

TONKAWA

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THE Tonkawa appear to have been an important and war-like tribe who lived in central Texas during most of the 18th and 19th centuries. The remnants of this group, less than forty in all, today live in the vicinity of Tonkawa, Oklahoma.

The first linguistic material on the Tonkawa was collected by two German travelers to Texas. This data was turned over to Dr. A. S. Gatschet, who reported on it in three short papers.¹ Later (ca. 1884) Dr. Gatschet collected additional material which has, as far as I know, never been published.

Powell classified Tonkawa as an independent linguistic stock, presumably on the basis of the data gathered by Gatschet.² In 1915, Swanton compared Tonkawa with the scanty materials available on the Coahuiltecan languages. As a result of this comparison, he set up a new Coahuiltecan stock with two subdivisions, one including Coahuilteco proper, Comecrudo, and possibly Karankawa; and the other, Cotoname and Tonkawa.³ In 1920, Sapir made a comparison between the Coahuiltecan of Swanton and the California Hokan languages. This brought out the important fact that Tonkawa and the Coahuiltecan languages may be remotely related to the Hokan languages of California.⁴

My material on Tonkawa was collected in 1928 and 1929 from one of the six remaining speakers of the language. A descriptive grammar based upon this data has been published⁵ but I have not yet had the opportunity of testing either of the above-mentioned hypotheses in the light of my more complete data.

The sketch that follows is essentially a brief summary of the longer descriptive account. I have, however, made several important changes in both the orthography and the phonological discussion. My earlier account of the phonology was in

¹ A. S. Gatschet, *Die Sprache der Tonkawas* (Zeitschrift für Ethnologie, vol. 9, pp. 64-73, 1877), *Remarks upon the Tonkawa Language* (Proceedings of the American Philosophical Society, vol. 16, 1876, pp. 318-327); *Zwölf Sprachen aus dem Südwesten Nordamerikas* (Weimar, 1876).

² J. W. Powell, *Indian Linguistic Families of America North of Mexico* (7th Annual Report of the Bureau of American Ethnology, 1891), p. 125.

³ John R. Swanton, *Linguistic Position of the Tribes of Southern Texas and Northeastern Mexico* (American Anthropologist, n.s., vol. 17, 1915, pp. 17-40).

⁴ E. Sapir, *The Hokan and Coahuiltecan Languages* (International Journal of American Linguistics, vol. 1, 1920, pp. 280-290); *The Hokan Affinity of Subtiaba in Nicaragua* (American Anthropologist, n.s., vol. 27, 1925, pp. 491-527).

⁵ Harry Hoijer, *Tonkawa, An Indian Language of Texas* (In Handbook of American Indian Languages, pt. 3, 1933, pp. 1-148).

many respects poorly done; the revision, I believe, takes care of most of its defects. The orthographic changes may briefly be summarized as follows:

Old	New	Old	New
b	p	ʔ	ʔ
d, t	t	c, s	s
g, k	k	xw	x ^w
gw, kw	k ^w	dj, dz, tc	c

m, n, w, y, and l are the same in both orthographies. The sounds t' and k' have been eliminated; it is clear that glottalized stops occur only in abnormally slow speech. kw', c', x', xw', m', n', w', y', l', and t'c have throughout been interpreted as the clusters k^wʔ, sʔ, xʔ, x^wʔ, mʔ, nʔ, wʔ, yʔ, lʔ, and cʔ, respectively.

1. THE PHONOLOGY

§1. The consonants.

POSITION OF ARTICULATION	VOICELESS			VOICED	
	Stops	Affricates	Spirants	Nasals	Frictionless Continuants
Bilabial	p			m	w
Dental	t	c	s	n	l
Palatal	k		x		y
Labiodental	k ^w		x ^w		
Faucal	ʔ		h		

p, t, k, and k^w are voiceless, unaspirated, and lenis. In the final position of the word or syllable they may be unexploded as well. There is no noticeable variation otherwise. Examples: pax "just," hacip "hole," kopul "round"; tan "tail," hex^wit "belt," na·ton "mountain"; kapay "nothing," ʔok "hide," makik "yellow"; k^wa·n "woman," na·k^w "go ahead," k^wa·k^wan "woman."

The glottal stop is clearly pronounced and does not vary noticeably in pronunciation: ʔa·x "water," ʔoʔoʔ "owl," ʔo·ʔon "blood veins."

c may be heard in either the dental or blade-alveolar position, though the latter is probably most common. The variation appears to be wholly random. In final position c, like the stops, is often unexploded. Examples: cakow "river," ha·c "land, earth," yacak "small, little."

s, too, is pronounced either as a blade-alveolar spirant (roughly similar to the

initial of ship) or as a dental. The former pronunciation is especially characteristic of final s; the latter, varying with the former, of s in the initial position. Examples: samox "red," losos "all," ?awas "buffalo."

x is a palatal spirant not unlike the ch of German lachen and x^w is the same sound plus strong labialization. Both vary in position of articulation, being front-palatal before e and i and mid- or back-palatal before a, o, and u. Examples: xa "fat, grease," xe:cwal "alligator," hoxolo:ko "shell," henox "pretty"; x^we:nkoxo? "he puts on his pants," hex^wit "belt," c^wax^w "cloth."

h is a light faucal aspiration which occurs only initially and medially. Examples: henox "pretty," ?ahen "daughter."

m and n are roughly similar to the initials of mad and neck, respectively, except that n is dental rather than alveolar. In final position both m and n become syllabic. Examples: maslak "white," hemaxan "chickens," me:m "cheeks"; nekak "vine," hanil "rat," hayon "itchy."

w, l, and y are similar to the initials of war, light, and young, respectively, except that l is pronounced in the dental position. In final position l becomes syllabic and w and y are vocalic rather than consonantal. Examples: waxes "surely," haway "long," ?aw "deer"; yamas "lips," hayon "itchy," ?asoy "stomach"; losos "all," keles "spotted," hewil "thickly clustered."

§2. The vowels.

Tonkawa vowels are distinguished according to quality and length, as follows.

i, high, front, unrounded, and long. Similar in quality to cardinal i. ?i:s?a "minnow."

i, lower-high, front, unrounded. Similar to the vowel of English bit (Midwestern American dialect). pix "sweet."

e, higher-mid, front, unrounded, and long. Similar to cardinal e in quality. ta:ʔe:k "spouse."

e, lower-mid, front, unrounded. Similar to the vowel of Midwestern American English bed. hetec "how?, in what manner?"

a, a:. Both of these vary in position of articulation from low central unrounded to low back unrounded. The variation appears to be random. wa?an "right, exactly," sa:xal "doorway, entrance."

o, lower-mid, back, rounded. Similar to the o of standard German voll. losos "all, many."

o, higher-mid, back, rounded. Similar to the o of standard German Sohn. yo:mʔo? "it rains."

u, u:, high, back, rounded. Similar to cardinal u in quality though the short u is sometimes a bit lower. hecu "what?"; noxlul "screech owl."

Vowels followed by y and w are raised slightly in position of articulation. haway "tall," ?aw "deer," hewil "thickly clustered," xa:sey "leaf," ?oyuk "sack," k^wa:low "big." u and u: do not occur in this position.

§3. Word and sentence prosody.

Tonkawa utterances consist of a succession of more or less evenly stressed syllables. In no case does it appear that either stress or pitch accent plays any significant role in the word. Disyllabic forms, however, are generally pronounced with a somewhat heavier stress on the final syllable, whereas in polysyllabic words the main stress moves to the penult.

It is my impression that pitch-stress patterns, in kind not unlike those of English, function in Tonkawa phrases and sentences. I do not, however, possess data with which to describe and illustrate this point.

§4. Consonantal combinations.

Both the word and the syllable in Tonkawa invariably begin with a consonant, though they may terminate in either a consonant or a vowel. The syllabic is always a vowel or a vowel plus semivowel. Vowels never occur in sequence without an intervening consonant.

Consonants, however, do occur before or after other consonants. There are two types of consonantal combinations. The first and most frequent results when a syllable terminating in a consonant immediately precedes one beginning with a consonant. Any consonant may begin a syllable and all but h may end one. It would appear, then, that consonantal combinations of the first type may consist of any consonant but h plus a slight hiatus marking the point of syllabic division plus any consonant. However, as a result of certain morphophonemic processes, certain combinations never or rarely appear. Thus: combinations of identical consonants always unite to form a single consonant; ? plus consonant is very rare; stop plus ? occurs only in slow speech (in normal speech the glottal stop is absorbed to the preceding stop); an h following another consonant always disappears; and consonant plus y is rare. Other combinations are also infrequent because the consonants involved occur but seldom.

Examples: hop-cow "soft," ?a-x-pix "cider"; net-xal "tongue," yak-to? "they sit about"; sok-no? "he owns it," tic-kan "people"; yak^w-tos-wan "water fall," ?aw-k^wa-low "elk"; ya-ka?^w-na-wo? "he swings," xac-?an "stingy"; he-coc-xo:k "frightful," nax-can "fire"; nam-?ek "fire-wood," kat-ma-?ac "meadow-lark"; tan-kol "back of the head," yox-no? "he flies away"; mas-lak "white," ?a-pan-su:s "house-fly"; nox-lul "screech owl," nok-xol "heel"; tox^w-na-wo? "it smells," ket-x^wa-no? "he smells me"; naw-lo? "he spreads it out," ka-l-wan "wagon"; he-xal-?oy "ants," hak-la-nan "sharp"; may-?an "land terrapin," nes-ye-xem-yo:n "money."

A second type of consonantal combination is found within the syllable. Such clusters are pronounced without an intervening hiatus and, with a few exceptions (viz. ?s, l?, y?, and s?), may only begin the syllable. The initial consonants of such clusters are k^w, c, m, n, s, x, x^w, l, and y; the final consonant is always the glottal stop. In slow speech the combinations p?, t?, and k? may also be heard but these always become p, t, and k, respectively, in normal speech.

It may also be noted that clusters of type two, when placed between vowels, become ambisyllabic just like the consonant combinations of type one. Thus, the cluster x^w , is pronounced without hiatus in $x^w\text{?e}\cdot\text{lo?}$ "he misses him" but becomes ambisyllabic in $kex^w\text{?e}\cdot\text{lo?}$ "he misses me." Clusters of type two, then, may be found as initials of syllables beginning an utterance, as initials of syllables immediately preceded by a syllable terminating in a consonant, and, in the case of the exceptional combinations ʔs , $l\text{?}$, $y\text{?}$, and $s\text{?}$, as syllable finals in syllables terminating an utterance.

Examples: $kas\text{?}k^w\text{ʔas}$ "five times"; $c\text{ʔax}^w$ "blanket," $\text{ʔa}\cdot\text{wa}\cdot\text{k}\text{?}e\cdot\text{k}$ "gum"; $m\text{ʔe}\cdot\text{tan}$ "lightning," $nen\text{?}m\text{ʔe}\cdot\text{no?}$ "he roasts it"; $n\text{ʔa}\cdot\text{n}\cdot\text{wo?}$ "it is ground," $\text{ʔa}\cdot\text{was}\text{?}n\text{ʔa}\cdot\text{n}$ "sausage"; $s\text{ʔa}\cdot\text{c}$ "finger-nail," $hen\text{?}s\text{ʔo}\cdot\text{y}\cdot\text{to?}$ "he stretches himself"; $x\text{ʔa}\cdot\text{y}$ "mother," $hec\text{?}x\text{ʔo}\cdot\text{mo?}$ "he pulls his foot back"; $x^w\text{ʔe}\cdot\text{lo?}$ "he misses him," $nes\text{?}x^w\text{ʔe}\cdot\text{lo?}$ "he causes him to miss him"; $yak\text{?}l\text{ʔa}\cdot\text{xo?}$ "he breaks it"; $y\text{ʔa}\cdot\text{co?}$ "he vomits," $wen\text{?}y\text{ʔe}\cdot\text{co?}$ "he milks them"; $yak\text{?}pan\text{?}wa\text{?}s\text{?}$ "I strike him (right now)," $yak\text{?}po\text{ʔs}$ "I strike him," ʔal? "all right!" $hey\text{?}$ and $he\text{?}hey\text{?}$ "yes!"

§5. The syllable.

It is now evident that there are five types of syllable in Tonkawa. These may be exemplified as follows:

- 1) Consonant plus vowel: $\text{ʔe}\text{?}x^w\text{a}$ "buzzard," $ka\text{?}la$ "mouth."
- 2) Consonant, vowel, consonant: ʔok "skin, hide," $ne\text{?}l$ "penis," $tan\text{?}kol$ "back of the head," $ka\text{?}l\text{?}wan$ "wagon," $na\text{?}so\text{?}n\text{?}ti$ "Caddo Indians," $hen\text{?}ca\text{?}n$ "pond, lake."
- 3) Consonant cluster (type two) plus vowel: $s\text{ʔa}\cdot\text{ko?}$ "he scrapes it," $yak\text{?}l\text{ʔa}\cdot\text{xo?}$ "he breaks it," $s\text{ʔe}\cdot\text{do?}$ "he cuts it," $nes\text{?}x\text{ʔe}\cdot\text{po?}$ "he makes him take it off."
- 4) Consonant cluster (type two), vowel, consonant: $s\text{ʔet}\text{?}x^w\text{a}\cdot\text{no?}$ "he chokes," $hec\text{?}x\text{ʔol}\text{?}o\text{?}$ "he pulls his hands back," $m\text{ʔe}\cdot\text{t}\text{?}no\text{?}$ "lightning strikes him," $hen\text{?}s\text{ʔo}\cdot\text{y}\cdot\text{to?}$ "he stretches himself."
- 5) Consonant, vowel, and ʔs , $l\text{?}$, $y\text{?}$, or $s\text{?}$. Syllables of this type are found only in the final position. $yam\text{?}xo\text{ʔs}$ "I paint his face," $yak\text{?}pan\text{?}wa\text{?}s\text{?}$ "I strike him (right now)," ʔal? "all right!" $hey\text{?}$ and $he\text{?}hey\text{?}$ "yes!" These examples are exhaustive.

2. MORPHOPHONEMICS

§6. Initial stem syllables beginning with h drop the h when a prefix syllable is added. If the prefix syllable has the form cv , its vowel is lengthened and given the quality of the vowel of the stem syllable. Examples: $hap\text{?}lo\text{?}$ "they attack him" but $ka\text{?}pi\text{?}lo\text{?}$ ($<ke\text{?}hap\text{?}lo\text{?}>$) "they attack me," $hew\text{?}lo\text{?}$ "he catches it" but $ke\text{?}wi\text{?}lo\text{?}$ ($<ke\text{?}hew\text{?}lo\text{?}>$) "he catches me," $hep\text{?}co\text{?}$ "several fall" but $xe\text{?}pa\text{?}co\text{?}$ ($<xa\text{?}hep\text{?}co\text{?}>$) "several fall hard," $ho\text{?}ʔo\text{?}xa\text{?}wo\text{?}$ "he steals it" but $ko\text{?}ʔo\text{?}xa\text{?}wo\text{?}$ ($<ke\text{?}ho\text{?}ʔo\text{?}xa\text{?}wo\text{?}>$) "he steals me."

When the prefix syllable ends in a consonant, the vowel of the initial stem syllable forms a new syllable with the final consonant of the prefix. Examples:

ne-sew-lo? (<nes-hew-lo?) "he causes him to catch it," ne-so·ʔo-xa-wo? (<nes-ho·ʔo-xa-wo?) "he causes him to steal it."

Some initial theme syllables beginning with y behave in a similar fashion when preceded by certain prefixes of the type cv. Thus, ya·ko-na· "to hit with the fist" but ha·ko-na· (<he-ya·ko-na·) "to box."

§7. Final stem syllables having the form cvw or cvy become co· when followed by a suffix beginning with a consonant. Examples: ʔe·ʔe-yaw· "to work" in ʔe·ʔe-ya-wo? (<ʔe·ʔe-yaw-o?) "he works" and ʔe·ʔe-yo·no? (<ʔe·ʔe-yaw-no?) "he is working." xal·ʔoy· "to cut" in xal·ʔo-yo? (<xal·ʔoy-o?) and xal·ʔo·no? (<xal·ʔoy-no?) "he is cutting it."

Similarly, the suffixes -we, declarative mode; -wesʔ, plural subject; and -a·dew, future tense; are heard -o· or -o, -o'sʔ, and -a·do·, respectively, except when preceded by a long vowel or, in the case of -a·dew, followed by a vowel. Examples: ya·ce·we·ʔ "he sees you" but ya·c-o·ʔ (<ya·c-we·ʔ) "he sees him" and ya·c-o·ka (<ya·c-we·ʔe·ka) "you see him"; ya·ce·wesʔ-o·ʔ "they two see you" but ya·c-o'sʔ-o·ʔ (<ya·c-wesʔ-we·ʔ) "they two see him"; ya·c-a·dew-o·ʔ "he will see him" and ya·c-a·dew-a·we·ʔ "he will see you" but ya·c-a·do·no? (<ya·c-a·dew-no?) "he will be seeing him."

§8. Vowels in Tonkawa are morphophonemically of two types. One group, which we shall distinguish by italic *a*, *a*·, *e*, *e*·, *i*, *i*·, *o*, *o*·, *u*, and *u*·, are found only in stems. The second group are written a, a·, e, e·, i, i·, o, o·, u, and u· and may occur in any portion of the word.

Vowels of the first type, when they occupy an even numbered position in the word, are reduced one mora in length. Short *a*, *e*, *i*, *o*, and *u* then become zero and long *a*·, *e*·, *i*·, *o*·, and *u*· are shortened. Examples: yamaxa· "to paint someone's face" in yamx-o· "he paints his face," ke-ymax-o· "he paints my face," nes-yamx-o· "he causes him to paint his face." ka·na· "to throw away" in ka·n-o· "he throws it away," xa·kan-o· "he throws it far away," nes-ka·n-o· "he causes him to throw it away."

Final vowels of stems, it will be noted, are elided if followed by a vocalic suffix (e.g., yamaxa· in yamx-o· "he paints his face") but are retained, regardless of their position, if the suffix begins with a consonant (e.g., yamaxa· in yamxa-no· "he is painting his face," ke-ymaxa-no· "he is painting my face").

When final in a word, the last vowel of the stem is dropped and the penultimate vowel retained. Examples: notso· "to hoe" in nots-o· "he hoes it," we·ntos-o· "he hoes them," notso·no· "he is hoeing it" and notos "hoe."

A syllable containing a vowel of type one, when reduplicated, sometimes repeats both consonant and vowel and sometimes only the consonant. Examples: topo· "to cut" in top-o· "he cuts it," ke·tp-o· "he cuts me," totop-o· "he cuts it repeatedly"; yakapa· "to hit" in yakp-o· "he hits him" ke-ykap-o· "he hits me," yakakp-o· "he hits him repeatedly." In neither case does the addition of a prefix

to the reduplicated form alter the vowel of the reduplicated syllable: ke-totop-o? "he cuts me repeatedly," ke-ykakup-o? "he hits me repeatedly."

§9. The following examples illustrate the preceding morphophonemic rules.

necpaw- in necpaw-o? "he touches him," ke-ncepaw-o? "he touches me," necpo·no? "he is touching him," ke-ncepo·no? "he is touching me."

tanxoy- in tanxoy-o? "he takes it from him," ke-tanxoy-o? "he takes it from me," tanxo·no? "he is taking it from him," ke-tanxo·no? "he is taking it from me."

nax^wece- in nax^wc-o? "he rattles it," we-nx^wec-o? "he rattles them," nax^wex^wc-o? "he rattles it repeatedly," we-nx^wex^wc-o? "he rattles them repeatedly," nax^wec "rattle."

na·ta- in na·t-o? "he steps on it," we-nat-o? "he steps on them," nanat-o? "he steps on it repeatedly," we-nanat-o? "he steps on them repeatedly."

ya·lo·na- in ya·lo·n-o? "he kills him," ke-yalo·n-o? "he kills me."

s^ʔe·ta- in s^ʔe·t-o? "he cuts it," we-s^ʔet-o? "he cuts them," s^ʔes^ʔet-o? "he cuts it repeatedly," we-s^ʔes^ʔet-o? "he cuts them repeatedly."

m^ʔaye- in m^ʔay-o? "he sets fire to it," we-m^ʔay-o? "he sets fire to them."

y^ʔoco- in y^ʔoc-o? "he pinches him," ke-y^ʔoc-o? "he pinches me," y^ʔoy^ʔoc-o? "he pinches him repeatedly."

salke- in salk-o? "he pulls it out," we-salk-o? "he pulls them out," sasalk-o? "he pulls it out repeatedly," we-sasalk-o? "he pulls them out repeatedly."

xaclew- in xaclew-o? "he becomes angry," xaclo·no? "he is getting angry," ke-xaclew-o? "I become angry," ke-xaclo·no? "I am getting angry," ke-xaxaclew-o? "I become very angry."

hayoxo- in hayx-o? "he mounts (a horse)," ka·yox-o? (<ke-hyox-o?) "he mounts me," hayoyox-o? "he mounts (a horse) repeatedly," ka·yoyox-o? (<ke-hayoyox-o?) "he mounts me repeatedly."

hatxese- in hatxes-o? "he knows him," ka·txes-o? (<ke-hatxes-o?) "he knows me."

hapaxa- in hapax-o? "he looks up," ka·pax-o? (<ke-hapax-o?) "I look up."

3. MORPHOLOGY

§10. Tonkawa morphemes may be divided into the following classes.

I. Themes

- A. Free themes.
- B. Bound themes.

II. Affixes

- A. Transformative affixes; i.e., affixes by means of which a theme may be altered in function.
- B. Verbal affixes; i.e., affixes which can be added only to verbs.
- C. Noun and pronoun affixes.

III. Enclitics; i.e., bound forms which may be added to gerundial verb forms, nouns, or pronouns.

It is clear from this list that affixation is an important grammatical process in Tonkawa. Suffixation is, however, far more important than prefixation.

Word order is grammatically negligible in differentiating between subject and object since these relations are indicated by means of noun endings. There is, however, a regular order: subject, object, verb, which is normally maintained. And word order functions grammatically in distinguishing between certain other form classes. For example, the free theme *cʔel* "up, above" functions differently in each of the following examples: *cʔel-ʔa-yʔik ha-noʔ* "he goes to the top" (*ha-noʔ* "he goes"), *na-ton-cʔel-ʔa-yʔik ha-noʔ* "he goes to the top of the mountain" (*na-ton* "mountain"), *cʔel ha-noʔ* "he goes upward." In the first example, *cʔel* occurs with two noun suffixes, *-ʔa-*, definite article, and *-yʔik*, dative of arrival, and functions therefore as a noun. In the second example, *cʔel* appears between a noun (*na-ton*) and its suffixes (*-ʔa-yʔik*) and functions therefore as an adjective. And, in the last example, *cʔel* occurs independently and directly preceding a verb, functioning therefore as an adverb.

Compounding is very common in Tonkawa. Verb compounds generally involve only bound verb themes. No more than two themes are combined and, in all cases, the second theme is the modifying element. Examples: *hawawne-taxka-* "to carry [several] to this place" (*hawawne-* "to carry a burden," *taxka-* "several arrive"), *yakaw-ka-na-* "to kick away" (*tr.*; *yakaw-* "to kick," *ka-na-* "to throw away"), *henkʔay-silwe-* "to run about here and there" (*henkʔay-* "to run," *silwe-* "to wander about"), *taʔan-aycona-* "to pull up" (*taʔan-* "to grasp, to seize," *haycona-* "one moves up"). Some themes occur only as second elements of verb compounds: *yak-ay-* "to pierce by shooting" (*yake-* "to shoot," *-ay-* "[to] pierce"), *yats-ay-* "to pierce by stabbing" (*yats-* "to stab"), *so-l-to-xa-* "to drip onto" (*so-l-* "to drip," *-to-xa-* "[to fall] on"), *ta-kona-tol-* "to search in vain" (*ta-kona-* "to search," *-tol-* "in vain"), *yako-n-yapalʔ-* "to knock down" (*yako-n-* "to strike," *-yapalʔ-* "down"). Most of these secondary themes serve an adverbial function in the compound.

Other than verb themes appear rarely in verb compounds. *ho-s-taxsew* "to be morning" is a combination of *ho-s* "early" and *taxsew-* "day breaks"; *na-x-sokna-* "to guide, to reconnoitre" is a compound of *na-x* "road" and *sokna-* "to put away, to have"; *tap-ecne-* "to lie on one's side" is *tap-* "on one's side" which is found compounded only with *hecne-* "to lie down."

Noun compounds may involve two or three free themes. Examples: *ʔa-x-pix* "cider" (*ʔa-x* "water," *pix* "sweet"), *ʔaw-kʔa-low* "elk" (*ʔaw* "deer," *kʔa-low* "big"), *ʔawas-esʔaw* "camel" (*ʔawas* "meat," *hesʔaw* "little"), *tan-maslak* "rabbit" (*tan* "tail," *maslak* "white"), *yakwan-oyuk* "leggings" (*yakwan* "leg," *oyuk* "sack"), *tan-ʔok-apay* "opossum" (*tan* "tail," *ʔok* "hair," *kapay* "none"),

tolʔaxan-oʔoxo-n-a-x "the Milky Way" (tolʔaxan "corn," hoʔoxo-n "that which is stolen," na-x "road").

Sometimes, however, a bound theme occurs in a noun compound: ʔawas-nʔa-n "sausage" (ʔawas "meat," -nʔa-n <nʔa-nwe- "to be ground"), ʔekʷans-xaw "horse" (ʔekʷan "dog," -s, instrumental suffix, -xaw "to move far [?]), maslak-taxso "frost" (maslak "white," taxso- "day breaks"), cʔaxʷ-yapec "thread" (cʔaxʷ "cloth," yapce- "to sew"). And, as in the verb, several noun themes occur only in compounds: ʔa-x-yaycan "kingfisher" (ʔa-x "water"), tas-ʔok "pubic hair" (ʔok "hair"), tan-soytat "squirrel" (tan "tail"), yoxanan-kamlew "bat" (yoxanan "wings").

Reduplication affects verb themes for the most part. Generally only one of the syllables of the theme is repeated. Reduplication symbolizes repeated action, plural subject, or rarely, vigorous or intense action. Examples: totop- "to cut repeatedly" (top- "to cut"), wawana- "several fall forward" (wa-na- "to fall forward"), sosoyana- "several swim away" (so-yana- "to swim away"), xaxaclewa- "to be very angry" (xaclewa- "to be angry"), sasalke- "to pull out repeatedly" (salke- "to pull out"), napopoxa- "to blow at repeatedly" (napoxa- "to blow at"), walalapa- "to boil vigorously" (walapa- "to boil"), yaypax- "to slap repeatedly" (yapxa- "to slap").

In noun themes, reduplicated forms occur rarely: nantoʔon "a range of mountains" (na-ton "mountain"), kʷa-kʷan "women" (kʷa-n "woman") hosaʔas "young [referring to plural noun]" (hosas "young [referring to one]"), henoʔox "pretty [referring to several]" (henox "pretty [referring to one]"), ʔoʔon "blood veins" (ʔo-n "blood").

THE THEME

§11. Themes, as has been indicated, are of two major types, free and bound. In general, free themes function as nouns and modifiers, bound themes as verbs and pronouns. There are, however, a number of free themes which may function as either nouns or verbs depending upon the suffix type added. Thus, the theme notox "hoe" functions as a noun when found with noun suffixes (e.g., notox-ʔa-la "the hoe"; -ʔa-, definite article, -la, nominative singular) and as a verb when verb suffixes are added (e.g., notx-o-ʔ "he hoes it"; -o, declarative mode suffix, -ʔ, third person, present tense). Other themes in this category are: mʔe-tan "lightning," mʔe-tn- "lightning strikes"; tolʔaw "dough," tolʔaw- "to knead"; naxʷec "rattle," naxʷce- "to rattle, to shake a rattle"; yakaw "spurs," yakwa- "to kick, to spur"; yawey "field," yawya- "to plant."

Similarly, there are some free themes functioning as demonstrative pronouns: helʔa-t "that one," heka-t "those," we-lʔa-t "that one," wa-taʔas "this time," and two that function as interrogative pronouns: hecu- "what?" (presumably to be analyzed into he-, interrogative prefix, and -cu-, but the latter does not occur independently) and hetwan "how many?"

Certain themes (both free and bound) may change in function only when transformative affixes are added. Thus, a number of free themes may function as verbs if either the suffix *-ʔe* or *-wa* is added (in addition, of course, to the regular verbal suffixes). Examples: *yatin* "scraper," *yatin-ʔe* "to scrape"; *palʔil* "brains," *palʔil-ʔe* "to smear [e.g., brains on skin]"; *ʔasoy* "stomach," *ʔasya-wa* "to be pregnant"; *taxas* "day," *taxse-wa* "day breaks"; *xa* "fat," *xa-wa* "to be fat"; *yo:c* "foam," *yo:c-wa* "to foam."

Similarly, many bound themes can be made noun themes by the addition of a suffix *-an*. Examples: *heylapa* "to stand erect," *heylap-an* "tree"; *yakwa* "to kick," *yakw-an* "leg"; *katwe* "to give birth to," *katw-an* "female animal"; *xʔene* "to sweep," *xʔen-an* "broom"; *sʔe-ta* "to cut," *sʔe-t-an* "rope." The gerundial verb suffix *-k* also serves this function in a few cases: *hecocxo* "an evil one" (*hecocxo* "to be feared"), *taxso* "tomorrow" (*taxso* "day breaks"), *ta-ʔe:k* "spouse" (*ta-ʔe* "to marry"), *hekto* "singing" (*hekto* "to sing"). The *-k* suffix has other functions as well.

This process is particularly well illustrated in the pronouns where, by the use of transformatives, demonstrative themes can be made to function as demonstrative adverbs, interrogatives, and indefinite pronouns. Examples: *te* "this," *te-ca* "this place," *te-l* "this direction" *te-c* "this way, in this manner," *he-te-ca* "in what place?" *he-te-l* "where?" *he-te-c* "in what manner?" *he-te-ca-ʔax* "some-where," *he-te-c-ʔax* "in some way, somehow."

§12. Most themes cannot be analyzed. In a few of them, however, certain elements appear which can be isolated. The most free of these isolable elements are the suffixes *-na* "away" and *-ta* "hither." They are found either as an essential part of the theme or in themes that may also be used without them. Examples: *ha-na* "one person goes," *ha-ta* "one person comes" (*ha* "one person moves," not used alone); *ka-na* "to throw away," *ka-ta* "to throw this way"; *wa-na* "to fall forward," *wa-ta* "to fall backward"; *yox-na* "to fly away," *yox-ta* "to come flying"; *so-ya-na* "to swim away," *so-ya-ta* "to come swimming"; *cetxa-na* "to jump away," *cetxa-ta* "to jump this way." The following themes may be used with or without the directives: *topo* "to stalk, to creep up on," *top-na* "to go along stalking," *top-ta* "to come stalking"; *he-sa* "to point at," *he-sa-na* "to point over there," *he-sa-ta* "to point here"; *ya-ce* "to see," *ya-ce-na* "to look away," *ya-ce-ta* "to look here."

A third suffix *-xa* "arrival at" is found with only two themes: *xa-xa* "one person arrives at a distant point" (*xa*, theme prefix "with force, to a distant point," *a* from *ha* "one person goes") and *xat-xa* "several arrive at a distant point" (*-t* from *-ta* "several move"; cf. *ta-na* "several go").

Certain other suffixes alternate with the *-na* and *-ta* suffixes and may, for this reason, be isolated. *yak-e* (< **yak-ʔe*) "to shoot," *yak-na* "to shoot away," *yak-ta* "to shoot this way"; *yasyak-e* (< **yasyak-ʔe*) "to tear," *yasyak-na* "to

go along tearing." From these two examples the suffix $\cdot\text{?e}$ may be isolated. Its meaning, however, is not too clear unless we can associate it with the transformative suffix $\cdot\text{?e}$ (see §11).

Another suffix, $\cdot\text{?a}$, may be isolated in the same way. Thus, $\text{yakew}\cdot\text{?a}$ "to make," $\text{yakew}\cdot\text{na}$ "to go along making"; $\text{co}\cdot\text{l}\cdot\text{?a}$ "to defecate," $\text{co}\cdot\text{l}\cdot\text{na}$ "to go along defecating." Here again the meaning of $\cdot\text{?a}$ does not appear clearly.

It is a possible hypothesis that $\cdot\text{?e}$ and $\cdot\text{?a}$ are verb forming suffixes of the type of the transformatives described in §11. The suffixes $\cdot\text{na}$, $\cdot\text{ta}$, and $\cdot\text{xa}$ may also have served a similar function in addition to their adverbial use. But there is no way of proving this hypothesis on the basis of Tonkawa materials alone.

§13. An interesting set of what may be called secondary stems can be isolated from the following themes: $\text{ha}\cdot\text{yco}\cdot\text{na}$ "one person goes up," $\text{ha}\cdot\text{yco}\cdot\text{ta}$ "one person comes up," $\text{ta}\cdot\text{yco}\cdot\text{na}$ "several go up," $\text{ta}\cdot\text{yco}\cdot\text{ta}$ "several come up," $\text{ha}\cdot\text{kla}\cdot\text{na}$ "one person goes down," $\text{ha}\cdot\text{kla}\cdot\text{ta}$ "one person comes down," $\text{ta}\cdot\text{kla}\cdot\text{na}$ "several go down," $\text{ta}\cdot\text{kla}\cdot\text{ta}$ "several come down," $\text{ha}\cdot\text{kxo}\cdot\text{na}$ "one person goes in," $\text{ha}\cdot\text{kxo}\cdot\text{ta}$ "one person comes in," $\text{ta}\cdot\text{kxo}\cdot\text{na}$ "several go in," $\text{ta}\cdot\text{kxo}\cdot\text{ta}$ "several come in," $\text{ha}\cdot\text{txil}\cdot\text{na}$ "one person goes out," $\text{ha}\cdot\text{txil}\cdot\text{ta}$ "one person comes out," $\text{ta}\cdot\text{txil}\cdot\text{na}$ "several go out," $\text{ta}\cdot\text{txil}\cdot\text{ta}$ "several come out," $\text{ha}\cdot\text{yxe}\cdot\text{na}$ "one person goes across," $\text{ha}\cdot\text{yxe}\cdot\text{ta}$ "one person comes across," $\text{ta}\cdot\text{yxe}\cdot\text{na}$ "several go across," $\text{ta}\cdot\text{yxe}\cdot\text{ta}$ "several come across."

Here the initial elements $\text{ha}\cdot$ and $\text{ta}\cdot$ are most certainly related to the initial morphemes of the themes $\text{ha}\cdot\text{na}$ "one person goes" and $\text{ta}\cdot\text{na}$ "several go," respectively. The final elements, $\cdot\text{na}$ and $\cdot\text{ta}$, are the directives "away" and "hither," respectively. That leaves a set of adverbial secondary stems, only one of which occurs in another connection. $\text{kox}\cdot\text{na}$ "several go in" seems to be a combination of the full form of $\cdot\text{kxo}$ with the directive suffix $\cdot\text{na}$. It is possible, therefore, that the themes described above may be old compounds, the second constituents of which have lost independent existence.

§14. Certain initial theme elements occur with sufficient frequency to be regarded as prefixes. The most frequently occurring of these are $\text{he}\cdot$, $\text{ya}\cdot$, and $\text{ne}\cdot$. Of the three, $\text{he}\cdot$ is easiest to define. Examples: $\text{ha}\cdot\text{kona}$ "to box" (= $\text{he}\cdot$ plus yakona "to hit with the fist"), $\text{ha}\cdot\text{xaxkosa}$ "several go in single file" (= $\text{he}\cdot$ plus the reduplicated form of yaxkosa "to follow"), $\text{ha}\cdot\text{tasa}$ "a fight with knives takes place" (= $\text{he}\cdot$ plus yatsa "to stab"), $\text{he}\cdot\text{tay}\cdot\text{?ew}$ "to join a group" ($\text{tay}\cdot\text{?ew}$ "to mix"), $\text{he}\cdot\text{ns}\cdot\text{?o}\cdot\text{yto}$ "to stretch oneself" (cf. $\text{?ey}\cdot\text{nos}\cdot\text{?o}\cdot\text{yto}$ "to stretch"), $\text{he}\cdot\text{ntitxew}\cdot\text{?a}$ "to move about nervously, to tremble," (cf. $\text{?ey}\cdot\text{netitxew}\cdot\text{?a}$ "to move"). From these examples, it is clear that $\text{he}\cdot$ gives a mediopassive significance to the verb theme. It may also be noted that the reflexive pronoun has exactly similar form (see §21). The $\text{he}\cdot$ themes, therefore, may be themes in which the reflexive pronoun has become fixed.

$\text{ya}\cdot$ themes occur with less frequency than $\text{he}\cdot$ themes and the function of $\text{ya}\cdot$

is not easily defined. Alternate forms are rare; the following are practically exhaustive. *ya-kpa-* "to strike" (tr.), *nes-kapa-*, "to close, to shut," (*nes-*, causative prefix). Here a form *-kapa-* seems isolable with the meaning "[two objects] come together, to bump" (act. intr.). If that is true, then *ya-* in *yakpa-* could be interpreted as a causative. Compare also *ya-tke-* "to be frozen" (intr.) and *nes-tike-* "to freeze." It is possible that *-tike-* means "to be cold" and that the two verbs above are causatives at different stages in the history of the language.

Another *ya-* prefix is found which is similar to the preceding in all but one respect. Where the former possesses an *a*-vowel (i.e., morphophonemic type one) (e.g., *yakp-o?* "he strikes him," *ke-ykap-o?* "he strikes me"), the latter has the *a*-vowel (e.g., *yaxaw-o?* "he frightens him," *ke-yaxaw-o?* "he frightens me"). The latter is, however, definitely a causative as the following examples show: *xamce-* "to be broken," *ya-xmac-* "to break" (tr.); *saxwa-* "to be frightened," *ya-sxaw-* "to frighten" (tr.); *?atsaw-* "to revive, to come to life," *ya-?atsaw-* "to revive, to bring to life" (tr.). It also occurs in a number of themes for which there are no alternates: *yatmaxe-* (*-yatmaxe-*) "to break" (tr.), *yatxalka-* (*-yatxalka-*) "to hang up" (tr.), *yalmete-* (*-yalmete-*) "to deceive" (tr.), *yalxilna-* (*-yalxilna-*) "to run away," *yatsan-* (*-yatsan-*) "to think of" (tr.). In these forms it has become a part of the theme much in the same way as has the previously discussed *ya-* except that it does not elide its vowel. Perhaps it is possible to associate the two *ya-* prefixes; the first *ya-* having become indissolubly a part of the theme to the extent of obeying the rules of elision characteristic of theme elements and the second having fused with some themes to a lesser extent and still being freely movable in others.

ne- themes occur with still less frequency and alternate forms are practically nonexistent. However, among the forms discussed by Gatschet⁶ is a word *paxka* which he defines "tobacco" and asserts is a borrowing from English. The form I recorded for tobacco is *nepaxkan*, a noun derived from the verb *nepaxka-* "to smoke" (tr.). My informant assured me, however, that this was a recent word for tobacco and that the archaic form was *na²acwawk*. If this is true, Gatschet's analysis is probably correct and we have a test form for *ne-*; i.e., *ne-paxka-* "to smoke" from an original *paxka* "tobacco."

One other alternation involving *ne-* may be mentioned. *nam²ene-* "to broil [meat] over coals" (tr.; possibly derived from *nam²e-k* "firewood," *-k* being a noun suffix) and *ne-nm²ene-* "to barbecue [meat]" (tr.). This alternation does not agree in meaning with the one above, however.

Finally, there is a difference between the two causative prefixes in Tonkawa which may have a bearing upon the meaning of *ne-*. *nes-* symbolizes the regular causative (see §22) and *hes-* a mediopassive causative. Thus, *nes-?ek-o?*s "I make him give it to him" (*?eke-* "to give to") and *hes-?ek-o?*s "I ask for it" (literally "I

⁶ A. S. Gatchet, *Remarks upon the Tonkawa Language* (Proceedings of the American Philological Society, vol. 16, 1876), p. 318.

make him give it to me"). It is possible that the *ne-* of *nes-* is cognate with the *ne-* of the *ne-* themes and the *he-* of *hes-* with the mediopassive *he-*.

§15. In addition to the more or less regular phonetic-semantic similarities described in the preceding, there are a number of less frequently occurring similarities in form and meaning between themes. Lack of space does not permit an exhaustive discussion of these; the following samples will serve to illustrate the type.

na-m^he-k "firewood," *na-m^he-ne-* "to broil [meat] over coals" (tr.), *ne-n-m^he-ne-* "to barbecue" (tr.), *ha-m^ha-m^ha-* "to burn," *m^ha-ye-* "to set fire to" (tr.), *m^he-lne-* "to shine, to glow," *m^he-lcicen* "sheet lightning." From these examples, we can isolate the elements *-m^he-*, *-m^he-*, and *-m^ha-*, all of which seem to have some reference to fire, heat, or light. Further analysis is impossible.

tol-^haxe- "to cut corn kernels from cob" (tr.), *kay-^haxe-* "to disjoint, to dismember" (tr.), *som-^haxe-* "to skin, to flay" (tr.), *yakl-^haxe-* "to break [e.g., neck]" (tr.), *ey-tam-^haxe-* "to smash" (tr.), *ey-pas-^haxe-* "to burst by pressure" (tr.), *ey-kel-^haxe-* "to smash" (tr.). In this series there seems to be a common element *-^haxe-* referring to cutting, breaking, or chopping. The first elements may be incorporated nouns defining the object. Some evidence for this point may be found in the series: *tol-^haxe-* "to cut kernels of corn from the cob" (tr.), *tol-^hawe-* "to knead [bread dough]" (tr.), *ya-tal-pa-* "to make [corn] bread."

so-ya-na- "to swim away," *so-ya-ta-* "to come swimming," *nen-so-ya-wa-* "to swim with a burden, to ferry" (tr.), *so-na* "duck" *so-la-* "[liquid] drips onto [something]." From the first three examples it seems possible to isolate a stem *so-ya-* referring to movement through the water. The functions of the other elements are not clear. A comparison of *so-ya-* with *so-na* and *so-la-* indicates a possible further analysis.

§16. The only conclusion that can be drawn from the preceding survey of theme morphology is that there is some slight evidence that the Tonkawa theme is composed of smaller morphologic units. It is probable that the basic unit is a stem composed of two phonetic elements (cvcv) and that this stem is often modified by the addition of various affixes. In most cases, however, the theme is now the functional unit and has been so for a long time. This has no doubt led to a phonetic fusion of stem and affix which, together with changes in the meanings of themes, makes it difficult to isolate, from Tonkawa evidences alone, the theme constituents.

Comparison with other Coahuiltecan languages and with the Hokan languages will no doubt aid greatly in understanding the structural history of the Tonkawa theme. Such a comparison is, however, beyond the scope of this paper.

NOUN SUFFIXES

§17. The noun suffixes may be summarized as follows:

	INDEFINITE		DEFINITE	
	Singular	Plural	Singular	Plural
Nominative	-la	-ka	-ʔa·la	-ʔa·ka
Accusative	-lak	-kak	-ʔa·lak	-ʔa·kak
Genitive		-ʔan	-ʔa·lʔan ⁷	
Dative (arrival)			-ʔa·y ik ⁸	
Dative (approach)			-ʔa·wʔan ⁸	
Instrumental	-es		-ʔa·las ⁹	-ʔa·kay
Conjunctive		-ʔen	-ʔa·lʔen ⁹	

Examples: ha·ʔako·n·la ha·noʔ “a man goes away”; ha·ʔako·n·ka tanoʔ “several men go away”; ha·ʔako·n·lak yakpoʔ “he strikes a man”; ha·ʔako·n·kak yakpoʔ “he strikes men”; ha·ʔako·n·ʔa·la ʔekʷan·ʔa·lak ya·lo·noʔ “the man kills the dog”; ha·ʔako·n·ʔa·ka ʔekʷan·ʔa·kak ya·lo·noʔ “the men kill the dogs”; hepayxʷetan·ʔa·lʔan xa·y·ʔa·la “the young woman’s mother”; ha·ʔako·n·ʔa·lʔan macxanan·ʔa·la “the man’s sweetheart”; xalo·nde·la kʷa·n·ʔan ʔo·nbaxcoʔ “this knife is all [covered with] a woman’s blood” (kʷa·n “woman”); na·ton·ʔa·y·ik xa·xoʔ “he arrived at the distant mountain”; na·ton·ʔa·wʔan ha·noʔ “he went toward the mountain”; yan·ʔa·nwan·el·ʔa·tas neskwitoʔ “he bound him with that chain” (yan·ʔa·nwan “chain”; hel·ʔa·t “that”); sax·ʔay·ʔa·las yakoʔ “he shot him with the arrow”; ʔekʷan·es hexsasoʔ “he yelped like a dog” (ʔekʷan “dog”); he·tyan·ʔa·kay ta·ʔancenəʔoʔ “they held him by his arms” (he·tyan “arms”); heykʷecan·ʔen heyxaxalʔan·ʔen ta·ʔanoʔ “he picked up rings and ear rings”; he·tyan·ʔa·lʔen yakwan·ʔa·lʔen yawoʔ “he tied up the [his] arms and the [his] legs.”

PRONOUNS

§18. The independent personal pronoun is used only for emphasis since person and number are regularly indicated by the verb form (see §25 to §27). Following

⁷ If the noun is followed by a demonstrative, the definite article suffix -ʔa· may be dropped and -lʔan suffixed directly to the demonstrative theme.

⁸ -ʔa·yik denotes an ending-point relationship, -ʔa·wʔan a relationship of approach (see the examples following). Here, also, the -ʔa· is dropped if the noun is followed by a demonstrative.

⁹ -ʔa· is dropped if the noun is followed by a demonstrative.

are the personal pronoun themes plus the case suffixes employed with them:

		<i>Nominative</i>	<i>Accusative</i>	<i>Genitive</i>
Singular	1	sa·ya	sa·sik	sa·ken
	2	na·ya	na·yak	na·xen
	3	?a·ye·la	?a·ye·lak	?a·xen
Dual	1	kew·sa·ya	kew·sa·sik	—
	2	we·na·ya	we·na·yak	—
	3	?a·we·la	?a·we·lak	—
Plural	1	kew·sa·ka	kew·sa·kak	kew·sa·ken
	2	we·na·ka	we·na·kak	na·wenexen
	3	?a·we·ka	?a·we·kak	?a·wxen

In addition to these forms are found the following: sa·x^wa “I also,” na·x^wa “you also,” ?a·x^wa “he also,” kew·sa·x^wa “we also,” we·na·x^wa “you (plural) also,” ?a·wa·x^wa “they also”; sa·cos “by myself,” na·cos “by yourself,” ?a·cos “by himself,” kew·sa·cos “by ourselves,” we·na·cos “by yourselves,” and ?a·wa·cos “by themselves.”

§19. The demonstrative pronouns are as follows:

	<i>Nominative</i>	<i>Accusative</i>	<i>Dative</i>	
Singular	wa·?a·la	wa·?a·lak	wa·y ^o ik	wa·w ^o an
Plural	wa·ka	wa·kak	—	—
Singular	te·la	te·lak	—	te·w ^o an
Plural	te·ka	te·kak	—	—
Singular	he·e·la	he·e·lak	he·e·k	he·e·w ^o an
Plural	he·ka	he·kak	—	he·w ^o an
Singular	—	—	we·y ^o ik	we·w ^o an

From this it can be seen that there are four demonstrative themes, wa· “that one aforementioned,” te· “this,” he·e· (or he·e· or he·) “that,” and we· “that one yonder.” The suffixes are similar in form and meaning to those employed with the noun (see §17).

Four other demonstratives occur in my material: hel^oa·t “that one,” heka·t·kak “those” (·kak, plural accusative noun suffix[?]), we·l^oat “that one near, it, that,” and wa·ta^oas “this particular time.” All of these may function either as demonstratives (in which case they require the proper noun suffixes) or as demonstrative adverbs.

Other demonstrative adverbs may be formed from the four bound demonstrative themes by the addition of the suffixes ·ca, “place,” ·l, “direction,” and ·c, “manner.” Thus: wa·ca “that place aforementioned,” te·ca “this place,” he·e·ca “that place,” te·l “this direction,” he·e·l “that direction,” we·il (an irregular formation) “that direction yonder,” te·c “this manner,” he·c “that manner” and we·c or we·tic “that manner.” There is apparently no difference in meaning between the last two forms and he·c.

§20. The interrogative pronouns are characterized by a prefix he·. Most of

them are formed from the demonstrative theme *te·*. Thus *he-te-l* "where?" (*-te-* reduced form of *te·* "this"; *-l*, direction suffix), *he-te-w'an* "which way?" (*-w'an*, dative suffix), *he-te-c* "how?" (*-c*, manner suffix) and *he-te-ca* "where?" (*-ca*, place suffix). Three other interrogative pronouns occur which cannot be so analyzed: *hecu·* "what?" *hecu·?et* "why, for what reason?" and *hetwan* "how many?"

The indefinite pronouns are formed from the interrogatives by the addition of a suffix *-?ax*. Thus: *hecu·?ax* "anything, anyone, something"; *hetwan·?ax* "several"; *hetec·?ax* "somehow"; *heteca·?ax* "somewhere"; and *hetew'an·?ax* "in some direction, in any direction."

VERB PREFIXES

§21. Four of the verb prefixes express pronominal concepts. These are: *ke·*, first person pronoun object, *we·*, plural pronoun object, *kew·*, first person plural pronoun object (obviously a combination of *ke·* and *we·*), and *he·*, a reflexive pronoun. Examples: *yakpo?* "he hits him," *ke-yakpo?* "he hits me," *we-yakpo?* "he hits us," and *he-yakpo?* "he hits himself."

Ordinarily the form *he·* is sufficient for the reflexive in all persons. When, however, it is necessary to emphasize person in the reflexive, the prefixes *sa·* "me," *na·* "you," *?a·* "him," *kewsa·* "us," and *wena·* "you (plural)" may be added before the reflexive pronoun. Examples: *sa-he-yakpo?s* "I hit myself," *na-he-yakpo·ka* "you hit yourself," *?a-he-yakpo?* "he hits himself," etc.

The prefix *he·*, the affixes *he· . . wa* and *he· . . wa*, and the suffix *-wa* are found in some verbs to express the notion of plural subject or repeated action. Examples: *he-y?ay?ace·* "to vomit repeatedly" (*y?ace·* "to vomit"), *he-ykakawa-wa·* "several dance" (*yakwa·* "to dance"), *he·nanace-wa·* "several bite" (*nace·* "to bite"), *neccepa-wa·* "to touch repeatedly" (*necpa·* "to touch"). It will be noted that in all these examples the theme is reduplicated. In many themes, the affixes need not be used, reduplication being sufficient.

The reciprocal pronoun is expressed by the affix *he· . . yew·* (*he· . . yo·*) or *he· . . yew* (*he· . . yo*). The variation between *-yew* and *-yo·* is phonetic (see §7); the variation between *he·* and *he·*, however, cannot be explained. Neither can it be proven that this prefix is the same as that discussed in the preceding paragraph. Examples: *he·?ensa·yew-o?* "they are jealous of one another" (*?ensaw·* "to be jealous"), *he·?ensa·yo·no?* "they are being jealous of one another," *he-cocna·yew-o?* "they are sleeping with each other" (*coxna·* "to sleep").

§22. There are two freely movable causative prefixes, *nes·*, the regular causative, and *hes·*, the mediopassive causative. Examples: *nes·?eke·* "to cause to give to" (*?eke·* "to give to"), *nes·?ace·* "to cause to become sick" (*?ace·* "to become sick"), *hes·?eke·* "to ask for" (literally, "to cause to give to oneself").

In some themes, *nes·* and *hes·* have become a part of the total form; i.e., the theme cannot be used without them. Examples: *nes-pece·* "to fill," *nes-tewe·* "to

call by name," nes-tike- "to be freezing," hes-kekte- "to be tied in score" (cf. nes-kete- "to count"), hes-k^wace- "to like."

§23. The postposition ta- "with, to" occurs in two other forms tas- and tasa-. Examples: tasa-yela- "to sit with" (yela- "to sit"), tas-ecne- "to lie with" (hecne- "to lie"), ta-notso- "to stand with" (notso- "to stand"). Only one theme is found in which this prefix is apparently "frozen": ta-kona- "to search for, to hunt."

The prefix xa- "with force, to a distance": xa-kana- "to throw with force, to throw to a distance" (ka-na- "to throw"), xa-ykapa- "to hit hard" (yakpa- "to hit"), xa-soyana- "to swim to a distance" (so-yana- "to swim away"), xe-cne- "to fall down" (<xa- plus hecne- "to lie down"), xe-nk^wa-na- "to run far away" (<xa- plus henk^wa-na- "to run away").

If a theme with the directional suffix -ta "hither" employs this prefix, the meaning of the two becomes "in a circle." Examples: ka-ta- "to throw here," xa-kata- "to swing" (i.e., "to throw in a circle"); so-yata- "to swim here," xa-soyata- "to swim in a circle."

The prefix ya- is probably an older causative prefix than that discussed in §21 since it occurs as a freely movable prefix with but few themes and is apparently an immovable part of several others. The relationship between this prefix and the theme element ya- has already been discussed (see §14). Examples: xamce- "to be broken," ya-xmace- "to break" (tr.); saxwa- "to be frightened," ya-sxawa- "to frighten." See §14 for other examples.

VERB SUFFIXES

§24. -ape, -ap, negative suffix. Ordinarily this suffix immediately follows the theme. When the verb employs the second person pronoun object, however, this is inserted between the theme and the negative suffix (see below). Examples: yakp-ap-o? "he does not strike him" (yakp- "to strike," -o?, declarative mode, present tense, third person) yakp-a-p-o? "he does not strike you" (the length of -a- is due to the second person pronoun); yakp-ape-no? "he is not striking him" (-n, continuative suffix).

The second person pronoun is expressed by adding one mora of length to the vowel of the preceding morpheme. Normally it follows the future tense suffix but when the negative suffix is used, the second person suffix comes between it and the theme (see above). Examples: yamxa-we? "he paints you" (cf. yamxo? "he paints him"; yamxa- "to paint"; -we?, declarative mode, present tense, third person), yamxa-po? "he does not paint you"; yamxa-tewa-we? "he will paint you" (cf. yamxa-tewo? "he will paint him"); yamxa-pa-tewo? "he will not paint you" (cf. yamxapa-tewo? "he will not paint him").

-nes[?]e, -nes[?], dual subject. Examples: hecne-nes[?]-o?s "we two lie down"; hecne-nes[?]-o-ka "you two lie down"; hecne-nes[?]-o? "they two lie down"; hecne-nes[?]e-s "we two shall lie down!" This suffix follows the negative suffix, the future tense suffix, and the second person object pronoun.

-wesʔe, -weʔ, -o:sʔe, -o:sʔ, plural subject. This suffix has the same position as the dual subject suffix. It occurs in the first and second persons of all modes. Third person plurals have a different form. Examples: ka·n·o·sʔ·oʔs "we throw it away," ka·n·o·sʔ·oʔ·ka "you plural throw it away," ʔeke·wesʔ·oʔs "we give it to you," ʔek·o·sʔ·e·s "we give it to him!"

-a·tew, -a·to·, future tense suffix. Examples: yakp·a·tew·oʔ "he will hit him"; yakp·a·to·noʔ "he is going to hit him"; ʔ·a·to·nes "I'll do it!"

-no, -n, continuative suffix. Examples: wa·na·n·oʔ "he is falling" (cf. wa·n·oʔ "he falls"); wa·na·to·n·oʔ "he is going to fall" (cf. wa·na·tewoʔ "he will fall"); wa·na·no·k "he, falling."

§25. -we, -o, -o, declarative mode suffix. This suffix always appears with either the present tense suffix -ʔe (-ʔ) or the past tense suffix -ʔey (-ʔe, -ʔe). The declarative present tense conjugation is as follows: yakp·oʔ·ʔs "I strike him," yakp·oʔ·ka "you strike him" (the tense suffix is completely elided), yakp·oʔ "he strikes him," yakpa·nesʔ·oʔ·ʔs "we two strike him," yakpa·nesʔ·oʔ·ka "you two strike him," yakpa·nesʔ·oʔ·ʔ "they two strike him," yakp·oʔ·sʔ·oʔ·ʔs "we strike him," yakp·oʔ·sʔ·oʔ·ka "you (plural) strike him," and yakp·oʔ·ʔo·yuk "they strike him." The continuative aspect of this tense mode is formed by inserting the continuative suffix -no, -n: yakpa·n·oʔ·ʔs "I am striking him," etc. Similarly, the future tense suffix may be inserted, forming a near future tense: yakp·a·tew·oʔ·ʔs "I shall strike him," etc.

The declarative past tense conjugation is as follows: yakp·oʔ·ʔoʔ·ʔ "I struck him," yakp·oʔ·ʔoy·no "you struck him," yakp·oʔ·ʔo "he struck him," yakpa·nesʔ·oʔ·ʔoʔ·ʔ "we two struck him," etc., yakp·oʔ·sʔ·oʔ·ʔoʔ·ʔ "we struck him," and yakp·oʔ·ʔo·lok "they struck him." The continuative suffix may also be inserted as before. The future tense suffix, used with this paradigm, denotes a remote future.

Both the preceding paradigms may be put into the interrogative by omitting the declarative suffix and adding, at the end, a suffix -ʔ. Thus: yakpa·ka·ʔ (< yakpa·ʔ·ka·ʔ) "are you striking him?" and yakp·ey·noʔ "did you strike him?" The dual and plural forms are built up as before. Both the continuative and the future tense suffixes may also be used. The final -ʔ (interrogative suffix) is dropped if the form is preceded by an interrogative pronoun.

§26. The assertive mode is conjugated as follows: yakp·a·nʔes "I strike him!" yakp·a·nʔey "you strike him!" yakp·aʔa "he strikes him!" yakpa·nesʔ·a·nʔes "we two strike him!" etc., yakp·oʔ·sʔ·a·nʔes "we strike him!" etc. There is no third person plural form. The continuative and future tense suffixes may be used with this mode: yakpa·n·a·nʔes "I am striking him!" etc., and yakp·a·tew·a·nʔes "I am going to strike him!" etc.

The following interrogative paradigm seems somewhat related to the above. yakpa·ya·ʔa·ʔ "did you strike him?" yakpa·l·ʔa·ʔ "did he strike him?" yakpa·nesʔ·e·ya·ʔa·ʔ "did you two strike him?" and yakp·oʔ·sʔ·e·ya·ʔa·ʔ "did you (plural) strike him?" As before, the final glottal stop (suffix for the interrogative) is dropped when the form is preceded by an interrogative pronoun.

§27. The declarative-assertive mode is conjugated as follows: *yakpa-nwa-s?* "I strike him," *yakpa-nwa-n'ey* "you strike him," *yakpa-nwa?* "he strikes him," *yakpa-nes'e-nwa-s?* "we two strike him," etc., and *yakp-o-s'e-nwa-s?* "we (plural) strike him," *yakp-o-s'e-nwa-n'ey* "you (plural) strike him," *yakpa-nwa'a-nik* "they strike him." The continuative and future tense suffixes may be added: *yakpa-no-nwa-s?* "I am striking him," etc., and *yakp-a-to-nwa-s?* "I shall strike him."

§28. The difference in function between the declarative, assertive, and declarative-assertive seems to be mainly one of emphasis. The declarative is used to denote a simple statement of fact or occurrence. *ʔekʷanwixwanlak nenxalo-s'o?s* "we found a little dog" (*nenxal-* "to find"), *nacekla ʔeykanxaycono?s* "when the fish bit, I pulled him up" (*ʔeykanxaycon-* "to pull up"), *we-yik ta-taxko?* "he brought her here." It will be noted that the declarative suffix is always combined with a tense suffix. The tenses distinguished are the present, the past, the near future, and the remote future: *cakaw'a-y'ik yaxasto-ka* "you are near the river" (*yaxast-* "to be near"), *hetopo'a-lak ʔeywencakanes'o'o?* "we two have killed the Osage," *taxas wa-ta'as na ʔeya-tewo-sno?s* "we are going [home] this very day" (*na ʔey-* "several go"), *ha-na-tewo'o?* "[someday] I'll go away."

The assertive is used when the statement of fact or occurrence is made with emphasis: *sa-ya ʔe-na-n'es* "it is me!" *to-nana'a* "he lies!" *te-l ʔe-na'a* "here he is!" Only the future tense is distinguished in this mode: *we-paka-tewa-n'es* "I shall tell them!"

The declarative-assertive is apparently used of statements of fact or occurrence without reference to time. Thus: *kokonwa-l'an ʔahen'a-la ʔe-nwa-s?* "I am the chief's daughter." Examples of this usage are rare, however. More often the future form of the declarative-assertive is found denoting an occurrence to take place at some definite future time: *taxso-k'wa ya-lo-na-to-nwa?* "tomorrow she will kill him," *yaxas'ok neswal'an keykew'a-to-nwa?* "if I eat it, I shall become a fish," *o-s'eyo'ok sosko-na-to-nwa'anik* "if you (plural) do that, they will hear of it."

§29. The suffix *-k'wa*, used only in the third person singular, denotes an exclamation. The continuative suffix and the future tense suffix may be used with it. Examples: *ha'as heykewta-k'wa* "many [people] are coming!" *k'wa-low yo-m'a-to-no-k'wa* "it is going to rain hard!" *ʔawas'a-la hetoxa-k'wa* "the meat is all gone!" *hexal'oyka kence-no-k'wa* "ants are biting me!"

There are two suffixes denoting the intentive mode: *-a-ha'a* and *-a'?*. The former apparently defines the simple intentive, the latter an emphatic intentive. Both may be used only in the first person, singular, dual, or plural. Examples: *hewl-a-ha'a* "I will catch him," *ʔo'ʔo-k'wa ya-lo-n-a-ha'a* "tonight, I will kill him," *c'a-mow ya-lo-n-a'?* "leave him alone, I'll kill him," *teyey'a-lak yaxapew sa-ya yax-a'?* "don't eat the liver, I intend to eat it."

The imperative mode is formed by the suffix *-w*. It is found only in the singular, dual, or plural second person. Examples: *ʔanco-w* "wake up!" *kecn-o-s'o-w* "[you plural] let me go!" *te-lak soko-w* "put this away!"

The suffix *-e-l* appears only in the third person singular, dual, and plural and appears to characterize an exhortation or command. Examples: *hamʔamto-x-a-tew-e-l* "let him be burned up!" *xa-n-e-l* "there he goes!" *weʔispax xastew-e-l* "[do it] once more!"

§30. The following three subordinating suffixes are added to themes conjugated for person and number.

-kaʔak "but, when, while, as": *yaxa-s-kaʔak* "I ate it but," *yaxa-ne-kaʔak* "you ate it but," *yaxa-l-kaʔak* "he ate it but," *yaxa-nesʔe-s-kaʔak* "we two ate it but," etc., and *yax-o-sʔe-s-kaʔak* "we ate it but," etc. Examples: *yaxaneykak ta-yaxa-l-kaʔak hetlo-noʔ* "he offered him food but he refused it" (*ta-yaxa-* "to offer food, to feed"); *hakoxa-nesʔe-l-kaʔak taʔancenesʔoʔ* "when those two became tired, two [others] held him."

-ʔok "when, as, if": *nesexwe-s-ʔok* "when I scream," *nesexwe-yo-ʔok* "when you scream," *nesexwe-l-ʔok* "when he screams," *nesexwe-nesʔe-s-ʔok* "when we two scream," etc., and *nesexw-o-sʔe-s-ʔok* "when we scream," etc. Examples: *ke-sya-ce-yo-ʔok ya-lo-na-tewa-noʔs* "when you see me, I shall kill you."

-kʷa "as soon as, when": *ya-ce-kʷa-nes* "when I see him," *ya-ce-ken* "when you see him," *ya-ce-kʷa* "when he sees him," *ya-ce-nesʔe-kʷa-nes* "when we two see him," etc., and *ya-c-o-sʔe-kʷa-nes* "when we see him," etc. Examples: *wa-na-kʷa-nes kenesyaxaw* "as soon as I fall, feed me," *hakxona-ken yalxilnoʔ* "as soon as you went in, he ran away," *na-ʔe-kʷa taʔanoʔ* "as they went away, he picked it up."

§31. Four other subordinating suffixes occur which are added to the unconjugated theme. Person and number are expressed for the combination in the principal verb.

These suffixes, *-ta*, *-ʔan*, *-lʔila*, and *-t*, all express a consecutive occurrence of two or more actions. *-ta* expresses simple conjunction between otherwise unrelated acts: *no-ta ha-noʔ* "he said [thus] and went away"; *neskapa-ta haxeynoʔ* "he closed [the door] and went away"; *taʔane-ta hanpilnoʔ* "he picked it up and went over there."

The other three indicate conjunction also but with varying degrees of dependence of the final action upon the initial action. When *-ʔan* is used, this dependence seems to be least marked: *nexʔewʔa-lak nok-an* (<*nok-ʔan*) *ʔeywencakanoʔ* "he took the gun and killed them" (*nok-* "to take"), *ha-n-ʔan mʔe-tnoʔ* "as he went off, he was struck by lightning" (*ha-n-* "one person goes"), *ʔawaskak ya-lo-n-ʔan ʔoyuka-lak nespecoʔ* "killing [several] buffalo, he filled the sack [with meat]" (*ya-lo-n-* "to kill").

-lʔila denotes a closer dependence of principal concept on subordinated concept: *hemaya-lʔila no-noʔ* "it is his ghost talking" (*hemaya-* "to be a ghost"), *ʔaweykak ya-lo-na-lʔila ta-yaxanoʔ* "whenever they killed many deer, they ate together" (*ya-lo-na-* "to kill"), *hetec ʔeye-nokye coxna-takʷe-lʔila* "how do you act when you are fast asleep" (*coxna-takʷe-* "to be fast asleep").

Finally; when *-t* is used, the relation of the two concepts is closest, in some cases approaching the unity of a compound. *na·ton·ʔa·y·ʔik haycona·t, heylapo·ʔ* "climbing the mountain, he stood there" (*haycona·* "one climbs, moves upward"); *hakxona·t* "hecu· ʔe·k·ʔa." *noklakno·ʔo* "entering [the tipi], he said, it is said, 'What's the matter!'" (*hakxona·* "one enters, goes into"); *haklana·t tekalak yax·ʔkayce·t, kaxaw nesam·ʔam·ʔata sokota coxno·ʔ* "descending, chopping off a piece of wood, he burned it black and put it away and went to sleep" (*haklana·* "one descends"; *yax·ʔkayce·* "to chop off").

§32. *-n* absolutive verb suffix (cf. *-an* noun forming suffix, §11). Examples: *hetlo·no·ʔ yaxa·n* "he doesn't want to eat" (*yaxa·* "to eat"), *hetlo·no·ka yakpa·n* "you don't want to hit him" (*yakpa·* "to strike"), *hecna·n ha·csokonayla* "coyote lying down" (*hecna·* "to lie down"), *hepakew ʔe·ta·n* "tell him to come" (*ʔe·ta·* "to come"), *hatxilna·n yoxno·ʔ* "going out, he flew away" (*hatxilna·* "to go out"). This suffix, added to the theme plus the continuative suffix, also expresses a hortatory: *ta·taklana·no·n* "let's take him down," *hecocxa·yo·no·n* "let's go to sleep," *wa·teca ʔe·no·n* "let's stay right here."

§33. A suffix *-k* is attached to themes conjugated for person and number: *yakpa·se·k* "I having struck him," *yakpa·ne·k* "you having struck him," *yakpa·k* "he having struck him," *yakpa·nes·ʔe·se·k* "we two having struck him," *yakpa·nes·ʔe·ne·k* "you two having struck him," *yakpa·nes·ʔe·k* "they two having struck him," *yakp·o·s·ʔe·se·k* "we having struck him," *yakp·o·s·ʔe·ne·k* "you (plural) having struck him," *yakpa·n* "they having struck him." Note that the third person plural employs an *-n* suffix (see §32). The continuative and future tense suffixes may also be employed in this paradigm.

-k forms are used with or without noun suffixes. In the latter case, they function as modifiers; *hexal·ʔoy ha·ʔas ʔe·no·k kenana·co·nok·ʔa* "there are many ants biting me." In this example, *hexal·ʔoy ha·ʔas ʔe·nok* "there are many ants" functions as a substantive phrase modifying *kenana·co·k·ʔa* "they are biting me." This is a rare usage; more often *-k* forms are found with noun suffixes and function either as verbal nouns or as subordinated forms: *xa·xa·k·la haklanat panxow newo·ʔ* "he having arrived, they said: 'Go down and bathe!'" (*xa·xa·* "one person arrives"), *ʔo·ʔo·k·la hecno·ʔ* "night having come, they lay down" (*ʔo·ʔo·* "night falls"), *yaxto·xa·k·la yalxilno·ʔ* "having eaten it all, he ran away" (*yaxto·xa·* "to eat all"), *ta·tanano·ʔ he·sokyo·k·wa·y·ʔik* "he was bringing him to that place aforementioned where he had fought" (*he·sokyo·* "to fight"), *sosko·no·ʔ hekto·k·wa·ʔa·lak* "he listened to that singing aforementioned" (*hekto·* "to sing"), *xa·xo·ʔ he·pano·k·wa·y·ʔik* "he arrived at the council" (*he·pano·* "to discuss, to hold council").

ENCLITICS

§34. Enclitics are bound morphemes that may be suffixed to *-k* forms of verbs, to nouns, or to demonstratives. They express certain modal concepts.

The declarative enclitic *-aw* (*-a·we*). Examples: *tickankalaka kew·ʔeyweyca·*

k-aw "the enemy have captured us" (?eyac- "to capture"), hecu·ʔax ʔeye·no-k-aw "something has been happening to you" (ʔeye- "to do to"), na·ya ta·hapse-ne-k-aw "you have helped her" (ta·hapse- "to help"), cakaw-e·ʔe·k-aw "there is the creek" (cakaw "creek," he·ʔe·k "to that place"), na·yak hel·ʔa·t-aw "yours is over there" (he·ʔa·t "over there").

The interrogative eclitics ·ye and ·yelk^wa. Both of these take the interrogative suffix -ʔ unless preceded by an interrogative pronoun (see §25 to §26). The first may be translated "have [you done] . . ." and the second "are [you] certain of . . ." Examples: hetec ʔa·to·ne-k-ye "how will you behave?" heteca ye·la-k-ye "where are they?" heteca yamka·k-ye "to what place were you called?" (yamka- "to call"), waxes ʔek^wan-yelk^wa·ʔ "are you sure it's a dog?" (ʔek^wan "dog"), xamʔaleʔela cʔawʔal-ye·ʔ "is that prairie wide?" (cʔawʔal "wide"), hetec ʔa·to·ne-k-yelk^wa "are you sure you will do it?"

The resultative -coʔ. Examples: te·c ʔa·to·se-k-coʔ "[if someone chased me] I should behave in this manner," we·y·ʔik kesʔetalʔok ke·waw-a·to·k-coʔ "if I am cut there, then I will die," keyacantitsʔanʔok ya·tet keyacenesʔe·k-coʔ "if they want to see me, they must come here to see me."

The hortatory -e. Examples: tana-se-k-e "let's go," tayxena-se-k-e "let's go across," yakexaycona-se-k-e "let's push it up," ya·lo·na-se-k-e "let's kill him."

The quotative -noʔo and the narrative -laknoʔo may be added only to verb forms in -k. Examples: cane-ne-k-noʔo "it is being said that you left her," ya·lo·na-k-noʔo "it is said that he killed him," xa·xa-k-laknoʔo "he arrived, it is said," yaxa-k-laknoʔo "he ate it, it is said." The narrative enclitic must be added to every verb form employed in a myth not in direct discourse or having a subordinating suffix. It distinguishes events known to the raconteur on the authority of cultural tradition from those which he has personally experienced.

There are three subordinating enclitics, -a·lakit "because," -ay "as, while," and -latoy "but." They may be added only to verb forms in -k and are not commonly used. Examples: ya·ce-se-k-a·lakit yalxilnoʔ "because I saw him, he ran away" (ya·ce- "to see"), yalxilnoʔ yakpa-ne-k-a·lakit "he ran away because you struck him," hecne-k-ay ʔatsawoʔ "as he lay there, he recovered consciousness," cʔawʔal tana-nesʔe-k-latoy yancicxa·xoʔ "they had gone far but he ran and caught them" (tana- "several go"), ʔe·k-latoy ha·ʔako·nwa·ʔa·la "all were there except that man aforementioned" (ʔe- "to be there").

PARTICLES

§35. The great majority of Tonkawa particles are composed of the verb theme ʔe-, probably identical with the theme ʔey-, ʔe- "to be, to do" plus one or more verb suffixes. Thus, ʔe·t "then, and" (-t, subordinating suffix, §31), ʔe·ta "and then" (-ta, §31), ʔe·k·la "then, it being so" (-k, §33; -la, noun suffix used with -k verbs, §33), ʔe·no-k-lak "it happened then" (-no, continuative; -k-lak, §33), ʔe·la "just as, when" (-la, noun suffix, here irregularly attached directly to a verb

theme), ?e·no·la “after, before” (-no, continuative, and -la [see the preceding]), ?e·lka “thus, in consequence of” (-lka, a unique suffix), ?e·lka?ak “whereupon, at that, when” (-lka?ak, §30), ?e·yo?ok “then, at that point, upon so doing” (-yo?ok, §30), and ?e·l?ok “but, and” (-l?ok, §30).

Other particles, not analyzable, are as follows: ?enik “then,” and the interjections ?ana “look there!” ?a·kay “no!” ?al? “all right!” ?eyew “agreed!” ?o·ko “no!” na·k^w “go ahead!” newey “hurry!” he?e·wa “don’t know!” hey? “yes!” hehey? “yes!” hecoco·k “be still!” wa?an “wait!” wa?ana·lesuk “just a moment!” we·?il “let’s go!”