roots take possessive prefixes that are distinct from the usual possessive pronouns. These Kashaya examples illustrate possession with the kinship root /ki/ ‘older brother’ versus the simple nouns *hayu* ‘dog’ (alienable) and *šahku* ‘leg’ (inalienable). Subject case is unmarked in these forms except in the first-person kinship, where it is the suffix /-n’/.

#### (7) Kashaya possessives (Oswalt 1961: 118)

	KINSHIP	ALIENABLE	INALIENABLE
1ST SING.		<i>k<sup>h</sup>e hayu</i>	<i>ṭo šahku</i>
1ST PLUR.	<i>ṭa:-ki-n'</i>	<i>yaṭk<sup>h</sup>e hayu</i>	<i>yal šahku</i>
2ND SING.		<i>miṭk<sup>h</sup>e hayu</i>	<i>miṭo šahku</i>
2ND PLUR.	<i>mi-ki</i>	<i>mayaṭk<sup>h</sup>e hayu</i>	<i>mayal šahku</i>
3RD SING. MASC.		<i>mu:kin'k<sup>h</sup>e hayu</i>	<i>mu:kiṭo šahku</i>
3RD SING. FEM.	<i>miya:-ki</i>	<i>ma:daṭk<sup>h</sup>e hayu</i>	<i>ma:dal šahku</i>
3RD PLUR.		<i>ma:caṭk<sup>h</sup>e hayu</i>	<i>ma:cal šahku</i>
3RD COREFERENTIAL	<i>ma-ki</i>	<i>ṭiṭk<sup>h</sup>e hayu</i>	<i>ṭiṭo šahku</i>

As seen for Kashaya, kinship terms do not mark the number or gender of the possessor (except by optional additional pronouns). They indicate first, second, or third person, and in the last category distinguish whether the possessor is coreferential with the subject of the main clause (see §6.3).

Special kinship morphology survives in Southeastern Pomo, but considerably altered thanks to the deletion of pre-tonic vowels. For example, a prefix /m-/ is associated with kinship terms more generally, including in first-person forms though not in vocatives (Moshinsky 1974: 102–103). It most likely represents a reinterpretation of possessive prefixes that started with this consonant, in particular second-person \*/mi-/ and third-person coreferential \*/ma-/.

## 5 Verb morphology

### 5.1 Instrumental prefixes

Twenty instrumental prefixes, which identify the body part or other instrument used to perform an action, or some other involvement of that instrument, can be reconstructed (McLendon 1973; Oswalt 1976). Thus \*/du-/ indicates an action by the finger, or something that happens to a finger. Quite specific meanings can arise by combining a prefix with a root that has a fairly general meaning, such as Eastern /-da-/ ‘force open, expose, generally by interrupting the enclosing surface’. All instrumental prefixes in Pomoan are from a basic \*/CV-/ structure, although individual languages may show deletion or lengthening of the vowel.

#### (8) Eastern Pomo (McLendon 1975: 41–56)

/di:-da-/	‘(watermelon) fall and shatter; hand be cut by sharp object slipping’
/du:-da-/	‘cut finger accidentally; split open with fingernail’
/ka:-da-/	‘cut open with knife’
/ma:-da-/	‘cut foot by stepping on glass’
/mu:-da-/	‘(overripe melon) split open by itself’
/p <sup>h</sup> i:-da-/	‘break open with axe, etc.’
/qa:-da-/	‘tear loose by biting; cut paper with scissors’

The original contrasts among prefixes survive best in Kashaya, Northeastern, and Eastern; introduction of a new prefix in Southern has shifted the meanings of several others, but they are also well attested. Some prefixes are merged in Northern due to the collapse of \*/u/ into /i/ in pretonic position; greater merger occurs in Central, since \*/i/ and \*/u/ are completely lost in the prefixes, and this can then affect the remaining initial consonant of the prefix, which undergoes

some mergers. In Southeastern, which lost all pretonic vowels, the original prefixal consonant is often best seen as part of a reanalyzed verb stem (Moshinsky 1974: 48).

## 5.2 Reduplication

Reduplication – the copying of one or two syllables of a verb stem – occurs in all the languages, mainly with a meaning of repetition or plurality. In Southeastern, it can more specifically indicate a repeated action that results in completion, as in /mte-mte-/ ‘pat down with the hands’, or plurality, as in /ʔna-ʔna-/ ‘one to tie several up’ (Moshinsky 1974: 47–48). In Kashaya, the iterative copies one syllable and indicates a few short repetitions: /pu-hṭ<sup>h</sup>e-/ ‘spread in the wind’, /pu-hṭ<sup>h</sup>e-hṭ<sup>h</sup>e-/ ‘flap in the wind’; while the frequentative copies two syllables and indicates repetition in quick succession: /šuhwen-šuhwe:n-/ ‘shake repeatedly’ (Oswalt 1961: 155–157, 176). The two are often related in plural formation as well: /šuhla-hla-/ ‘one be shiny’, /šuhla-šuhla-m-/ ‘several be shiny’.

Reduplication is also found as a recurrent pattern in nouns, but it is more idiosyncratic and normally an inherent part of the lexical item. Examples are Southeastern *t’un-t’un* ‘mole’, *tsilik-tsilik* ‘swallow’ (Moshinsky 1974: 45), and Kashaya *s’uʔnu-ʔnu* ‘huckleberry’, *biye:-ye* ‘sunflower’ (Buckley 1994: 273). It is more systematic in some kinship terms, as mentioned in section 4.3; Kashaya /ba:-ba-/ ‘my father’s father’ is one of a set of ten similar forms such as /pe:-pe-/ ‘my father’ and /ka:-ka-/ ‘my mother’s mother’.

## 5.3 Plurality

Verbs are widely marked for the plurality of the absolutive participant – that is, the patient or agent of an intransitive verb, and the patient of a transitive verb. More broadly, the plurality may derive from the nature of the event, since repeating the same action on a single object leads to plural marking as well (see especially Mithun 1988a and O’Connor 1992). Some verbs have unrelated stem forms in singular and plural, such as Central /čano:n/ ‘one is talking’, /lowač’/ ‘several are talking’. A prefix containing /l/ plus a copy of the vowel in the root syllable can be reconstructed to the proto-language; it occurs in Eastern as well as the Southern Group, but with relatively few verbs and always preceded by an instrumental prefix. Examples include Kashaya /da-č’u:-/ ‘break one in half with the hands’, /da-lu-č’u:-/ ‘break several in half’, and Eastern *ka:-xa*: ‘cut once’, *ka:-la-x* ‘cut more than once’ (with deletion of the original vowel in the root /-xa-/).

Most often, however, plurality is marked by suffixation. In descriptions of most of the languages, there are several plural markers that have different meanings: Central /-ma/ for collective agency versus /-t(a)/ for multiple events (Mithun 1988a: 524–526), and Southeastern plural participant /-y/ as well as dual /-tta/, a category not found in the other languages (Moshinsky

1974: 71–72). In Kashaya, many presumed prior distinctions have collapsed into a set of synonymous allomorphs that are partly conditioned by the preceding consonant, such as /-aq/ and /-ataq/ that occur after /l/ (Oswalt 1961: 167–177). Some affixes such as /-ta/ are infixes before a non-coronal stem-final consonant, otherwise suffixed: /qašo<ta>q-/ ‘several get well’, /diṭ’an-ta-/ ‘bruise several by dropping’ (see Buckley 2000). Similar plural allomorphs are found in Southern (Walker 2020: 188–194), and infixation of /-ta/ also occurs in Northern (O’Connor 1992: 59).

#### 5.4 Aspect

Characteristic verb marking in Pomoan emphasizes aspect (referring to the internal structure of an activity) such as perfective (completed) versus imperfective (ongoing) (Oswalt 1990). This can be contrasted with languages that mainly indicate tense, or the location of an activity in the future, present, or past. The languages have numerous suffixes that mark aspect of various kinds, including imperfectives that convey durative and habitual meanings (see especially Mithun 1990b). All the languages have cognate suffixes that mark imperfective or durative, containing \*/d/ or \*/l/; perfective or semelfactive (for an action performed once), containing \*/k/; and stative (for an ongoing state), containing \*/m/. Kashaya verbs can add all three suffixes to yield different meanings.

(9) Kashaya (Oswalt 1990: 46)

<i>ʔdo-m-</i>	‘hold the hand out’ (STAT)
<i>ʔdo-m-či-</i>	‘put the hand out’ (STAT-PFV)
<i>ʔdo-m-či-med-</i>	‘keep putting the hand out’ (STAT-PFV-DUR)

Often, where a single imperfective suffix indicates an ongoing action, a second imperfective can convey habitual action.

(10) Central Pomo (Mithun 1990b: 63, 71)

<i>ča:no-w</i>	‘vocalize; sing’ (PFV)
<i>ča:no:n</i>	‘talk’ (IPFV)
<i>ča:no:d-an</i>	‘habitually talk’ (IPFV-IPFV)

Many of the languages also have various means of indicating tense that may include other components as well. For instance, Kashaya has a future suffix /-ʔk<sup>h</sup>e/ that is quite common and



can also occur in contexts that suggest an irrealis meaning for an action that has not happened yet; a similar overlap exists in Central. Northern has a suffix /-e/ that indicates “present relevance” and can refer to events that are occurring, or have just occurred, so that it is not a simple present tense marker (O’Connor 1992: 41).

## 5.5 Evidentials

All the Pomoan languages have evidential suffixes or clitics that indicate the source of information reported by the speaker (McLendon 2003); they vary in number across the languages, although all have at least three.<sup>5</sup> Meanings include hearsay or quotative, inferential reasoning, and direct witness by sight or other means. The systems are most complex in the Southern Group (Mithun 2020a; Oswalt 1986a).

(11) Eastern Pomo (McLendon 1975: 87–100)

<i>ts’ets’e-nk’e</i>	‘I feel something sticking me’	(non-visual perception)
<i>xa na:p<sup>h</sup>o-:le</i>	‘they lived (I heard tell)’	(hearsay)
<i>tsa:rʔi-ne</i>	‘it must be clean’	(logical inference)

Some evidentials are largely cognate across the family (though not in Eastern), such as a hearsay including the string /do/ and a visual or direct experience with the basic form /ya/.

## 5.6 Directionals

All the languages (again with uncertainty for Northeastern) include a class of morphemes that indicate the direction of movement, often in a highly systematic set. For example, Southern includes /-mač/ ‘in, away from speaker’ and /-ok/ ‘out, toward speaker’ when the speaker is outside, versus /-mok/ ‘in, toward speaker’ and /-ak/ ‘out, away from speaker’ when the speaker is inside (Walker 2020: 205). In most languages they are suffixes, but in Eastern and Southeastern the suffixes are outnumbered by elements that precede the verb (Moshinsky 1974: 55–62; McLendon 1975: 133–135; Halpern 1982). Locative-directional marking is a feature of the Northern Hokan languages among which Pomoan has been classified (Jany 2017: 279–280).

A few directionals have extended uses that relate to the local geography. In Kashaya, two suffixes combine the meanings ‘out’ and ‘to the north or west’, while two others mean ‘in’ alongside ‘to the south or east’. This correlation likely originated in the fact that the Gualala River, which runs through Kashaya territory, flows northwest along the coastline and then turns abruptly

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<sup>5</sup> Evidence for Northeastern remains uncertain, though a possible such suffix is listed by Walker (2016b: 96).

to empty into the Pacific Ocean (Oswalt 1976: 23). The other Western languages display an opposite association, with ‘in’ as ‘north’ and ‘out’ as ‘south’, which may in turn relate to the southerly flow of the Russian River.

## 6 Syntax

### 6.1 Constituent order

The most common ordering of phrasal constituents in all the Pomoan languages appears to be subject–object–verb, or SOV. The strongest generalization is for the verb to be final in the clause; example (12b) shows a final verb in the main clause as well as in the complement clause.

(12) Southeastern Pomo (Moshinsky 1974: 108, 113)

- a. *wiy bxe mdoqat*  
we deer killed  
‘we killed the deer’
- b. *ʔuyi [ ʔa ba ts'indo ] munya*  
he I SUBJ did said  
‘he said [ that I did it ]’

In at least some of the languages arguments can follow the verb. In Kashaya, subordinate clauses are strictly verb-final (Olsson 2010); in main clauses the verb need not be final, but deviations are sometimes explicitly marked. A non-final verb suffix /-e:/ occurs on evidential and modal verbs when another element follows in the clause, and a clitic /=?/ occurs at the end of an imperative sentence when the verb is not final (Oswalt 1961; Buckley 2015). The relative ordering of the subject (agent) and object (patient) is freer and generally depends on pragmatic factors; for example, Central is mainly SOV but the patient may be initial as the focus or topic, or after the verb as repeated information (Mithun 1993a).

### 6.2 Case marking

The Pomoan family is well known for case marking that does not follow common notions of subject (for intransitive and transitive verbs) versus object (only for intransitive verbs). Instead, the most relevant notions are agent and patient (McLendon 1978; Mithun 1991, 2008; O’Connor 1992). Patterns like this have sometimes been called “fluid-S systems” (Deal & O’Connor 2010),

but in Pomoan this label is misleading, as the categorization is not restricted to intransitives or subject (S) arguments. In particular, core arguments can be marked with either agent or patient case, depending on factors such as those discussed below. Northeastern again stands apart, and does not have the same case marking: the inherited agent/patient system has been recast as nominative/accusative (Walker 2016a), as also found in its eastern neighbors, the Wintuan languages.

Although the use of these case markers has not been thoroughly studied in all the languages, generally speaking agent case is used for participants viewed as being in control of the situation, and patient case for those who lack control and are affected by it. Certain verbs can occur with either case, depending on the nature of control or intention.

(13) Central Pomo (Mithun 1991: 518–520)

<i>ʔa: maɬ'ém</i>	‘I stepped on it (intentionally)’ (AGT)
<i>ʔo: maɬ'ém</i>	‘I stepped on it (accidentally)’ (PAT)

(14) Eastern Pomo (McLendon 1978: 3)

<i>há: c'e:xélka</i>	‘I am sliding’ (AGT)
<i>wí c'e:xélka</i>	‘I am slipping’ (PAT)

Patient case indicates the speaker is taking the perspective of that referent, and this can correspond to greater expressiveness if the patient case is chosen for a verb of internal experience on the part of the speaker. By contrast, the agent case suggests an unusual detachment from personal involvement in the experience.

(15) Northern Pomo (Deal & O’Connor 2010: 186)

<i>ʔa: diɬ<sup>h</sup>ale</i>	‘I am/was sick’ (AGT) : simple statement of fact
<i>ʔo: diɬ<sup>h</sup>ale</i>	‘I am/was sick’ (PAT) : said with dismay

Since use of patient case depends on an expression of empathy by the speaker, certain verbs can occur with two patient-case or two agent-case arguments (Mithun 1991: 523).

Many languages have passive structures in which an object is promoted to a subject, as when English *she ate the apple* becomes *the apple was eaten*. The Pomoan languages are characterized by non-promotional passives that do not create a new subject in this way. They may

relate instead to topic structure; for instance, Central Pomo /-(y)a/ indicates that “the agent of a clause is not the topic”, contrary to the most common choice of topic (Mithun 1988b: 42). In Northern Pomo, related /-ya/ is similar in that there is no expression of a subject argument (O’Connor 1992). As discussed by O’Connor & Maling (2014), the analysis of patterns like this can depend strongly on the author’s overall theory of language structure and function.

### 6.3 Coreference

The four Western languages (with the root /ʔi/), as well as Eastern Pomo (/hi:/), have third-person pronouns that require coreference with the subject of the immediate or higher clause; O’Connor (1992: 285) calls these non-clause-bounded reflexives. They are similar in function to logophoric pronouns, where “special elements are found in complements of verbs of speech” (p. 313) – in particular, a special pronoun that indicates the subject of the verb of speaking refers to the same person as a participant stated in the reported speech. In Pomoan, however, these elements can occur in broader contexts.

In this example from Kashaya, the coreference is not with the subject of the embedded verb ‘kill’ but with the higher verb ‘hear’.

(16) Kashaya (Oswalt 1964a)

<i>mul</i>	<i>šoʔ</i>	<i>ʔima:ʔa</i>	<i>ʔem</i>	[	<i>ʔi-ʔo</i>	<i>pʰakʰum-ʔkʰe</i>	]
this	heard	woman	the.AGT		3.COREF-PAT	kill-FUT	
‘the woman <sub>i</sub> heard [ they were going to kill <b>her</b> <sub>i</sub> ]’							

If it were a different female referent as the object of ‘kill’, the regular pronoun /ma:dal/ ‘her’ would be used. The meaning ‘kill herself’ would be expressed by a reflexive suffix /-ičʰ/ on the verb.

The possessive prefix \*/ma-/ found in kinship terms (§4.3) has the same essential function of coreference.

(17) Kashaya (Oswalt 1964a)

<i>mahʰel cahqaw</i>	‘they <sub>i</sub> showed it to <b>their</b> <sub>i</sub> (own) mother’
<i>miya:ʰel qʰadeʔ</i>	‘they <sub>i</sub> went to get <b>his</b> <sub>j</sub> mother’

Mithun (1990a) shows for Central that these pronouns can also be used in reference to a participant who is not named in the sentence, but with whom the speaker empathizes by taking that point of

view. There are no reports of coreferential pronouns in Northeastern (perhaps due to limited documentation) or Southeastern (due either to loss from the proto-language, or introduction of the distinction after Southeastern had split off).

#### 6.4 Switch reference

An additional property related to coreference across clauses is the switch reference system found throughout the family (though not currently reported for Northeastern). These are suffixes that mark a dependent verb for whether its subject or agent is the same as the corresponding argument of another verb, most often that of the main clause (Oswalt 1983). The suffixes may distinguish whether the events are simultaneous or sequential, and whether they have occurred (realis) or have not yet occurred (irrealis). These pairs of sentences illustrate sequential realis marking, with same and different subjects.

(18) Eastern Pomo (McLendon 1978: 7)

- a. *ha: kaluhu-y si:ma: merqaki:hi*  
 I went.home-SS.SEQ sleep lay.down  
 ‘I went home and then went to bed’
- b. *ha: kaluhu-qan mi:p’ merqaki:hi*  
 I went.home-DS.SEQ he lay.down  
 ‘I went home and then he went to bed’

(19) Southern Pomo (Walker 2020: 254)

- a. *ča:du-ba daʔʔ’a-w*  
 look-SS.SEQ find-PFV  
 ‘he<sub>i</sub> looked and (he<sub>i</sub>) saw’
- b. *ʔa:ʔa ʔač:a ča:du-ka-:li daʔʔ’a-w*  
 I inside look-CAUS-DS.SEQ find-PFV  
 ‘I<sub>i</sub> let him<sub>j</sub> look inside and he<sub>j</sub> found it’

The Pomoan languages often deploy suffixes of this general category in ways that are sensitive to questions other than identity of reference across clauses. O’Connor (1983) shows that supposedly

“different subject” suffixes in Northern can have the same reference depending on the larger semantic context. Mithun (1993b) argues that in Central, the identity of subject or agent is secondary to the primary purpose of indicating whether the clauses are construed as describing aspects of a single event.

## 7 Revitalization and orthographies

There are revitalization efforts in place for a range of Pomoan languages, many led by members of the local tribes. As a simple example, I belong to a Facebook group for those interested in all the Pomoan languages, mainly tribal members. Most of the posting activity involves Central, Northern, and Southern; less so Kashaya and Southeastern. There are, however, also members interested in Eastern<sup>6</sup> and Northeastern.

Kashaya and Southeastern may be less represented on this forum because they host in-person language classes. The Kashia Band of Pomo Indians of Stewarts Point Rancheria holds a monthly class at which at least two native speakers are generally present. I have worked with the Kashia Band, and have created a website of Kashaya resources including links to the Webonary dictionary site, various word lists, and two Android apps for language learning.<sup>7</sup>

The Southeastern Pomo similarly hold regular classes (through the Koi Nation), and there is a searchable dictionary of vocabulary at Berkeley with about a thousand recordings from members of the Elem Indian Colony.<sup>8</sup>

Alex Walker worked formerly with the Dry Creek Rancheria Band of Pomo Indians. That Southern Pomo class lasted from 2011–2014, and then was revived in 2016–2017 by remote video after Alex had moved away; but the 2017 fire that ravaged Santa Rosa brought this to an end. Still, there are some former students who have mastered considerable vocabulary.

Cathy O’Connor of Boston University is working with several Northern Pomo groups on their language, and has created a website that includes a dictionary and other resources.<sup>9</sup> She and other linguists have collaborated with the Redwood Valley Rancheria to organize two weekend language camps (Ko, et al. 2019).

Distinct orthographies exist for the different languages. The notation used in this chapter is essentially the same as that in Walker (2020), with explicit marking of the two sorts of /t/ and a colon for vowel length, except that /c/ is used there for what I write as /ts/. Other orthographies vary along these lines as well. Oswalt (1961) has /t/ for the dental stop and /t̥/ for the alveolar and uses /c/ for what I write here as /č/. He writes /·/ for vowel length, as do most linguists, except that

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<sup>6</sup> See <http://cimcc.org/epomo/> for a searchable dictionary.

<sup>7</sup> See <http://https://www.ling.upenn.edu/~gene/kashaya.html> and <https://www.webonary.org/kashaya/>.

<sup>8</sup> See <http://linguistics.berkeley.edu/~sepomo/> with many audio files, mainly from Loretta Kelsey.

<sup>9</sup> See <https://northernpomolanguagetools.com/>, which includes many phrases as well as words.

Mithun's earlier work uses a doubled vowel. Moshinsky (1974), McLendon (1975), and O'Connor (1992) have /c/ for /ts/. Some later work, such as Mithun (1988a, et seq.) and Deal & O'Connor (2010), has /t̥/ for the dental and plain /t/ or explicit /t̥/ for the alveolar. Most of the other aspects of pronunciation are fairly consistently transcribed in the literature.

As we move to practical orthographies, a stronger influence of English spelling comes into play. Perhaps the most standardized is Southeastern Pomo, where /č/, /š/ are usually written *ch*, *sh*. In a nod to the interdental pronunciation of the fricative in *thing*, the dental stop is written *th*. Some other highlights include the digraphs *ee*, *oo* for /i/, /u/, and *u* for the inserted schwa vowel, based on short *u* in English. There is no distinctive aspiration in Southeastern Pomo, so the need to add an *h* to digraphs like *ch*, *th* does not arise.

In Northern Pomo, one strategy for dealing with aspiration is to use *j* for unaspirated /č/, and *ch* for the aspirated version of this sound, based on the usual English distribution of surface aspiration. The Northern Pomo online dictionary adopts this approach, and also has *ts* for the alveolar affricate. The online dictionary of Eastern Pomo largely uses *g*, *k* for /k/, /k<sup>h</sup>/, as well as a doubled vowel for length. For most of the languages, non-linguists have created a variety of transcriptions to suit their purposes.

## 8 Conclusion

The seven Pomoan languages demonstrate strong resemblances across many aspects of linguistic structure, despite divergences by individual languages in a variety of ways. The most distinctive of the languages is Southeastern, which split off first from the rest of the family. A different sort of outlier is Northeastern, which was geographically isolated from the other languages and shows clear signs of influence due to contact with non-Pomoan languages. It is also the least well understood, however, so more points of similarity may be come to light as work on its description continues.

## 9 References

- Barrett, Samuel A. 1908. The ethnography of Pomo and neighboring Indians. *University of California Publications in American Archaeology and Ethnology* 6(1). 1–332.
- Basgall, Mark E. 1982. Archaeology and linguistics: Pomoan prehistory as viewed from northern Sonoma County, California. *Journal of California and Great Basin Anthropology* 4(1). 3–22.

- Bright, William. 1978. Sibilants and naturalness in aboriginal California. *Journal of California Anthropology, Papers in Linguistics* 1. 39–63.
- Buckley, Eugene. 1994. *Theoretical aspects of Kashaya phonology and morphology*. Stanford, CA: Center for the Study of Language and Information.
- Buckley, Eugene. 2000. Explaining Kashaya infixation. *Proceedings of the Berkeley Linguistics Society* 23. 14–25.
- Buckley, Eugene. 2014. Pomoan stress: Change, contact, and reanalysis. Minconference on Metrical Structure. Utrecht University, April 15-17.
- Campbell, Lyle. 1997. *American Indian languages: The historical linguistics of Native America*. Oxford: Oxford University Press.
- Crawford, J. Grey. 1973. *A comparison of Pomoan and Yuman*. Pocatello, ID: Idaho State University MA thesis.
- Dailey, Brady. 2020. Word level prosody in Northern Pomo. Paper presented at the Society for the Study of the Indigenous Languages of the Americas. New Orleans, January 3.
- Deal, Amy Rose & Catherine O'Connor. 2010. The perspectival basis of fluid-S case-marking in Northern Pomo. In Suzi Lima (ed.), *Proceedings of SULA 5: Semantics of Under-Represented Languages in the Americas*, 173–188. Amherst, MA: Graduate Linguistic Student Association.
- Dixon, Roland B. & Alfred L. Kroeber. 1913. New linguistic families in California. *American Anthropologist* 15. 647–655.
- Golla, Victor. 2011. *California Indian languages*. Berkeley & Los Angeles: University of California Press.
- Goodman, Beverley. 1992. Implications of Pomo epenthesis for a theory of syllabification. *Chicago Linguistic Society* 26(2), *Parasession on the syllable in phonetics and phonology*, 143–157.
- Halpern, Abraham M. 1964. A report on a survey of Pomo languages. In William Bright (ed.), *Studies in Californian languages* (University of California Publications in Linguistics 34), 88–93. Berkeley & Los Angeles: University of California Press.
- Halpern, Abraham M. 1982. Southeastern Pomo directionals. In James E. Redden (ed.), *Proceedings of the 1981 Hokan-Penutian Languages Conference*, 53–63. Carbondale, IL: Department of Linguistics, Southern Illinois University.
- Halpern, Abraham M. 1984. Southern Pomo h and ? and their reflexes. *Journal of California and Great Basin Anthropology Papers in Linguistics* 4. 3–43.
- Jany, Carmen. 2017. The Northern Hokan area. In Michael Fortescue, Marianne Mithun & Nicholas Evans (eds.), *The Oxford handbook of polysynthesis*, 260–283. Oxford: Oxford University Press.



- Kaufman, Terrence. 2006. Hokan languages. In Keith Brown (ed.), *Encyclopedia of language and linguistics*, 2nd edn., 365–372. Amsterdam: Elsevier.
- Ko, Edwin, Julia Nee, Catherine O'Connor & Erica Carson Jr. 2019. Blended language learning in a language revitalization context. Paper presented at the SSILA Summer Meeting, University of California at Davis, July 13.
- Langdon, Margaret. 1979. Some thoughts on Hokan with particular reference to Pomoan and Yuman. In Lyle Campbell & Marianne Mithun (eds.), *The languages of Native America: Historical and comparative assessment*, 592–649. Austin: University of Texas Press.
- McLendon, Sally. 1969. Spanish words in Eastern Pomo. *Romance philology* 23(1). 39–53.
- McLendon, Sally. 1973. *Proto-Pomo* (University of California Publications in Linguistics 71). Berkeley & Los Angeles: University of California Press.
- McLendon, Sally. 1975. *A grammar of Eastern Pomo* (University of California Publications in Linguistics 74). Berkeley & Los Angeles: University of California Press.
- McLendon, Sally. 1976. The Proto-Pomo pronominal system. In Margaret Langdon & Shirley Silver (eds.), *Hokan studies: Papers from the First Conference on Hokan Languages, held in San Diego, California, April 23–25, 1970*, 29–53. Berlin: Mouton de Gruyter.
- McLendon, Sally. 1978. Ergativity, case, and transitivity in Eastern Pomo. *International Journal of American Linguistics* 44(1). 1–9.
- McLendon, Sally. 2003. Evidentials in Eastern Pomo with a comparative survey of the category in other Pomoan languages. In A. Y. Aikhenvald & R. M. W. Dixon (eds.), *Studies in evidentiality*, 101–129. Amsterdam & Philadelphia: John Benjamins.
- McLendon, Sally. 2006. Pomoan languages. In Keith Brown (ed.), *Encyclopedia of language and linguistics*, 2nd edn., 748–753. Amsterdam: Elsevier.
- McLendon, Sally & Robert L. Oswalt. 1978. Pomo: Introduction. In R.F. Heizer (ed.), *Handbook of North American Indians, Vol. 8, California*, 274–288. Washington, DC: Smithsonian Institution.
- Mithun, Marianne. 1988a. Lexical categories and number in Central Pomo. In William Shipley (ed.), *In honor of Mary Haas*, 517–537. Berlin: Mouton de Gruyter.
- Mithun, Marianne. 1988b. The “passive” in an active language. In James E. Redden (ed.), *Proceedings of the 1987 Hokan-Penutian Languages Workshop and Friends of Uto-Aztecan Workshop* (Southern Illinois Occasional Papers on Linguistics 14), 39–45. Carbondale, IL: Department of Linguistics, Southern Illinois University.
- Mithun, Marianne. 1990a. Third-person reference and the function of pronouns in Central Pomo natural speech. *International Journal of American Linguistics* 56(3). 361–376.
- Mithun, Marianne. 1990b. The role of lexicalization in shaping aspectual systems. In James E. Redden (ed.), *Proceedings of the 1990 Hokan-Penutian Languages Workshop and Friends*

- of Uto-Aztecan Workshop* (Southern Illinois Occasional Papers on Linguistics 15), 62–74. Carbondale, IL: Department of Linguistics, Southern Illinois University.
- Mithun, Marianne. 1991. Active/agentive case marking and its motivations. *Language* 67(3). 510–546.
- Mithun, Marianne. 1993a. Prosodic determinants of syntactic form: Central Pomo constituent order. *Berkeley Linguistics Society* 19, *Special session on syntactic issues in Native American languages*, 86–106.
- Mithun, Marianne. 1993b. “Switch-reference”: Clause combining in Central Pomo. *International Journal of American Linguistics* 59(2). 119–136.
- Mithun, Marianne. 1999. *The languages of Native North America*. Cambridge: Cambridge University Press.
- Mithun, Marianne. 2007. Grammar, contact, and time. *Journal of Language Contact* 1(1). 144–167.
- Mithun, Marianne. 2008. The emergence of agentive systems in core argument marking. In Mark Donohue & Søren Wichmann (eds.), *The typology of semantic alignment*, 297–333. Oxford: Oxford University Press.
- Mithun, Marianne. 2020a. Context and consciousness: Documenting evidentials. In Karolina Brzech, Eva Schultze-Berndt & Henrik Bergqvist (eds.), *Knowing in interaction: Empirical approaches to epistemicity and intersubjectivity in language*. Special issue of *folia Linguistica* 2020. 54.2, 317–342. DOI: <https://doi.org/10.1515/flin-2020-2045>.
- Mithun, Marianne. 2020b. Prosody and the organization of information in Central Pomo, a California indigenous language. In Heliana Mello, Shlomo Izre’el, Tommaso Raso & Alessandro Panunzi (eds.), *In search of basic units of spoken language: A corpus-driven approach*, 107–126. Amsterdam: John Benjamins.
- Mithun, Marianne. 2020c. Topicality, affectedness, and body-part grammar. In Roberto Zariquiey (ed.) *The grammar of body parts*. Oxford, UK: Oxford University Press.
- Moshinsky, Julius. 1974. *A grammar of Southeastern Pomo* (University of California Publications in Linguistics 72). Berkeley & Los Angeles: University of California Press.
- Moshinsky, Julius. 1976. Historical Pomo phonology. In Margaret Langdon & Shirley Silver (eds.), *Hokan studies: Papers from the First Conference on Hokan Languages, held in San Diego, California, April 23–25, 1970*, 55–75. Berlin: Mouton de Gruyter.
- O’Connor, M.C. 1983. *Does Northern Pomo have switch-reference? An examination of interclausal syntax and semantics*. M.A. thesis, University of California, Berkeley.
- O’Connor, M.C. 1992. *Topics in Northern Pomo grammar*. [Garland Series of Outstanding Dissertations in Linguistics]. New York: Garland Publishing.

- O'Connor, M.C. 1996. The situated interpretation of possessor raising. In S.Thompson & M. Shibatani (eds.), *Grammatical constructions: Their form and meaning*, 125–156. Oxford: Oxford University Press.
- O'Connor, M.C. 2007. External possession and utterance interpretation: A crosslinguistic exploration. *Journal of Linguistics* 45(3). 577–613.
- Catherine O'Connor & Joan Maling. 2014. Non-promotional passives and unspecified subject constructions: Navigating the typological Kuiper Belt. In Stacey Katz Bourns & Lindsay L. Myers (eds.), *Perspectives on linguistic structure and context: Studies in honor of Knud Lambrecht*, 17–38. John Benjamins.
- Olsson, Bruno. 2010. *Subordinate clauses in Kashaya Pomo*. Stockholm University MA thesis.
- Oswalt, Robert L. 1958. Russian loanwords in Southwestern Pomo. *International Journal of American Linguistics* 24. 245–247.
- Oswalt, Robert L. 1961. *A Kashaya grammar (Southwestern Pomo)*. Berkeley, CA: University of California dissertation.
- Oswalt, Robert L. 1964a. *Kashaya texts* (University of California Publications in Linguistics 36). Berkeley & Los Angeles: University of California Press.
- Oswalt, Robert L. 1964b. A comparative study of two Pomo languages. In William Bright (ed.), *Studies in Californian languages* (University of California Publications in Linguistics 34), 149–162. Berkeley & Los Angeles: University of California Press.
- Oswalt, Robert L. 1964c. The internal relationships of the Pomo family of languages. *Actas y memorias del XXXV Congreso Internacional de Americanistas (Mexico, 1962)*, vol. 2, 413–427.
- Oswalt, Robert L. 1975. *K'ahśá:ya cahno kalikak<sup>h</sup> (Kashaya vocabulary)* (Working Paper No. 32, Kashaya Language in Culture Project). Sonoma, CA: Department of Anthropology, California State College.
- Oswalt, Robert L. 1976. Comparative verb morphology of Pomo. In Margaret Langdon & Shirley Silver (eds.), *Hokan studies: Papers from the First Conference on Hokan Languages, held in San Diego, California, April 23–25, 1970*, 13–28. Berlin: Mouton de Gruyter.
- Oswalt, Robert L. 1977. The Hokan word for 'tongue': The Pomo evidence. *University Museum Studies* 11. 69–78. Carbondale, IL: University Museum, Southern Illinois University.
- Oswalt, Robert L. 1983. Interclausal reference in Kashaya. In John Haiman & Pamela Munro (eds.), *Switch reference and universal grammar: Proceedings of a symposium on switch reference and universal grammar, Winnipeg, May 1981* (Typological Studies in Language 2), 267–290. Amsterdam & Philadelphia: John Benjamins.

- Oswalt, Robert L. 1986a. The evidential system of Kashaya. In Wallace L. Chafe & Johanna Nichols (eds.), *Evidentiality: The linguistic coding of epistemology* (Advances in Discourse Processes 20), 29–45. Norwood, NJ: Ablex.
- Oswalt, Robert L. 1988. The floating accent of Kashaya. In William Shipley (ed.), *In honor of Mary Haas*, 611–621. Berlin: Mouton de Gruyter.
- Oswalt, Robert L. 1990. The perfective-imperfective opposition in Kashaya (with comparative comments on Southern Pomo and Pomoan). In James E. Redden (ed.), *Proceedings of the 1990 Hokan-Penutian Languages Workshop* (Southern Illinois Occasional Papers on Linguistics 15), 43–51. Carbondale, IL: Department of Linguistics, Southern Illinois University.
- Oswalt, Robert L. 1998. Three laryngeal increments of Kashaya. In Leanne Hinton & Pamela Munro (eds.), *Studies in American Indian languages: Description and theory* (University of California Publications in Linguistics 131), 87–94. Berkeley & Los Angeles: University of California Press.
- Sapir, Edward. 1917. The position of Yana in the Hokan stock. *University of California Publications in American Archaeology and Ethnology* 13(1). 1–34.
- Shepardson, Rebecca. 2008. *A study of tonal distinctions in Northern Pomo*. Boston, MA: Boston University MA thesis.
- Vihman, Eero. 1976. On pitch accent in Northern Pomo. In Margaret Langdon & Shirley Silver (eds.), *Hokan studies: Papers from the First Conference on Hokan Languages, held in San Diego, California, April 23–25, 1970*, 77–83. Berlin: Mouton de Gruyter.
- Walker, N. Alexander. 2016a. Assessing the effects of language contact on Northeastern Pomo. In A.L. Berez-Kroeker, Diane M. Hintz & Carmen Jany (eds.), *Language contact and change in the Americas: Studies in honor of Marianne Mithun*, 67–90. Amsterdam & Philadelphia: John Benjamins.
- Walker, N. Alexander. 2016b. A working lexicon of the Northeastern Pomo language. Ms., Western Institute for Endangered Language Documentation. [http://wieldoc.org/?page\\_id=528](http://wieldoc.org/?page_id=528) (accessed 29 November 2018).
- Walker, N. Alexander. 2020. *A grammar of Southern Pomo*. Lincoln, NE: University of Nebraska Press.
- Webb, Nancy. 1971. Statement of some phonological correspondences among the Pomo languages. *International Journal of American Linguistics* 37(3), supplement Part II. 157–174.
- Whistler, Kenneth W. 1988. Pomo prehistory: A case for archaeological linguistics. *Journal of the Steward Anthropological Society* 15(1-2). 64–98.