Title
Nez Perce Grammar

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Publication Date
1965
Nez Perce Grammar
By
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A.B. (Hiroshima University) 1953
M.A. (University of California, Los Angeles) 1958
Dissertation
Submitted in partial satisfaction of the requirements for the degree of
Doctor of Philosophy
in
Linguistics
in the
Graduate Division
of the
University of California, Berkeley
Approved:

Committee in Charge

Degree conferred. Date
PREFACE

The field work for this study was done during the summers of 1960, 1961, and 1962 at Kooskia, Idaho, under the auspices of the Survey of California Indian Languages, Department of Linguistics, University of California, Berkeley, with the cooperation of the Idaho State Historical Society.

My thanks go to Professor William F. Shipley, who, as the chairman of the dissertation committee, encouraged and helped me from the beginning even to correcting the ever intrusive Japanese in my English; to Professor Mary R. Haas, who, as the head of the Survey of California Indian Languages, first introduced me to American Indian linguistics and has been a constant source of encouragement ever since; and to Professor Murray B. Emeneau for reading and commenting on a draft of the grammar.

My thanks also go to Professor Sven Liljeblad, for making available a valuable tape of Mrs. Agnes Moses, who was one of the last monolingual speakers of this language and died before I reached the field; to Mr.
H. J. Swinney, Director of the Idaho State Historical Society, Mr. Merle W. Wells, Historian and Archivist of the same Society, Mr. Marcus J. Ware of Lewiston, Mr. and Mrs. Samuel Swayne of Orofino, Mr. William Johnston and Mr. Ladd Hamilton of the Lewiston Tribune for their kind assistance; and finally, to my teachers of the language, especially to Mr. and Mrs. Harry Wheeler and Mrs. Elizabeth P. Wilson, whose warm hospitality and rewarding friendship will never be forgotten.

While I am indebted to many in this study, the final responsibility for any errors or inconsistencies is mine alone.
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INTRODUCTION

The Nez Perces called themselves /nimí·pu·/. The neighboring Indians\(^1\) called them Šiwaniš 'stranger,' Šukwíšuk'wi 'dark brown' (Sahaptin dialects), séhápten (Flathead) (Teit 1930: 300), cugádika?a 'kows eater,' såiduka?a 'people under the tule' (Bannock), cöiga?a 'kows people' (Shoshoni), kúmunuitsitapi 'dark green or dark blue people' (Blackfoot). The whites called them Nez Perces, Pierced Noses, Chopunnish, Blue Earth Indians, Blue Mud Indians, Green Wood Indians, and Flatheads.

/nimi·pu·/ is analyzable into /nimi·/ and /pu·/. The former occurs only with /pu·/, and the latter means 'people.' Together, they mean 'the Nez Perce people.' An apparent variant numipu is also found (Spalding 1840; Morvillo 1888, 1891, 1895; Spinden 1908a: 171). Haines has Nimapu and notes that it means 'the Real people' (Haines 1955: 8).

---

\(^1\)The following are by personal communication: Sahaptin dialects from Bruce Rigsby, Bannock and Shoshoni from Sven Liljeblad, Blackfoot from Allan Ross Taylor.
Šiwaniš 'stranger' is used by all the dialects of Sahaptin for the Nez Perce. Some older people, according to Rigsby, use Šukwišukwi, which means 'dark brown' or 'mahogany color' because the Nez Perces are supposed to have darker skin.

The name sèhápten and its variants are recorded by Thompson as early as 1809 (White 1950: 72). Sometimes it was to refer only to the Nez Perces (by Thompson, cf. Tyrrell 1916, White 1950); only to Northern or Northwestern Sahaptin (by Tolmie and Dawson, 1884: 78-87, who call their obviously Northern Sahaptin vocabulary "Shahaptan or Nez Percée"); or presumably for S(h)ahaptian including both Northern Sahaptin and Nez Perce.

sáiduka?a 'people under the tule' apparently refers to a Nez Perce type of dwelling, and cugádika?a 'kows eater,' and cóiga?a 'kows people' to one of their favorite foods. According to Liljeblad, sáiduka?a in Oregon Paiute means 'enemy,' 'enemies.'

2 That the feeling was mutual is indicated by the Nez Perce word /tiwélqe/, which at once means 'the Snake Indians (and other Uto-Azteccans),' and 'enemy.'
According to A. R. Taylor, kúmunuitsitapi is analyzable into kúmunui 'dark green or dark blue' and tsitapi 'people'; the former is a possible loan from Nez Perce. Nez Perce has no word resembling kúmunui with the suggested meaning. However, the Nez Perce word /qemůynu:/ for the Wallawa band of Nez Perces (probably identical with kamůinu in Bulletin 30 of the Bureau of American Ethnology given as 'own name') may possibly be the source of the Blackfoot form.

According to Josephy (1955: 14), Nez Perce as a tribal name was coined by the French Canadians. It was first recorded in David Thompson's Journal on March 11, 1810 (White 1950: 96). The name derives from the early Nez Perce custom of wearing a dentalium shell through the septum of the nose as noted by Meriwether Lewis:

"The ornaments worn by the Chopunnish are, in their nose a single shell of Wampom, the pirl and beads are suspended from the ears." (Thwaites 1904-5: 4.37f.)

The custom was also noted by Thompson ca. 1812 (Tyrrell 1916: 486f.), by Ross ca. 1818 (1855: 1.185), by Chief Joseph (1879: 416), by Spinden (1908a: 172), by Curtis (1911: 8.4 note 1), and by Teit (1930: 82, 147, 340). An early discontinuation of this custom was indicated by Parker.
(1838: 80) in an entry for August 12, 1835:

"... but how will those ... account for the Nes. Percés being so called, since they do not pierce their noses ..."

and by Ferris (Phillips 1940: 303), who in recounting his experiences in the Rocky Mountains from 1830 to 1835, noted:

"... there is not among the Nez-perces an individual having any part of the nose perforated."

This early discontinuation probably accounts for the view that the custom never existed and that the name is a misnomer—a view held by not a few including the authors of the article on Nez Perce in Bulletin 30. It is to be noted that Nez Perce was also used to designate the Northern Sahaptin as evident from vocabularies by Ross (1855: 1.312-323) and Tolmie and Dawson (1884: 78-87). The Anglicized Pierced Noses occurred as early as the date of Lewis and Clark's first historical encounter with the Nez Perces, September 20, 1805. Numerous variants are known including Neepercil and Nenpersaas (Henshaw and Farrand 1910: 2.67). Occasional missing of the mark is noted in Neckpercie (Henshaw and Farrand 1910: 2.67) and Oreille Percé (Coues 1897: 1.398)
Chopunnish was used by Clark in 1805 (Thwaites 1904-5: 3.78). Henshaw and Farrand (1910: 2.66) suggested that this is a corrupted form of a Nez Perce word Tsútpéli, a self-designation. Spinden (1908a: 172, note 1) suggested that it might be from a Sioux word Tsunitpelun, a possible corruption of the Nez Perce form. The present corpus bears out neither of the suggestions, nor does it offer a better one.

Blue Earth Indians and Blue Mud Indians may refer (as the Blackfoot word might) to the color and material of face paint. No explanation is available for Green Wood Indians. Blue Mud Indians was recorded by Lewis and Clark (Thwaites 1904-5: 6.106), Blue Earth Indians and Green Wood Indians by Henry (Coues 1897: 2.712), and the latter again by Thompson (White 1950: 105).

The name Flathead seems to have been used in at least three ways; (1) the ethnic group speaking a Salish language, (2) any group practising frontal deformation, (3) any tribe inhabiting the mountainous area west of the Rocky Mountains. It is possible that in the latter two applications the Nez Perces may have been included.

The practice of frontal deformation among the Nez Perces is noted by Teit (1930: 168, 381f.). Spinden
(1908a: 226) refers to skeletal evidence suggesting that it may have been an ancient or occasional practice. However, the reference Chittenden makes to the testimony of an "eye-witness" that the Nez Perce delegates to St. Louis in 1831-32 had flat heads (Chittenden 1902: 2.889) appears to be unfounded since Haines clarifies that the "eye-witness" William Walker arrived in St. Louis late in 1832, after the delegates had left the city (Haines 1937: 78). Further, Catlin did not paint them with flat heads. Even among the Salish-speaking Flatheads who did flatten their heads, the practice may have been discontinued early, as noted by Parker (1838: 80) in 1835:

"I was disappointed to see nothing peculiar in the Flathead Indians to give them their name."

Flathead as an areal term inclusive of the Nez Perces is mentioned by Lewis and Clark. After noting that all nations west of the Rockies practiced flattening of heads Lewis remarks:

"... it is from this peculiar form of the head that the nations east of Rocky mountains, call all the nations on this side, except the Aliohtans or Snake Indians, by the generic name of Flatheads."

(Thwaites 1904-5: 4.184)
Further evidence of this use may be found in Catlin's following statement:

"The Nez Percés who inhabit the upper waters and mountainous parts of the Columbia, are a part of this tribe [Flatheads] ..." (Catlin 1841: 2.108)

and in the following phrasing in a burial certificate of a 1831 Nez Perce delegate to St. Louis:

"... Je sousigné ai inhumé dans le Cemètre de Cette Paroisse le corps de Keepellelé ou Pipe Bard du Nez Percé dela tribu de Chopoweck Nation appelé Tête Plates ..." (Chittenden and Richardson 1905: 22, note 3)

The territory occupied by the Nez Perce, according to Spinden (1908a: 172), extended from the Bitterroot mountains on the east to the Blue mountains on the west, between latitude 45° and 47°. Thus, while mostly in Idaho, they occupied a considerable area in Oregon and Washington. The adjacent tribes were Northern Sahaptin to the west, Flatheads to the north and east, and the northern Uto-Aztecs to the south, in increasing order of enmity. The military alliance between Nez Perce and Salish against the common enemy, horse-thieves who were after the famed breed of Appaloosa, resulted in an amicable symbiosis of the two tribes. Structural
borrowing from the Salish, in consequence, appears probable.

Driver and Massey (1957: 167) state that "every anthropologist agrees that man's biological evolution took place in the Old World." But we are yet to learn of the relations of the Old World languages to the present American Indian languages, the dates of their intercontinental migrations, or their subsequent development in the New World.

The evidence for human habitation in nearby areas include the Five Mile Rapids in Oregon where continuous human occupation of a site from about 11,000 years ago up to the 1820's was established (Cressman 1960: 66; 1962: 2), the Indian Well site dating from 7500 to 8500 years ago (Butler 1959: 13) on the Washington side across the Columbia from the Dalles, the Lind Coulee site of some 8700 years ago (Daugherty 1956: 256), and the Ash Cave site of about 7940 years ago in the Columbia Basin (Butler 1962: 71). The famed Fort Rock Cave sandals have a radiocarbon date of 9053 ± 350 (Libby 1955: 119). Within the present Nez Perce territory, the Weis Rockshelter site indicates continuous human habitation from 7340 ± 140 years
ago (Butler 1962: 28) to about 1400 A.D. (Ibid. 29) with indications of volcanic ash deposits identified as eruptions of Mt. Mazama (Ibid. 25f.), which are dated as having occurred around 6453 years ago (Libby 1955: 118f.). The Weis Rockshelter is located in /nipéhe/ or Rocky Canyon near Cottonwood, Idaho.

Cressman notes that the time of the impact of the first Shoshonean speaking peoples who filtered into the intermontane region may be the end of the Altithermal, that is 4000 to 4500 years ago (Cressman 1960: 69), and that the date of Salish settlement in the Tillamook area may be 2000 years ago (Ibid. 71). In reference to the pre-Shoshonean linguistic groups, Cressman notes that "Sapir's Penutian stock was apparently that of the old Great Basin population" (Ibid. 74).

Butler recognized an early culture characterized by leaf-shaped projectile points found not only in the Northwest but also in Mexico, Venezuela, Peru, and Chile. He called it the Old Cordilleran Culture (Butler 1961). At Weis Rockshelter, Butler considers the Craig Mountain phase of 5500 B.C. to 1490 B.C. (Butler 1962: 54) to be the regional expression of this culture (Ibid. 56). At The Dalles and in the
Columbia Basin the culture was coterminous with the anathermal period, but in the Camas Prairie region, in the Puget Lowland and in northeastern California it persisted until a later date (Ibid. 56). Swanson refers to the correspondence between the Old Cordilleran Culture and Penutian (1962: 157).

A different linguistic identification of this culture has been suggested by Daugherty, who after revising the Old Cordilleran Culture to "Northwest Cordilleran Area tradition," notes that "the remarkable correspondence, both temporally and spatially, between the concept of Northwest Cordilleran Area tradition and the apparent distribution of early Salishan languages, suggest a relationship" (1962: 149).

Both Cressman and Swanson agree that Penutian preceded Shoshonean.

Still another view is expressed by W. W. Taylor, who in reference to the Macro-Penutian classification suggested by Whorf (1935: 608) notes that "if the concept of Macro-Penutian is valid, the split between Penutian and Utaztecan was thus probably in the neighborhood of 10,000 years ago and somewhere in the mountainous region north of the Great Basin" (Taylor 1961: 75). He
adds that "in fact, the Macro-Penutian speakers, as they moved southward along the western flanks of the Northern Rockies, may have been split by running into the block of Hokaltecans already occupying the desert habitat of the northern Basin." It is to be noted that Taylor's quotation begins with an "if." In Taylor's statement, the suggested sequence is first Hokaltecan, then the Macro-Penutian, which later split into Penutian and Uto-Aztecan.

With our present knowledge it is premature to establish any linguistic chronology subsequent to the earliest evidence of human habitation in the area, especially in view of the possibility that neither the equation of archaeological cultures with linguistic groups, nor that of transitions in cultures with migrations is necessarily warranted. One simple possibility is that the ancestors of the Nez Perces may have occupied their present habitat for several millenia, and that the people who occupied the Weis Rockshelter for the first time some 7340 years ago may have spoken a language ancestral to Nez Perce.
Nez Perce, along with Northern Sahaptin, is a member of the Sahaptian family of languages. Sapir proposed that Sahaptin, Wailatpuan, and Lutuami are members of a larger group, Plateau Penutian, which in turn is a member of a still larger group, Penutian (Sapir 1929). Sahaptian and Lutuami are probably related (Aoki 1963b), but beyond this there is no published demonstration of Plateau Penutian as a genetic group. Besides Sapir, exploratory attempts toward the placement of Sahaptian in a larger group include Swadesh (1954, 1956), and Hymes (1957, 1964). California Penutian, proposed by Dixon and Kroeber (1919) and demonstrated as related by Pitkin and Shipley (1958), and Sahaptian, together with Klamath, probably belong to the same genetic group.

Spinden in 1908 listed some forty divisions or bands within the Nez Perce tribe (Spinden 1908a: 174f.). That they are geographical or micropolitical units and not necessarily linguistic subdivisions is suggested by their names which are mostly derivatives of place names, e.g., /lamtá•ma/ 'Whitebird band on Salmon River' is composed of /lamátá/ 'Whitebird (place name)' and /ma/ 'from,' 'people from.'
Almost a century after the tribal relocation into reservations, the historical dialect situation is not clear. According to the informants, all of whom live in the middle and south fork regions of the Clearwater River (Mr. and Mrs. Wheeler in Stites, Mrs. Wilson in Kamiah, Mr. Arthur in East Kamiah, and Mrs. Moody in Kooskia), there is a separate dialect, which may be termed the Lower Nez Perce dialect. The dialect treated in this study, the Upper Nez Perce dialect, and the Lower dialect are mutually intelligible. This division may have some historical relevance since a similar division of the tribe was mentioned by Captain Bonneville in the early 1830's.

The scanty information may be summarized as follows:

<table>
<thead>
<tr>
<th>Upper</th>
<th>Lower</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>petkúhtu?</td>
<td>petkéhhtu?</td>
<td>'we will be shooting'</td>
</tr>
<tr>
<td>tukéyetet</td>
<td>tukéy tet</td>
<td>'hunting'</td>
</tr>
<tr>
<td>pi·tamyalon</td>
<td>pi·tamyanon</td>
<td>'chicken hawk'</td>
</tr>
<tr>
<td>célmen</td>
<td>cénmen</td>
<td>'Chinese'</td>
</tr>
<tr>
<td>mé·ywi</td>
<td>mé·y mi</td>
<td>'morning'</td>
</tr>
<tr>
<td>so·yá·po·m</td>
<td>so·yá·po·nim</td>
<td>'of the white'</td>
</tr>
<tr>
<td>maná</td>
<td>manáma</td>
<td>'how'</td>
</tr>
<tr>
<td>sepú·msise</td>
<td>sepí·wemsise</td>
<td>'I am leading'</td>
</tr>
<tr>
<td>peénpe·yse</td>
<td>peénpe·nse</td>
<td>'he takes somebody else's'</td>
</tr>
<tr>
<td>konwacá·n</td>
<td>konwacá·t</td>
<td>'for that reason'</td>
</tr>
</tbody>
</table>

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The lower dialect seems to have at least one additional phoneme /kʷ/, which marks it as the more conservative dialect of the two, according to the tentative inventory of phonemes in Proto-Sahaptian (Aoki 1962: 173). The two sets with /l/ in the Upper dialect and /n/ in the Lower may or may not be significant since n-1 consonant symbolism (300) exists in both dialects. The set with /y/ in the Upper dialect and /n/ in the Lower in allomorphs of {e·y} (benefactive suffix) may involve an incorrect identification by informants. A. B. Smith, in reference to his linguistic observations at Kamiah in 1839-41, notes that kiansha means 'go for another,' and hahnansha means 'see another's wife, children etc.' (Drury 1958: 105). In the dialect of this study Smith's forms would be /kiyé·yse/ and /hexné·yse/. Smith's teacher of Nez Perce was Chief Lawyer (Ibid. 107), whose old home was in the Upper Nez Perce area of Kamiah.

It is possible that there was an extensive vocabulary limited to myths. According to Mrs. Elizabeth Wilson there are at least the following sets, one for common use and the other limited to myths.
<table>
<thead>
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<th>myth</th>
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<td>nisé•weynu•</td>
</tr>
<tr>
<td>wé•xpus</td>
<td>nenínme</td>
</tr>
<tr>
<td>wé•ptes</td>
<td>tipiyeléxne</td>
</tr>
<tr>
<td>himi•n</td>
<td>teqelixniké•t</td>
</tr>
<tr>
<td>yá•yax</td>
<td>wiske?yné•t</td>
</tr>
<tr>
<td>titó•qan</td>
<td>neti•telwit</td>
</tr>
<tr>
<td>hi•semtuks (luminary)</td>
<td>wiyetené•t</td>
</tr>
</tbody>
</table>

The words used only by older people include /nicu/ 'younger kinsman,' /no•ciwá•tx/ 'we alone.' The former is without a one-word equivalent in common usage; the newer and more common form for the latter is /nonciwá•tx/. /ki•?molikam/ 'mountains' is used only in connection with the guardian spirit quest. The common word for mountain is /mé•xsem/.

Certain phonetic modifications produce various subsystems of the Nez Perce language as spoken by different animals in myths.³ Phinney notes

"Fox speaks with utmost clarity and directness. Bear slurs consonants into ñ. Skunk nasalizes in a high pitched voices and changes ñ to x and k, s to ts, a to á." (Phinney 1934: ix)

³A similar phenomenon is noted in Nootka (Sapir 1915).
No corresponding information was available except for the change of n to 1 and s to 3 in Coyote's speech, e.g., /nisé·weynu·/ 'coyote (in common speech)' and [li36·weylu·] 'coyote (in Coyote's speech).'

My principal informants were Mr. and Mrs. Harry Wheeler (1960-61), and Mrs. Elizabeth P. Wilson (1961-62). Other informants were Mr. David Arthur, Mr. John Mofatt, and Mrs. Lottie Moody.
The published sources on the Nez Perce Indians may be divided into scholarly and popular works. For the former this bibliography is (hopefully) exhaustive with respect to those dealing with the language. A selection of other sources are cited, including those referred to in the introduction.

Linguistic publications include two primers by Spalding (1839, 1840), a grammatical sketch by Hale (1846) based on A. B. Smith's field work, another grammatical sketch by Ainslie (1876a), a grammar and an English-Nez Perce dictionary by "a missionary of the Society of Jesus in the Rocky Mountains,"¹ a collection of texts by Phinney (1934), and a study of verb affixes by Velten (1943). There are at least three translations of various sections of the Bible: Spalding (1845), Ainslie (1876b, 1876d) and Cataldo (1914).

In manuscript are a grammar by A. B. Smith (ca. 1841), grammatical notes and an English-Nez Perce dictionary by Sue L. McBeth (ca. 1873-93), and three dictionaries; one presumably by Morvillo (ca. 1890), another by Morvillo as the author (Schoenberg 1957: 66).

¹Schoenberg identifies Anthony Morvillo as the author.
William Wheeler (ca. 1900), and a third by Corbett Lawyer (1955-61). Also in manuscript are texts, grammatical notes, and a lexical file by Morris Swadesh (ca. 1930), and grammatical and lexical notes by Phinney (ca. 1930).

One of the most extensive collections of Nez Perce traditions is Phinney's texts (1934). Collections in English include works by Spinden (Boas 1907, Spinden 1908b, 1917). Studies in the content and style of the Nez Perce oral literature include Skeels (1954a, 1954b, Ms) and Clark. Ethnographical studies exclusively concerned with Nez Perce are represented by Spinden's article (1908a) based on his field work, and Coale's restatement (1956) of various nineteenth-century accounts including that of Lewis and Clark. An excellent history of the Nez Perces is by Haines (1955).

Further bibliographical information is found in the following:

Beal 1963, pp. 343-357
Brosnan 1932, pp. 331-334
Drury 1936, pp. 429-431
Drury 1949, pp. 192-193
Drury 1958, pp. 367-368
Fee 1936, pp. 313-318
Haines 1939, pp. 343-349

Even though these are catalogued as "Cayuse" the language studied is a dialect of Nez Perce.
Haines 1955, pp. 311-318
Haines Ms, pp. 372-380
Howard and McGrath 1941, pp. 349-357
McWhorter 1940, pp. 313-315
McWhorter 1952, pp. 627-632
Patton Ms, pp. 131-141
Spinden 1908a, pp. 272-274

The bibliography is as follows:

Ainslie, George


1876c. Catechism for Young Children, Translated into the Nez Perce Language. Philadelphia.

Alvord, Benjamin


Aoki, Haruo


Bailey, Robert G.

1935-47. River of No Return, a Century of Central Idaho and Eastern Washington History and Development; Together With the Wars, Customs, Myths and Legends of the Nez Perce Indians. Lewiston.
Beal, Merrill D.

Berreman, Joel Van Meter

Boas, Franz

Brady, Cyrus Townsend

Brosnan, Cornelius James

Burns, Robert Ignatius
Butler, B. Robert


Butterfield, G.


Cataldo, Joseph Mary


Catlin, George


Chalmers, Harvey II

Chittenden, Hiram Martin

Chittenden, Hiram Martin and Alfred Talbot Richardson, eds.

Clark, Ella E.


Clark, J. S.

Coale, G. L.

Coues, Elliott, ed.


Cox, Ross

1831. Adventures on the Columbia River, Including the Narrative of a Residence of Six Years on the Western Side of the Rocky Mountains Among Various Indian Tribes Hitherto Unknown, Together with a Journey Across the American Continent. London.

Cressman, Luther S.


1962. The Sandal and the Cave, the Indians of Oregon. Portland.

Culin, Stewart

Curtis, Edward S.

Daugherty, Richard D.

Daugherty, Richard D. and E. A. Dammel

Dixon, R. B. and A. L. Kroeber

Dodge, Richard Irving

Donaldson, Thomas Corwin

Douglas, David

Driver, Harold E. and William C. Massey
Drury, Clifford Merrill

Dunn, John
1845. The Oregon Territory and the British North American Fur Trade, With an Account of the Habits and Customs of the Principal Native Tribes of the Northern Continent. Philadelphia.

Eells, Myron

Farrand, L.

Fee, Chester Anders

Foreman, G.
Gass, Patrick


Gatschet, Albert Samuel


Gray, William Henry


Grinnell, George Bird


Gunther, Erna


Hale, Horatio E.

Haines, Francis D.


Henshaw, H. W. and L. Farrand


Hines, Gustavas


Howard, Helen Addison and Dan L. McGrath

1941. War Chief Joseph. Caldwell.

Howard, Oliver Otis


Huntington, J. V. ed.

1854. Franchère's Narrative of a Voyage to the Northwest Coast of America in the Years 1811, 1812, 1813 and 1814. New York.

Hymes, Dell Hathaway


Irving, Washington

1836. Astoria, or Anecdotes of an Enterprise beyond the Rocky Mountains. London.

1837. The Adventures of Captain Bonneville, U.S.A., in the Rocky Mountains and the Far West Digested from His Journal and Illustrated from Various Other Sources. London.

Jacobs, Melville


Johansen, Dorothy O. and Charles M. Gates

Joseph, Chief

Josephy, Alvin M. Jr.

Judson, Katherine Berry

Kane, Paul
1859. Wanderings of an Artist among the Indians of North America from Canada to Vancouver's Island and Oregon through the Hudson's Bay Co.'s Territory and Back Again. London.

Kip, Lawrence

Lawyer, Corbett
In possession of the author, Lapwai, Idaho.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Leepar, R. D. and T. Beall  
n.d.  Legends of the Nez Perces.

Lewis, Albert Buell  

Lewis, Meriwether  


Libby, Willard F.  

Liljeblad, Sven  
1957. Indian Peoples of Idaho. [mimeographed volume for studies only] Idaho State College, Pocatello.

MacLean, John

Martin, Frances Gardiner

McBeth, Kate C.

McBeth, Sue L.

MuMurray, J. W.

McWhorter, Lucullus Virgil
1940. Yellow Wolf: His Own Story. Caldwell.
1952. Hear Me, My Chiefs! Caldwell.

Merk, Frederick, ed.

[Morvillo, Anthony]

Osborne, D.

Packard, R. L.

Palmer, Joel
1847. Journals of Travels over the Rocky Mountains to the Mouth of the Columbia River, Made during the Years 1845 and 1846. In Early Western Travels, vol. 30 (ed. by Reuben Gold Thwaites). [Nez Perce vocabulary, pp. 271-276]

Parker, Samuel
Patton, Bessie Jane


Phillips, Paul C., ed.

1925. Forty Years on the Frontier as Seen in the Journals and Reminiscences of Granville Stuart. Cleveland.

1940. Life in the Rocky Mountains, 1830-35. Denver.

Phinney, Archie


Ms. Sahaptin Lexicon. American Philosophical Society Library. MS no. 497.3 B63c Ps la 6.

Pitkin, Harvey and William F. Shipley


Powell, J. W.

Quaife, Milo M., ed.

Radin, Paul

Rafinesque, Constantine Samuel

Ray, Verne F.

Ray, Verne F. et al.

1947. Part of Dispatch from George Simpson Esq', Governor of Ruperts Land. Toronto.
Ross, Alexander


Sapir, Edward


Schoenberg, Wilfred P., S. J.


Scouler, J.


Skeels, Dell Roy


Smith, Asa Bowen

Ms. Peculiarities of the Nez Percé Language. Archives of American Board. [ca. 1841]

Spalding, Henry Harmon


Spinden, Herbert Joseph


Steward, Julian H.

Sutherland, Thomas A.

1878. Howard's Campaign against the Nez Percé Indians, 1877. Portland.

Swadesh, Morris


Ms. Cayuse Interlinear Texts. American Philosophical Society Library. MS no. 497.3 B63c Ps 1a 1 [1930].

Ms. Sahaptin-Nez Perce Grammatical Notes. American Philosophical Society Library. MS no. 497.3 B63c Ps 1a 2 [1930].

Ms. Cayuse Lexical File. American Philosophical Society Library. MS no. 497.3 B63c Ps 1a 3 [1930].

Swanson, Earl H. Jr.


Sweetser, Kate Dickinson


Taylor, Frank J., ed.


Taylor, Walter W.

Teit, James Alexander


Thwaites, Reuben Gold, ed.


Tolmie, W. F. and G. M. Dawson

1884. Comparative Vocabularies of the Indian Tribes of British Columbia.

Townsend, John Kirk

1839. Narrative of a Journey across the Rocky Mountains to the Columbia River and a Visit to the Sandwich Islands. Philadelphia.

Tyrrell, J. B. ed.


Velten, Harry de Veltheyn


Ms. A Brief Comparative Analysis of Nez Percé Grammar. American Philosophical Society Library. MS no. 497.3 B63c Ps la 5 [ca. 1935].
Victor, Frances Fuller

1870. The River of the West. Hartford.

Warren, Elizabeth Spalding


Wheeler, William

Ms. An English-Nez Perce Dictionary. ca. 1900.
In possession of Mrs. Ida Wheeler, Stites, Idaho.

White, M. Catherine, ed.


Whorf, Benjamin Lee


Wyman, Ann


Young, F. G., ed.


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LIST OF SYMBOLS

[ ] Phonetic brackets (Chapter One)
[ x ] "x is optional" (Chapters Two and Three)
/ / Phonemic brackets
\ \ Morphophonemic brackets
{ } Morphemic brackets
< x > "class of items including x"
\ "in free variation with"
\ "varies with"
:\ "is represented by" (between two forms)
C Consonant
P Stop
V Vowel

Special symbols for the section on kinship term stems (510.3)

(m) a man speaking   Mo mother, mother's
(f) a woman speaking  O older
Br brother, brother's  Si sister, sister's
Ch child, child's     So son, son's
Da daughter, daughter's  Wi wife, wife's
Fa father, father's    Y younger
Hu husband, husband's
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>aS</td>
<td>adjective stem</td>
<td>I</td>
<td>interjection</td>
</tr>
<tr>
<td>aT</td>
<td>adjective theme</td>
<td>IPh</td>
<td>interjectory phrase</td>
</tr>
<tr>
<td>At</td>
<td>attributive</td>
<td>kS</td>
<td>kinship stem</td>
</tr>
<tr>
<td>C</td>
<td>connective</td>
<td>kT</td>
<td>kinship theme</td>
</tr>
<tr>
<td>Cc</td>
<td>coordinating connective</td>
<td>L</td>
<td>locative</td>
</tr>
<tr>
<td>CL</td>
<td>clause</td>
<td>nS</td>
<td>general noun stem</td>
</tr>
<tr>
<td>CLc</td>
<td>copulative clause</td>
<td>nT</td>
<td>general noun theme</td>
</tr>
<tr>
<td>CLd</td>
<td>dependent clause</td>
<td>nuS</td>
<td>numeral stem</td>
</tr>
<tr>
<td>CLg</td>
<td>general clause</td>
<td>nuT</td>
<td>numeral theme</td>
</tr>
<tr>
<td>CLh</td>
<td>hortatory clause</td>
<td>O</td>
<td>object</td>
</tr>
<tr>
<td>CLI</td>
<td>interrogative clause</td>
<td>Ph</td>
<td>phrase</td>
</tr>
<tr>
<td>CLp</td>
<td>possessive clause</td>
<td>ppS</td>
<td>personal pronoun stem</td>
</tr>
<tr>
<td>Cs</td>
<td>subordinating connective</td>
<td>ppT</td>
<td>personal pronoun theme</td>
</tr>
<tr>
<td>cvS</td>
<td>copulative verb stem</td>
<td>pS</td>
<td>pronominal suffix</td>
</tr>
<tr>
<td>cvT</td>
<td>copulative verb theme</td>
<td>Q</td>
<td>question particle</td>
</tr>
<tr>
<td>dS</td>
<td>demonstrative stem</td>
<td>QW</td>
<td>question word</td>
</tr>
<tr>
<td>dT</td>
<td>demonstrative theme</td>
<td>S</td>
<td>subject</td>
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<tr>
<td>esT</td>
<td>expanded substantive theme</td>
<td>SEN</td>
<td>sentence</td>
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<tr>
<td>GPh</td>
<td>general phrase</td>
<td>sT</td>
<td>substantive theme</td>
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<tr>
<td>gVS</td>
<td>general verb stem</td>
<td>Vc</td>
<td>copula</td>
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<tr>
<td>gVT</td>
<td>general verb theme</td>
<td>Vf</td>
<td>finite verb</td>
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<td>H</td>
<td>hortatory particle</td>
<td>Vg</td>
<td>general verb</td>
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<tr>
<td>HW</td>
<td>hortatory word</td>
<td>Vp</td>
<td>possessive verb</td>
</tr>
</tbody>
</table>

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CHAPTER ONE
PHONOLOGY

100. PHONEMICS

Nez Perce has 36 phonemes as follows:

Segmentals

Consonants

<table>
<thead>
<tr>
<th>Plain:</th>
<th>Labial</th>
<th>Dental</th>
<th>Alveolar</th>
<th>Velar</th>
<th>Post-Velar</th>
<th>Glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stops</td>
<td>p</td>
<td>t</td>
<td>c</td>
<td>k</td>
<td>q</td>
<td>?</td>
</tr>
<tr>
<td>Spirants</td>
<td>i</td>
<td>s</td>
<td>x</td>
<td>x</td>
<td>h</td>
<td></td>
</tr>
<tr>
<td>Nasals</td>
<td>m</td>
<td>n</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Semivowels</td>
<td>w</td>
<td></td>
<td>y</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lateral</td>
<td></td>
<td>l</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Glottalized:

| Stops                   | p'     | t'     | c'       | k'    | q'         |         |
| Nasals                  | m'     | n'     |          |       |            |         |
| Semivowels              | w'     |        | y'       |       |            |         |
| Lateral                 |        | l'     |          |       |            |         |

Vowels

<table>
<thead>
<tr>
<th>Front</th>
<th>Central</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>i</td>
<td>u</td>
</tr>
<tr>
<td>Mid</td>
<td></td>
<td>o</td>
</tr>
<tr>
<td>Low</td>
<td>e</td>
<td>a</td>
</tr>
</tbody>
</table>

Suprasegmentals

| Length:     | ·       |
| Stress:     | ·       |
Junctures

Phonological word juncture +
Pause form ,
Terminal contour .

110. Consonants. There are at least two directions in which general allophonic statements for consonants may be made: (1) according to the manner of articulation, and (2) according to the point of articulation.

(1) The voiceless plain stops /p/, /t/ and /c/ are unaspirated before a vowel, moderately aspirated before another consonant, and strongly aspirated before a juncture.

The voiceless plain stops /p/, /t/, /c/ and /q/ occur in close transition when geminated. /k/ and /ʔ/ do not geminate.

The voiced continuants /m/, /n/, /w/, /y/ and /l/ are frequently voiceless before a terminal contour.

(2) The dental consonants /t/, /d/, /n/ and /l/ are palatalized before /u/.

The lamino-alveolar consonants /s/ and /c/ are palatalized before /i/.²

---

¹The allophony describes Mrs. HW's ideolect.
²In the ideolect of HW, /s/ and /c/ are palatalized everywhere, apparently as in the dialects studied by Smith, Spalding, and Ainslie.
/p/ (bilabial) is: unaspirated and without initial closure (since the preceding segment is unreleased) after /p/ and before a vowel, e.g.,
mitippe 'at a place where elderberries are'
unaspirated with initial closure elsewhere before a vowel,
páyn 'to arrive'
?ápa 'brick of ground camas'
weyí·letpu· 'Cayuse'
cí·kspe 'at sister-in-law's' (a woman speaking)
unreleased before /p/, e.g.,
mitippe 'at a place where elderberries are'
moderately aspirated before a consonant other than /p/, e.g.,
qepsiʔs 'evil'
múʔpc 'one-year old fawn'
walápsksa 'I jerk it away'
and strongly aspirated elsewhere, e.g.,
?ásqap 'younger brother' (a man speaking)
čéyne·sp (place name).

/t/ (apico-dental) is: unaspirated and palatalized before /u/,³ e.g.,
tú·skex 'upward'
peʔtú·qes 'man-crazy'
³/t/ does not occur, probably fortuitously, after /t/ and before /u/.
unaspirated, unpalatalized and without initial closure after /t/ and before vowels other than /u/, e.g.,

ʔ̓ipnátiwá·tit 'monologue'

unaspirated, unpalatalized and with initial closure elsewhere before vowels other than /u/, e.g.,

téhes 'ice'
ʔá·tim 'arm'
ʔisé·ptekey 'parfleche'
kú·xsteyn 'to guess wrong'
ʔeʔnpté·ce 'I go to get it'

unreleased before /t/, e.g.,

weqítise 'I loudly speak'

moderately aspirated before consonants other than /t/, e.g.,

petkúhtuʔ 'we will be shooting'
wasátqsa 'I whip'
weqiwtkse 'I am cutting grass'

and strongly aspirated elsewhere, e.g.,

lepit 'two'
ʔelwéht 'spring (season)'
wehéyqt 'necklace'
kéʔnpt 'to bite.'

/c/ (apico-alveolar) is: unaspirated, palatalized and without closure after /c/ and before /i/, e.g.,
picpiccim 'only red fir trees'
unaspirated, palatalized with initial closure elsewhere before /i/, e.g.,
cílmi 'squirrel'
hiwehcí-x 'they are barking'
unaspirated, unpalatalized without initial closure after /c/ and before vowels other than /i/, e.g.,
'kaccaynó·myac 'coyote'
unaspirated, unpalatalized with initial closure elsewhere before vowels other than /i/, e.g.,
cawi·tx 'wild carrot'
píxé·xsce 'I am unlucky'
unreleased before /c/, e.g.,
picpiccim 'only red fir trees'
moderately aspirated before consonants other than /c/, e.g.,
li·ckaw (place name)
léqexcne (place name)
and strongly aspirated elsewhere, e.g.,
wálc 'knife'
pálxc 'rabbit'
títewxc 'chisel mouth.'

/k/ (dorso-velar) is: unaspirated and slightly labialized before /i/, e.g.,
kimile 'tamarak'

Kapskisa 'I eat from the bones'

unaspirated and unpalatalized before vowels other than /i/, e.g.,

ké·tim 'spear'

li·ckaw (place name)

and moderately aspirated before consonants, e.g.,

tewli·kt 'tree'

walápsksa 'I jerk it away.'

/k/ does not occur before /k/ or a juncture.

/q/ (dorso-postvelar) has a spirantal off-glide

without initial closure after /q/ and before a vowel, e.g.,

hiqqé·wise 'he is drunk'

has a spirantal off-glide with initial closure elsewhere

before a vowel, e.g.,

qí·wn 'old man'

hi?psqíke?ykse 'he is walking'

tewqeqé·wit 'nightmare'

is unreleased before /q/, e.g.,

hiqqé·wise 'he is drunk'

and moderately aspirated before a consonant other than

/q/, e.g.,

ná·qc 'one'

wéwpe?qt 'to split'

wasátqsa 'I whip.'
With one exception noted in 200., /q/ does not occur before a juncture.

/ʔ/ is glottal, e.g.,

ʔé·leʔ 'paternal grandmother' (vocative)
țáʔc 'good'
múʔpc 'one-year old fawn'
ʔewxčʔúpeʔqe 'I broke it by sitting on it.'

The spirants are represented by the following allophones:

/ɻ/ (apico-alveolar lateral) alternates freely with a homorganic affricate between vowels, e.g.,
cú·lm 'bull,'
elsewhere /ɻ/ is an apico-alveolar lateral spirant, e.g.,
ńé·páep 'butterfly.'

/s/ (lamino-alveolar) is palatalized before /i/, e.g.,
símux 'charcoal,'
and unpalatalized elsewhere, e.g.,
sáway 'graveyard,'
máqs 'gall.'

/x/ (dorso-velar) is backed before /q/ or /χ/, e.g.,
ʔatwiyaxqana 'I advise him,'
te·xì·ćemkse 'I am angry because of cold,'
and is dorso-velar elsewhere, e.g.,
wati·sx 'tomorrow,' 'yesterday.'
/χ/ (dorso-postvelar) is a fortis trill between consonants, e.g.,
   pitxpá:ma 'nephews, nieces',
and is a less fortis spirant elsewhere, e.g.,
   tasχ 'grease.'

/h/ (faucal), after a vowel and before a consonant, is a voiceless, non-vocalic off-glide homorganic with the preceding vowel, e.g.,
   ?elweht 'year',
and is a faucal spirant elsewhere, e.g.,
   há:ma 'man, husband.'

The sonornats are represented by the following allophones:

/m/ (bilabial nasal) is frequently voiceless in final position, e.g.,
   wá·wam 'head of stream',
and voiced elsewhere, e.g.,
   mitá:t 'three.'

/n/ (anico-dental nasal) is velarized before /k/ or /q/, e.g.,
   ?anqá·xalpx 'remove!',
palatalized before /u/, e.g.,
   nú·snu 'nose',
frequently voiceless in final position, e.g.,
\[\text{wigclamn 'lacking,'}\]
and is an apico-dental voiced nasal elsewhere, e.g.,
\[\text{ná'qc 'one.'}\]
\[/w/\] (bilabial semivowel) is frequently voiceless
in final position, e.g.,
\[\text{níc-kaw 'basket-cap,'}\]
and is voiced elsewhere, e.g.,
\[\text{wú'yce 'I run away.'}\]
\[/y/\] (palatal semivowel) is frequently voiceless
after a vowel and in final position, e.g.,
\[\text{kúy 'go away!'}\]
is voiced and with strong friction after /n/ and before
a vowel, e.g.,
\[\text{konyá 'over there,'}\]
and is voiced without friction elsewhere, e.g.,
\[\text{yá'ca? 'elder brother' (vocative).}\]
\[/l/\] (lamino-alveolar lateral) is palatalized and
voiced before /u/, e.g.,
\[\text{?ilú't 'belly,'}\]
voiceless in final position, e.g.,
\[\text{?excí?mil 'throat,'}\]
and is lamino-alveolar and voiced elsewhere, e.g.,
\[\text{lepit 'two.'}\]

The following examples support the phonemic analysis
given above:
/p/ - /t/: pé·qt 'bark (of tree)', té·qt 'woodpecker.'
/t/ - /c/: ?á·tim 'come out!', ?á·cim 'come in!' 
/c/ - /k/: yá·ca? 'elder brother', yá·ka? 'brown bear.'
/k/ - /q/: pé·kt 'woman's younger brother', Pé·qt 'bark (of tree).'
/q/ - /ʔ/: qi·wn 'old man', qi·wn 'urination.'
/yi/ - /ʔi/: wé·yikt 'to move across', wé·ʔikt 'grease.'
/wu/ - /ʔu/: wú·yce 'I run away', ú·yse 'I begin.'  
(imperfect pair).
/t/ - /s/: hiwtelí·kse 'he spreads (something)',  
hiwselí·kse 'he stands.'
/c/ - /s/: hé·cu 'fire wood', hé·su 'eel.'
/q/ - /ʔχ/: qápqap 'cottonwood tree', χápχap 'skin disease.'  
(imperfect pair).
/k/ - /ʔ/: kéhen 'biceps', hehen 'stem of plants.'
/ʔ/ - /ʔ/: ?ehétewise 'I admire him', hehétewise 'he admires.'
/ʔχ/ - /ʔχ/: ?awyá·xnoʔqa 'I could see it as I went',  
?awyá·xnoʔqa 'I could find it.'  
(imperfect pair).
/m/ - /n/: ?í·m 'you (sg.)', ?í·n 'I.'
/n/ - /nn/: ?imí·ne 'knee (object case)', ?imí·nne 'gopher (object case).'

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The glottalized consonants are distinguished by simultaneous coarticulation of glottal closure, while \( \text{C} \) and \( \text{C} \) are cases of preglottalization and postglottalization, the latter being very infrequent. In glottalized stops, after simultaneous closure at the two points, the oral closure is released slightly before the release of the glottal closure. As a result a slight pop is sometimes produced, e.g., \( \text{'páyn 'to be drained.'} \) In cases of preglottalized stops, three articulatory stages are observed: first glottal closure, second, simultaneous glottal release and oral closure, and finally oral release, e.g., \( \text{'a? páwaca 'I am putting it.'} \) In cases of postglottalization, the three stages are: first, oral closure, then simultaneous oral release and glottal closure, and finally glottal release, e.g., \( \text{hi? imce 'it is growing.'} \)

The glottalized stops occur word-initially and word-medially, while the general pattern seems to indicate that the glottalized continuants occur word-medially and finally. In general the glottalized consonants are found much less frequently than their unglottalized counterparts. That /\( \text{'n}/ \) and /\( \text{'l}/ \) are not found word-finally is probably fortuitous.

/\( \text{'p}/ \) is bilabial stop, e.g.,

\( \text{'páyn 'to be drained'} \)

\( \text{\text{?i?pílp 'red'}} \)
/t/ is apico-dental stop, e.g.,
 táwn 'to guess in stick game'
 ?i-ťit 'end,' 'stern of canoe'

/č/ is apico-alveolar stop, e.g.,
 čí-xlú 'mountain ground squirrel'
 wé-čekse 'I am jumping'

/k/ is dorso-velar stop, e.g.,
 kúyc 'nine'
 hi-kiwce 'it is sunny'

/q/ is dorso-postvelar stop, e.g.,
 qáxno 'prairie chicken'
 yoqopi 'that'

/m/ is bilabial nasal, e.g.,
 cú-áimayn 'for the steer'
 la?ám 'all'

/ñ/ is apico-dental nasal, e.g.,
 ?a·kíñač 'I would have seen him'

/w/ is bilabial semivowel, e.g.,
 ?e·ñí·se 'I am giving it'
 kí·w 'cut (past participle)'

/y/ is palatal semivowel, e.g.,
 ?e·ýsce 'I am happy'
 hipstú·ý 'enough'

/l/ is lateral, e.g.,
 kiwikiwílec 'drum.'
The following examples support the phonemic analysis given above:

/p/ - /p/: páyn 'to arrive,' páyn 'to be drained'
/t/ - /t/: tawn 'to make stone tools,' tawn 'to guess in stick game'
/c/ - /c/: cewcew 'whisper,' cewcew 'ghost' (imperfect pair)
/k/ - /k/: tukux 'stiff,' tukux 'straight'
/q/ - /q/: qocqoc 'meadowlark,' qocqoc 'naked' (imperfect pair)
/n/ - /n/: tinun 'grass widow,' tinun 'male mountain sheep'
/w/ - /w/: wa-wa 'mosquito,' wa-wa 'fish hook'
/p/ - /p/ - /p/: a?pawaca 'I am putting it,'
   a?papapap 'lizard,' 'tadpole,' hipimce 'it is growing'
120. Vowels. All unstressed vowels have somewhat centralized lenis and lax allophones.

After glottalization, vowels have a pharyngealized quality, e.g.,

\[ \text{'ca\-no 'that man'}, \]
\[ \text{'ce\-cl 'fat, awkward.'} \]

After /h/ or /ʔ/ and before /n/, stressed vowels are frequently nasalized, e.g.,

\[ \text{'pe\-ni 'fool hen'}, \]
\[ \text{'he\-nêke 'again.'} \]

/i/ is high, front and unrounded before /ː/, e.g.,

\[ \text{si\-s 'broth'}, \]

has a centralized on-glide after /q/ or /x/, e.g.,

\[ \text{qi\-wn 'old man'}, \]
\[ \text{xi\-cêmc 'I am angry'}, \]

and is lower high, front and unrounded elsewhere, e.g.,

\[ \text{le\-pít 'two.'} \]

/e/ is lower mid, front and unrounded after /y/, e.g.,

\[ \text{ki\-yêwkiyêw 'katydids'}, \]

and higher low, and rounded elsewhere, e.g.,

\[ \text{'pe\-ks 'sister.'} \]

/a/ is higher low, central and unrounded after /w/ or /m/, e.g.,

\[ \text{ma\-qs 'gall'}, \]
and is low central and unrounded elsewhere, e.g.,
  ná·qc  'one.'

/o/ is mid, back and rounded after /w/ or /m/, e.g.,
  mó·ía?  'maggot',
and is lower mid, back and rounded elsewhere, e.g.,
  ?oylá·qc  'six.'

/u/ is high and back before /*/ e.g.,
  ?ú·yit  'beginning',
and is lower high and back elsewhere, e.g.,
  kúyc  'nine.'

In general, rounding is non-distinctive.

The following examples support the phonemic analysis given above:

/u/ - /e/ - /a/:  súhuy 'fat', séhey 'worm', sáhay 'sore.'
(imperfect pair).

/i/ - /u/:  qiyé·sqiyes 'mean looking', quyé·squyes 'bluejay.'
(imperfect pair).

/u/ - /o/:  qulusquí·lus 'dandruff', qolosqó·los 'esophagus.'
(imperfect pair).

/i/ - /e/:  nikise (place name), nekíse 'I think.'

/i/ - /a/:  ?akcí·qa  'we saw it',  ?akcá·qa  'I saw it.'
Suprasegmentals

/\ (vowel length) is characterized by relative tenseness in the syllable and a vowel length of approximately two morae, e.g.,

\si\-s 'broth' (cf. \si\-s 'navel')
\m\-\qe\-? 'snow' (cf. \m\-\qe\-? 'paternal uncle (vocative)')
\ha\-l\-\la\-l\-\alc\-\i\-x 'they cheer' (cf. hal\-\la\-l\-\alc\-\i\-x 'we cheer').

// (stress) is characterized by high pitch and relative loudness in the syllable, e.g.,

\m\-\qe\-? 'snow.'

/+/ (phonological word juncture) is characterized by a mid-to-high glide on the following long stressed syllable, and by an occurrence of the dental allophone of a preceding /n/ when /k/ or /q/ follows, e.g.,

/\nk/ : [\nk] \an\-\k\-\i\-\ls\-\a 'I tear it with hand'
/n+k/ : [nk] \i\-\n + k\-\se 'I go.'

// (pause form) is characterized by a clearly marked short silence. The following long stressed syllable starts with middle pitch.
/.\ (terminal contour) is characterized by a slight drop in pitch, and by voiceless allophones of the preceding m, n, w, y or l.

The following examples support the phonemic analysis given above:
/.\ - no length: sí·s 'broth,' sis 'navel'; mé·qe? 'snow,' méqe? 'paternal uncle (vocative)'; ?a·tō?sa 'I go out to see somebody else's,' ?atō?sa 'I go out to see mine'; ?ó·qoxc 'ankle,' ?óqoxc (man's name); mú· 'cow,' mú 'call.'

/\ - weak stress: we·cese 'I am riding,' we·cé·se 'I am dancing.' (imperfect pair)

/+ - no juncture: ?é· + wí·ce 'you are crying,' ?ewí·ce 'I am sleepy.' (imperfect pair)
140. Phonotactics

141. The syllable canon is $C_1V(\cdot)(C_2)(C_3)(C_4)(C_5)$. After a phonological word juncture $C_1$ may be any consonant except glottalized continuants; elsewhere, $C_1$ may be any consonant. $V$ may be any vowel. $C_2$, when followed by a juncture, may be any consonant except /k/, /q/, /h/ and glottalized stops. There are no consonant clusters after a phonological word juncture.

142. Prejunctural consonants and consonant clusters.

In general, three-member and four-member prejunctural clusters contain two-member prejunctural clusters in final position. Namely, in $C_1V(\cdot)C_3C_4$, $C_3C_4$ are permissible final position two-member clusters (with the exception of qt and qs), so are $C_4C_5$ in $C_1V(\cdot)C_2C_3C_4C_5$. However, in four-member clusters $C_3C_4C_5$ are permitted final three-member clusters in only three cases out of eight examples.

No gemination or glottalized consonants are found in prejunctural clusters. It may be significant that /p/ and sonorants do not occur as the final member after stops (with the exception of /ʔ/) in prejunctural clusters.

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4An exception is /hoqʰəʔ/ 'hog,' a probable loan from English.
The prejunctural consonants and consonant clusters may be summarized as follows:

<table>
<thead>
<tr>
<th>$C_1$</th>
<th>$V(\cdot)$</th>
<th>$C_2$</th>
<th>$C_3$</th>
<th>$C_4$</th>
<th>$C_5$</th>
</tr>
</thead>
<tbody>
<tr>
<td>any</td>
<td></td>
<td>$C^{-k,q,h,\hat{b}}$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$V$</td>
<td>$C^{-i,\acute{c}}$</td>
<td>$C^{-k,q,h,\acute{c}}$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$C^{-p,t,k,q,\acute{c}}$</td>
<td>$p,t,c,q,x,y$</td>
<td>$t,c,s,x$</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$p,\hat{p},h,x$</td>
<td>$t,c,n,y,w,s$</td>
<td>$p,k,s$</td>
<td>$t,c,s$</td>
<td></td>
</tr>
</tbody>
</table>

Examples of $C_1V(\cdot)C_2$:

- p  ásqap  "younger brother of a male"
- t  mitá:t  "three"
- c  xá?wic  "sharp (of points)"
- ?  ?é:le?  "paternal grandmother (vocative)"
- i  tá·qma·i  "hat"
- s  téhes  "ice"
- x  simux  "charcoal"
- x  peqiyex  "nephew"
- m  cú·dim  "bull"
- n  tinú:n  "grass widow"
- w  sá:w  "silence"
- y  weté·key  "leggings"
- l  ?excí?mil  "throat"
Examples of $C_1V(\cdot)C_2C_3$:

The combinations found are as follows:

<table>
<thead>
<tr>
<th>$C_2$</th>
<th>$C_3$</th>
<th>$p$</th>
<th>$t$</th>
<th>$c$</th>
<th>$?</th>
<th>$s$</th>
<th>$x$</th>
<th>$\chi$</th>
<th>$m$</th>
<th>$n$</th>
<th>$w$</th>
<th>$y$</th>
<th>$l$</th>
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</thead>
<tbody>
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<td>$p$</td>
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<td>$k$</td>
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<td>22</td>
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<td>$\chi h$</td>
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<td>$nw$</td>
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</tr>
</tbody>
</table>

1. $pt$ 'uyné $pt$ 'seven' 
2. $pc$ kapckápc 'furious' 
3. $ps$ ?ehips 'I ate it' 
4. $px$ ?enímipx 'toward winter' 
5. $px$ sipxsipx 'dirty' 
6. $ts$ só $ts$ 'deep water' 
7. $tx$ ?ini $tx$ 'to the house' 
8. $tx$ pi $tx$ 'maternal uncle'
9. cx ʔá·cx  'go in!'  
10. kt tewlí·kt  'tree'  
11. ks pewé·yiks  'we crossed over'  
12. qc ná·qc  'one'  
13. qs sá·slaqs  'moose'  
14. ?p xe'?pxé?p  'sneaky'  
15. ?t kiké?t  'blood'  
16. ?c tá?c  'good'  
17. ?s sewí?s  'mussel'  
18. ?x nacé?x  'Chinook salmon'  
19. ?m hi?m  'mouth'  
20. ?n qeqé·wi?n  'drunk'  
21. ?w ki?w  'as'  
22. ?y wakayka?yá·?y  'uncleaned'  
23. sp čéyne·sp  (place name)  
24. st pist  'father'  
25. si mási  'so long,' 'that long'  
26. sx qilá·sx  'otter'  
27. sx pisx  'tick'  
28. xt múxmtuxt  'small sucker fish'  
29. xc hé·?yu xc  'cottontail'  
30. xs púxs  'inner skin'  
31. xp pitáxp  'man's sister's child'  
32. xc táxc  'definitely'  
33. xs táxs  'willow'
<table>
<thead>
<tr>
<th>No.</th>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>34.</td>
<td>ht ?elwéht</td>
<td>'spring (season)'</td>
</tr>
<tr>
<td>35.</td>
<td>mt pú·timt</td>
<td>'ten'</td>
</tr>
<tr>
<td>36.</td>
<td>ms tims</td>
<td>'chokecherry'</td>
</tr>
<tr>
<td>37.</td>
<td>mx tamántoyamx</td>
<td>(place name)</td>
</tr>
<tr>
<td>38.</td>
<td>mx pi·mx</td>
<td>'paternal uncle'</td>
</tr>
<tr>
<td>39.</td>
<td>mn pi·mn</td>
<td>'knee'</td>
</tr>
<tr>
<td>40.</td>
<td>nx sapankitá·nx</td>
<td>'to plant'</td>
</tr>
<tr>
<td>41.</td>
<td>nm kínm</td>
<td>'this' (possessive case)</td>
</tr>
<tr>
<td>42.</td>
<td>wt laymíwt</td>
<td>'small'</td>
</tr>
<tr>
<td>43.</td>
<td>wx ?iskíwx</td>
<td>'cut it!'</td>
</tr>
<tr>
<td>44.</td>
<td>wn qi·wn</td>
<td>'old man'</td>
</tr>
<tr>
<td>45.</td>
<td>yc kúyc</td>
<td>'nine'</td>
</tr>
<tr>
<td>46.</td>
<td>y? ti?má·y?</td>
<td>'maiden'</td>
</tr>
<tr>
<td>47.</td>
<td>yx ?ó·tkuyx</td>
<td>'take it away!'</td>
</tr>
<tr>
<td>48.</td>
<td>yx ċayxáyx</td>
<td>'white'</td>
</tr>
<tr>
<td>49.</td>
<td>yn ciwáyn</td>
<td>'projection'</td>
</tr>
<tr>
<td>50.</td>
<td>yl kiwáyl</td>
<td>'this long'</td>
</tr>
<tr>
<td>51.</td>
<td>lp ?ilpiłp</td>
<td>'red'</td>
</tr>
<tr>
<td>52.</td>
<td>lt ?últ</td>
<td>'penis'</td>
</tr>
<tr>
<td>53.</td>
<td>lc wálc</td>
<td>'knife'</td>
</tr>
<tr>
<td>54.</td>
<td>l? ?iskí·l?</td>
<td>'rock mouse'</td>
</tr>
<tr>
<td>55.</td>
<td>lx cú·yekílx</td>
<td>'close it!'</td>
</tr>
<tr>
<td>56.</td>
<td>lx ?ispá·lx</td>
<td>'sack'</td>
</tr>
</tbody>
</table>
Examples of $C_1V(\cdot)C_2C_3C_4$:  
The combinations found are as follows:

<table>
<thead>
<tr>
<th>$C_2$</th>
<th>$C_3$</th>
<th>$C_4$</th>
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<tbody>
<tr>
<td></td>
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<td>$t$</td>
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<td>$x$</td>
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<td>$?m$</td>
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<td>$w$</td>
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<td>$y$</td>
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<td>$?x$</td>
<td>$c$</td>
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<td>$c$</td>
<td>$?a$</td>
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<td>$?x$</td>
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<tr>
<td>$?y$</td>
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<td>34</td>
</tr>
</tbody>
</table>

1. $?pt$ ce-?ptukte?pt 'to crawl under'  
2. $?pc$ mû?pc 'one-year old fawn'  
3. $?px$ wepsú?px 'to the right'  
4. $?px$ ?eqté?px 'to the side'
| 5. | hpt | wé·plehpt | 'imagination' |
| 6. | npt | wiye?énpt | 'to carry' |
| 7. | yps | taypsťáysps | 'tough (of wood)' |
| 8. | lpt | temé·cì·lpt | 'encampment' |
| 9. | lps | lilps | 'mushroom, sp.' |
| 10. | lpx | ?anká·xalpx | 'open!' |
| 11. | mtx | ?á·yitimtx | 'come and start!' |
| 12. | wtx | ?á·cqaawtx | 'go in!' |
| 13. | ytx | wiske?éytx | 'go on a trip!' |
| 14. | ñcx | léqexcx | (place name) |
| 15. | ckt | ?icapyó·ckt | 'strip of tanned hide' |
| 16. | ?kt | hi·kte?kt | 'to cover' |
| 17. | ?ks | tuxcgé?ks | 'get stuck (in mud)' |
| 18. | ñkt | niká·qóïkt | 'to remove' |
| 19. | ñks | tuké·pçeïks | 'I crushed with hand' |
| 20. | skt | sapó·ta·skt | 'to blow to put out' |
| 21. | mks | wislámks | 'I moved' |
| 22. | nkt | celpé·ketinkt | 'poisoning' |
| 23. | wkt | taxsáawkt | 'echo' |
| 24. | ykt | wapáykt | 'to wash' |
| 25. | yks | wapáyks | 'I washed' |
| 26. | lkt | taqakálkt | 'to close door' |
| 27. | ?qt | wéwpe?qt | 'to split' |
| 28. | ?qs | wé·mupe?qs | 'I broke with head' |
29. mqt wecimqt 'to get splinter'
30. yqt wehëyqt 'necklace'
31. lxc pålxc 'rabbit'
32. ?yc hë?yc 'loose'
33. ?ys hë?ys 'itch,' 'rash'
34. ?yx wilë·ke?yx 'run!'

Examples of $C_1V(\cdot)C_2C_3C_4C_5$:  
1. pckt welëykipckt 'to tie'
2. ?tkt we?lé·mu?tkt 'to tie hair on the forehead'
3. ?npt ké?npt 'to bite'
4. ?ykt quqûke?ykt 'to gallop'
5. ?wxc tîte?wxc 'chisel mouth'
6. htkt watâhtkt 'to wade out'
7. xsks tûxsksk 'I smashed with hand'
8. xskt ?icetûxskkt 'to cut open'

143. The consonants and consonant clusters that occur intervocalically may be summarized as follows:

<table>
<thead>
<tr>
<th>$C_1$</th>
<th>$C_2$</th>
<th>$C_3$</th>
<th>$C_4$</th>
</tr>
</thead>
<tbody>
<tr>
<td>any C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cu,č,k,q,w</td>
<td>C-'/,'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cu</td>
<td>Cu-'i,h</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p,?,w,l</td>
<td>p,t,c,s,x,m,n,y,l</td>
<td>p,c,k,q,s</td>
<td>t,c,k,q,?,s</td>
</tr>
</tbody>
</table>

Cu: unglottalized consonants, Pu: unglottalized stops

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### Examples of $V(*)C_1V$:

<table>
<thead>
<tr>
<th>Vowel</th>
<th>Phoneme</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>p</td>
<td>?ápa</td>
<td>'brick of ground camas'</td>
</tr>
<tr>
<td>t</td>
<td>?áitim</td>
<td>'arm'</td>
</tr>
<tr>
<td>c</td>
<td>?ácim</td>
<td>'come in!'</td>
</tr>
<tr>
<td>k</td>
<td>hekice</td>
<td>'I see'</td>
</tr>
<tr>
<td>q</td>
<td>?áqam</td>
<td>'above'</td>
</tr>
<tr>
<td>?</td>
<td>?á?a</td>
<td>'crow'</td>
</tr>
<tr>
<td>á</td>
<td>cúaim</td>
<td>'steer'</td>
</tr>
<tr>
<td>s</td>
<td>?ése</td>
<td>'claw'</td>
</tr>
<tr>
<td>x</td>
<td>tuxit</td>
<td>'to make fishing lines'</td>
</tr>
<tr>
<td>ñ</td>
<td>?exewíke?ykt</td>
<td>'to go alongside'</td>
</tr>
<tr>
<td>h</td>
<td>?éhé</td>
<td>'yes'</td>
</tr>
<tr>
<td>m</td>
<td>?ama</td>
<td>'island'</td>
</tr>
<tr>
<td>n</td>
<td>?éni</td>
<td>'fool hen'</td>
</tr>
<tr>
<td>w</td>
<td>?áwit</td>
<td>'widow'</td>
</tr>
<tr>
<td>y</td>
<td>?áyi</td>
<td>'younger sister!'</td>
</tr>
<tr>
<td>l</td>
<td>?ála</td>
<td>'fire'</td>
</tr>
<tr>
<td>t</td>
<td>tiput</td>
<td>'lung'</td>
</tr>
<tr>
<td>t</td>
<td>?étis</td>
<td>'red face paint'</td>
</tr>
<tr>
<td>c</td>
<td>?eícèc</td>
<td>'short time'</td>
</tr>
<tr>
<td>k</td>
<td>?ékex</td>
<td>'magpie'</td>
</tr>
<tr>
<td>q</td>
<td>?óqóxc</td>
<td>'ankle'</td>
</tr>
<tr>
<td>m</td>
<td>cúíimayn</td>
<td>'for the steer'</td>
</tr>
<tr>
<td>n</td>
<td>tinú'n</td>
<td>'male: mountain sheep'</td>
</tr>
<tr>
<td>w</td>
<td>wá'wa</td>
<td>'fish hook'</td>
</tr>
<tr>
<td>l</td>
<td>kiwikíwilce</td>
<td>'drum'</td>
</tr>
</tbody>
</table>
The combinations found are as follows:

Examples of $\text{V} \text{C}\times \text{C}^2$:

<table>
<thead>
<tr>
<th>Combination</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\text{V} \text{C} \text{C}$</td>
<td>33</td>
</tr>
<tr>
<td>$\text{V} \text{C} \times \text{C}^2$</td>
<td>17</td>
</tr>
<tr>
<td>$\text{V} \times \text{C} \text{C}^2$</td>
<td>15</td>
</tr>
<tr>
<td>$\text{V} \times \text{C} \times \text{C}^2$</td>
<td>14</td>
</tr>
</tbody>
</table>

Note: The table continues with more combinations and their frequencies.
1. pp mišippe 'at elderberry'
2. pt ?isë•ptekey 'parfleche'
3. pc ?istú•ptupce 'I cut hair'
4. pk cá•pkiʔlaksa 'I gather'
5. pq heʔlepqénut 'without shoes'
6. pʔ hipʔimce 'it is growing'
7. pá šatápiatap 'flimsy, easily bent'
8. ps niké•pse 'I eat in a hurry'
9. px xápuxap 'skin disease'
10. pn nesxsepniπx 'quite different'
11. pw pilepwé 'four (men)'
12. py ?icapyó•ckt 'strip of tanned hide'
13. pl taul•play 'short pestle'
14. pt ?iπté•se 'I hit'
15. pk kapakápap 'round'
16. pq qapapqápap 'tight'
17. tp weyi•letpu• 'Cayuse'
18. tt weqittise 'I loudly speak'
19. tc textéqetce 'I worry'
20. tk petkúhtuʔ 'we will be shooting'
21. tq hipetqú•ye 'they drowned'
22. tx tátxinma (place name)
23. tx χétxet 'spine'
24. tm sapátma 'late season'
25. tn wisé•tnix 'we have been standing'
26. tw titwitε•s 'tooth mark'
27. ty pi·ckatyo  'brook trout'
28. ti' tátlo  'ground squirrel'
29. tp wi心仪的pet (place name)
30. tf tatfát  'easy to tear'
31. tk kátkat  'cut fringes'
32. tq hipet'qulewske 'they came back in a hurry'
33. tn qi·tńes  'smoke hole'
34. cp ricpe?stúptupne 'I cut hair'
35. cc kaccaynó·mya?c 'coyote'
36. ck li·ckaw (place name)
37. cq qócqoc  'meadowlark'
38. cs wa·csaca 'I beat with stick'
39. cx cicxemé·mkt 'elk with one horn'
40. cm né·cmi?š 'I wish'
41. cn ?ipoxpoqácná 'your great grandparent' (object case)
42. cw wacwácno 'saddlehorn,' 'pommel'
43. cy xa·cya·ya 'man-like grizzly bear'
44. cl wiclekú·pt 'to break in cutting'
45. ck ?ickátkatin 'fringes'
46. cq qócqóc 'naked'
47. kp ?ekpi·ke?ykse 'I trace it'
48. kt hi·kte?ke 'cover'
49. kc hé·wlelke 'I am disappearing'
50. ks ?ewní·kse 'I put it'
51. kn cepé·knekt  'to select the best'
52. ky wewúkye  'bull elk'
53. kí likli·ce  'I turn'
54. kc watiká·sa  'I step on'
55. qp peqpe  'high noon'
56. qt hiliwheqteqt  'dead timber'
57. qc te·wcíqce  'I talk at night'
58. qq hiqqé·wise  'he is drunk'
59. qs we?wuqse  'I vomit'
60. qm tá·qma·ì  'hat'
61. qn wisteqné·mit  'gift'
62. ql ?ipeqlísne  'man's son's child' (object case)

63. ?p ?a?páwaca  'I am putting it'
64. ?t pe?tú·ques  'man-crazy'
65. ?c wa·tiwa?ca  'I am wearing belt'
66. ?k hi·kte?ke  'cover'
67. ?q septeqepé?qe  'I broke it'
68. ?ì iíte?íte?  'flat'
69. ?s ?a?sa'kiwka?nya  'I cut his'
70. ?x ?e?xilpíse  'I am quarreling with him'
71. ?m sa?máwas  'belt'
72. ?n pú·?niks  'he names it'
73. ?w ?é·le?wic  'easy to get'
74. ?y ti?yet  'laugh'
75. ?ì he?lepqénut  'without shoes'
76. ?t mi'cyó·x'tas  'radio'

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77. ?c ?é·le?cayn 'for father's mother'
78. ?q ?u?qi·ckińike·x 'south'
79. in káina 'wild currant'
80. ēt cepé·te?kse 'I flatten'
81. sp paspaśi·n 'rancid'
82. st ?ástay 'awl'
83. sc wačásćasca 'I splash'
84. sk tú·skex 'upward'
85. sq qé·sqe·s 'dotted,' 'parti-colored'
86. ss kassáyno 'elbow'
87. sxi čaši·sxiś 'goat'
88. sh hiné·shin 'tell them!' (in slow speech)
89. sm sizmáxnot 'without shirt'
90. sn sayqisníx 'very beautiful'
91. sw waswášno 'chicken'
92. sy yó·syó·s 'blue'
93. sli sá·slaqs 'moose'
94. sp ?ispá·lx 'sack'
95. sc wačásćasca 'I splash'
96. sk ?iski·l? 'rock mouse'
97. sq qósqos 'blackbird'
98. xp ?išé·puxpux 'ashes'
99. xt tukuxtúkux 'protruding'
100. xc ca·xcá·x 'wild onion'
101. xk peté·?mixki 'they went over'
102. xq qi?yaxqi?yax 'squawfish'
103. xi lixi·ks 'scattered rubbish'
104. xs ?enú·xsukse  'I know by smell'
105. x̌ te·x̌i·čemke  'I was angry because it was cold'
106. xh helé·xhewlex  'thin air'
107. x̌ múmxuxt  'fish sp.'
108. xn tukelixne?wé·t  'hunter'
109. xw ?acixwá·ko?š  'canteen'
110. xl ci?mtaxló·yn  'to wear clothes inside out'
111. x̌ číxčix  'hay'
112. xk ta·xkó·mayka  'I became ill from cold'
113. x̌ qeyexqéyex  'young chub'
114. xn tuxnípec  'radio'
115. xp poxpóqc  'great grandparent'
116. xt texteqétce  'I worry'
117. xc caqaxcáqax  'small sore'
118. x̌ nexsepniłx  'quite different'
119. xn sis màñnot  'without shirt'
120. x̌ piwixwi·qin  'argument'
121. xy ?éxyew  'mane'
122. xl čí·xlu  'mountain chipmunk'
123. xt téxtex  'strawberries'
124. x̌ čó·xčoqca  'I am sucking'
125. ht petkúhtu?  'we will be shooting'
126. hc hiwehcfí·x  'they are barking'
127. hk hiweʔynéhkeʔyle  'he took her home'
128. hs tiʔnéhse  '(the sun) rises'
129. hn mú·hne  'cow' (object case)
<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>130.</td>
<td>hw</td>
<td>?inahwá-latksa</td>
<td>'I carry fire'</td>
</tr>
<tr>
<td>131.</td>
<td>hy</td>
<td>te?néhyekse</td>
<td>'I am going up hunting'</td>
</tr>
<tr>
<td>132.</td>
<td>mp</td>
<td>ne?é·lempe</td>
<td>'my paternal grandmother's place'</td>
</tr>
<tr>
<td>133.</td>
<td>mt</td>
<td>té·mtešlikse</td>
<td>'I spread something'</td>
</tr>
<tr>
<td>134.</td>
<td>mk</td>
<td>ne?é·lemki</td>
<td>'through my father's mother'</td>
</tr>
<tr>
<td>135.</td>
<td>mq</td>
<td>hiyé·mqece</td>
<td>'I cry after'</td>
</tr>
<tr>
<td>136.</td>
<td>m?</td>
<td>há·m?awit</td>
<td>'widower'</td>
</tr>
<tr>
<td>137.</td>
<td>ms</td>
<td>té·msespeye</td>
<td>'I pack by throwing in'</td>
</tr>
<tr>
<td>138.</td>
<td>mx</td>
<td>ʰxoimxivim</td>
<td>'alone'</td>
</tr>
<tr>
<td>139.</td>
<td>mm</td>
<td>pammì·?wacpa</td>
<td>'frequently'</td>
</tr>
<tr>
<td>140.</td>
<td>mn</td>
<td>hamná-wisa</td>
<td>'I visit my folks' (of married woman)</td>
</tr>
<tr>
<td>141.</td>
<td>mw</td>
<td>ne?é·lemwecet</td>
<td>'because of my father's mother'</td>
</tr>
<tr>
<td>142.</td>
<td>my</td>
<td>pi'tamyalon</td>
<td>'chicken hawk'</td>
</tr>
<tr>
<td>143.</td>
<td>ml</td>
<td>weyli·mleks</td>
<td>'stray one' (e.g. a dog)</td>
</tr>
<tr>
<td>144.</td>
<td>mt</td>
<td>ʰxmírtyuy</td>
<td>'periwinkles'</td>
</tr>
<tr>
<td>145.</td>
<td>mc</td>
<td>?amčiya</td>
<td>'I heard it'</td>
</tr>
<tr>
<td>146.</td>
<td>mk</td>
<td>tamákαc</td>
<td>'hail'</td>
</tr>
<tr>
<td>147.</td>
<td>np</td>
<td>ʰinpise</td>
<td>'I take it'</td>
</tr>
<tr>
<td>148.</td>
<td>nt</td>
<td>kuntemelú·kt</td>
<td>'the second' (e.g. son)</td>
</tr>
<tr>
<td>149.</td>
<td>nk</td>
<td>ʰenkitipise</td>
<td>'I am tanning hide'</td>
</tr>
<tr>
<td>150.</td>
<td>nq</td>
<td>capalá·nqama</td>
<td>'I was working'</td>
</tr>
<tr>
<td>151.</td>
<td>nm</td>
<td>sepú·nmise</td>
<td>'I blow horn'</td>
</tr>
<tr>
<td>152.</td>
<td>nn</td>
<td>?imíi·nne</td>
<td>'gopher' (object case)</td>
</tr>
<tr>
<td>153.</td>
<td>nw</td>
<td>?inwim</td>
<td>'last year'</td>
</tr>
<tr>
<td>154.</td>
<td>ny</td>
<td>konyá</td>
<td>'there'</td>
</tr>
</tbody>
</table>
155. nk ?imu·né·nke 'they also'
156. nm ?inmé·ks 'my sister'
157. wp ciki·wpe 'at wife's brother's'
158. wt té·wti?yese 'I laugh at night'
159. wc tamatamáwca 'I throw too far'
160. wk ?a·sakiwa?nya 'I cut his'
161. wq tewqequé·wit 'nightmare'
162. w? taw?oxó?óxaca 'I cough at night'
163. ws wé·wsese 'I thrash beans'
164. wh hiliwheqteqt 'dead timber' (in slow speech)
165. wn qalawi·n 'beaded'
166. ww tewwí·ce 'I cry at night'
167. wy pi·wyú·cix 'we separate'
168. w1 hé·wlekse 'I am disappearing'
169. wt cá·wtalahsasa 'I raise front lock of hair with stiffener'
170. wc te·wliqcce 'I talk at night'
171. w q' aáwq'aw 'white horse'
172. yp paypayló·ya 'tattle-tale'
173. yt táytay 'little salmon'
174. yc pe·lé·yce 'I got lost'
175. yk tiwáyka·s 'hair oil'
176. yq tayqisa 'I thread'
177. y? ?a·tway?áyn 'for an old woman'
178. ys su'kuysúkuy 'dark' (of skin)
179. y x̂ xayxáyx 'white'
180. ym laymiwt 'small'

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| 181. | yn | páyna | 'I arrived' |
| 182. | yw | mé·ywí | 'morning' |
| 183. | yy | hípeyyewicwíye | 'they were poor' |
| 184. | yl | miwáyl | 'how long?' |
| 185. | yč’ | tuké·yč'iliks | 'I am exhausted' |
| 186. | yk’ | kaykáyoc | 'raccoon' |
| 187. | yq’ | sayqísníx | 'very beautiful' |
| 188. | yń’ | wayáwyawnas | 'fan' |
| 189. | lp | wisálpó’s | 'paddle' |
| 190. | lt | tálátíkti | 'with cedar' |
| 191. | lk’ | ?etelkelif’kce | 'I am leading' |
| 192. | lq | hiwa·tálcqa | 'it stopped' |
| 193. | ls | čí·lilse | 'I curl up' |
| 194. | lm | cíími | 'pine squirrel' |
| 195. | ln | kálkáína | 'maggot' |
| 196. | lw | lawí·lwít | 'intelligent' |
| 197. | ly’ | cílyé·xne | 'fly' (object case) |
| 198. | ll | tillá·pca | 'I am lonesome' |
| 199. | lp’ | cílpú’? | 'ace' (of cards) |
| 200. | lk’ | kálkál | 'maggot' |
| 201. | lq’ | pá·lqallay | 'both ends' |
| 202. |(cx | xi’íxi’c | 'rubber' |
| 203. | cn | ?iné·cnehewitíse | 'it is going downstream' |
| 204. | čy | mícyó·xoťas | 'radio' |
| 205. | kn | ?iné·knikt | 'band' (of people) |
| 206. | kł | titečuí·yôn?n | 'pigeon-toed' |
| 207. | qp’ | seq’ííse | 'I am scratching' |
Examples of $V(\cdot)C_1C_2C_3V$:

The combinations found are as follows:

<table>
<thead>
<tr>
<th>$C_2$</th>
<th>$C_3$</th>
<th>$C_4$</th>
<th>$p$</th>
<th>$t$</th>
<th>$c$</th>
<th>$k$</th>
<th>$q$</th>
<th>$s$</th>
<th>$x$</th>
<th>$m$</th>
<th>$n$</th>
<th>$w$</th>
<th>$y$</th>
<th>$l$</th>
<th>$t$</th>
<th>$c$</th>
<th>$k$</th>
<th>$q$</th>
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1. pcq ʰɪpʰqɪʰ·tɪt  'bird with long bill'
2. pcₕ-capcⁱ̩ilₕayksa  'I sweep'
3. pcl ₁apcl₁apc  'covered all over'
4. pks ʰɛcu·yeʔipkse  'I am cultivating'
5. p?n cúp?nit 'emerge from timber'
6. p?l hip?látaca 'he goes mining'
7. psc qépsce 'I close eyes'
8. psq ?ipsqíkie?ykse 'I walk'
9. pxn tasi·pxne 'cow elk' (object case)
10. tks cú·yeti·pitkse 'I make it smooth'
11. tkw petkwéhtu? 'we will be shooting'
12. tqs wasátqsa 'I whip'
13. txl litxlítx 'bushy'
14. txp pitxpá·ma 'mother's brothers'
15. txt ?atxtó·ca 'I am sneaking up on it'
16. txc ?átxcapsa 'I shoot it lengthwise'
17. txs hitxsáwksa 'it is echoing'
18. cpk poxpoqácpki índice 'from great grandparent's'
19. ksp ci·kspe 'at sister-in-law's'
   (a woman speaking)
20. kst či·lá·kstin 'deer claw bells'
21. ksy hi·semteksyé·ye 'luminary (personified)'
22. qcs ?oylaqcsikí·wpa 'six days before or after'
23. qcn ?inípoxpoqcna 'my great grandparent'
   (object case)
24. qcw ?oylí·qcwa 'six (men)'
25. qst teqsté·qs 'fern'
26. qsm maqsmáqs 'yellow'

5 HW gave this form, which is noted as of lower dialect by EPW.
<table>
<thead>
<tr>
<th>Number</th>
<th>Pronunciation</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>?px xe?pxe?p</td>
<td>'sneaky'</td>
</tr>
<tr>
<td>28</td>
<td>?pt e?ppte?se</td>
<td>'I hit it'</td>
</tr>
<tr>
<td>29</td>
<td>?ts sap?tsa</td>
<td>'I let it out'</td>
</tr>
<tr>
<td>30</td>
<td>?cs sap?csa</td>
<td>'I let it in'</td>
</tr>
<tr>
<td>31</td>
<td>?cn e?ele?cn?nt</td>
<td>'without paternal grandmother'</td>
</tr>
<tr>
<td>32</td>
<td>?ks hi?kte?kse</td>
<td>'I cover'</td>
</tr>
<tr>
<td>33</td>
<td>?qs icepe?qse</td>
<td>'I cut'</td>
</tr>
<tr>
<td>34</td>
<td>?st icpe?st?upne</td>
<td>'I cut hair'</td>
</tr>
<tr>
<td>35</td>
<td>?sn sewi?snime</td>
<td>(place name)</td>
</tr>
<tr>
<td>36</td>
<td>?sw teqepsi?swiye</td>
<td>'he made me upset'</td>
</tr>
<tr>
<td>37</td>
<td>?xm ku?xmac</td>
<td>'several'</td>
</tr>
<tr>
<td>38</td>
<td>?xs he?xsisi?milwi?se</td>
<td>'he eats much'</td>
</tr>
<tr>
<td>39</td>
<td>?xl la?xla?x</td>
<td>'powdery'</td>
</tr>
<tr>
<td>40</td>
<td>?mp hi?ti?mpe?qs</td>
<td>'I broke it with knee'</td>
</tr>
<tr>
<td>41</td>
<td>?mc hi?ti?mce</td>
<td>'I am kneeling'</td>
</tr>
<tr>
<td>42</td>
<td>?mq ilst?mqet</td>
<td>'partly burned tree'</td>
</tr>
<tr>
<td>43</td>
<td>?mw sa?mwa?ca</td>
<td>'I wear a belt'</td>
</tr>
<tr>
<td>44</td>
<td>?ml hi?ti?mlikse</td>
<td>'I am about to kneel'</td>
</tr>
<tr>
<td>45</td>
<td>?mp e?npise</td>
<td>'I arrest him'</td>
</tr>
<tr>
<td>46</td>
<td>?nn ti?nnux</td>
<td>'quick death'</td>
</tr>
<tr>
<td>47</td>
<td>?ny a?sakiwka?nya</td>
<td>'I cut it for him'</td>
</tr>
<tr>
<td>48</td>
<td>?ws ce?pe?wse</td>
<td>'I select'</td>
</tr>
<tr>
<td>49</td>
<td>?yk hiwe?ynéhke?yke</td>
<td>'he took her with him'</td>
</tr>
<tr>
<td>Number</td>
<td>Word 1</td>
<td>Word 2</td>
</tr>
<tr>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>50</td>
<td>?ys</td>
<td>pâ·nya?ysa</td>
</tr>
<tr>
<td>51</td>
<td>?yn</td>
<td>to?yné?ayn</td>
</tr>
<tr>
<td>52</td>
<td>?yy</td>
<td>a?yyi?c</td>
</tr>
<tr>
<td>53</td>
<td>?yq</td>
<td>pikun?ma?yqá·1</td>
</tr>
<tr>
<td>54</td>
<td>?lw</td>
<td>ha?lwíyá</td>
</tr>
<tr>
<td>55</td>
<td>ñks</td>
<td>co·lahóiksa</td>
</tr>
<tr>
<td>56</td>
<td>ñks</td>
<td>wató·sksa</td>
</tr>
<tr>
<td>57</td>
<td>xpk</td>
<td>wepsú·xpki·ikike</td>
</tr>
<tr>
<td>58</td>
<td>xcn</td>
<td>léqexcne</td>
</tr>
<tr>
<td>59</td>
<td>xcw</td>
<td>loxcwi·sa</td>
</tr>
<tr>
<td>60</td>
<td>xck</td>
<td>hinuxckomayn</td>
</tr>
<tr>
<td>61</td>
<td>x?l</td>
<td>ta·x?látwa</td>
</tr>
<tr>
<td>62</td>
<td>xst</td>
<td>kú·xsteyn</td>
</tr>
<tr>
<td>63</td>
<td>xsc</td>
<td>piké·ixc</td>
</tr>
<tr>
<td>64</td>
<td>ñc?</td>
<td>wi?x?utekey</td>
</tr>
<tr>
<td>65</td>
<td>ñsc</td>
<td>?emús?xsc</td>
</tr>
<tr>
<td>66</td>
<td>hps</td>
<td>hiwwé·plehpse</td>
</tr>
<tr>
<td>67</td>
<td>hts</td>
<td>tukéhtse</td>
</tr>
<tr>
<td>68</td>
<td>mck</td>
<td>temckileyleké·t</td>
</tr>
<tr>
<td>69</td>
<td>mks</td>
<td>'guyímkse</td>
</tr>
<tr>
<td>70</td>
<td>mst</td>
<td>?emsteqé·ánpse</td>
</tr>
<tr>
<td>71</td>
<td>msc</td>
<td>?emscú·kwece</td>
</tr>
<tr>
<td>72</td>
<td>msk</td>
<td>himskuye</td>
</tr>
<tr>
<td>73</td>
<td>nps</td>
<td>?emsteqé·ánpse</td>
</tr>
</tbody>
</table>
74. nʔm pikúnʔmaʔyqá·1 'September'
75. wks hitxswawksa 'it is echoing'
76. wʔy yiʔyé·wʔyew 'all of a sudden'
77. wʔt wawʔti·liyaxc 'woodpecker sp.'
78. wsw pewswé·lu·ye 'we are going down'
79. wwk kewxké·wx 'brown'
80. wny yawnyá·ya 'Cold' (a mythical figure)
81. yks ?iné·tepeleykse 'I am getting confused by talking so much'

82. yqs wehéyqse 'I put a necklace on'
83. yqn wehéyqne 'necklace' (object case)
84. ysn ?aysnimm (place name)
85. yxč qoyxčá·1 'July'
86. lps tuké·pilpse 'I carry in arms'
87. lpʔ xálpﺧalp 'mythical figure on cloud'
88. lks ?o·ciči·lksa 'I spoil it'
89. lqs wa·tálqsa 'I stop'
90. 1st ?ilísté·mqet 'partly burned tree'
91. 1xc cálxcalx 'cricket'
92. 1xp qoqalxpipam 'among buffaloes'
93. lxʔn ?ilxni·wisix 'we increased in number'
Examples of $V(\cdot)C_1C_2C_3C_4V$:

<table>
<thead>
<tr>
<th>Verb</th>
<th>Arabic</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>?psq</td>
<td>hi?psqike?ykse</td>
<td>'he is walking'</td>
</tr>
<tr>
<td>?cks</td>
<td>capti?wacâ?cksa</td>
<td>'I am ready to shoot'</td>
</tr>
<tr>
<td>?mks</td>
<td>?eqsimteqeti?mksa</td>
<td>'I am throwing it in anger'</td>
</tr>
<tr>
<td>?npt</td>
<td>?e?npté?ce</td>
<td>'I go to get it'</td>
</tr>
<tr>
<td>?nks</td>
<td>?iyé?ti?nkse</td>
<td>'I will drown'</td>
</tr>
<tr>
<td>?yks</td>
<td>hi?psqike?ykse</td>
<td>'he is walking'</td>
</tr>
<tr>
<td>?lqs</td>
<td>?ehisi?lqse</td>
<td>'I am moistening'</td>
</tr>
<tr>
<td>ptksa</td>
<td>?átxcaptksa</td>
<td>'I shoot it lengthwise'</td>
</tr>
<tr>
<td>psksa</td>
<td>walápsksa</td>
<td>'I jerk it away'</td>
</tr>
<tr>
<td>wtkes</td>
<td>weqiwtkses</td>
<td>'I am cutting grass'</td>
</tr>
<tr>
<td>wçç</td>
<td>?ewçç?upe?qe</td>
<td>'I broke it by sitting'</td>
</tr>
<tr>
<td>lpsc</td>
<td>?i?lpsce</td>
<td>'I snap eyes at'</td>
</tr>
<tr>
<td>lpsk</td>
<td>kalpskisa</td>
<td>'I eat from the bones'</td>
</tr>
</tbody>
</table>

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200. MORPHOPHONEMICS

Nez Perce has 17 morphophonemes represented by phonemic alternations. These morphophonemes are in two groups:

1. \[c\], \[k\], \[q\], \[\dagger\], \[\ddagger\], \[\k^w\], \[\q^w\], \[h\], \[\h\], \[\u\], \[\l\], \[-\]
2. \[r\], \[r\_\], \[R\].

210. The members of the first group show the following phonemic alternation:

\[c\] : /s/ before \[n\] or \[w\], and /c/ elsewhere, e.g.,
\[yú?c\] : /yú?c/ 'poor,' 'pitiful'
\[yú?cne\] : /yú?sne/ 'poor' (object case)
\[uylé\cdotqc\] : /oylá\cdotqc/ 'six'
\[uylé\cdotqcwe\] : /oylá\cdotqswa/ 'six' (of men)

\[k\] : /x/ before \[k\], \[q\], \[n\], \[l\] or \[+] ; /k/ elsewhere, e.g.,
\[cemitékki\] : /cemitékki/ 'with huckleberry'
\[fiyélí\cdotkqewne\] : /iyálí\cdotqswa/ 'I drifted by'
\[cemítknú\cdott\] : /cemítxnú\cdott/ 'without huckleberry'
\[cemitékleykin\] : /camítáxlaykin/
'near huckleberry'
huckleberry' : /cemi·tx/ "huckleberry"
for huckleberry' : /camitkáyn/ "for huckleberry"

/q/ : /ϕ/ before /k/, /n/, /l/, or /+/, /q/ elsewhere, e.g.,
'the went on back' : /hickili·toξkika/ 'he went on back'
'he spoke' : /hici·xne/ 'he spoke'
'talking squirrel' : /ci·xlu/ 'talking squirrel'
'tobacco' : /tú·ϕ/ 'tobacco'
'I smoke tobacco' : /tú·qise/ 'I smoke tobacco'

/'/ : /ϕ/ after /?/ or /'/; /'/ after other stops; /ʔ/ elsewhere, e.g.,
'skunk' : /tisqe?/ 'skunk'
'for skunk' : /tisqaʔyn/ 'for skunk'
'your mother' : /ʔimi·s/ 'your mother'
'just a youngster' : /teʔexeθu/ 'just a youngster'
'house' : /ʔini·t/ 'house'

/ʔ/ : /ʔ/ , e.g.,
'all day' : /halxpí·s/ 'all day'

∅ after a consonant at normal speed; /h/ elsewhere, e.g.,
tell them!' : /hiné·sin/ 'tell them!
'stem,' 'vine' : /héhen/ 'stem,' 'vine'
\[H\] : a homorganic unglottalized stop before a glottalized stop; the same consonant before a sonorant \((\|m\|, \|n\|, \|l\|)\); and \(\emptyset\) elsewhere, e.g.,

\[
\begin{align*}
\|\text{kuyc}\| : & /\text{kuy}/ 'nine' \\
\|\text{peh}\text{kuyc}\| : & /\text{peh\kuy}/ 'nine each' \\
\|\text{lepit}\| : & /\text{lepit}/ 'two' \\
\|\text{peh}\text{lepit}\| : & /\text{pelepit}/ 'two each' \\
\|\text{p\text{u}\text{tmt}}\| : & /\text{p\text{u}\text{tmt}}/ 'ten' \\
\|\text{peh}\text{p\text{u}\text{tmt}}\| : & /\text{pepu\text{tmt}}/ 'ten each'
\end{align*}
\]

\(^\wedge\).

With vowels. \(\|\hat{\text{v}}\| : /\text{v}/ when \(\|^\wedge\|\) occurs with the first vowel in a word or with the third vowel which follows a consonant cluster; and \(\emptyset\) elsewhere, e.g.,

\[
\begin{align*}
\|\text{mic}\text{'ik\text{u}'ynekse}\| : & /\text{mick\text{'u}'ynekse}/ 'I believe' \\
\|\text{himic}\text{'ik\text{u}'ynekse}\| : & /\text{himic\text{'k}\text{u}'ynekse}/ 'he believes' \\
\|\text{mic}'\text{'se}\| : & /\text{mi\text{'c}'sa}/ 'I hear' \\
\|\text{emic}'\text{'se}\| : & /\text{an\text{'c}'sa}/ 'I hear someone else's' \\
\|\text{en\text{'e}'smic}'\text{'se}\| : & /\text{an\text{'e}'smic\text{'c}sa}/ 'I hear them' \\
\|\text{hipe}'\text{elel\text{'e}'ynekse}\| : & /\text{hipa\text{'l}\text{a}'ynekse}/ 'they are all burned up'
\end{align*}
\]

With length. \(\|\text{\text{\char`\^\text{c}}}\| : /\text{\text{\char`\^}}/ when \(\|^\wedge\|\) occurs after the first or third vowel after \(\|+\|\); and \(\emptyset\) elsewhere, e.g.,

\[
\begin{align*}
\|\text{hi\text{\char`\^\text{c}'miyaca}}\| : & /\text{hi\text{\char`\^}{miyaca}}/ 'I lick' \\
\|\text{hihi\text{\char`\^\text{c}'miyaca}}\| : & /\text{hihi\text{\char`\^}{miyaca}}/ 'he licks'
\end{align*}
\]
With length and ||R||, ||^|| is Ø in the reduplication and /•/ elsewhere, e.g.,

||tê’mul|| : /tê·mul/ 'hail'
||R tê’mul|| : /temultê·mul/ 'sleet'

||kW||. ||kWv|| : /ku/ after ||^|| with the second vowel after ||+||; /kV/ elsewhere, e.g.,

||tûkWeylé·kse|| : /tukeylé·kse/ 'I drive down'
||hitûkWeylé·kse|| : /hitkuylé·kse/ 'he drives down'

||qW||. ||qWv|| : /qu/ after ||^|| with the second vowel after ||+||; /qV/ elsewhere, e.g.,

||tûqWeléhnece|| : /tuqeléhnece/ 'I swim down'
||hitûqWeléhnece|| : /hitqueléhnece/ 'he swims down'

Nez Perce has extensive vowel harmony. In a harmonic sequence, which is bounded by ||−|| or ||+||, and is either coterminous with or smaller than a morphophonemic word, either the set /i/, /a/, /o/ or the set /i/, /e/, /u/ is found. The following four morphophonemes, ||e||, ||u||, ||_||, and ||−|| describe the harmony. Among older speakers, the
harmonic sequences are frequently coterminous with morphophonemic words. Consequently, the occurrence of harmonic sequence boundary marker, \(-\|\), is very infrequent, the main exception being foreign loans.

\(\|\text{e}\|\) : /a/ with \(\|\|\) within the same harmonic sequence bounded by \(\|\|\) or \(\|+\); /e/ elsewhere, e.g.,

\[\|\text{tú·teʔ}\| : /tó·taʔ/ 'father' (vocative)\]
\[\|\text{i·teʔ}\| : /ʔi·teʔ/ 'mother' (vocative)\]
\[\|\text{piléqeʔ}\| : /piláqaʔ/ 'grandmother' (vocative)\]
(\(\text{maternal grandmorther}\))
\[\|\text{cewitk'éyn}\| : /cawitkáyn/ 'for wild carrot'\]
\[\|\text{lém-he'y}\| : /lémha·y/ 'the Lemhi River, Idaho'\]

\(\|\text{u}\|\) : /o/ with \(\|\|\) within the same harmonic sequence bounded by \(\|\|\) or \(\|+\); /u/ elsewhere, e.g.,

\[\|\text{su·yé·pu·}\| : /so·yá·po·/ 'the white people'\]
\[\|\text{tewe·pu·}\| : /tewe·pu·/ 'people of Orofino, Idaho'\]
\[\|\text{tuʔáynu}\| : /tuʔáynu/ 'tail'\]
\[\|\text{tuʔynú'eyn}\| : /toʔynóʔayn/ 'crupper,' 'for the tail'\]
\[\|\text{cú·aim'eyn}\| : /cú·aimayn/ 'for the steer'\]

---

6 Lemhi, originally Limhi, was named after a king by Mormon immigrants in the area ca. 1855.
7 /cú·aim/ 'steer' is a loan from Salish.
\( \varepsilon \) is phonemically \( \emptyset \), e.g.,

\( \text{nê·qc} \) : /ná·qc/ 'one'

\( \text{tú·teʔ} \) : /tó·taʔ/ 'father' (vocative)

\( \text{cí·ceʔ} \) : /cí·caʔ/ 'paternal aunt' (vocative)

\( \| \) (harmonic sequence boundary marker) is phonemically \( \emptyset \), e.g.,

\( \text{lém-he·y} \) : /léma·y/ 'the Lemhi River, Idaho'

\( \text{cú·dim·'eyn} \) : /cú·dimayn/ 'for steer'

220. The members of the second group are morphophonemes of reduplication.

\( \text{r} \) : /he/ before \( \text{ʔi} \) or \( \text{`i} \); /hV/ before \( \text{ʔV} \) or \( \text{'V} \)

(V representing \( \text{e} \) or \( \text{u} \)); elsewhere a sequence of a consonant and a vowel corresponding to the initial CV, e.g.,

\( \text{'iskit} \) : /ʔiskit/ 'trail'

\( \text{r 'iskit} \) : /heʔiskit/ 'trails'

\( \text{'éhew} \) : /ʔéhew/ 'wounded'

\( \text{r 'éhew} \) : /heʔéhew/ 'wounded' (distributive)

\( \text{hê·cwe1} \) : /há·cwal/ 'son'

\( \text{r hê·cwe1} \) : /hahácwal/ 'sons'
$|r_i|$ : a sequence of the following consonant and /i/, 
e.g.,

$|t\_c|$ : /t\_c/ 'good'
$|r_i t\_c|$ : /tit\_c/ 'good' (distributive)
$|\chi\_wic|$ : /\chi\_wic/ 'sharp' (of points)
$|r_i \chi\_wic|$ : /\chi\chi\_wic/ 'sharp' (distributive)

$\|R\|$ : complete reduplication of the following stressed 
sequence, e.g.,

$|qi\_yex|$ : /qi\_yax/ 'squawfish'
$\|R qi\_yex\|$ : /qi\_yaxq\_yax/ 'little squawfish'
$|mAqs|$ : /m\_aqs/ 'gall'
$\|R mAqs\|$ : /maqm\_aqs/ 'yellow'
$'|\ilp|$ : /|\ilp/ 'reddish skin eruption'
$\|R |\ilp|$ : /|\ilp\_ilp/ 'red'
$'|\eys|$ : /|\eys/ 'parsnip sp.'
$\|R |\eyc|$ : /|\eyc\_eyc/ 'parsnip sp.'

230. Morphophonemic sequences.

$|ewe|$ and $|\acute{e}we|$ are phonemically /u\_/, /o\_/, /\acute{u}\_/, /\acute{e}\_/.
$|ew\_\acute{e}|$ : /ew\_\acute{e}/ or /aw\_\acute{e}/.

$|wey\_\acute{i}kni\_\acute{u}|$ : /wey\_\acute{i}kni\_\acute{u}/ 'I will be flying around'
$|pewey\_\acute{i}kni\_\acute{u}|$ : /pu\_\acute{i}kni\_\acute{u}/ 'we will be flying
around'
\[ \text{\textbf{wé\textasciitilde{}yiksik}} : /\text{\textasciitilde{}yiksix}/ 'we are going across' \]
\[ \text{\textbf{sitú\textasciitilde{}yiksik}} : /sitú\textasciitilde{}yiksix/ 'we are looking across' \]
\[ \text{\textbf{wepteméwne}} : /waptamáwna/ 'I murdered' \]
\[ \text{\textbf{ewépteméwne}} : /\text{\textasciitilde{}ptamáwna}/ 'I murdered (somebody else's)' \]
\[ \text{\textbf{wé\textasciitilde{}pci\textasciitilde{}yewcik}} : /\text{\textasciitilde{}pci\textasciitilde{}ywacix}/ 'we are killing' \]
\[ \text{\textbf{ewépci\textasciitilde{}yewcik}} : /\text{\textasciitilde{}pci\textasciitilde{}ywacix}/ 'we are killing (somebody else's)' \]
\[ \text{\textbf{wéwyaca}} : /\text{\textasciitilde{}wyaca}/ 'I beat with stick' \]
\[ \text{\textbf{ewéwyaca}} : /\text{\textasciitilde{}wyaca}/ 'I beat (somebody else's)' \]

There are following exceptions:
\[ \text{\textbf{méwe}} : /máwa/ 'when' \]
\[ \text{\textbf{téwe}} : /táwa/ 'well ...' \]
\[ \text{\textbf{kéwe}} : /káwa/ 'so much,' 'that much' \]
\[ \text{\textbf{kéweye}} : /kéweye/ 'let them' \]
\[ \text{\textbf{we\textasciitilde{}léwe}} : /wa\textasciitilde{}lawa/ 'Wallawa, Wash.' \]
\[ \text{\textbf{ipéwece}} : /\text{\textasciitilde{}páwaca}/ 'I put in papoose' \]

\[ \text{\textbf{VhV}} \text{ and } \text{\textbf{V'V}} \text{ show the following:} \]
\[ \text{\textbf{VhV}} : /\text{\textasciitilde{}V}/ ñ /\text{\textasciitilde{}V}hV/ \]
\[ \text{\textbf{heqtí\textasciitilde{}se}} : /\text{\textasciitilde{}htí\textasciitilde{}se}/ 'I am getting old' \]
\[ \text{\textbf{hiheqtí\textasciitilde{}se}} : /\text{\textasciitilde{}htí\textasciitilde{}se}/ ñ /hiheqtí\textasciitilde{}se/ 'he is getting old' \]
\[ V_1 h V_2 \] : \[ V_2 h V_2 \]
\[ hé·sce \] : \[ hé·sce \] 'I breathe'
\[ hi hé·sce \] : \[ he hé·sce \] 'he breathes'
\[ V_1 ' V_2 \] : \[ V_2 ' V_2 \]
\[ 'eiwice \] : \[ 'eiwice \] 'I spend winter'
\[ hi 'eiwice \] : \[ he 'eiwice \] 'he spends winter'
\[ V_1 ' V_2 \] : \[ V_2 ' V_2 \]
\[ 'é·yewise \] : \[ 'é·yewise \] 'I am peaceful'
\[ hi 'é·yewise \] : \[ he 'é·yewise \] 'he is peaceful'
300. CONSONANT AND VOWEL SYMBOLISM

An interesting feature of Nez Perce is the occurrence of consonant and vowel alternation, mainly with augmentative-diminutive significance. /s/, /n/, /k/, and /e/ as non-diminutive forms are paralleled by /c/, /l/, /q/, and /a/ as diminutive forms. The diminutive forms indicate smallness in size, possession by the first person (in kinship terms), verisimilitude, or contempt (in tribal names). These diminutives often occur with ॥R॥.

s ~ c:

॥pê·su·yece॥ : /pê·su·yece/ 'he rocks (a child)'
॥pê·cu·yece॥ : /pê·cu·yece/ 'he rocks (a baby)'
॥R wês nu॥ : /waswásno/ 'chicken'
॥R wêc nu॥ : /wacwácno/ 'saddle horn'
॥ne?yé·c॥ : /na?yá·c/ 'my elder brother'
॥'imyê·s॥ : /'imyá·s/ 'your elder brother'
॥ne?cí·c॥ : /na?cí·c/ 'my paternal aunt'
॥'imsí·s॥ : /'imsí·s/ 'your paternal aunt'
॥'iski·cu·mix॥ : /'iski·cu·mix/ 'Coeur d'Alene'
॥'icki·cu·mix॥ : /'icki·cu·mix/ 'Coeur d'Alene'

(in derision)
n ~ l:

||hité\textsuperscript{m\textacute n\textsuperscript{es}}|| : /hité\textsuperscript{m\textacute n\textsuperscript{es}}/ 'book' (\{hité\textsuperscript{me}\} 'read')

||kiwiki\textsuperscript{lé\textacute c}|| : /kiwiki\textsuperscript{lé\textacute c}/ 'drum' (\{kiwiki\} 'beat')

||'iceyé\textsuperscript{ye-q\textacute en}|| : /?iceyé\textsuperscript{yeqan}/ 'young coyote' (\{'iceyé\textsuperscript{ye}\} 'coyote') cf. ||qe\textsuperscript{l}|| in 'dog' below.

k ~ q:

||si\kern{-1pt}kem|| : /sí\kern{-1pt}kem/ 'horse'

||ciq\textsuperscript{é\textsuperscript{m}\textsuperscript{q}\textsuperscript{e}l}|| : /ciq\textsuperscript{á\textsuperscript{m}\textsuperscript{q}\textsuperscript{a}l}/ 'dog'

e ~ a:

||sé\textsuperscript{x}|| : /sé\textsuperscript{x}/ 'onion'

||R cè\textsuperscript{x}|| : /ca\textsuperscript{c\acute a\textsuperscript{x}}/ 'wild onion'

||kè\textsuperscript{tis}|| : /kè\textsuperscript{tis}/ 'spear'

||R kè\textsuperscript{\textacute t\textsuperscript{ic}}|| : /katic\textsuperscript{k\acute a\textsuperscript{t\acute ic}}/ 'toy spear'
CHAPTER TWO

MORPHOLOGY

400. INTRODUCTION

The Nez Perce morphological word is a sequence of one or more morphemes between successive morphological word junctures symbolized as {+}. {+} is represented by free alternation of ||+|| and Ø, e.g.,

\{yuq + 'ipnim + 'ini·t\} 'that house of his'

: \|yuq + 'ipnim + 'ini·t|| Ñ \|yuq + 'ipnim 'ini·t||

Ñ \|yuq 'ipnim + 'ini·t|| Ñ \|yuq 'ipnim 'ini·t||

: /yoq + ?ipnim + ?ini·t/ Ñ /yoq 'ipnim 'ini·t/ Ñ /yoq'ipnim + ?ini·t/ Ñ /yoq'ipnim'ini·t/.

The morphological word is either identical with or larger than the theme, which in turn, is either identical with or larger than the stem.

There are three morphological word classes internally defined: substantives, verbs, and particles. These are differentiated by discrete sets of affixes or by the absence of affixes.
500. SUBSTANTIVES

Substantive stems are discussed in 510 and substantive themes are discussed in 520.

510. Substantive stems.

There are six stem classes.

510.1 General noun stems (nS) : one or two general noun root morphemes.

There are three factors determining the allomorphs of general noun stems, the first of these is morphological, the others are phonological: (1) the absence or presence of affixes, (2) the absence or presence of stress in the affix, (3) whether or not the initial consonant of the suffix is a voiced continuant. The combination of these three results in five sets of environments:

I: no affixes

II: followed by an unstressed suffix with initial voiced continuant, e.g., {nim}, {ne}

III: followed by an unstressed suffix with initial voiceless stops, e.g., {pe}, {cim}, {k}, {kek}, {ki}, {ki'nik}

IV: followed by a stressed suffix with initial voiced continuant, e.g., {l̄ykin}, {nime}, {nú·t}
V: followed by a stressed suffix with initial voiceless stops or glottalization, e.g., {pipem}, {ˈeyn}. The alternation between allomorphs of a general noun may be summarized as a difference in the number of segments, in length, and in stress.

Of segmental differences there is but one, namely, the stem final t, which alternates with zero in environments II and IV. Others involve vowels, the most frequent being the alternation between CV(•)CC in environment I and CVCVC in environments II and III.

Length difference may be observed in the alternation between final short vowels in environments I, IV, and V and final long vowels in II and III. This alternation is morphologically conditioned.

Stress difference is generally characterized by stressed allomorphs in environments I, II, and III and stressed allomorphs in IV and V. Though there are exceptions, allomorphs in II and III tend to occur with the stress placed closer to the stem-final position than in I.
The types of allomorphy and examples are as follows:

(1) {wexwéqt} type. The members of this type have six allomorphs, two forms in environment V. An example is {wexwéqt} 'frog.'

I: {wexwéqt +} : ||wexwéqt|| : /wexwéqt/ 'frog'

II: {wexwéqt ne} : ||wexweqé ne|| : /wexweqéne/ 'frog' (object)

III: {wexwéqt pe} : ||wexweqét pe|| : /wexweqétpe/ 'at the frog'

IV: {wexwéqt nime} : ||wexweqé nime|| : /wexweqéne/nime/ 'Frog-Place'

Va: {wexwéqt '6yn} : ||wexweqt '6yn|| : /wexweqétáyn/ 'for a frog'

Vb: {wexwéqt pipem} : ||wexweqet pipem|| : /wexweqetpipem/ 'among frogs'

(2) {telétet} type. The members of this type have five allomorphs. An example is {telétet} 'cedar.'

I: {telétet +} : ||telétet|| : /talátat/ 'cedar'

II: {telétet ne} : ||telté ne|| : /taltána/ 'cedar' (object)
III: {telétet pe} : /taltátpa/
   'at the cedar'
IV: {telétet níme} : /taltaníma/
   'Cedar-Place'
V: {telétet pipem} : /taltatpipam/
   'among cedars'

(3) {cé·qet} type. The members of this type have four allomorphs. An example is {cé·qet} 'raspberry.'
   I: {cé·qet +} : /cé·qet/ 'raspberry'
   II: {cé·qet ne} : /ceqé·ne/ 'raspberry' (object)
   III: {cé·qet pe} : /ceqé·tpe/ 'at raspberry'
   IV and V: {cé·qet níme} : /ceqet níme/ 'Raspberry-Place'
             {cé·qet pipem} : /ceqet pipem/ 'among raspberries'

(4) {té·mses} type. The members of this type have four allomorphs. An example is {té·mses} 'wild rose.'
   I: {té·mses +} : /tá·msas/ 'wild rose'
II and III: \{té·mses nim\} : \{tē·sé·s nim\}:
: /tamsá·snim/ 'wild rose' (possessive-nominative)
\{té·mses pe\} : \{tē·sé·s pe\} : /tamsá·spa/
'at the wild rose'
IV: \{té·mses nú·t\} : \{tē·mses nú·t\} : /tamsasnó·t/
'without wild rose'
V: \{té·mses 'éyn\} : \{tē·sé·s 'éyn\} : /tamsa·sáyn/
'for wild rose'

(5) \{qé·msit\} type. The members of this type have
four allomorphs. An example is \{qé·msit\} 'kows'
(�ible root) (\textit{lomatium kaus}).

I and III: \{qé·msit +\} : \{qé·msit\} : /qá·msit/
'kows'
II: \{qé·msit ne\} : \{qé·msi ne\} : /qá·msina/
/ /qá·msitna/ 'hows' (object)
IV: \{qé·msit nú·t\} : \{qemsi nú·t\} : /qamsinó·t/
/qamsitnó·t/ 'without kows'
V: \{qé·msit pipem\} : \{qemsi pipem\} : /qamsitpípam/
'among kows'
(6) \{qe\q\q\q\-t\} type. The members of this type have four allomorphs, with two freely alternating allomorphs each in environments II and III. An example is \{qe\q\q\-t\} 'root somewhat like kows.'

I: \{qe\q\q\-t \+\} : \|qe\q\q\-t\| \:$/$qe\q\q\-t/$ 'qe\q\q\-t'

II: \{qe\q\q\-t ne\} : \|qe\q\q\- ne\| \:$/$qe\q\q\- ne/$

: $/qe\q\q\-ne/ \:$/$qe\q\q\-tn\- ne/$ 'qe\q\q\-t' (object)

III: \{qe\q\q\-t pe\} : \|qe\q\q\-t pe\| \:$/$qe\q\q\-y\-t pe/$

: $/qe\q\q\-tpe/ \:$/$qe\q\q\-y\-tpe/$ 'at qe\q\q\-t'

IV and V: \{qe\q\q\-t pipem\} : \|qe\q\q\-t pipem\| :

$\|qe\q\q\-tpipem\|$ 'among qe\q\q\-t'

\{qe\q\q\-t nú\-t\} : \|qe\q\q\-t nú\-t\| : $/qe\q\q\-tnú\-t/$

'without qe\q\q\-t'

(7) \{p\e\-ps\} type. The members of this type have three allomorphs. An example is \{p\e\-ps\} 'red fir tree.'

I: \{p\e\-ps \+\} : \|p\e\-ps\| \:$/$p\e\-ps/$ 'red fir tree'

II and III: \{p\e\-ps nim\} : \|p\e\- ps nim\| \:$/$p\e\-snim/$

'red fir tree' (possessive-nominative)

IV and V: \{p\e\-ps pipem\} : \|p\e\-ps pipem\| \:$/$p\e\-spipem/$

'among red fir trees'

Other examples in this type are \{sî\-ks\} 'nest,' \{pî\-ps\} 'bone,' \{é\-yx\} 'white salmon.'
(8) \{\textit{aíté-n}\} type. The members of this type have three allomorphs. An example is \{\textit{aíté-n}\} 'bitterroot.'

I, II and III: \{\textit{aíté-n +}\} : \textit{aíté-n} : /\textipa{aitán}/
'bitterroot'

\{\textit{aíté-n ne}\} : \textit{aíté-n ne} : /\textipa{aitánna}/
'bitterroot' (object)

\{\textit{aíté-n k}\} : \textit{aíté-n k} : /\textipa{aitánx}/ 'to bitterroot'

IV: \{\textit{aíté-n nú-t}\} : \textit{aítén nú-t} : /\textipa{aitannó’t}/
'without bitterroot'

V: \{\textit{aíté-n pipem}\} : \textit{aíté-n pipem} : /\textipa{aitanpiphone}/
'among bitterroots'

(9) \{\textit{yé·ke'\}} type. The members of this type have two allomorphs. An example is \{\textit{yé·ke'}\} 'brown bear.'

I, II and III: \{\textit{yé·ke'} +\} : \textit{yé·ke'} : /\textipa{yá·ka’}/
'brown bear'

\{\textit{yé·ke' ne}\} : \textit{yé·ke' ne} : /\textipa{yá·ka’na}/ 'brown bear' (object)

\{\textit{yé·ke' pe}\} : \textit{yé·ke' pe} : /\textipa{yá·ka’pa}/ 'at the brown bear'

IV and V: \{\textit{yé·ke' níme}\} : \textit{yéké’ níme} : /\textipa{yaka’níma}/
'Brown Bear Place'

\{\textit{yé·ke' pipem}\} : \textit{yéké’ pipem} : /\textipa{yaka’piphone}/
'among brown bears'
The frequency of the nine types in a sample of 52 general noun stems is:

<table>
<thead>
<tr>
<th>Type</th>
<th>Environments</th>
<th>Number of Allomorphs</th>
<th>Frequency (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>{wexwéqt}</td>
<td>1 2 3 4 5 6</td>
<td>6</td>
<td>1.9</td>
</tr>
<tr>
<td>{teleyet}</td>
<td>1 2 3 4 5</td>
<td>5</td>
<td>3.8</td>
</tr>
<tr>
<td>{céqet}</td>
<td>1 2 3 4</td>
<td>4</td>
<td>1.9</td>
</tr>
<tr>
<td>{témses}</td>
<td>1 2 3 4</td>
<td>4</td>
<td>3.8</td>
</tr>
<tr>
<td>{qémsit}</td>
<td>1 1 2 1.3 4</td>
<td>4</td>
<td>1.9</td>
</tr>
<tr>
<td>{qeqit}</td>
<td>1 1.2 1.3</td>
<td>4</td>
<td>1.9</td>
</tr>
<tr>
<td>{péps}</td>
<td>1 2 3</td>
<td>3</td>
<td>53.8</td>
</tr>
<tr>
<td>{itién}</td>
<td>1 2 3</td>
<td>3</td>
<td>3.8</td>
</tr>
<tr>
<td>{yiték}</td>
<td>1 2</td>
<td>2</td>
<td>25.0</td>
</tr>
</tbody>
</table>
In compound stems, the maximal number of constituent morphemes appears to be two. As in monomorphemic stems the allomorphic variation is in number of segmentals, in length and in stress. Unlike monomorphemic stem allomorphs, some morphemes with consonant-final allomorphs before a morphological word juncture have allomorphs ending in a stressed vowel when they are the first member in a compound. Though there are exceptions, the second member tends to have unstressed allomorphs.

\[
\text{\texttt{\textit{hecwelé} miye?c}} : /\texttt{hacwalámiya?c}/ \textit{son}'
\]
\[
\text{\texttt{hé?cwel}} : /\texttt{hácwal}/ \textit{boy}'
\]
\[
\text{\texttt{miyé?c}} : /\texttt{miyá?c}/ \textit{child}'
\]
\[
\text{\texttt{cewitéx si*s}} : /\texttt{cawitáxsi*s}/ \textit{carrot soup}'
\]
\[
\text{\texttt{cewi*tk}} : /\texttt{cawi*tx}/ \textit{wild carrot}'
\]
\[
\text{\texttt{sí*s}} : /\texttt{si*s}/ \textit{broth}'
\]
\[
\text{\texttt{ele télu}} : /\texttt{?alatálo}/ \textit{yellowjacket}'
\]
\[
\text{\texttt{?ele}} : /\texttt{?ála}/ \textit{fire}'
\]
\[
\text{\texttt{té*lu}} : /\texttt{tálo}/ \textit{testes}'
\]
\[
\text{\texttt{piyéxc ini*t}} : /\texttt{piyéxčini*t}/ \textit{Mt. Idaho}'
\]
\[
\text{(from its shape)}
\]
\[
\text{\texttt{piyexs}} : /\texttt{piyexs}/ \textit{rawhide strap}'
\]
\[
\text{\texttt{ini*t}} : /\texttt{?ini*t}/ \textit{house, 'tepee}'
\]
510.2 Numeral stems (nuS): any numeral.

The numeral allomorphy may be summarized:

510.3 Kinship term stems (kS): any kinship term.

The kinship term stems may be divided into two groups and five subgroups. The relationship of these groups and subgroups and affixal allomorphs may be summarized:

<table>
<thead>
<tr>
<th>Environments</th>
<th>{ne?}</th>
<th>{im}</th>
<th>{pe'}</th>
<th>{e?c}</th>
<th>{nim}</th>
<th>{ne}</th>
<th>{e}</th>
<th>{e?}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stem groups</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Group 1a</td>
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<tr>
<td>Group 1b</td>
<td>ne?</td>
<td>im</td>
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<tr>
<td>Group 2a</td>
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<tr>
<td>Group 2b</td>
<td>'in'</td>
<td>'in'</td>
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<tr>
<td>Group 2c</td>
<td>'inim'</td>
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</tr>
</tbody>
</table>

Environment 1: + {ne?} / {im} stem - +
Environment 2: + {pe'} stem - + or + stem {e?c} - +

The membership of the groups above is as follows:

Group 1a: {qeléc} 'FaFa,' {é'1} 'FaMo,' {piléq} 'MoFa,'
{qé'c} 'MoMo.'
Group 1b: {cí·c} 'Fa,' {í·c} 'Mo,' {méq} 'FaBr,'
{inté} 'PaSi,' {téq} 'MoBr,' {qé·q} 'MoSi,'
{yé·c} 'OBr,' {né·n} 'OSi.'

Group 2a: {é·cæ} 'YBr(m),' {nípe} 'YBr(f),' {qéni}
'YSi(m),' {é·yí} 'YSi(f),' {é·ks} 'Si(f),'
{pré·qiy} 'BrCh(m),' {pré·me} 'BrSo(f),'
{pré·y} 'BrDa(f),' {mém} 'SiCh(m),' {f·te}
'SiCh(f),' {miyé·c} 'Ch,' {pré·hep} 'Da(m),'
{pré·elix} 'SoCh(m),' {pré·lepx} 'DaCh(m),'
{pré·te} 'SoCh(f),' {pré·ex} 'DaCh(f),'
{piné·kin} 'HuBr,' 'BrWi(m),' {ci·ks} 'HuSi,'
'BrWi(f),' {tiwé·ye} 'WiBr,' {ci·i·wn} 'WiBr,'
{piné·xis} 'HuFa,' 'SoWi,' {pré·ses} 'WiFa,'
{'iwé·p} 'Wi.'

Group 2b: {hé·me} 'Hu.'

Group 2c: {ciwé·qu} 'WiMo.'

Semantically, Group 1 includes the forms referring
to senior consanguineal kin, while the second group
includes the forms referring to junior consanguineal
kin and affinal relationships. Group 1a includes
four grandparent-grandchild forms.

The stem allomorphy in Group 1 is characterized by
a [c]-[s] alternation between first and second person
singular possessed forms, the former occurring with
and the latter with \[s\], and by final t-less allomorphs before suffixes with initial n and by p-less allomorphs before suffixes with initial m.

The complete inventory of kinship stem allomorphy is:

Environments:

<table>
<thead>
<tr>
<th>Environment</th>
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</thead>
<tbody>
<tr>
<td>1: (+ - +)</td>
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<tr>
<td>2: (+ - {e?})</td>
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<tr>
<td>3: {ne?} - +</td>
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<tr>
<td>4: {ne?} - {nim}/{ne}</td>
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<td>5: {im} -</td>
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<tr>
<td>6: {pe} - + or - {e?c} +</td>
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<tr>
<td>7: {pe} - {ne} or {e?c}{ne}</td>
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<td></td>
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<tr>
<td>8: {pe} - {me} or - {e?c}{me}</td>
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<td></td>
</tr>
</tbody>
</table>

Environments: 1 2 3 4 5 6 7 8

\[\{qel\} \ FaFa \ \emptyset qel \ = \ = \ = \ = \ = \ = \ =\]
\[\{'e\cdot l\} \ FaMo \ \emptyset 'e\cdot l \ 'el \ 'e\cdot l \ = \ = \ = \ *\]
\[\{p\dot{l}\} \ MoFa \ \emptyset p\dot{l} \ = \ = \ = \ = \ = \ *=\]
\[\{q\cdot c\} \ MoMo \ \emptyset q\cdot c \ = \ = \ q\cdot s \ q\cdot c \ = \ *=\]
\[\{t\cdot t\} \ Fa \ \emptyset t\cdot t \ = \ = \ st \ si \ sit\]
\[\{i\cdot c\} \ Mo \ \emptyset i\cdot c \ = \ = \ 'i\cdot s \ ke \ k\cdot e \ =\]
\[\{m\dot{c}\} \ FaBr \ \emptyset m\dot{c} \ = \ = \ m\dot{q} \ m\dot{c} \ =\]
\[\{c\dot{i}\cdot c\} \ FaSi \ \emptyset c\dot{i}\cdot c \ = \ = \ s\cdot i\cdot s \ sis \ si\cdot s \ =\]
\[\{t\dot{c}\} \ MoBr \ \emptyset t\dot{c} \ = \ = \ tq \ t\dot{c} \ *=\]
\[\{q\dot{e}\cdot q\} \ MoSi \ \emptyset q\dot{e}\cdot q \ = \ = \ q\dot{e}q \ q\dot{e}\cdot q \ =\]
\[\{y\dot{c}\} \ OBr \ \emptyset y\dot{c}\ = \ = \ y\dot{c}\cdot s \ yep \ y\cdot p \ y\cdot e \]
\[\{n\dot{e}\cdot n\} \ OSi \ \emptyset n\dot{e}\cdot n \ nic \ = \ nis \ het \ n\cdot e \ n\dot{e} \]

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<table>
<thead>
<tr>
<th>Environments:</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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</thead>
<tbody>
<tr>
<td>{'ecqe}</td>
<td>YBr(m)</td>
<td>'écqe</td>
<td>'ésqep</td>
<td>=</td>
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<td></td>
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</tr>
<tr>
<td>{nipe}</td>
<td>YBr(f)</td>
<td>nipe</td>
<td>pekt</td>
<td>pekt</td>
<td>pé·kt</td>
<td>peki</td>
<td>pé·kt</td>
<td>peki</td>
</tr>
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<td>{qéni}</td>
<td>YSi(m)</td>
<td>qéni</td>
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<td>=</td>
<td>qénis</td>
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<td>{'éyi}</td>
<td>YSi(f)</td>
<td>'éyi</td>
<td>'écip</td>
<td>=</td>
<td>'ci·p</td>
<td>'écip</td>
<td>'eci·p</td>
<td>'eci·</td>
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<tr>
<td>{'é·ks}</td>
<td>Si(f)</td>
<td>'e·ks</td>
<td>=</td>
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<td></td>
</tr>
<tr>
<td>{pé·qi}</td>
<td>BrCh(m)</td>
<td>pé·qi</td>
<td>peqi{y}</td>
<td>=</td>
<td>peqi{y}</td>
<td>peqi{y}</td>
<td>peqi{y}</td>
<td>peqi{y}</td>
</tr>
<tr>
<td>{pé·me}</td>
<td>BrSo(f)</td>
<td>pé·me</td>
<td>pemtin</td>
<td>=</td>
<td>pemtin</td>
<td>=</td>
<td>pé·me</td>
<td>pemtin</td>
</tr>
<tr>
<td>{pú·}</td>
<td>BrDa(f)</td>
<td>pú·y</td>
<td>pu·t</td>
<td>pu·t</td>
<td>pú·t</td>
<td>pú·t</td>
<td>pú·t</td>
<td></td>
</tr>
<tr>
<td>{mém}</td>
<td>SiCh(m)</td>
<td>mém</td>
<td>pitxpe</td>
<td>=</td>
<td>pitxpe</td>
<td>=</td>
<td>pitxpe</td>
<td></td>
</tr>
<tr>
<td>{'i·te}</td>
<td>SiCh(f)</td>
<td>'i·tx</td>
<td>=</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>{péhe}</td>
<td>Da(m)</td>
<td>péhe</td>
<td>pehe</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>péhe</td>
<td>pehe</td>
</tr>
</tbody>
</table>

Environments: 1: + - + 4: + \{'im\} - + 7: + \{pe\} - \{ne\} + 2: + \{ne\} - + 5: + \{'im\} - \{ne\} + 8: + \{pe\} - \{me\} + 3: + \{ne\} - \{ne\} + 6: + \{pe\} - +
<table>
<thead>
<tr>
<th>Environments:</th>
<th>1</th>
<th>2</th>
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<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>{peqélis} SoCh(m)</td>
<td>φ</td>
<td>peqélis</td>
<td>=</td>
<td>peqélis</td>
<td>peqélis</td>
<td>peqélis</td>
<td>=</td>
<td></td>
</tr>
<tr>
<td>{péplex} DaCh(m)</td>
<td>φ</td>
<td>peplex</td>
<td>=</td>
<td>peplex</td>
<td>peplex</td>
<td>peplex</td>
<td>=</td>
<td>*</td>
</tr>
<tr>
<td>{piptex} SoCh(f)</td>
<td>φ</td>
<td>piptex</td>
<td>=</td>
<td>piptex</td>
<td>piptex</td>
<td>piptex</td>
<td>=</td>
<td></td>
</tr>
<tr>
<td>{pêqex} DaCh(f)</td>
<td>φ</td>
<td>pêqex</td>
<td>=</td>
<td>pêqex</td>
<td>pêqex</td>
<td>pêqex</td>
<td>=</td>
<td>*</td>
</tr>
<tr>
<td>{pinú•kin} HuBr</td>
<td>φ</td>
<td>pnukin</td>
<td>pnukun</td>
<td>pnú•kin</td>
<td>pnukán</td>
<td>pinú•kin</td>
<td>pnukún</td>
<td>=</td>
</tr>
<tr>
<td>{ci•ks} HuSi</td>
<td>φ</td>
<td>ciks</td>
<td>=</td>
<td>cî•ks</td>
<td>=</td>
<td>=</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>{piné•xsin} HuFa</td>
<td>φ</td>
<td>pnexsin</td>
<td>=</td>
<td>pné•xsin</td>
<td>=</td>
<td>piné•xsin</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>{cići•wn} WiBr</td>
<td>φ</td>
<td>cićiwn</td>
<td>=</td>
<td>cići•wn</td>
<td>=</td>
<td>*</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>{tiwé•ye} WiBr</td>
<td>φ</td>
<td>tiweye</td>
<td>=</td>
<td>tiwé•ye</td>
<td>=</td>
<td>=</td>
<td>*</td>
<td>tiweyé</td>
</tr>
<tr>
<td>{pîses} WiFa</td>
<td>φ</td>
<td>pîses</td>
<td>=</td>
<td>pîses</td>
<td>=</td>
<td>=</td>
<td>pisé•s</td>
<td>*</td>
</tr>
<tr>
<td>{'îwé•p} Wi</td>
<td>φ</td>
<td>'îwé•p</td>
<td>=</td>
<td>=</td>
<td>=</td>
<td>=</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>{hé•me} Hu</td>
<td>φ</td>
<td>hé•me</td>
<td>hé•m</td>
<td>=</td>
<td>=</td>
<td>hé•me</td>
<td>=</td>
<td>*</td>
</tr>
<tr>
<td>{ciwé•qu} WiMO</td>
<td>φ</td>
<td>ciweg</td>
<td>ciweq</td>
<td>{ciweq}</td>
<td>ciwé•qu</td>
<td>=</td>
<td>ciwé•qu</td>
<td>*</td>
</tr>
</tbody>
</table>
510.4 Personal pronoun stems (ppS): any personal pronoun is:

The stem allomorphy of the personal pronouns is:

<table>
<thead>
<tr>
<th>before:</th>
<th>+ nim</th>
<th>ne</th>
<th>ke</th>
<th>'eq we·tk</th>
<th>ciwé·tq</th>
<th>ník</th>
<th>hi'n</th>
<th>me</th>
</tr>
</thead>
<tbody>
<tr>
<td>{'i·n}</td>
<td>1sg</td>
<td>'i·n = = = = 'in 'in = * ∅</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>{'i·m}</td>
<td>2sg</td>
<td>'i·m 'im 'ime 'i·m ∅ * 'im = * 'im</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>{'ipí}</td>
<td>3sg</td>
<td>'ipí 'ip = 'ipin ∅ * 'ip 'ipin 'ipn ∅</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>{nú·n}</td>
<td>1pl</td>
<td>nú·n = = = = * {nun~ nun * ∅</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

{'i·m} with {me}, a plural suffix, indicates either second or third person; and second person singular without {me}.

{nú·n ciwé·tq} has two forms, /nonciwá·tx/ and /no·ciwá·tx/, the latter being an "older" form (cf. p. xxii).
510.5 Demonstrative stems (dS): any demonstrative.

There are two demonstrative stem morphemes: \{ki\} 'this,' and \{ku\} 'that.' The allomorphs are:

<table>
<thead>
<tr>
<th>Environments:</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>{ki} 'this'</td>
<td>ki</td>
<td>kin</td>
<td>kin</td>
<td>kin</td>
<td>ki</td>
</tr>
<tr>
<td>{ku} 'that'</td>
<td>ø</td>
<td>kun</td>
<td>kün</td>
<td>kun</td>
<td>kun</td>
</tr>
</tbody>
</table>

Environments 1: before \{+, \{kek\}

2: before \{pe +\}, \{ike\}, \{ki\}, \{ki'nik\},
\{ne\}, \{nim\}, \{wecet\}

3: before \{'éyn\}

4: before \{pe 'mé\}

5: before \{me\}

Examples are:

<table>
<thead>
<tr>
<th>Environments 1</th>
<th>{ki}</th>
<th>{ku}</th>
</tr>
</thead>
<tbody>
<tr>
<td>before {+}</td>
<td>ri</td>
<td>ri</td>
</tr>
<tr>
<td>before {kek}</td>
<td>ki•</td>
<td>ki•</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environments 2</th>
<th>{ki}</th>
<th>{ku}</th>
</tr>
</thead>
<tbody>
<tr>
<td>before {pe +}</td>
<td>kin e</td>
<td>kun é</td>
</tr>
<tr>
<td>before {ike}</td>
<td>kin ike</td>
<td>kun iké</td>
</tr>
<tr>
<td>before {ki}</td>
<td>kin ki</td>
<td>kun ki</td>
</tr>
<tr>
<td>before {ki'nik}</td>
<td>kin ik</td>
<td>kun ik'k</td>
</tr>
</tbody>
</table>
Environment 3: before {ne} ||kin ye|| ||kun ye||
before {nim} ||kin m|| ||kun im||
before {wecet} ||kin wecet|| ||kun wecet||

Environment 4: before {pe mé} ||kin é· me|| ||kun é· mé||

Environment 5: before {me} ||ki· me|| ||kun mé||

{yuq} 'that' is semantically similar to {ku} 'that.'

However, the allomorph ||ne|| of {ne}, instead of ||ye|| or ||yé||, occurs with yuq, which may be taken as a general noun. Because yuq occurs in the first environment, where ku does not, yuq frequently is found as a suppletive element.
Adjective stems (aS) : any adjective.

Adjective stem allomorphy may be treated more systematically after a larger corpus is examined; affixes occur with adjectives much less frequently than with the other subclasses of substantives. However, three trends may be observed, (1) stems with stress on the last syllable in an allomorph which occurs after a {+} tend to have an allomorph with stress on the first syllable after an unstressed prefix, (2) an unstressed allomorph occurs after {'eteyé'} or before {ník}, (3) allomorphs ending in \( V'\) before a {+} tend to have an allomorph ending in \( V'\)C before a suffix.

Example of (1):

\[ \text{||cicqi\textasciicircum{}c\| : } /\text{cicqi}\textasciicircum{}c/ \ 'generous' \]
\[ \text{||r} \text{cicqi\textasciicircum{}c\| : } /\text{cicicqi}\textasciicircum{}c/ \ 'generous' \textit{ (distributive)} \]

Example of (2):

\[ \text{||t\textasciitilde{}e\textasciicircum{}c\| : } /\text{t\textasciitilde{}c}/ \ 'good' \]
\[ \text{'etey\textasciitilde{}e'} \text{ te\textasciitilde{}c\| : } /\text{?atay\textasciitilde{}a}\text{ ta}\textasciitilde{}c/ \ 'too good' \]
\[ \text{||te\textasciitilde{}c ník\| : } /\text{ta\textasciitilde{}sníx}/ \ 'very good' \]

Examples of (3):

\[ \text{||te\textasciitilde{}c w\textasciitilde{}it\| : } /\text{ta\textasciitilde{}ácwit}/ \ 'goodness' \]
\[ \text{||qepsi\textasciitilde{}s\| : } /\text{qepsi}\textasciitilde{}s/ \ 'bad' \]
\[ \text{||qepsi\textasciitilde{}is w\textasciitilde{}it\| : } /\text{qepsi}\textasciitilde{}iswit}/ \ 'badness' \]
520. Substantive themes (sT).

Each of the above stem classes is defined by its occurrence in special thematic constructions. These constructions include classes of substantive affixes, which are shown below, together with their distributions among the various stem-classes.

521. Thematic affix classes.

Prefixes:

<table>
<thead>
<tr>
<th>class</th>
<th>subclass</th>
<th>number of members</th>
<th>occurs with</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>nS</td>
</tr>
<tr>
<td>&lt; r &gt;</td>
<td></td>
<td>1</td>
<td>x</td>
</tr>
<tr>
<td>&lt; peH &gt;</td>
<td></td>
<td>1</td>
<td>x</td>
</tr>
<tr>
<td>&lt; ne? &gt;</td>
<td></td>
<td>3</td>
<td>x</td>
</tr>
<tr>
<td>&lt; 'e·t &gt;</td>
<td>'e·t</td>
<td>1</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>eteyé</td>
<td>1</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>'ic</td>
<td>9</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>wiweqi</td>
<td>1</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>'úy'</td>
<td>1</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>'uy</td>
<td>2</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>siléw</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
### Suffixes:

<table>
<thead>
<tr>
<th>class</th>
<th>subclass</th>
<th>number of members</th>
<th>occurs with</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>nS</td>
</tr>
<tr>
<td>&lt; 'é·l &gt;</td>
<td></td>
<td>31</td>
<td>x</td>
</tr>
<tr>
<td>&lt; e?éce &gt;</td>
<td></td>
<td>3</td>
<td>x</td>
</tr>
<tr>
<td>&lt; e?éptit &gt;</td>
<td></td>
<td>1</td>
<td>x</td>
</tr>
<tr>
<td>&lt; hú·sus &gt;</td>
<td></td>
<td>1</td>
<td>x</td>
</tr>
<tr>
<td>&lt; we &gt;</td>
<td></td>
<td>1</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>&lt; e?c &gt;</td>
<td></td>
<td>2</td>
<td>x</td>
</tr>
<tr>
<td>&lt; 'eg &gt;</td>
<td></td>
<td>5</td>
<td>x</td>
</tr>
<tr>
<td>&lt; weyl &gt;</td>
<td></td>
<td>1</td>
<td>x</td>
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<tr>
<td>&lt; ník &gt;</td>
<td></td>
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<td>x</td>
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<tr>
<td>&lt; nú·t &gt;</td>
<td></td>
<td>1</td>
<td>x</td>
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<tr>
<td>&lt; nim &gt;</td>
<td></td>
<td>1</td>
<td>x</td>
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<tr>
<td>&lt; me· &gt;</td>
<td></td>
<td>1</td>
<td>x</td>
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<td></td>
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<tr>
<td>&lt; 'éyn &gt;</td>
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</tbody>
</table>
521.1 Thematic Prefix Classes.

< r > The single member of this class is \{r\} (distributive), e.g.,

\[ \text{\textasciitilde h\textasciitilde e\textasciitilde \textasciitilde c\textasciitilde w\textasciitilde e\textasciitilde 1\textasciitilde} : /\textasciitilde h\textasciitilde \cdot c\textasciitilde w\textasciitilde \textasciitilde 1/ 'son'
\[ \text{\textasciitilde r \textasciitilde h\textasciitilde \textasciitilde e\textasciitilde \textasciitilde c\textasciitilde w\textasciitilde e\textasciitilde 1\textasciitilde} : /\textasciitilde h\textasciitilde \textasciitilde h\textasciitilde \textasciitilde a\textasciitilde c\textasciitilde w\textasciitilde \textasciitilde \textasciitilde 1/ 'son' (distributive)
\[ \text{\textasciitilde w\textasciitilde p\textasciitilde c\textasciitilde \textasciitilde \cdot \textasciitilde k\textasciitilde} : /\textasciitilde w\textasciitilde p\textasciitilde c\textasciitilde \cdot \textasciitilde x/ 'intelligent'
\[ \text{\textasciitilde r\textasciitilde i \textasciitilde w\textasciitilde \textasciitilde \textasciitilde e\textasciitilde \textasciitilde p\textasciitilde c\textasciitilde \textasciitilde k\textasciitilde} : /\textasciitilde w\textasciitilde i\textasciitilde \cdot \textasciitilde p\textasciitilde c\textasciitilde \textasciitilde \textasciitilde x/ 'intelligent' (distributive)

< peH > The single member of this class is \{peH\} 'each' (with general nouns and kinship terms), 'in groups of ...' (with numerals), e.g.,

\[ \text{\textasciitilde h\textasciitilde \cdot \textasciitilde p\textasciitilde e\textasciitilde \textasciitilde y\textasciitilde} : /\textasciitilde h\textasciitilde \textasciitilde \cdot \textasciitilde p\textasciitilde e\textasciitilde \textasciitilde \cdot \textasciitilde y/ 'middle'
\[ \text{\textasciitilde p\textasciitilde e\textasciitilde H \textasciitilde h\textasciitilde \cdot \textasciitilde p\textasciitilde e\textasciitilde \textasciitilde y\textasciitilde} : /\textasciitilde p\textasciitilde e\textasciitilde \textasciitilde h\textasciitilde \cdot \textasciitilde p\textasciitilde e\textasciitilde \textasciitilde \cdot \textasciitilde y/ 'each of the middle ones' (e.g., any toe other than big and little toes)
\[ \text{\textasciitilde p\textasciitilde e\textasciitilde H \textasciitilde l\textasciitilde e\textasciitilde p\textasciitilde t\textasciitilde} : /\textasciitilde p\textasciitilde e\textasciitilde \textasciitilde l\textasciitilde e\textasciitilde p\textasciitilde t\textasciitilde / 'in twos'

< ne? > The three members of this class are \{ne?\} (first person singular possessive), \{im\} (second person singular possessive), \{pe\} (non-possession). An example with \{ne?\} is:

\[ \text{\textasciitilde n\textasciitilde e\textasciitilde ? \textasciitilde t\textasciitilde \textasciitilde \textasciitilde \textasciitilde t\textasciitilde} : /\textasciitilde n\textasciitilde a\textasciitilde t\textasciitilde \textasciitilde \textasciitilde o\textasciitilde \textasciitilde t\textasciitilde / 'my father'
This class has 16 members, generally attributive in meaning. An example is: {'é·t} 'big,' 'very.'

| tɛ?c | /tá?c/ | 'good'
| 'é·t- tɛ?c | /e·ttá?c/ | 'very good'

The others are:

{'eteyé·} 'distant,' 'deceased,' 'unbelievably'
{'ic} 'direction of'
{'ilé·} 'of fire'
{ke·} 'connected with biting'
{kun} 'once removed'
{pex} 'each'
{telí·} 'short'
{we?} 'with hand'
{wiyé·} 'in camping,' 'in moving'
{wiweqi} 'old'
{'ýy} 'all,' 'both'
{'uy} 'five'
{pi·} 'twice,' 'mutually'
{siléw} 'seemingly'
{R} (diminutive)
521.2 Thematic Suffix classes.

< 'é•1> This class has 27 members. An example is

{é•1} 'season of ...'

\|q\uyxc\| : /q\ý\yc/ 'small reddish salmon'

\|q\uyxc 'é•1\| : /q\ý\yc\á•1/ 'season of small
reddish salmon'

The others are:

{es} 'cure for ...'

?m} 'season of ...'

?\wé•t} 'person who uses'

{e?é1} 'place where ... is'

{e?\é•t} 'female ...'

{en} (meaning uncertain)

{e•s} 'site of ...'

{ete•s} 'place where ... lives'

{hi•c} 'place where ... is' (of plants)

{ht} 'beginning of ...'

{i} 'possessor of ...'

{i?\les} 'one that lives in ...'(?)

{inme} 'a creature from ...'

{mep} 'place of ...'

{ni\key} 'all of ...'

{nime} 'place where ... is'

{nime} 'people who eat ...'
{nume} (place name formant)
{pe'u} 'person connected with ...
{pu} 'residents at ..., 'band or tribe of ...
{qen} 'young of ..., 'small'
{si?wey} 'bush of ...
{twe} 'friend in ..., 'mate,' 'person having ...
... in common'
{wé'ku's} 'a thing like ...'
{wite's} 'place where ... was,' 'person that used to be ...
{yé'ye} 'the family of ...

< e?éce > The three members of this class are {e?éce}
'group,' {e?éle} 'pair,' {éhem} 'times.'
An example (with {éhem}) is:
||lep éhem|| : /lepéhem/ 'twice'

< e?éptit > The single member of this class is {e?éptit}
'ten times,' e.g.,
|| 'uy mit e?éptit|| : /?oymita?éptit/ 'eighty'

< hú'sus > The single member of this class is {hú'sus}
'hundred times,' e.g.,
|| 'uy mit hú'sus|| : /?oymitó'sos/ 'eight hundred'
< we > The two members of this class are \( \{ \text{we} \} \) (personal classifier), \( \{ t \} \) (neutral classifier), e.g.,
\[ \text{'uy n é· p we} \] : /\text{'uy n é· p we/} 'seven' (people)
\[ \text{'uy n é· p t} \] : /\text{'uy n é· p t/} 'seven'

< e?c > The two members of this class are \( \{ e?c \} \)
(non-possession), and \( \{ eyu\} \) '... and others,' e.g.,
\[ \text{qelé c e?c} \] : /\text{qelé c e?c/} 'paternal grandfather'
\[ \text{me? t ú· t eyu} \] : /\text{me? t ú· t eyu/} 'my father and others'

< 'eq > This class has 5 members. An example is
\( \{ \text{ciwé· t q} \} \) 'alone.'
\[ \text{'i· n} \] : /\text{'i· n/} 'I'
\[ \text{'in ciwé· t q} \] : /\text{'in ciwé· t q/} 'I alone'
The others are:
\( \{ 'eq \} \) (optative suffix)
\( \{ \text{ke} \} \) 'also'
\( \{ \text{qu?c} \} \) 'first'
\( \{ \text{we· tk} \} \) 'alone'
< weyl > The single member of this class is \{weyl\}
'so much,' e.g.,
\(\|ki\ weyl\| : /ki\,wy\|l/ 'this long,' 'this much'

< nik > The three members of this class are \{nik\}
(intensifier), \{cim\} 'only,' \{tí\,te\} 'same.'
An example with \{nik\} is:
\(\|té\,c\| : /tá\,c/ 'good'
\(\|té\,c\ nik\| : /ta\,sníx/ 'very good'
\(\|'í\,n\| : /?í\,n/ 'I'
\(\|'in\ nik\| : /?inníx/ 'I myself'
\(\|kuné\| : /koná/ 'there'
\(\|kuney\ nik\| : /konayníx/ 'at that very place'

< nú\,t > The single member of this class is \{nú\,t\}
'without,' e.g.,
\(\|é\,tim\| : /?á\,tim/ 'arm'
\(\|é\,tim\ nú\,t\| : /?atímnó\,t/ 'armless,' 'General Oliver O. Howard'

< nim > The single member of this class is \{nim\}
(possessive-nominative), e.g.,
\(\|síkém\| : /síkém/ 'horse'
\(\|síké\,m\ nim\| : /síké\,mním/ 'horse' (poss-nom)
The four members of this class are {éyn}
'(thing) for ...,' {hi'ń} '(an object)
with ...,' {mé} '(people) from ...,' {pe}
'at ...,' 'place of ....'
\(\text{ciqé·m qel}\) : /ciqá·mqal/ 'dog'
\(\text{ciqé·m qel éyn}\) : /ciqá·mqaláyn/ 'for dog,'
'dog sled'
\(\text{héses}\) : /há·sas/ 'nit'
\(\text{hésé·s hi'ń}\) : /hasá·siʔn/ 'nitty,' 'Shoshoni'
\(\text{elpewewi}\) : /?alpawawi/ 'Alpowa Creek, Wash.'
\(\text{elpewewi mé}\) : /?alpawawimá/ 'people from Alpowa'
\(\text{tuhun}\) : /tóhon/ 'leggings'
\(\text{tuhun pe}\) : /töhónpa/ 'in leggings'
522. Thematic constructions.

The varying internal structures of the substantive theme (sT) are described in the following sections. The elements surrounding the stem class markers are references to the preceding chart of affixes.

| sT: ne? r peH 'e·t nS 'e·l 'eyn me we nik |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 1. x            | x               | x               |                 |                 |                 |                 |                 |
| 2. x            | x               | x               | x               |                 |                 |                 |                 |
| 3. x            | x               | x               |                 |                 |                 |                 |                 |
| 4. x            | x               | x               |                 |                 |                 |                 |                 |
| 5. x            |                 |                 |                 |                 |                 |                 |                 |
| 6. x            | x               | x               | x               | x               |                 |                 |                 |
| 7. x            |                 |                 |                 |                 |                 |                 | x               |
| 8. x            |                 |                 |                 |                 |                 |                 | x               |
| 9. x            |                 |                 |                 |                 |                 |                 |                 |

Examples:
1. {ne? 'ilú·t twe·} : {in 'ilú·t we·} : /?iné·twe/ 'my half-brother' (a woman speaking) ({ne?} 'my,' {'ilú·t} 'belly,' {twe·} 'a person having ... in common'
2. {r 'inwim mé cim} : {r 'inwí·m e cim} : /he?inwí·mcim/ 'only yearlings' ({r} distributive, {'inwim} 'year,' {mé} '(a being) from,' {cim} 'only')
3. {r peH néqe} : {r peH néqe} : /pepennéqe/ 'half-breeds' ({r} distributive, {peH} 'each,' {néqe} 'half')
Unlike substantive themes in which a general noun stem is a constituent, the substantive themes having a numeral stem as the constituent occur with at least one obligatory suffix.
Examples:

1. \{peH 'uy né•qc éhem\} : ||peH 'uy leqc éhem|| :
   /pa?oylaqcáham/ 'six times each' ({peH} 'each,'
   {'uy} 'five,' {né•qc} 'one,' {éhem} 'times')

2. \{lep e?éptit hú•sus\} : ||l e?éptit hú•sus|| :
   /le?éptitú•sus/ 'two thousand' ({lep} 'two,'
   {e?éptit} 'ten times,' {hú•sus} 'hundred times')

3. \{pú•tim t e?éle\} : ||pu•tim t e?éle|| : /pu•timte?éle/
   'ten pairs' ({pú•tim} 'ten,' {t} neutral classifier,
   {e?éle} 'pair')

4. \{pé•xe we nik\} : ||pex 1u• nik|| : /paxlo•nix/ 'only
   five people' ({pé•xe} 'five,' {we} personal classifier,
   {nik} intensifier)

5. \{pé•xe e?éptit éhem\} : ||peq eptit éhem|| : /paqaptitáham/
   'fifty times'
6. {lep hú:sus we} : ||lep hú:sus we|| : /lepu*suswe/
   'two hundred people' ({lep} 'two,' {hú:sus} 'hundred times,' {we} personal classifier)
7. {'uy lep we ník} : ||'uy nep we ník|| : /?uynepweníx/
   'only seven people' ({'uy} 'five,' {lep} 'two,' {we} personal classifier, {ník} intensifier)
8. {lep t} : ||lepi t|| : /lepit/ 'two' ({t} neutral classifier)

Either the < ne? > class, or the < e?c > class is required as a constituent with a kinship stem (kS).

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<tr>
<th>sT:</th>
<th>'e·t ne?</th>
<th>kS</th>
<th>e?c me</th>
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<th>ɛyn</th>
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Examples:
1. {pi· pe· 'é·ks} : ||pi· pe 'eks|| : /pi·peʔeks/
   'cowives,' 'rivals' ({pi·} reciprocal prefix, {pe·} non-possession, {'é·ks}'sister')
2. `{ne? 'é·1 nim 'éyn}`: `{ne? 'é·1 em - 'éyn}`: 
   `/ne?é·lemayn/ 'article for my paternal grandmother'
   ({ne?} 'my,' {'é·1} 'paternal grandmother,' {nim}
   possessive-nominative, {'éyn} '(thing) for ...')

3. `{ne? 'é·1 nim cim}`: `{ne? 'é·1 em cim}`: `/ne?é·lemcim/
   'only my paternal grandmother' ({cim} 'only')

4. `{é·1 e?c 'éyn}`: `{é·1 e?c - 'éyn}`: `/é·1e?cayn/
   'article for a paternal grandmother' ({e?c} non-
   possession)

5. `{qeléc e?c me}`: `{qeléc e?c me}`: `/qaláca?cma/
   'paternal grandfathers' ({qeléc} 'paternal grandfather,'
   {me} plural suffix)

6. `{ne? qeléc}`: `{ne? qeléc}`: `/na?qalác/ 'my paternal
   grandfather'

7. `{qeléc e?c}`: `{qeléc e?c}`: `/qaláca?c/ 'paternal
   grandfather'

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Examples:
1. \{'i'm me nim nik\} : ||'i'm e m nik\| : /?imemnix/
   'your (pl.) very own,' 'their very own' (\{'i'm\}
   'you (sg.),' \{me\} plural suffix, \{nim\} possessive-
   nominative suffix, \{nik\} intensifier)
2. \{'i'm me nim ke\} : ||'im é m ke\| : /?ime*mke/
   'you (pl.) also,' 'they also' (\{ke\} 'also')
3. \{'ipi nim nik pe\} : ||'ip nim nix pe\| : /?ipnimnixpe/
   'his own place' (\{'ipi\} 'he, she, it,' \{pe\} 'place of ...')
4. \{'i'm pe\} : ||'im pe\| : /?impé/ 'your (sg.) place'
5. \{'i'm nik\} : ||'im nik\| : /?imnix/ 'you (sg.) yourself'
6. \{'i'm ke\} : ||'i'm ke\| : /?i*mke/ 'you (sg.) also'
7. \{'i'm me\} : ||'im é\| : /?ime/ 'you (pl.),' 'they'
8. \{'i'm\} : ||'i'm\| : /?i*m/ 'you (sg.)'

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Examples:

1. \{\text{kun me nim ti·te}\} : /konmamti·ta/ 'the same those' \({\{\text{kun}\} 'that', {\text{ti·te}} 'same'}\)
2. \{\text{kun ey nik}\} : /konaynik/ 'that very place'
3. \{\text{kun me 'eyyn}\} : /konma'yeyyn/ 'an article for those'
4. \{\text{kun é}\} : /koná/ 'that place'
5. \{\text{kun mé}\} : /konná/ 'those'
6. \{\text{ki· weyl}\} : /ki weyl/ 'this long'
7. \{\text{ki·}\} : /ki·/ 'this'

\[\text{sT: re·t as we nik}\]

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Examples:

1. \{\text{r néxsep}\} : /ninéxsep/ 'different' (distributive) \({\{\text{r}\} \text{ distributive}, \{\text{néxsep}\} 'different'}\)
2. \{\text{'eteyé· té?c}\} : /?atayá·ta?c/ 'unbelievably good' \({\{\text{'eteyé}\} 'unbelievably', {\text{té?c}} 'good'}\)

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3. \{nexsep nik\} : /nexsep nik/ 'very different'

4. \{'iléxni we\} : /'iléxni·we/ 'many' (people) (\{'iléxni\} 'many,' \{we\} personal classifier)

5. \{té?c\} : /tá?c/ 'good'

523. Deverbative themes.

In addition to the preceding there are substantive themes which include verb stems (vS) as a constituent.

523.1 Deverbative themes in which affixes for substantive themes occur as optional constituents:

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<th>sT:</th>
<th>vS</th>
<th>'é·1</th>
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Examples:

1. \{péy nime\} : /páynima/ (place name) (literally 'place of arrival') (\{péy\} 'come,' \{nime\} a place name formant, a member of < 'é·1 > class)

2. \{léwyele\} : /láwyala/ 'fishing' ('fish (vb.)')
523.2 Deverbative themes in which special suffixes for verb derivation occur as constituents. This special suffix class will be called < ?é·t > class. The 21 members of this class and their allomorphs are as follows:

{?é·t} (agentive 1) indicates the performer of an action. There are four morphemes (agentives 1-4) with similar semantic content, the last two are extremely limited in occurrence. {?é·t} : ||ne·t|| or ||né·t|| after a c-class verb theme (cf. 620 for c- and s-class distinction); ||ye?é·t|| after an s-class theme ending in ||i||; ||?é·t|| or ||?ét|| elsewhere.

||ne·t||:
{pî?im ?é·t} : /pi?imne·t/ 'young person'
({pî?im} 'grow' c-class)

||né·t||:
{temtê·y ?é·t} : /tamtaýná·t/ 'minister'
({temtê·y} 'preach,' 'gossip' c-class)

||ye?é·t||:
{sepi·newi ?é·t} : /sepi·newiye?é·t/ 'surveyer'
({sepi·newi} 'measure' s-class)

||?é·t||:
{tûkW e lû· ?é·t} : /tukelu·?é·t/ 'diver'
({tûkW} 'dive'; {lû·} 'move under water' s-class)
||?ét||:

\{wepeyete ?ét\} : /wapayata?át/ 'helper,' 'assistant' (\{wepeyete\} 'help' s-class)

\{ewéét\} (agentive 2): ||ne?wéét|| after a c-class theme; ||ye?wéét|| after an s-class theme ending in a vowel other than ||e||; ||wéét|| after an s-class theme ending in ||e||; ||?wéét|| elsewhere.

||ne?wéét||:

\{sepé hité me e?wéét\} : /sepehiteme ne?wéét/ 'teacher' (\{sepé\} causative 620; \{hité me\} 'read' c-class, lit. 'one who makes one read')

||ye?wéét||:

\{tuk 1ú e?wéét\} : /tukelu ye?wéét/ 'diver'

||wéét||:

\{wepeyete e?wéét\} : /wapayata wáét/ 'helper,' 'assistant'

||e?wéét||:

\{hipí e?wéét\} : /hipewéét/ 'eater' (\{hipí\} 'eat' s-class)

\{un\} (agentive 3) is found in the following two examples, which occur after s-class themes.

\{'imé · činp un\} : /?imé · činpun/ 'prophet'

(\{'imé · činp\} 'prophesy' s-class)
{ku\cdot e'yik\n\nun} : /kikè'yikun/ 'perennial traveler' ({ku\cdot} 'go' s-class; {e'yik} repetitive 620 s-class)

{lu} (agentive 4) is found in the following single example after a c-class theme.

{cî\cdot q\n\nlu} : /cî\cdot xlu/ 'talking squirrel'
({cî\cdot q} 'talk' c-class)

{e?î} (inanimate agentive): \|e?î\| before {+}; \|e?î\| elsewhere. There are no examples of \{e?î\} after a c-class theme.

\|e?î\|

\{we\cdot ke?éyk e?î\} : /we\cdot ke?yke?î/ 'airplane'
({we\cdot} 'fly'; {ke?éyk} 'go' s-class)

\|e?î\|

\{'ipné\cdot wîlé\cdot ke?éyk e?î ki\} : /\'ipnewleke\?yke?î\?ki/ 'by automobile' ({\'ipné\cdot} third person singular reflexive prefix, < pi \cdot > class 620; {wîlé\cdot} 'run' 610.1; {ki} 'by' of < k > class 533)

\{e?s\} 'an object for ... ing': \|nes\|, \|iec\| or \|s\| after a c-class theme; \|e?s\| after a consonant-final s-class theme; \|tes\| elsewhere.
||nes||:
\{hité·me e?s\} : /hité·me'nes/ 'book'
({hité·me} 'read' c-class)

||iec||:
\{kiwikiwi e?s\} : /kiwikiwi'iec/ 'drum'
({kiwikiwi} 'beat' c-class)

||s||:
\{tí·pse? s\} : /tí·pse?/ 'scraper' ({tí·pse?} 'scrape' c-class)

||e?s||:
\{'ise kiw k e?s\} : /?'ise kí wi ká s/ 'saw'
({'ise} 'with a cutting instrument';
{kíw} 'cut'; {k} meaning uncertain, < étk >
class 620, s-class)

||tes||:
\{'ipé·te e?s\} : /?'ipé·tetes/ 'scraper/
({'ipé·te} 'scrape' s-class)

\{ú? s\} 'an object for ...ing': ||-nú? s|| after a c-class
theme; ||u?ús|| after an s-class verb theme ending in a
single consonant and not before a {+}; ||ú? s|| elsewhere
after a consonant-final s-class theme; ||-tu? s|| elsewhere.

||-nú? s||:
\{'iye léhne ú? s\} : /?'i yehnen6s/ 'pole' (for
a canoe) {'fye}' 'afloat'; {léhne}' 'down'
class)

||u?ús||:
{wislíp ú?s ne} : /wislípo?ósna/ 'snow-shovel
(object case)' ({wislíp} 'shovel' s-class;
{ne} objective 532)

||u?ús||:
{wislíp ú?s} : /wislíp6?ós/ 'snow-shovel'

||-tú?ús||:
{cuké·ymi ú?s} : /cukéymitó?ós/ 'bone instrument
for scraping the inner pine bark used for
food' ({cuké·ymi} 'get bark' s-class)

{nwe·s}'place of ...ing': ||niwe·s|| after a c-class
consonant-final theme; ||inwe·s|| after an s-class consonant-
final theme; ||nwe·s|| elsewhere.

||niwe·s||:
{'é·?ys nwe·s} : /?é·?ysniwe·s/ 'heaven, '
'Happy Hunting Ground' ({'é·?ys} 'be\'happy'
class)

||inwe·s||:
{'é·lik nwe·s} : /?á·likinwa·s/ 'fireplace'
({'é·lik} 'make fire' s-class)

||nwe·s||:
{'ítemyé· nwe·s} : /?ítamýá·nwa·s/ 'store, '
'town' ({'ítemyé·} 'sell' s-class)
{tesi·n} 'place of ...ing' is found in one example.
{wepté·tesi·n}: /wepté·tesi·n/ 'place for feathering arrows' ({wepté} 'feather arrows' s-class)

{éhe} 'place of ...ing' is found in one example.
{ú·yi éhe}: /úyéhe/ 'starting place'
({'ú·yi} 'begin,' 'start' s-class)

{sí·mey} 'one incapable of ...ing': ||cí·mey|| after a c-class theme; ||sí·mey|| elsewhere.
||cí·mey||:
{lememt sí·mey}: /lamamtcí·may/ 'impatient person' ({lememt} 'be patient' c-class)

||sí·mey||:
{cí·q sí·mey}: /cíqsí·mey/ 'deaf-mute,'
'quiet person' ({cí·q} 'talk' s-class)

{e?yé·?y} 'one incapable of ...ing': ||né·?y|| after a c-class theme; ||e?yé·?y|| or ||e?yé·y|| elsewhere.
||né·?y||:
{siwlé· e?yé·?y}: /siwlé?né·?y/ 'one unable to swim' ({siwlé} 'swim' c-class)
\|e\?y\?\?-y\|:
{we k\'y\? k e\?y\?-y\}: /wakayka?y\?-y/ 'unrinsed'
(of clothes), 'unsifted' (of sand) ({we}
'with implement'; {k\'y\?} 'clean' s-class)

\|e\?y\?\?-y\|:
{neki e\?y\?\?-y\}: /neke?y\?-y/ 'unthinking person'
({neki} 'think' s-class)

{tpes} 'one who is unwilling to ...' is found in one example.
{mi\'ci\'-tpes} : /mi\'ci\'-tpas/ 'one who does not want to understand,' 'stubborn person'
({mi\'ci\'} 'hear' s-class) cf. /mi\'cisi\'-may/
'one who does not understand (a language),' 'deaf-mute'

{tekey} 'object for ...ing' is found in the following two examples.
{wi\'xs \'?u tekey} : /wixc\?u tekey/ 'buffalo robe
to sit on,' 'cushion' ({wi\'xs} 'sit'; {?u}
meaning uncertain, c-class)
{'is\'e\?-pe\'} {tekey} : /?is\'a\?-ptakay/ 'parfleche'
({'is\'e\?-pe} 'put in a parfleche' c-class)
{'tpes}' 'object for ...ing': is found in one example.

{'kícuy' 'íte tpes'}: /kicú·yitetpes/
'purse' ('{kícuy}' 'money,' 'metal'; {'íte}
'put in' s-class)

{'ew}' 'characterized by ...ing'

{'hením' 'ew'}: /henímem/ 'lazy, man' ('{hením}
'not to go' c-class)

{'íkú·y tim' 'ew'}: /?ikú·ytimew/ 'honest man'
({'íkú·y} 'be honest'; {tim} 'speak' s-class)

{'i?n}' 'one that is ...ed'

after a stressed s-class theme with final ||i||
and before {+} ..............................................||?n||
after a stressed s-class theme with other
finals and before {+} ..............................................||i?n||
after a stressed s-class theme elsewhere .....||i?s||
after an unstressed vowel-final s-class
theme and before {+} ..............................................||?i·n||
elsewhere after an s-class theme and before
{+} ..........................................................||yí·n||
after a c-class theme and before {+} .........||ni?n||
elsewhere after a c-class theme ..............||ni?s||

{i?n} is not found after an unstressed s-class theme
and not before {+}.

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{qeqé·wi iʔn} : /qeqé·wiʔn/ 'drunk'
  ({qeqé·wi} 'drink' s-class)

{we kékik iʔn} : /wakáykiʔn/ 'sifted (sand)'
  ({we} 'with implement'; {kékik} 'clean' s-class)

{sepé· piyúxte iʔn 'éyn} : /cepé·pyuxtíʔsʔayn/
  'for a pie' ({sepé·} causative prefix 620;
  {piyúxte} 'place in between' s-class; {'éyn} 'for' 534)

{yexse iʔn} : /yaxsaʔi·n/ 'poured over'
  ({yexse} 'spill' s-class)

{he·ni iʔn} : /hanyi·n/ 'made,' 'manufactured'
  ({he·ni} 'make' s-class)

{‘é·tim ki·w iʔn} : /a·timki·wniʔn/ 'Gen.
  O. O. Howard' (< 'arm cut') ({‘é·tim} 'arm';
  {ki·w} 'cut' c-class)

{‘é·tim ki·w iʔn ne} : /a·timki·wniʔsna/
  'Gen. O. O. Howard (object case)' ({ne} object case suffix 532)
\{t\} 'ing'

after a vowel-final c-class theme and before \{+\} ..........||n||
elsewhere after a vowel-final c-class theme ........... \Ø
after a consonant-final c-class theme ..................||in||
after an s-class theme ..................................||t||

Examples:

\|n|:

\{pî· we·p \(\text{ci}^?\text{y}_\text{ew} t\}\} : /pî·wapci?yawn/ 'war'
\quad\{(pî·\} reciprocal prefix 620; \{we·p\} 'with
\quad\text{hand or paw'; } \{\text{ci}^?\text{y}_\text{ew}\} 'kill' c-class

\Ø:

\{pî· we·p \(\text{ci}^?\text{y}_\text{ew} t\ pe\}\} : /pî·wapci?yawpa/
\quad 'during the war' (\{pe\}'at the time of' 534)

\|in|:

\{tûk\text{we} \(\text{l}_\text{i}·k t\}\} : /tukelî·kin/ 'hunting'
\quad\{(tûk\text{we}\} 'hunt'; \{\text{l}_\text{i}·k\} 'move,' 'go' c-class

\|t|:

\{\text{neki} t\} : /né·kt/ 'thinking,' 'idea'
\quad\{(\text{neki\} 'think' s-class

\{típec\} (desiderative suffix)

after a c-class theme and before \{+\} ..........||típec||
elsewhere after a c-class theme ..................||ni?pé·c||
after an s-class theme and before \{+\} ..........||típec||
elsewhere..............................................||típec·c||
Examples:

\[\text{\{tuk tıpec\}} : \text{/tuxn̩ıpec/} \ 'one who likes to talk,' 'gossiper' (\{tuk\} 'gossip' c-class)

\[\text{\{niʔpēcdot\}}:
\{cikli· tıpec wı se\} : \text{/ci̱kli·niʔpē·cwıse/}
'I want to go home' (\{cikli\} 'turn' c-class;
\{wi\} 'do' 622.1)

\[\text{\{tıpec\}}:
\{'inē· kū· tıpec\} : \text{/ʔinęku·tıpec/} \ 'one given to drinking' (\{'inē\} reflexive prefix 620;
\{kū\} 'drink (with a reflexive prefix)' s-class)

\[\text{\{tipēcdot\}}:
\{hi cikli· tʊq tıpec wı se\} : \text{/hıcikli·tʊqtipá·cwısa/}
'he is anxious to return' (\{tʊq\} 'back' s-class)

\{tic\} 'one that does,' 'one that is characterized by ...ing':
\[\text{\{'ic\} or \{'is\} after a c-class theme; \{'ic\} elsewhere.}

\[\text{\{'ic\}}:
\{tillē·p tic\} : \text{/tillá·pıc/} \ 'lonesome'
\{tillē·p\} 'be lonely' c-class)
The second type of deverbative themes may be summarized as follows:

\[ sT: \text{gvT} \prec \text{'t'}. \]

General verb themes (gvT) are described in 622.1.
530. Substantive inflection.

The following five classes of suffixes occur as inflectional elements in constituency with substantive themes:

<table>
<thead>
<tr>
<th>class</th>
<th>subclass</th>
<th>number of members</th>
<th>occurs with</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>nT   nuT  kT  ppT  dT  aT</td>
</tr>
<tr>
<td>&lt; nim &gt;</td>
<td></td>
<td>1</td>
<td>x   x   x   x   x   x   x</td>
</tr>
<tr>
<td>&lt; ne &gt;</td>
<td></td>
<td>1</td>
<td>x   x   x   x   x   x   x</td>
</tr>
<tr>
<td>&lt; k &gt;</td>
<td>k</td>
<td>1</td>
<td>x   x   x   x   x   x   x</td>
</tr>
<tr>
<td></td>
<td>kek</td>
<td>1</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>ki</td>
<td>1</td>
<td>x   x   x   x   x   x   x</td>
</tr>
<tr>
<td></td>
<td>kini</td>
<td>1</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>hinek</td>
<td>1</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>leykin</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ike</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>wecet</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>&lt; éyn &gt;</td>
<td>éyn</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>hí'n</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>mé</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>pe</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>&lt; e &gt;</td>
<td></td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

1nT, nuT, kT, ppT, dT, aT are substantive themes having nS, nuS, kS, ppS, dS, aS as constituents respectively. nT also stands for an sT having a verb stem as a constituent.
531. <nim>. The single member of this class is {nim} (possessive-nominative) indicating either the possessor of an object or the performer of the action of the verb.

{nim}

with general nouns: ||m||, ||im||, ||nm||, ||nim||

as ||m|| after a thematic suffix, e.g., {ciq6*m qel nim} : /ciqâ·mqalm/ 'dog' (possessive-nominative);
as ||im|| elsewhere after ||n||, e.g., {qî·wn nim} /qî·wnim/ 'old man' (possessive-nominative);
as ||nm|| elsewhere after a vowel, e.g., {piswe nim} : /piswâ·nm/ 'stone' (possessive-nominative);
as ||nim|| elsewhere, e.g., {lê·qec nim} : /laqâ·snim/ 'mouse'

with kinship terms: ||em||, ||im||, ||pim||
as ||em|| with the first group (510.3) and with
{ne?} 'my, ' or {im} 'your (sg.),' e.g.,
{ne? tû·t nim} : /na?tô·tam/ 'my father' (posse-nom);
as ||im|| elsewhere after ||p||, e.g., {piyep nim}:
/piyê·pim/ 'elder brother' (possessive-nominative);
as ||pim|| elsewhere, e.g., {pe· 'i·c nim}:
/pikê·pim/ 'mother' (possessive-nominative)

with personal pronouns: ||nim||, ||im||, ||m||, ||im||
as ||nim|| after {'ipî} 'he, she, it,' e.g.,
{'ipî nim} : /qipnîm/ 'his,' 'he';
as ||im|| after {'i·m} 'you (sg.),' e.g.,
\{\text{\textit{\textit{i}'\textit{\textit{n}}\textit{im}}} \} : /\text{\textit{i'imim}}/ \ '\text{your (sg.)}', \ '\text{you (sg.)}' as \|m\| after \{\text{\textit{me}}\} (plural suffix), e.g.,
\{\text{\textit{i}'\textit{\textit{n}}\textit{me nim}} \} : /\text{\textit{imé'm}}/ \ '\text{your (pl.)}', \ '\text{their}',
'\text{you (pl.)}', \ '\text{they}' as \|im\| elsewhere, e.g., \{\text{\textit{i}'\textit{n} nim}\} : /\text{\textit{i'\textit{nim}}}/
'my'; 'I'

with demonstratives: \|m\|, \|im\|
as \|m\| after \{\text{\textit{kí'}}\} 'this,' e.g., \{\text{\textit{kí}' \textit{nim}}\} :
/\text{\textit{kínm}}/ 'this' (possessive-nominative);
as \|im\| after \{\text{\textit{ku}}\} 'that,' e.g., \{\text{\textit{ku} nim}\} :
/\text{\textit{konim}}/ 'that' (possessive-nominative)

with adjectives: \|nim\|
\{\text{\textit{icwé'ys nim}}\} : /\text{\textit{icwe'}\textit{snim}}/ \ 'cold' (possessive-nominative)

Occasionally allomorphs of \{\text{\textit{nim}}\} for general nouns occur with kinship terms, possibly indicating an analogical formation, e.g., \{\text{\textit{pe' \textit{i'}c nim}}\} : \|\text{\textit{piké'nm}}\| : /\text{\textit{piké'nm}}/ 'mother,' instead of /\text{\textit{piké'pinm}}/.

A possible indication of the preceding morphophonemic segment as the conditioning factor with general nouns may be in the following freely alternating doublets:
\|\text{\textit{c6'qet}}\| : /\text{\textit{c6'qet}}/ \ 'blackberry'
\|\text{\textit{ceqé'}t nim}\| f \|\text{\textit{ceqé'} nm}\| : /\text{\textit{ceqé'tnim}}/ f /\text{\textit{ceqé'nm}}/ \ 'blackberry' (possessive-nominative)
\|\text{\textit{'é'wit}}\| : /\text{\textit{'é'wit}}/ \ 'widow'
\|\text{\textit{ewé'}t nim}\| f \|\text{\textit{ewé'} nm}\| : /\text{\textit{awé'tnim}}/ f /\text{\textit{awé'nm}}/ \ 'widow' (possessive-nominative)
The single member of this class is \{ne\}

(objective) indicating the object of the verbal action. \{ne\}

with general nouns: \|né\|, \|e\|, \|ne\|

as \|né\| after \{kele\} 'that much,' e.g., \{kele
ne\} : /kalaná/ 'that much' (object);
as \|e\| after \|1\| or \|n\|, e.g., \{qí·wn ne\} :
/qí·wne/ 'old man' (object);
as \|ne\| elsewhere, e.g., \{cé·qet ne\} :
/ceqé·ne/ 'raspberry' (object)

with numerals: \|ine\|, \|ine\|, \|ne\|

as \|ine\| after \{t\} (neutral classifier) preceded
by \{pú·tim\} 'ten,' e.g., \{pú·tim t ne\} :
/pu·timine/ 'ten' (object);
as \|ine\| elsewhere after \{t\}, e.g., \{lep t ne\} :
/lepítine/ 'two' (object);
as \|ne\| elsewhere, e.g., \{lep we ne\} : /lepú?ne/
'two (people)' (object) (\{we\} personal classifier)

with kinship terms: \|ep\|, \|ne\|

as \|ep\| with group 1 or 2b (510.3) and with \{ne?\}
'my,' or \{'im\} 'your (sg.),' e.g., \{ne? qeléc ne\} :
/na?qalácap/ 'my paternal grandfather' (object);
as \|ne\| elsewhere, e.g., \{qeléc e?c ne\} :
/qaláca?qna/ 'paternal grandfather' (object)
with personal pronouns: \[n\ê\], \[e\], \[nê·n\], \[en\]
as \[n\ê\] after \{'ipî\} 'he, she, it' and before \{+\}, e.g., \{'ipî ne\} : /?ipné/ 'him, her, it';
as \[e\] elsewhere before \{+\}, e.g., \{'i·n ne\} :
/?i·ne/ 'me';
as \[nê·n\] elsewhere after \{'ipî\}, e.g., \{'ipî ne ke\} : /?ipné·nke/ 'him/her/it also';
as \[en\] elsewhere, e.g., \{'i·n ne ke\} :
/?i·nenke/ 'me too'
with demonstratives: \[ye\], \[yë\]
as \[ye\] after \{ki·\} 'this,' e.g., \{ki· ne\} :
/kînye/ 'this' (object);
as \[yë\] after \{ku\} 'that,' e.g., \{ku ne\} :
/konyâ/ 'that' (object)
with adjectives: \[ene\]
as \[ene\] everywhere, e.g., \{kückuc ne\} :
/kückucene/ 'small' (object)

533. < k >. The ten members of this class, mostly
with locative or instrumental meanings, are as follows:
\{k\} 'to,' 'upto,' 'than,' 'against,'-th'(with numerals).
with numerals: \[k\], \[kipk\], \[ipk\], \[ipk\]
as \[k\] after \{küyc\} 'nine' or \{e?qéptit\}
'ten times,' e.g., \{küyc k\} : /ku?icx/ 'ninth';
as /kipk/ after {hú·sus} 'hundred times,' e.g.,
{pú·tim hú·sus k} : /pu·tmú·suskipx/ 'one thousandth' ({pú·tim} 'ten');
as /ipk/ after {né·qc} 'one' or {pé·çé} 'five'
followed by {t} (neutral classifier), e.g.,
{pé·çé t k} : /pa·çatipx/ 'fifth';
as /ipk/ elsewhere, e.g., {lep t k} : /lepítipx/
'second' ({lep} 'two')

with non-numerals: /pk/, /k/
as /pk/ after a vowel, e.g., {'è·le k} :
/ʔà·lapx/ 'against fire' ({‘è·le} 'fire');
as /k/ everywhere, e.g., {mé·çsem k} :
/mexsé·mx/ 'to mountain' ({mé·çsem} 'mountain').

{kek} 'in the direction of ...'
as /kek/ everywhere, e.g., {né·we kek} :
/newé·kex/ 'toward Lolo Creek' ({né·we} 'Lolo Creek, Idaho').

{ki} 'in the language of ...,' 'at the time of ...,' 'on account of ...,' 'in comparison with ...,' 'about ...'
(of a subject matter), 'by means of ...,' 'than!?: /ki/
after {ku} 'that'; /ki/ elsewhere, e.g.,
{ku ki} : /konki/ 'with that'
{su·yé· pe we timt ki} : /so·ya·po·timtki/
'in English' ({su·yé·} 'the white,' {pe}...
'place of ...,' {we} personal classifier, {timt} 'language')

{ki'nik} 'from ...': ||i·k|| after {ku} 'that'; ||ik|| after {ki·} 'this'; ||pki'nik|| after |?|, ||k||, ||q|| or a vowel; ||ki'nik|| elsewhere.

||i·k|| :

{ku ki'nik} : /koní.x/ 'from that'

||ik|| :

{ki· ki'nik} : /kínix/ 'from this'

||pki'nik|| :

{cemí·tk ki'nik} : /cemitépki'nik/ 'from huckleberry' ({cemí·tk} 'huckleberry')

||ki'nik|| :

{ne? tú·t nim ki'nik} : /na?tó·tamki'nik/ 'from my father'

In two instances of place names, ||ki'nik|| is found after a vowel:

{we?léwe ki'nik} : /wa?lwá·ki'nik/ 'from Wallawa, Washington'

{leméte ki'nik} : /lamtá·ki'nik/ 'from Whitebird, Idaho'

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With personal pronouns, \textit{ki\'nik} is found after a thematic
suffix and \textit{ki\'ni\'k} elsewhere, e.g.,
\begin{align*}
\{'i\cdot m \text{nim} \text{ki\'nik}\} & : /?imimki\'ni\'x/ \ 'from you (sg.)' \\
\{'i\cdot m \text{ki\'nik}\} & : /?imkin\'i\cdot x/ \ 'from you (sg.).'
\end{align*}
The last two were given as possible free alternants in a text.

\{hi\cdot nek\} 'even ...
\begin{align*}
\{p\cdot ps \ hi\cdot nek\} & : /pipsi\cdot nek/ \ 'even a bone' \\
\{wesw\_esnu \ hi\cdot nek\} & : /waswasnohi\cdot nek/ \ 'even
\text{a chicken}' (\{wesw\_esnu\} 'chicken')
\end{align*}

\{leykin\} 'in the vicinity of ...
\begin{align*}
\{l\cdot qe \ leykin\} & : /l\cdot a\cdot qalaykin/ \ 'near a pine
tree' (\{l\cdot qe\} 'pine tree') \\
\{si\cdot kem \ leykin\} & : /sik\cdot a\cdot mlaykin/ \ 'near a horse'
(\{si\cdot kem\} 'horse')
\end{align*}

\{pipem\} 'among ...
\begin{align*}
\{l\cdot we\cdot wtiwe\cdot pipem\} & : /lawtiwa\cdot pipam/ \ 'among
friends' (\{l\cdot we\cdot wtiwe\} 'friend')
\end{align*}

\{ike\} 'at ... side': \textit{ike} after \{ki\cdot\} 'this'; \textit{ik\'e} after \{ku\} 'that,' e.g.,
\begin{align*}
\{ki\cdot ike\} & : /k\text{\'inike}/ \ 'on this side'
\{ku \ ike\} & : /konik\'a/ \ 'on that side'
\end{align*}
{met} 'at the time of ...'

{kí· met} : /kí·met/ 'at this time'

{wecet} 'because of ...': ||wecé·n|| after {ku} 'that';

||wecet|| elsewhere, e.g.,

{ku wecet} : /konwacá·n/ 'therefore'

{ítú· wecet} : /?itú·wecet/ 'why' ({'ítú·'} 'what')

534. < 'éyn >. The four members of this class are
ambivalent in that they occur either as thematic affixes
or inflectional elements.

{éyn} 'for the sake of ...': ||yéyn|| after {ku} 'that'
followed by {me} (plural suffix); ||yéyn|| elsewhere
after demonstratives; ||éyn|| - ||éyn|| after ||s||; ||éyn|| -

||éyn|| - ||éyn|| elsewhere.

||yéyn|| :

{ku me 'éyn} : /konma'yáyn/ 'for those'

||yéyn|| :

{ki· 'éyn} : /ki'nyayn/ 'for this'

||éyn|| :

{piskis 'éyn} : /piskisáyn/ 'for door'
||  'éyn|| :  
{ciqé:m qel 'éyn} : /ciqamqaláyn/ 'for dog'

||  'éyn|| :  
{tu?úynu 'éyn} : /toynóayn/ 'for tail'

||  'éyn|| :  
{'é·l e?c 'éyn} : /?é·le?çayn/ 'for paternal grandmother'

{hi'n} 'with...': ||hi'n|~||hi'n|, e.g.,
{pe· tú·t hi'n} : /pisti:n/ 'with father'
{he·ses hi'n} : /hasá·si?n/ 'nitty'
({he·ses} 'louse egg')

{mé} 'from ...
after {kú·seyñ} 'Montana' or {ku} 'that' : ||emé||
after {té·kin} 'meadow' : ||'mé||
after a theme with final ||m|| : ||e|~||'é||
elsewhere : ||me||~||mé||

||emé|| :
{kú·seyñ mé} : /kuseyñemé/ 'from Montana'

|| 'mé|| :
{té·kin mé} : /tekiñmé/ 'from meadow'

||e|| :
{'inwim mé} : /?inwi·me/ 'from last year'
({'inwim} 'year')
"é" :

{mé·xsem mé} : /mexsemé/ 'from mountain'

me :

{nipehe mé} : /nipehème/ 'from Graves Creek, Idaho'

mé :

{'elpéwewi mé} : /?älpawawimá/ 'from Alpowa, Washington'

{pe} 'at,' 'in,' 'at the time of ...

after {ki·} 'this': before {+} : ||e||

before {nik} : ||ey||

after {ku} 'that': before {+} : ||é||

before {nik} : ||ey||

after {nik} or {'i·m} 'you (sg.)' : ||pé||

elsewhere : ||pe||

e :

{ki· pe} : /kine/ 'here'

ey :

{ki· pe nik} : /kineynix/ 'at this very spot'

{ku pe nik} : /konaynix/ 'at that very spot'

é :

{ku pe} : /koná/ 'there'

pé :

{né·qc nik pe} : /na·qcnipá/ 'at the place of only one'
\[\text{túhun pe} \colon /\text{tohónpa}/ \text{'in leggings'}\]

({túhun} 'trousers,' 'leggings')

535. \(< \text{e} >\). The two members of this class are:

\{e\} (junior vocative suffix) occurs with the four kinship terms denoting grandparent-grandchild relationship and indicates that the vocative refers to the younger referent of the reciprocal system.

The four examples are:

\{qéléc e\} : /qaláca/ 'son's child!' (a man speaking)

\{píléq e\} : /piláqa/ 'daughter's child!' (a man speaking)

\{'é·1 e\} : /?é·le/ 'son's child!' (a woman speaking)

\{qé·c e\} : /qá·ca/ 'daughter's child' (a woman speaking)

\{e?\} (senior vocative suffix) occurs with twelve kinship terms and indicates the senior referent.

\{qéléc e?\} : /qaláca?/ 'paternal grandfather'

\{píléq e?\} : /piláqa?/ 'maternal grandfather'

\{'é·1 e?\} : /?é·le?/ 'paternal grandmother'
The substantive constructions in which the inflectional suffix classes above participate are:

**Ss = subject substantive**

**Ss : sT [nim]**

Example: sT < nim >

{ 'ipi   nim}  
||'ip   nǐm||  
/    ?ipnim    /

he

**So = object substantive**

**So : sT [ne]**

Example: sT < ne >

{ 'ipi   ne}  
||'ip   né||  
/    ?ipné    /

him

**S1 = locative substantive**

**S1 : sT /ˈɪyn**

Examples: sT < k >  sT < ˈɛyn >

{tiwélqe  ki}  {ku  pe}

||tiwélqe  ki||  ||kun  é||

/ tiwélqeki /  / koná /

on account of the enemy  at that place
At = attributive

At: sT [nim]

Example: sT < nim >

{ 'ipí nim}

|| 'ip nim ||

/ ?ipnim /

his

I = interjection

I: sT e

Example: sT < e >

{ qeléc e ? }

|| qeléc e ? ||

/ qaláca? /

paternal grandfather!
Verb stems are discussed in 610 and verb themes are discussed in 620.

610. Verb stems.

There are two verb stem classes.

610.1 General verb stems (gvS): one or two general verb root morphemes, or a general verb root morpheme plus a preceding general noun root morpheme.

The two main variables in the allomorphy of monomorphemic verb stems are stress and canonical forms.

The two major types of verb stems, in terms of the first variable noted above, are stressed and unstressed types, the latter with two subtypes.

A stressed verb stem occurs always with a stress, and ends in either a consonant or an unstressed vowel, e.g.,

\{tëqï·k\} 'come down' s-class
\|tëqï·k s e\| : /teqï·kse/ 'I am coming down'
\|tëqï·k s e qe\| : /taqï·ksaq\| 'I came down'
\{ti·we\} 'smell bad' c-class
\|ti·we c e\| : /ti·wece/ 'I smell bad'
\|ti·we c e qe\| : /ti·wacaq\| 'I smelled bad'
Members of the unstressed type are represented by some stressed and some unstressed allomorphs, and may be further divided into two subtypes: \{hipí\} type and \{hení\} type.

\{hipí\} type is characterized by final stressed |i| in an allomorph before \{s\} class marker and \{e\} singular suffix, and by unstressed allomorphs elsewhere, e.g.,

\{hipí\} 'eat' s-class

\|hipí s e\| : /hipíse/ 'I eat'

\|hip's é' qe\| : /hipsá'qa/ 'I ate'

\|hip ú?\| : /hipú'/ 'I will eat'

\{heki\} 'see' c-class

\|heki c e\| : /hekiçe/ 'I see'

\|hek c é' qe\| : /hakcá'qa/ 'I saw'

\|'e hek n ú?\| : /?e'xnú'/ 'I will see it'

\{hení\} type is characterized by final stressed vowel in an allomorph before \{s\} and \{e\}, \{u\}, \{u?\} indicative future suffix, or \{u?qe\} conditional past suffix, and by unstressed allomorphs elsewhere, e.g.,

\{hení\} 'make' s-class

\|hení s e\| : /haní'sa/ 'I make'

\|hení s é' qe\| : /hanísá'qa/ 'I made'

\|hení yu?\| : /haniyo?/ 'I will make'
The following shows the suffixal allomorphs determined by the two stem types and subtypes discussed above.

<table>
<thead>
<tr>
<th></th>
<th>after stressed stem</th>
<th>after unstressed stem</th>
</tr>
</thead>
<tbody>
<tr>
<td>{e} singular (not before {+})</td>
<td></td>
<td></td>
</tr>
<tr>
<td>{i} plural</td>
<td></td>
<td></td>
</tr>
<tr>
<td>{u?} indicative future</td>
<td></td>
<td></td>
</tr>
<tr>
<td>{eq} conditional present</td>
<td></td>
<td></td>
</tr>
<tr>
<td>{u?qe} conditional past</td>
<td></td>
<td></td>
</tr>
<tr>
<td>{te} frequentative present</td>
<td></td>
<td></td>
</tr>
<tr>
<td>{qeqe} frequentative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>recent past with {i}</td>
<td></td>
<td></td>
</tr>
<tr>
<td>{qene} frequentative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>remote past with {i}</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When certain prefixes occur with an unstressed stem, a stressed allomorph of the prefix occurs if the prefix can be represented by a stressed allomorph. In such cases the stem allomorph before {s} and {e} is without the final ||i||. Furthermore, an unstressed set of suffixal allomorphs occur, e.g.,

||weqe 1pí s e|| : /waqalpísa/ 'I hug'

({weqi} 'in arms,' {ínpi} 'seize')
The canonical alternation may be found stem-initially or stem-finally, the former is found in all types of stems while the latter is found only in \{hipi\} and \{heni\} types.

The stem-initial alternation is as follows:
\[C_1 V C_2 C_3 \text{ after } \{+\} \text{ and } C_1 V C_2 V C_3 \text{ elsewhere.} \]

\[
\begin{align*}
\| \text{cikili}^*k\ s\ e \| : & /\text{cikili}^*kse/ \ 'I\ return' \\
\| \text{hi}\ \text{cikili}^*k\ s\ e \| : & /\text{hickili}^*kse/ \ 'he\ returns' \\
\text{(\{hi\} third person subject prefix)}
\end{align*}
\]

\[
\begin{align*}
\| \text{titweti}^*s\ e \| : & /\text{titwati}^*sa/ \ 'I\ tell\ a\ story' \\
\| \text{hi}\ \text{titweti}^*s\ e \| : & /\text{hitiwati}^*sa/ \ 'he\ tells\ a\ story' \\
\end{align*}
\]

The stem-final alternation is as follows:
\[C_1 C_2 \hat{V}(\cdot) \text{ before } \{s\} \text{ and } \{e\}, \text{ and } C_1 \hat{V} C_2 \text{ before } \{t\}. \]

\[
\begin{align*}
\| \text{we} \ '\text{inpi}\ s\ e \| : & /\text{we}^*\text{npise}/ \ 'I\ am\ singing' \\
\text{(\{we\} 'with\ mouth,' \{inpi\} 'seize')} \\
\end{align*}
\]
1-stems. There is a group of stems, which have \( \|1\| \) (or \( \|n\| \)) - \( \emptyset \) alternation stem-initially. In general, allomorphs without \( \|1\| \) (or \( \|n\| \)) occur after stops and spirants, while those with \( \|1\| \) occur after vowels and semivowels. There are some exceptions. Semantically, members of this group indicate some locative-directional ideas.

<table>
<thead>
<tr>
<th>Forms with ( |1| ) occurs after</th>
<th>Forms without ( |1| ) occurs after</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>léhse</td>
<td>V, m, w, q</td>
<td>éhse</td>
</tr>
<tr>
<td>léhne</td>
<td>V, y</td>
<td>éhne</td>
</tr>
<tr>
<td>léhyek</td>
<td>V</td>
<td>éhyek</td>
</tr>
<tr>
<td>lewi·k</td>
<td>V</td>
<td>ewi·k</td>
</tr>
<tr>
<td>leylé·k</td>
<td>w, y, V</td>
<td>eylé·k</td>
</tr>
<tr>
<td>léht</td>
<td>V</td>
<td>éht</td>
</tr>
</tbody>
</table>

Examples:

\[ \|\text{léhse}\| \] \[ \|\text{hi. qûqléhse ye}\| : /hiqqolāhsaya/ 'she galloped up' \{qûqû·\} 'gallop,' \{e\} indicative indefinite past) \]
||éhse|| wís éhse s e || /wisáhsasa/ 'I am moving up'
   ( {wíṣ} 'move,'  'travel' )
||léhne|| wíle léhne c e || /wíleléhne/ 'I am running
down' ( {wílé} 'run' )
||éhne|| wís éhne c i k || /wiséhnecix/ 'we are moving
down'
||léhyek|| hi 'ípsqi léhyek s e || /hi?psqiléhyekse/ 'he is walking upstream'
   ( {hi} third person
subject prefix, { 'ípsqí} 'walk' )
||éhyek|| wís éhyek t || /wiséhyekt/ 'to go upstream'
||lewí'k|| hi wíse lewí'k e || /hiwselewí'ke/ 'she
moved downstream'
||lewí'k|| wet ewí'k s e || /watawí'ksa/ 'I wade downstream'
   ( {wét} 'wade' )
||leylé.k|| hi wixsi léylek s e || /hiwxsiléylekse/ 'he sits
in' ( {wíxs} 'sit,'  ||leylé.k|| alternates with
||léylek|| )
||leylé.k|| hi tukw eylé.k s e || /hitkuylé'kse/ 'he dives
in' ( {tukw} 'dive' )
||léht|| 'íye léht s e || /?iyeléhtse/ 'I am coming out
of water' ( { 'íye} 'afloat,' 'in swimming' )
||éht|| 'ínek éht s e || /?ínekéhtse/ 'I am taking out'
   ( { 'ínek} 'carry' )
Compound verb stems are of three types, (1) adverbial prefix + verb root, (2) verb root + verb root, (3) noun root + verb root.

The first type of compound stem is very common, the manner of action being expressed by the adverbial prefix, and the general direction or scene of action by the root. There are 139 adverbial prefixes.

Examples:

{wilé'} 'run'

||wilé· ke'y k s e|| : /wilé·ke'ykse/  
'I am running' ({ke'y} general locomotion,  
{k} suffix of uncertain meaning)

||wilé· quyim k s e|| : /wilé·quyimkse/  
'I am running to the top' ({quyim} 'to the top')

||wilé· wewiti s e|| : /wilé·wewitise/  
'I am running downstream' ({wewi·ti} 'downstream')

||wilé· welu· s e|| : /wilé·welu·se/ 'I am running down to the river' ({wé·lu·} 'down to the river')

||wilé· yewne c e|| : /wilé·yewnece/ 'I am running over (e.g., hills, humps)' ({yéwne} 'over')
{'ipsqí} 'on foot'

"'ipsqí ke?y k s e" : /?ipsqíke?ykse/
'I am walking'

{kípiʿ} 'trace (e.g. footprints)'

"'e kípi· ke?y k s e" : /?ekípi·ke?ykse/
'I am tracing' ({'e} third person object prefix)

{qísím} 'in anger'

"qísím ke?y k s e" : /qísímke?ykse/
'I am going away in anger'

{qûqú·} 'gallop'

"hi qûqú ke?y k s e" : /hiqqûke?ykse/
'he is galloping'

{síwi} 'swim'

"síwi ke?y k s e" : /siwike?ykse/ 'I am swimming'

{tú·ke} 'with a cane-like object'

"tú·ke ke?y k s e" : /tú·keke?ykse/
'I am limping with cane'

Examples of the second type of compound stem are:

{'înpí} 'seize, catch' + {ciklí·} 'turn'

"'înpí s e" : /?inpíse/ 'I catch'

"ciklí· c e" : /ciklí·ce/ 'I turn'
"\textit{\'Inp cikli\, tuq i m e}} : /\textit{\'Inpcikli\, toqima/}
'I came back to get it' \{{\textit{tuq}}\} 'back,' \{\textit{i}\} plural suffix, \{\textit{m}\} motion toward the speaker or to the second person, \{\textit{e}\} indicative indefinite past)

\{'\textit{\'ewi}\}' 'shoot' + \{\textit{t\'iwi\,k}\} 'follow'

\"\textit{\'ewi\, s e}\} : /\textit{\'ewi\,se/} 'I shoot'
\"\textit{t\'iwi\,k c e}\} : /\textit{t\'iwi\,kce/} 'I follow'
\"\textit{e \'ewiye t\'iwik c e}\} : /\textit{\'ewiyetwikce/}
'I shoot as I chase it' \{(\textit{\textit{e}})\ third person object prefix\}

A bound root morpheme may occur as the second member of a compound stem. \{\textit{\textit{te\,m\,\,e\,w}}\} 'be in excess,' which does not occur after \{\textit{+}\}, but occurs immediately before suffixes, is an example.

\{\textit{\textit{ci\,q}}\} 'speak' + \{\textit{\textit{te\,m\,\,e\,w}}\} 'be in excess'

\"\textit{\textit{ci\,q c e}\} : /\textit{\textit{ci\,qce/}} 'I talk'
\"\textit{\textit{ciq \textit{te\,m\,\,e\,w n}\}} : /\textit{\textit{ciqtam\,\,\,a\,\,w\,n/}} 'I talked too much' \{(\textit{n}, an allomorph of \{\textit{s}\} class marker)\}

The third type of compound stems, which show a kind of noun incorporation, appears to be rare and often occurs with nominalizing suffixes.
Examples of noun root + verb root:

{qililu*} 'raw hide' + {wéwye} 'beat'

||qililu*|| : /qililu/ 'raw hide'
||wéwye c e|| : /wáwyaca/ 'I beat'
||qillú* wéwye c e|| : /qilló,wáwyaca/ 'I sing a departing song for warriors' (literally 'I beat raw hide')

{wélc} 'knife' + {ité} 'put in'

||wélc|| : /wálc/ 'knife'
||ité s e|| : /itése/ 'I put in'
||wélc 'ité ̣tes|| : /walcitétas/ 'scabbard'

(||tes||, an allomorph of {e?s} 'an object for ...ing')

{é·tim} 'arm' + {ki·w} 'cut'

||é·tim|| : /á·tim/ 'arm'
||é·tim ki·w ni?n|| : /a·timki·wni?n/

'General O. O. Howard' (literally 'arm-cut')

(||ni?n||, an allomorph of {i?n} 'one that is ... ed')

The following may be considered an example of a verb stem consisting of a noun root and a bound verb root.

{tiwé·t} 'shaman' + {tim} 'speak'

||tiwé·t|| : /tiwé·t/ 'shaman'
||tiwéti· tim t|| : /tiwéti·timt/ 'dreamer religion' (literally 'shaman-speaking')
610.2 Copulative verb stems (cvS).

The single member of this class is \{wé\} 'be, 'possess,' e.g.,
\[\text{/hiwé·ke so·yá·po/ 'he was a white man'}\]
({hi} third person subject prefix; \|wé·k\|, an allomorph of \{wé\}; \|e\| an allomorph of \{ne\} indicative remote past; \{su·yé\} 'the white')
\[\text{/e'ewé·ke ?iwé·pne/ 'he had a wife'}\]
({'e} third person object prefix; {'iwé·p}, 'wife'; \{ne\} object case suffix 532.).

A copulative verb stem is always monomorphemic.
620. Verb themes (VT).

Each of the above stem classes is defined by its occurrence in special thematic constructions. These constructions include classes of verb affixes which are shown below. The thematic affixes occur only with general verb stems.

621. Thematic affix classes.

All the suffixes have at least two morphologically conditioned groups of allomorphs: an s-group and a c-group. The verb stems and thematic suffixes may be labeled as to which group of allomorphs they occur with, the s-class or the c-class.

<table>
<thead>
<tr>
<th>Prefixes:</th>
<th>class</th>
<th>subclass</th>
<th>number of members</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; pi· &gt;</td>
<td>pi·</td>
<td>(reciprocal)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>'iné· (reflexive)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>&lt; wi &gt;</td>
<td></td>
<td>(distributive)</td>
<td>1</td>
</tr>
<tr>
<td>&lt; sepé· &gt;</td>
<td></td>
<td>(causative)</td>
<td>2</td>
</tr>
</tbody>
</table>

| Suffixes:        |       | (aspectual)   | 21                |
Examples of thematic prefixes:

< pi* >

The two subclasses of this class are reciprocal and reflexive prefixes.

The single member of the first subclass is {pi*}
(reciprocal): ||pi*|| - ||pi*|| - ||pi||, e.g.,

||pi*||:
{pi* te?nwé* s i k} : /pi*te?nwesix/ 'we are talking to each other' ({te?nwé*} 'talk')

||pi||:
{pi* te yú*xu? s i k} : /pi*tayó*xo?six/
'we are warning each other' ({té*} 'by speech' adverbial prefix, {yú*xu?} 'caution,' 'wait')

||pi||:
{pi* titweti* u7} : /pitiwatıyó?/ 'we'll tell story to each other' ({titweti*} 'tell story,' {u7} future indicative).

{pi*} occurring with a plural suffix as in examples above indicates that the actor is animate, and elsewhere that a natural phenomenon is involved, e.g.,

/pi*wewkunise/ 'they meet' (of rivers, mountains)
/pi*wewkunisix/ 'they meet' (of people)
/pi*wyu*yce/ 'they separate' (of trails)
/pi*wyu*ycix/ 'they separate' (of people)
The five members of the second subclass are:

\{'iné\}', first person singular reflexive: \|\'iné\| ~ \|\'ilé\|.

\|\'iné\|:

\{'iné· sepelú·k s e} : /?iné·sepelu·kse/
'I hide myself' (\{sepelú·k\} 'hide')

\|\'ilé\|:

\{'iné· wepe lí·k s e} : /?inú·pelikce/ 'I dress'
\{wepe\} 'dress'; \{lí·k\} 'be,' 'go'

\{'imé\}', second person singular reflexive: \|\'imé\| ~ \|\'imé\|.

\|\'imé\|:

\{'imé· sepelú·k s e} : /?imé·sepelu·se/
'you hide yourself'

\|\'imé\|:

\{'imé· wepe lí·k s e} : /?imú·pelikce/ 'you dress'

\{'ipné\}', third person singular reflexive: \|\'ipné\| ~ \|\'ipné\|

\|\'ipné\|:

\{'ipné· sepelú·k s e} : /?ipné·sepelu·kse/
'he hides himself'
'ipné':
{ 'ipné· wepe lí·k s e} : /'ipnú·pelikce/
'he dresses'

'ipné':
{ 'ipné· wîlé· ke?éy k e?i} : /'ipnewileke?yke?i/
'car' ({wîlé} 'move quickly'; {ke?éy} 'move'; {k} suffix of uncertain meaning; {e?i} agentive suffix; literally 'self-fast-move-er')

{nemé'}, first person plural reflexive: ||nemé·| ~ ||nemé||.

'nemé·|
{nemé· sepelú·k s i k} : /nemé·sepelu·ksix/
'we hide ourselves'

'nemé'|
{nemé· wepe lí·k s i k} : /nemú·pelikcix/
'we dress'

'imemé'}, second and third person plural reflexive:

'imemé·| ~ ||imemé||.

'imemé·|
{ 'imemé· sepelú·k s i k} : /'imemé·sepelu·ksix/
'you hide yourselves,' 'they hide themselves'

'imemé·|
{ 'imemé· wepe lí·k s i k} : /'imemú·pelikcix/
'you (pl.) dress,' 'they dress'
\(<\text{wi}>\)  The single member of this class is \{\text{wi}\} (distributive): \text{\|wi\*}\sim\|\text{wi}\sim\|\text{wi}\).

\|\text{wi}\*\|:

\{\text{wi cilú• s e}\} : /\text{wi•cilú•se}/ 'I cook them separately' (\{cilú\} 'cook')

\|\text{wi}\|:

\{'\text{e wi• heki i k}\} : /\text{ewihekitx}/ 'look each one over!' (\{heki\} 'see'; \{i\} plural suffix; \{k\} imperative)

\<\text{sepé•}>\  The two members of this class are \{\text{sepé•}\} (singular causative), and \{\text{sepé•p}\} (plural causative).

\{\text{sepé•}\}: \|\text{sepé•}\| \sim \|\text{sepe}\| \sim \|\text{cepé•}\| \sim \|\text{cepe}\|.

\|\text{sepé•}\|:

\{\text{sepé• čé•k s e}\} : /\text{sapá•ča•ksa}/ 'I cause it to hang'

\|\text{sepe}\|:

\{\text{pi• sepé• twe s i k}\} : /\text{pi•sepetwecix}/ 'we are mixing it' (\{twe\} 'be together')
The thematic suffixes, represented by both s- and c-group allomorphs, are themselves either of the s- or the c-class. For example, {etk} 'as an object goes by' is represented by ||etk|| after an s-class verb stem and by ||netk|| after a c-class verb stem. {etk} is of the s-class.
Examples of thematic suffixes:

< _etk > This class has 21 members, generally aspectual in meaning. The allomorphs and class affiliations of these thematic suffixes are:

<table>
<thead>
<tr>
<th>meaning</th>
<th>after an s-class stem</th>
<th>after a c-class stem</th>
<th>class</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. {etk} as the object</td>
<td></td>
<td></td>
<td>etk</td>
</tr>
<tr>
<td>passes by</td>
<td></td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2. {ce} remote</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. {é·ce} on, upon</td>
<td>'</td>
<td></td>
<td>éce</td>
</tr>
<tr>
<td>4. {eni·k} trail behind</td>
<td></td>
<td></td>
<td>eni·k</td>
</tr>
<tr>
<td>move in order</td>
<td>e</td>
<td></td>
<td>yik</td>
</tr>
<tr>
<td>5. {e·yik} to... move</td>
<td>-V</td>
<td></td>
<td>é·yik</td>
</tr>
<tr>
<td>around</td>
<td>C</td>
<td></td>
<td>é·yik</td>
</tr>
<tr>
<td></td>
<td>(1)e</td>
<td></td>
<td>?y</td>
</tr>
<tr>
<td></td>
<td>-V</td>
<td></td>
<td>é·y</td>
</tr>
<tr>
<td>6. {ey} benefactive,</td>
<td>'C</td>
<td></td>
<td>ey</td>
</tr>
<tr>
<td>affective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2)e</td>
<td></td>
<td>?ny</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td></td>
<td>e?ny</td>
</tr>
<tr>
<td>' ] : after a stressed verb stem</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- ] : elsewhere (-V] : after a verb stem ending in a vowel other than the preceding)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i/e/C/V] : after a verb stem ending in</td>
<td></td>
<td>i</td>
<td></td>
</tr>
<tr>
<td>(1) : before {s e}, {teq}, {tetu}, {qe}, {k}</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) : before inflectional suffixes {e}, {u?}, {s}, {t}</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th></th>
<th>meaning</th>
<th>after an s-class stem</th>
<th>after an c-class stem</th>
<th>class</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.</td>
<td>{i·k} inceptive</td>
<td></td>
<td></td>
<td>i·k</td>
</tr>
<tr>
<td>8.</td>
<td>{k} (uncertain)</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>{kik} away from here</td>
<td></td>
<td></td>
<td>kik</td>
</tr>
<tr>
<td>10.</td>
<td>{né·pi·k} be prevented from</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>{qew} right through</td>
<td></td>
<td></td>
<td>qé·w</td>
</tr>
<tr>
<td>12.</td>
<td>{suʔ} competitive</td>
<td></td>
<td></td>
<td>suʔ</td>
</tr>
<tr>
<td>13.</td>
<td>{té·} go away to</td>
<td></td>
<td></td>
<td>té·</td>
</tr>
<tr>
<td>14.</td>
<td>{tété·} intentional</td>
<td></td>
<td></td>
<td>tété·</td>
</tr>
<tr>
<td>15.</td>
<td>{tneqí} compleative</td>
<td></td>
<td></td>
<td>tneqí</td>
</tr>
<tr>
<td>16.</td>
<td>{tuq} reversative</td>
<td></td>
<td></td>
<td>tuq</td>
</tr>
<tr>
<td>17.</td>
<td>{twe} commitative</td>
<td></td>
<td></td>
<td>twe</td>
</tr>
<tr>
<td>18.</td>
<td>{tuyu} negative</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>{ú·} directional</td>
<td></td>
<td></td>
<td>ú·</td>
</tr>
<tr>
<td>20.</td>
<td>{ú·kini} as someone comes</td>
<td></td>
<td></td>
<td>ú·kini</td>
</tr>
<tr>
<td>21.</td>
<td>{wi} return from</td>
<td></td>
<td></td>
<td>wi</td>
</tr>
</tbody>
</table>
{'as an object goes by'

||| etk||:

{hi temé· sitk etk u?} : /hitamá·sitkatko?/
'he will lasso as you go by' ({temé·}
'throw'; {sitk} 'encircle'; {u?} future)

||| né·tk||:

{hi weh etk s i k} : /hiwahná·tksix/
'they barked as we went by' ({weh} 'bark')

||| netk||:

{'é·ýs etk s e} : /?á·ýsnatksa/ 'I am happy

to see it pass' ({'é·ýs} 'be happy')

'remote'

{pe· nim tiwi·k ce u?} : /pé·mtiwikcenu?/
'they will see them leave (from a place
away from here)' ({pe·} 'he/they ... him/them';
{nim} 'see'; {tiwi·k} 'follow') cf.
/pé·mtiwignu?/ 'they will see them leave
(from here)'

'on,' 'upon'

||| é·ce||:

{wixs lí·k é·ce s e} : /wiξslíké·cese/
'I am sitting on something' ({wixs} 'sit';
{lí·k} 'do,' 'assume a position') cf.
/wixsli·kse/ 'I am sitting'

t{teʔepɛ li·kɛ·ce s e} : /teʔepelikecese/
'I put something down upon something'
({teʔepɛ} 'lie') cf. /teʔepelikse/
'I put something down'

{eni·k} 'trail behind'

{hipi eni·k s e} : /hipeni·kse/ 'I eat after others' ({hipi} 'eat') cf. /hipise/ 'I eat'

{e·yik} 'move in order to ...', 'move around'; repetitive

\|yik\|

{hi we· letpɛ· e·yik s e} : /hiwe·letpɛ·yikse/
'he is bumping around' ({hi} 'he/she/it'; {we·} 'swiftly'; {letpɛ·} 'run into things')
cf. /hiwe·letpɛ·se/ 'he runs into things'

\|yɛ'yik\|

{'e mɛçi· e·yik s e} : /mɛciyayiksa/ 'I came to hear it' ({'e} 'him/her/it'; {mɛçi·} 'hear')
cf. /mɛci·sa/ 'I hear it'

\|ɛ·yik\|

{'ɛnpɛ· e·yik s e} : /ɛnpe·yikse/ 'I go to take something' ({'ɛnpɛ} 'seize') cf. /ɛnpe·se/
'I take something'
||e'yik||:
{ 'é·c e'yik s e} : /?á·ca'yiksa/ 'I go in from another,' 'I go out and in' ({'é·c} 'go in') cf. /?á·csa/ 'I go in'

||né'yik||:
{ 'e heki e'yik s e} : /?e·xné·yikse/ 'I go around looking' ({heki} 'see') cf. /?e·kice/ 'I see it'

||ne'yik||:
{ 'xi·cem e'yik s e} : /xi·cemne'yikse/ 'I go being angry' ({xi·cem} 'be angry') cf. /xi·cemce/ 'I am angry'

{é·y} (benefactive, affective) indicates an action beyond the expected sphere of the subject, and means '(do something) for the benefit of (someone),' 'dare (to do something),' '(do something) damaging to (someone).' 

||?y||:
{ 'e títú·le é·y s e} : /?attó·la?ysa/ 'I forget his' ({títú·le} 'forget') cf. /?attó·lasa/ 'I forget it'

||yé·y||:
{he·ni é·y s e} : /haniyá·ysa/ 'I make it for someone' ({he·ni} 'make') cf. /ha·nisa/ 'I make it'
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||é•y||:
{ˈɪnpí ɛ•y s e} : /ˈɪnpé•yse/ 'I buy (from someone)' ({'ɪnpí} 'seize') cf. /ˈɪnpíse/ 'I take'

||ey||:
{ˈe ˈè•lik é•y s e} : /ˈa•álikaysa/ 'I make fire for him' ({'è•lik} 'kindle fire')

||ne?y||:
{hité•me é•y s e} : /hité•mene?yse/ 'I am reading for someone' ({'hité•me} 'read') cf. /hité•mece/ 'I am reading'

||?ny||:
{titú•le é•y e} : /titó•la?nya/ 'I forgot his'
({e} indicative indefinite past) cf. /titó•laya/ 'I forgot'

||e?ny||:
{pe• 'íniki é•y e} : /pé•?nike?nye/ 'he put (someone else's)' ({'íniki} 'place,' 'put')

:{i•k} indicates that the action is about to begin.

||i•k||:
{piním i•k s e} : /pinmí•kse/ 'I am going to sleep' ({'piním} 'sleep') cf. /pinímse/ 'I am asleep'

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\[\text{nik}\] :

\{té\-wyé \(\cdot\) k s e\} : /té\-wyenikse/ 'I am settling down to live' (\{té\-wyé\} 'live')

\[\text{cf.} /té\-wyecse/ 'I am living'\]

\{k\} of uncertain meaning occurs after a stem when one of the following adverbial prefixes is found as one of the stem-constituents: \{'ile\}, \{'înek\}, \{'îpé\} 'with fist,' \{'îpé\} 'due to smoke,' \{'îpsqî\}, \{cú\-ye\}, \{ké\}, \{mûxc\}, \{nîké\}, \{qûqû\}, \{sîlé\-w\}, \{sîwî\}, \{té\}, \{té\-l\}, \{têx\}, \{ti\-wele\}, \{tiyê\}, \{tûk\-wele\}, \{tûk\-wê\-p\}, \{tulê\}, \{we\}, \{we\-lé\}, \{we\-lê\}, \{we\-p\}, \{wepé\}, \{weqî\}, \{wê\-w\}, \{wêyê\}, \{wîle\}, \{wis\}, \{witi\}, \{wû\-l\}, \text{e.g.},

\{hi \ 'ile tehém k s e\} : /hi\-letéhemkse/ 'it is dark from smoke' (\{'île\} 'in the fire'; \{tehém\} 'be dark') \[\text{cf.} /hitéhémce/ 'it is dark'\]

\{'înek pêy k s e\} : /\text{?ináhpayksa}/ 'I am bringing it' (\{'înek\} 'carry'; \{pêy\} 'come') \[\text{cf.} /pâyc\-a/ 'I am coming'\]

\{sîlé\-w \xi\-cêm k s e\} : /sîlé\-w\xi\-cêmkse/
'I am angry to see it' (\{sîlé\-w\} 'see'; \{\xi\-cêm\} 'be angry') \[\text{cf.} /\xi\-cêmc\-e/ 'I am angry'\]
\{kik\} indicates remoteness of the starting point of an action, or continuity of an action (usually away from the speaker).

||\{kik\}:
{hi kú\{e\}k e\} /hikú\{e\}kike/ 'he went from a point away from here' ({kú\{e\}} 'go')
cf. /hikúye/ 'he went from here'

||\{nikik\}:
{e tīwī\{e\}k kik e\} /tēwīnikike/ 'I followed it on' (\{tīwī\{e\}\} 'follow')
cf. /tēwīxne/ 'I followed it'

\{nē\{e\}pi\{e\}k\} indicates that the action is prevented by something. The absence of allomorphs after an s-class stem in the present corpus may be fortuitous.

{wīlē\{e\} li\{e\}k nē\{e\}pi\{e\}k s e\} /wilalixnā\{e\} pist\{s\}e\}/
'I am running away hindered' (\{wīlē\{e\}\} 'run'; \{li\{e\}k\} 'go')
cf. /wilalī\{e\}kca/ 'I am running away'

\{qew\} indicates an action performed without interruptions.

||\{qew\}:
{hi 'īse sú\{e\}p qew s e\} /hi\{e\}casō\{e\}pqawca/ 'he cuts it with a knife in a hurry'
(\{'īse\} 'with knife'; \{sú\{e\}\} 'cut')
cf.
/hi?cesá?pse/ 'he cuts'

||qé*w||:

{'înpi qew s e} : /?inpqá'wca/ 'I grab as I go' ('înpi} 'seize') cf. /?inpise/ 'I grab'

||neqew||:

{le?ém qew s e} : /la?ámnaqawca/ 'I empty it right through' (le?ém} 'exhaust') cf. /la?ámca/ 'I finish it'

||neqé•w||:

{'e heki qew s} : /?a'xnaqá'wn/ 'I see it as I go by' (heki} 'see') /hekcíe/ 'I see it'

{su?} indicates that an action is performed in competition with someone else, e.g.,

{'e wis tuk léhse su? s e} : /?awstokahsó?sa/
'I shoot up against (someone)' {wis} 'travel'; {tuk} 'shoot'; {léhse} 'up') cf. /wistokáhsasa/
'I shoot upward'

{té•} indicates that one moves to another location for an action.

||te||:

{'ipé•te té• s e} : /?ipé•tete|ese/ 'I go to scrape' ('ipé•te} 'scrape') cf. /?ipé•tese/
'I scrape'

||té·||:

{ˈɪnpi té· se} : /ˈinptē·se/ 'I go to take'

({ˈɪnpi} 'seize') cf. /ˈinpise/ 'I take'

{té·} indicates an action which is to take place in the immediate future, or the intention of the subject to perform an action.

||té·||:

{pi· ˈemk té· s i k} : /piʔamktaʔsä·x/  
'we are going to be gathered' ({pi·} reciprocal prefix; {ˈemk} 'gather') cf. /piʔamkcix/ 'we are gathered'

||té·||:

{tiʔkī té· s e} : /tiʔnkite té· se/  
'I may die any minute' ({tiʔnkī} 'die') cf. /tiʔnkice/ 'I die'

{tneq̥i} indicates that an action is completed.

||tneq̥i||:

{wis léhse tneq̥i e} : /wisáhsatnaqiya/  
'I finished traveling up' ({wis} 'move'; {léhse} 'up') cf. /wisáhsaya/ 'I traveled up'
\|\text{neqi}\|:
{\text{pi\cdot we\cdot p ci\?yew tneqi e}} : /\text{pi\cdot wapci\?yawna\?iya}/
'they are through with fighting' (\{we\cdot p\}
'with hand or paw'; \{ci\?yew\} 'kill') cf.
/\text{pi\cdot wapci\?yawna}/ 'they were fighting'

\{tuq\} indicates a movement back toward the original point of reference.
\|\text{tuq}\|:
\{\text{we\cdot yik tuq s e}\} : /\text{w\?\?yiktoqsa}/ 'I am crossing back' (\{\text{we\cdot yik}\} 'go across') cf. /\text{w\?\?yikse}/
'I am crossing over'
\{\text{cikli\cdot tuq s e}\} : /\text{cikli\cdot toqsa}/ 'I am turning back' (\{\text{cikli\cdot}\} 'turn') cf. /\text{cikli\cdot ce}/
'I am turning around'

\{\text{twe}\} indicates that an action takes place in association with another person.
\{\text{hi tu\cdot qi twe s e}\} : /\text{hitu\cdot qitwece}/ 'he smokes with someone' (\{tu\cdot qi\} 'smoke (pipe)') cf.
/\text{hitu\cdot qise}/ 'he smokes'

\{\text{\text{tuyu}}\} indicates negation.
\{\text{hi c\text{i\cdot q tuyu s e}\} : /\text{hici\cdot q\text{tuyuse}/} 'he is not speaking' (\{c\text{i\cdot q}\} 'speak') cf. /\text{hici\cdot qce}/
'he speaks'
{ú•} indicates that an action is directed toward an object or goal.

||ú•||:
{'înikí ú• s e} : /ðinikû•se/ 'I put something for ...' ({'înikí} 'put') cf. /ðinikîse/
'I put something'

||nú•||:
{hi péy ú• s e} : /hipaynó•sa/ 'he comes to see someone' ({péy} 'come') cf.
/hipá•yca/ 'he comes'

{ú•kini} 'indicates that an action takes place as an object approaches the subject.

||ú•kini||:
{'e 'înpi ú•kini s e} : /ðenpû•kinise/
'I take it as it comes' ({'înpi} 'seize')
cf. /ðenpîse/ 'I take it'

||nú•kini||:
{pe• we•p ci?ywé ú•kini s e} : /po•pci?yawnó•kinisa/
'he kills him as he comes' cf. /pó•pci?yawca/
/he kills him'

{wi} indicates that an action is completed and the subject is returning to the point of origin.
{'imi wi s e} /\im\i
622. Construction of verb themes.

The varying internal structures of the verb theme (vT) are described in the following sections. The elements surrounding the stem class markers are references to the preceding chart of affixes.

622.1 General verb theme (gvT). The two types of general verb themes are: (1) those with general verb stem (gvS) as a constituent, and (2) those with substantive stems (sS) as a constituent.

<table>
<thead>
<tr>
<th>gvT:</th>
<th>pi'</th>
<th>wi</th>
<th>sepé*</th>
<th>gvS</th>
<th>etk</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>x</td>
<td>:</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

Examples:

1. {wi sepé* ŋé;p} in /?ene·swicepexé?psene/
   'I put them underneath separately' ({' e} third person object prefix; {ne·s} plural object prefix; {ŋé;p} 'go under'; {s} class marker; {e} singular subject prefix; {ne} indicative remote past)

2. {'imemé· wi tekley} in /?imama·witkaláyna/
   'they changed clothes' ({tekley} 'exchange')

3. {pi· či·q ú·} in /pičixnú·six/  'we are arguing over it' ({či·q} 'talk')

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In addition to the preceding is the second type of general verb themes which is denominative. The following class of special suffixes enter into such verb theme construction:

< hi* >. The five members of this class are:

{hi*} 'put on,' 'go up to (?)': ∥hi∥ - ∥hi∥, e.g., ∥hi∥:

{túhun hi* s e} : /tohoní·sa/ 'I put on trousers' ({túhun} 'trousers')

∥hi∥:

{kepu* hi* s e} : /kapó·hísa/ 'I put on coat' ({kepu*} 'coat')

{ínek tú*yem hi* s e} : /?inaxtoyá·mísa/
'I carry it to the top' ({tú*yem} 'summit')

{né·nek} 'become'

{léwtiwe* né·nek s e} : /lawtiwa·ná·naksa/
'I become a friend' ({léwtiwe*} 'friend')

{yé·k} 'go to get'

{cé·qet yé·k s e} : /ceqetyé·kse/ 'I go to get blackberries' ({cé·qet} 'blackberry')
{é·w} 'become characterized by'

{tésq é·w s} : /tasqá·ws/ 'I became fat'

({tésq} 'grease,' 'fat')

{wi} 'act as,' 'do': ||wi|| - ||wi||, e.g.,

||wi||:

{'iyeqis wi s e} : /?iyeqiswi·se/ 'I fight'

({'iyeqis} 'hot')

||wi||:

{qepsi?·s wi s e} : /qepsi?·swise/ 'I do evil'

'I sin' ({qepsi?·s} 'bad')

The general verb themes with substantive stem as a constituent may be summarized as follows:

gvT: nS/aS < hi*.>

All five members of < hi* > class occur with general noun stems (nS), and {wi} may also occur with adjective stems (aS).

622.2 Copulative verb theme (cvT). Copulative themes are always coterminous with copulative verb stems (cvS):

cvT: cvS.

Example:

{wé·} in /hiwé·ke/ 'he was' ({hi} third person subject prefix; ||e||, an allomorph of {ne} indicative remote past 638.5)
630. Verb inflection.

The following four classes of prefixes and four classes of suffixes occur as inflectional elements in constituency with verb themes:

**Prefixes:**

<table>
<thead>
<tr>
<th>class</th>
<th>number of members</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; hi &gt; (subject/object prefixes)</td>
<td>2</td>
</tr>
<tr>
<td>&lt; pe &gt; (subject and object prefix)</td>
<td>1</td>
</tr>
<tr>
<td>&lt; pe &gt; (plural subject prefix)</td>
<td>1</td>
</tr>
<tr>
<td>&lt; ne's &gt; (plural object prefix)</td>
<td>1</td>
</tr>
</tbody>
</table>

**Suffixes:**

<table>
<thead>
<tr>
<th>class</th>
<th>number of members</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; s &gt; (class marker suffix)</td>
<td>1</td>
</tr>
<tr>
<td>&lt; e &gt; (number suffixes)</td>
<td>2</td>
</tr>
<tr>
<td>&lt; m &gt; (locative suffixes)</td>
<td>2</td>
</tr>
<tr>
<td>&lt; k &gt; (tense-modal suffixes)</td>
<td>14</td>
</tr>
</tbody>
</table>
631. `<hi> class.

The two members of this class are {hi} and {e}.

{hi} (third person subject prefix): ||hi·|| before {wé·}
'be' followed by {s} and {+}; ||hi|| elsewhere, e.g.,

||hi·||:

{hi wé· s} : /hi·wes/ 'he is'

||hi||:

{hi titweti· s e} : /hittiwati·sa/ 'he tells
a story' ({{titweti·} 'tell a story'}

{hi 'eiwi s e} : /he?eiwice/ 'he spends
winter' ({{'eiwi} 'spend winter'}

{e} (third person object prefix) indicates that the
object is in the third person, or more specifically,
that the object is either not closely related to the
speaker or not in possession of the speaker. When an
independent substantive is in the sentence as a referent, the
object is marked by {ne} (532). {e}: ||'ew|| before ||'v||
or ||hv||; ||'e|| elsewhere.

||'ew||:

{e 'ini· s e} : /ewmi·se/ 'I am giving it'

(/{'ini·} 'give' )

{e hi s e} : /ewice/ 'I speak to him'

(/{hi} 'speak' )
"e":

{e wepe li*k s e} : /?u·peli·kce/ 'I dress up someone not closely related to me'
({wepe} 'dress'; {li*k} 'be,' 'go,' 'assume a position') cf. /wepeli·kce/ 'I dress up (someone close to me, e.g., wife, child, horse)'

Exceptionally, ||'e|| occurs before {êwi·} 'shoot (arrow)'
and before {heki} 'see.'

{e 'êwi· s e} : /?e*wí·se/ 'I shoot at it'
{e heki s e} : /?e·kíce/ 'I see it'

632. < pe· > class.

The single member of this class is {pe·} indicating that the subject and the object are in non-identical third person.

{pe·}: ||pé·||, ||pe·|| or ||pe||.

||pé·||:

{pe· wéwluq s e} : /pé·wewluqse/ 'he wants it'
({wéwluq} 'want') cf. /?ewéwluqse/ 'I want it'

||pe·||:

{pe· titwetí· u?} : /pa·ttiwatíyo?/ 'he will tell him a story' cf. /?attiwatíyo?/ 'I will tell him a story'

||pe||:

{pe· 'ínpi s e} : /pe?énpse/ 'he seizes him'
({'ínpi} 'seize')
633. < pe > class.

The single member of this class is {pe} indicating the plurality of the subject. {pe}: \( \parallel pe \parallel \sim \parallel pe^\prime \parallel \sim \parallel pe \parallel \).

\( \parallel pe \parallel : \)

{pe titwetí· u?} : /pattiwatiyo?/ 'we will tell a story' cf. /pa·ttiwatiyo?/ 'he will tell him a story'

\( \parallel pe^\prime \parallel : \)

{hi pe kú· s} : /hipé·kus/ 'they just left'

\( \parallel pe \parallel : \)

{'e pe we·p ci?yew k ki} : /?apó·pci?yawnki/

'we killed him' (\{we·p\} 'with hand or paw'; {ci?yew} 'kill'; {k} indicative present; {ki} 'away from the speaker')

634. < ne·s > class.

The single member of this class is {ne·s} indicating the plurality of the object. {ne·s}: \( \parallel ne·c\parallel \sim \parallel nec\parallel \)

before \( \parallel \)'; \( \parallel né·s\parallel \sim \parallel nes\parallel \) elsewhere.

\( \parallel né·c\parallel : \)

{'e ne·s 'înpí s e} : /?ené·cinpse/ 'I seize them'

\( \parallel nec\parallel : \)

{'e ne·s 'ecú? s e} : /?anačacó?sa/ 'I go into them' (\{'ecú?\} 'go in') cf. /?acó?sa/ 'I go in'

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I hear them

He will tell us a story

I will tell them a story
635. < s > class.

The single member of this class is {s} (class marker). {s} does not occur with the following tense-modal suffixes: frequentative present, imperative (without locative suffixes).

{s} has the following allomorphs:

<table>
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<tr>
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<td>before V</td>
<td>Ø</td>
<td>C]</td>
</tr>
<tr>
<td>before VI</td>
<td>Ø</td>
<td>C]</td>
</tr>
</tbody>
</table>

Environments (Arabic numerals refer to the tense-modal suffixes in 638.):

I: tense-modals 1, 4, 5, 8

II: tense-modal 2 (without locative suffixes)

III: tense-modal 7

IV: tense-modals 2 (with locative 1), 3 (without locatives, or with locative 1), 6, 9, 11, 12
    (with plural), 13 (with plural), 14 (with locative 1)

V: tense-modals 12 (with singular), 13 (with singular)

VI: tense-modals 2 (locative 2), 3 (with locative 2)
Examples:

||\(\text{s}\) (before I):
\{hipi s e\} : /hipise/ 'I eat' (\{hipi\} 'eat')

||\(\text{c}\) (before I):
\{heki s e\} : /hekice/ 'I see' (\{heki\} 'see')

||\(\text{s}\) (before II):
\{hi pe kú s\} : /hipékus/ 'they just left'
(\{kú\} 'go')

||\(\text{in}\) (before II):
\{wú y s\} : /wúyin/ 'I just escaped' (\{wú y\} 'run away')

||\(\text{n}\) (before II):
\{hi hi s\} : /hihin/ 'he just said' (\{hi\} 'say')

||\(\text{t}\) (before III):
\{'e ípté s eq\} : /?ápťatáx/ 'I could hit him'
(\{'ípté\} 'hit')

||\(\text{n}\) (before III):
\{'e tíwi k s eq\} : /?atwi xnaʔx/ 'I would have gone with him'
(\{tíwi k\} 'accompany, follow')

||\(\text{n}\) (before IV):
\{hi pe péy s m\} : /hipapáynim/ 'they have come'
(\{péy\} 'arrive')

||\(\text{ne}\) (before V):
\{'e heki s qeqe\} : /ʔá xnaqaqa/ 'many times you may have seen it'
(\{qeqe\} frequentative past)
||n|| (before V):
{'ipsqi 1é· s qeqe} : /?ipsqilá·nqaqa/
'I walked around' ({'ipsqi} 'on foot';
{1é·} 'move,' 'move around')

||ni|| (before VI):
{pe cikli· s ki} : /peckili·niki/ 'we went on home' ({pe} plural subject prefix; {cikli·} 'return'; {ki} 'away from the speaker')

||n|| (before VI):
{'e pe we·p ci?yew s ki} : /?apó·pci?yawnki/
'we killed it' ({'e} third person object prefix; {we·p} 'with hand or paw'; {ci?yew} 'kill')

636. < e > class.
The two members of this class are {e} and {i}.
{e} (singular) does not occur with tense-modal suffixes 2, 3, 6, 7, or 9, and shows the following allomorphy:

with tense-modal 1 (without locatives) ...........||e||
with tense-modal 1 (with locatives), 4, or 5
and after a stressed stem ......................||e||
with tense-modal 1 (with locatives), 4, or 5
and after an unstressed stem .................||é·||
with tense-modal 10 ..........................||tu||
with tense-modals 11, 12, 13, 14 ..............Ø.
Examples:

\[ \|e\|: \]
{hipi s e} : /hipise/ 'I eat'
{tiwi*k s e m} : /tiwi*kcem/ 'you are following me' ({tiwi*k} 'follow,' 'accompany')

\[ \|é\|: \]
{'e hipi s e ne} : /e*psé*ne/ 'I had eaten it'

\[ \|tu\|: \]
{'é*t te tu} : /á*ttato/ 'I go in and out'  
({'é*t} 'go out'; {te} frequentative present)

{i} (plural) does not occur with tense-modal suffixes 2, 3, 6, 7, or 9, and shows the following allomorphy:
- with tense-modals 1, 4, 5, 8 and after a stressed stem ....................... \|i\|
- with tense-modals 1, 4, 5, 8 and after an unstressed stem ..................... \|i*\|
- with 10 ........................................ \|nik\|
- with 14 (without locatives) after a vowel, or with 14 (with locatives) .......... \|tk\|
- with 14 (without locatives) after a consonant... \|itk\|
- with 11, 12, or 13 ......................... \ø
Examples:

\[ \text{hi té•?wy} \text{ s i k} : /hi té•?wyecix/ 'they dwell' \{té•?wy\} 'dwell' \]

\[ \text{hipí s i k} : /hipsí•x/ 'we eat' \{hipí\} 'eat' \]

\[ \text{'e heki e•yik te i} : /?e•xné•yikte•nix/ 'we go to see him many times' \{heki\} 'see'; \{e•yik\} 'move in order to ...' 620; \{te\} frequentative present \]

\[ \text{wepté• i} : /wepté•tx/ 'put feather on!' (to pl.) (e.g., on arrows) \{wepté•\} 'put feather on' \]

\[ \text{'e•c i} : /?á•citx/ 'go in!' (to pl.) \{‘e•c\} 'go in' \]

637. < m > class.

The two members of this class are \{m\} and \{ki\}. \{m\} (locative 1) indicates an action toward the speaker (with second or third person subject), or an action toward the second person (with first person subject).
The allomorphs are:

- with tense-modals 1, 3 (after a vowel-final s-class theme), 4 (with singular), 10 (with singular), 14 (after a vowel-final s-class theme) .......... ||m||
- with tense-modal 4 (with plural) .................. ||nm||
- with tense-modal 6 ..................................... ||kum||
- with tense-modals 2 (after a consonant-final s-class theme, or after a c-class theme), 3 (after a consonant-final s-class theme, or after a c-class theme), 14 (after a consonant-final s-class or after a c-class theme) ...... ||im||.

Examples:

- ||m||:
  {tìwì·k s e m} : /tiwì·kcem/ 'you are following me' ({tìwì·k} 'accompany,' 'follow')

- ||nm||:
  {'e wìyè· heki s i m qè} : /?awyá·kcinmqá/ 'we were looking at it as we came' ({wìyè·} 'as one moves'; {heki} 'see'; {qè} indicative recent past)

- ||kum||:
  {hi 'èít u? m} : /haʔatóʔkom/ 'he will come out' ({u?} indicative future; {'èít} 'move out')
\( \{ \text{hi pe p} \cdot \text{y sm e} \} : / \text{hipap\-ynima/ } ^{'} \text{they arrived here} ^{'} (\{ \text{p} \cdot \text{y} \} ^{'} \text{arrive} ^{'} ) \)

\( \{ \text{ki} \} (\text{locative } 2) \) indicates a motion away from the speaker. The allomorphs are:

- with tense-modal 1 or 2 ....................... \( \| \text{ki} \| \)
- with tense-modal 3 ................................. \( \| \text{kik} \| \)
- with tense-modal 4 ................................. \( \| \text{nqe} \| \)
- with tense-modal 5 ................................. \( \| \text{nqi q} \| \)

Examples:

\( \| \text{ki} \| : \)

\( \{ \text{pe w} \cdot \text{yik ki} \} : / \text{pew} \cdot \text{yixki/ } ^{'} \text{we crossed over (to the other side)} ^{'} (\{ \text{w} \cdot \text{yik} \} ^{'} \text{cross} ^{'} ) \)

\( \| \text{kik} \| : \)

\( \{ \text{hi cikl} \cdot \text{i tuq kik e} \} : / \text{hickil\-to\-xkika/ } ^{'} \text{he went on back} ^{'} (\{ \text{cikl} \cdot \} ^{'} \text{turn} ^{'} ; \{ \text{tuq} \} ^{'} \text{back} ^{'} ; \{ \text{e} \} ^{'} \text{indicative indefinite past} ^{'} ) \)

\( \| \text{nqe} \| : \)

\( \{ ^{'} \text{e heki s e ki qe} \} : / ^{'} \text{a\-kca\-nqaqa/ } ^{'} \text{I have been to see him} ^{'} (\{ \text{qe} \} ^{'} \text{indicative recent past} ^{'} ) \)

\( \| \text{nqi q} \| : \)

\( \{ ^{'} \text{e heki s i ki e} \} : / ^{'} \text{a\-kcf\-nqia/ } ^{'} \text{we have been to see him (long ago)} ^{'} (\{ \text{e} \} ^{'} \text{indicative indefinite past} ^{'} ) \)
638. <k> class.
This class has 14 members generally indicating
tense and modes.

638.1 {k} (indicative present) covers actual events
of the present:
  after {i} (plural) and with a locative (637). ||n||
  elsewhere after {i} (plural) ....................... ||k||
  elsewhere ...................................................... \0

Examples:
||n||:
  {hi té•?mik s i k m} : /hité•?miksinm/
    'they came down' ({té•?mik} 'go down')

||k||:
  {hi té•?mik s i k} : /hité•?miksix/
    'they move down'

||\0||:
  {hi té•?mik s e} : /hité•?mikse/ 'he moves
down'

638.2 {indicative perfect} (to be abbreviated as {IP})
is morphophonemically zero.

{wú•y s IP} : /wú•yin/ 'I just escaped'
{IP} is used to describe an action just completed,
or to constitute a hortatory construction with {ke},
/kex ñehékin/ 'let me see'
638.3 {e} (indicative indefinite past) is used to describe an action that was completed at any time in the past. {e}: ||ye|| after a vowel; ||e|| elsewhere.

||ye||:

{titwa' e} : /titwaïya/ 'I told a story'

||e||:

{pe· hipî e} : /pehîpe/ 'he ate it'

({hipî} 'eat')

638.4 {qe} (indicative recent past) is used to (1) describe an action that was completed earlier on the same day or up to a few days prior to the time of speech, or to (2) describe an incomplete action.

{titwa' s e qe} : /titwaïsa·qa/ 'I told a story (this morning, yesterday, a few days ago)'

{'inî s e qe} : /'iniså·qa/ 'I was giving it to you (but you did not take it)' ({'inî} 'give')

638.5 {ne} (indicative remote past) is used to describe an action completed in a time that precedes the area covered by {qe} 638.4, especially to tell myths.

{têqe pêy s i ne} : /taqaçycina/ 'we dropped in (last year)' ({têqe}'briefly'; {pêy} 'come')
638.6 {u?} (indicative future) is used to describe an action in future time, and future conditions, e.g.,

/čalawi hiwekú? tá?c lé·heyn wati·sx, ka·
?i·n kiyú?./ 'If it is fine tomorrow,
I will go.' ({čelewí} 'if'; {hi} third person subject prefix; {wé·} 'be'; {hi wé· u?} : /hiweku?/; {té?c} 'good'; {lé·heyn} 'day'; {wati·sk} 'tomorrow,' 'yesterday'; {'i·n} 'I'; {kú· u?} : /kiyú?/, {kú·} 'go')

{u?} : ||yu?|| after a vowel; ||ú?|| elsewhere after an unstressed theme; ||u?|| elsewhere.

||yu?||:

{hení· u?} : /haní·yo?/ 'I will make'
({hení·} 'make')

||ú?||:

{'e hipí u?} : /?e·pú?/ 'I will eat it'
({hipí} 'eat')

||u?||:

{pe té·?wyé i·k u?} : /peté?wyeniku?/
'we are going to settle down to live'
({pe} plural subject prefix 633;
{té·?wyé} 'dwell'; {i·k} inceptive suffix 620)
There are three morphemes that are used to describe conditions contrary to fact: \{eq\} conditional present, \{neq\} conditional perfect, \{u?qe\} conditional past. \{neq\} occurs very infrequently. \{eq\} and \{u?qe\} are used interchangeably, as noted in the four examples below. The name such as conditional present in this case is for identification of the morphemes rather than for accurate description of their uses. All four sentences below mean 'if he came yesterday, I would have seen him.'

1. /čalawi hipá\*yno?qa ?ipi watí\*sx, ka* ?a\*xn6?qa./
2. /čalawi hipá\*yno?qa ?ipi watí\*sx, ka* ?a\*kiňax./
3. /čalawi hipá\*ynax ?ipi watí\*sx, ka* ?a\*xn6?qa./
4. /čalawi hipá\*ynax ?ipi watí\*sx, ka* ?a\*kiňax./

\{čelewí\} 'if'; \{pê\*y\} 'come'; \{ipí\} 'he/she/it'; \{wetí\*sek\} 'tomorrow,' 'yesterday'; \{ke\*\} 'and,' 'then'; \{heki\} 'see')

Sentence 2 was given as the "best."

\{eq\} : \|'e\*q\| or \|'eq\| after an unstressed stem; \|eq\|
elsewhere.

\|'e\*q\|:
\{hi wé\* s eq\} : /hiwatá\*x/ 'it would have been'

\|'eq\|:
\{'e heki s eq\} : /?a\*kiňax/ 'I would have seen him'

\|eq\|:
\{'e 'ıpté\* s eq\} : /?a?ptá\*tax/ 'I could hit him'
{\textit{neq}}: ||'\textit{neq}|| after an unstressed stem; ||'\textit{neq}|| elsewhere.

\begin{itemize}
  \item \textit{\textquotesingle neq\textquotesingle}: \\
    \{\textit{ku\cdot s e neq}\} : /\textit{kos\cdot na\cdot x}/ 'I would be doing' \\
    ({\textit{ku\cdot}} 'do')
  \item \textit{neq}: \\
    \{\textit{e ku\cdot ú s e neq}\} : /\textit{akiy\cdot san\cdot a\cdot x}/ 'you would have been advancing toward it' \\
    ({\textit{e}} third person object prefix; \{\textit{ku\cdot}\} 'go'; \{\textit{ú}\cdot\} directional suffix)
\end{itemize}

{\textit{u?qe}} is used, besides the conditional expression noted above, to describe the capability or potentiality of an action on the part of the subject, and to describe an action in interrogative and negative statements, e.g.,

\begin{itemize}
  \item /\textit{i\cdot n ?a\cdot xn\cdot ò\cdot qa.}/ 'I can see.' ({\textit{i\cdot n}} 'I'; \{\textit{heki}\} 'see'; \{\textit{e heki s u?qe}\} : /\textit{a\cdot xn\cdot ò\cdot qa}/) \\
  \item /\textit{we\cdot t ?a\cdot xn\cdot ò\cdot qa.}/ 'can you see it?' ({\textit{we\cdot t}} question particle) \\
  \item /\textit{we\cdot t u ?a\cdot xn\cdot ò\cdot qa.}/ 'I cannot see it.' \\
    ({\textit{we\cdot t u}} 'no,' 'not')
\end{itemize}

{\textit{u?qe}}: ||'u?qe|| after a vowel; ||'u?qe|| elsewhere after an unstressed stem; ||'u?qe|| elsewhere. This may be further analysed in \{\textit{u}\?\} and \{\textit{qe}\}. 

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The four morphemes describing frequentative or customary actions are: \{te\} frequentative present, \{q\} frequentative indefinite past, \{qeq\} frequentative recent past, and \{qene\} frequentative remote past.

\{te\} : \{te\} after an unstressed stem; \{te\} elsewhere.

\{te\}:

\{'e heki te e\} : /?e·kté·tu/ 'I see him always'

\{te\}:

\{'é·t te e\} : /?á·ttato/ 'I go in and out'

({\{'é·t\} 'go out'} )
\{q\} : \|e?nik\| after \{i\} (plural suffix); \|q\| elsewhere.

\|e?nik\|:

\{cepe? 1e\cdot s q\} : /cepe?1e\cdot ne?nix/ 'we used to work' (\{cepe?\} meaning uncertain; \{1e\cdot\} 'move,' 'move around')

\|q\|:

\{hi q?q?ú\cdot 1e\cdot s q\} : /hiqqol\cdot nx/ 'he was in the habit of galloping around' (\{q?q?ú\} 'gallop'; \{1e\cdot\} 'move around')

\{qeqe\} shows the following allomorphy:

with \{e\} (singular) ...................... \|qeqe\|

with \{i\} (plural)

after a stressed vowel-final stem .......... \|ye?niqe\|

after an unstressed consonant-final stem. \|e?ni\cdot qe\|

elsewhere ...................................... \|e?niqe\|

Examples:

\|qeqe\|:

\{'ipsqi 1e\cdot s e qege\} : /?ipsqil\cdot nqaqa/

'I used to walk around' (\{'ipsqi\} 'walk')

\|ye?niqe\|:

\{qin\cdot i s i qege\} : /qiniya?niqa/ 'we used to dig' (\{qini\} 'dig')
||e?ni·qe||:
{hi kú·s i qeqe} : /hikya?ní·qa/ 'they used to go' ({hi} third person subject prefix; {kú·} 'go')

||e?niqe||:
{hi wú·y s i qeqe} : /hiwó·yna?niqa/ 'they used to run away' ({wú·y} 'run away')

{qene} shows the following allomorphy:

with {e} (singular) .................................................. ||qene||
with {i} (plural)
  after a stressed vowel-final stem........||yenixne||
  after an unstressed consonant-final stem..||ení·xne||
  elsewhere ..............................................||enixne||

Example:

||qene||:
{pé·xwi s e qene} : /pá·xwiqana/ 'I used to steal (but not any more)' ({pé·xwi} 'steal')

||yenixne||:
{té·1 wewí·ti s i qene} : /telwewitiyenixne/
  'we used to run downstream' ({té·1} 'run, '
  'gallop'; {wewí·ti} 'downstream')

||ení·xne||:
{hipí s i qene} : /hipeni·xne/ 'we used to eat'
638.9 \{k\} (imperative) is used to make directive statements. \{k\} shows the following allomorphs:

with \{e\} (singular) and without locatives

- after an s-class theme ending in ||i||..............||k||
- after an s-class theme ending in other vowels. ||y||
- after an s-class theme ending in a consonant. \(\emptyset\)
- after a c-class theme ending in \{tɛ\}620...... \(\emptyset\)
- after a c-class theme ending in a vowel, ||y||, ||w|| or ||l||.................................||n||
- elsewhere..............................................................||in||
elsewhere................................................................... \(\emptyset\).

Examples:

||k||:

\{tít-wé-tí\ e k\} : /tí-twatíx/ 'tell a story!'
(to one person) (\{tít-wé-tí\} 'tell a story')

||y||:

\{'e tí-tú·le e k\} : /?attó·lay/ 'forget it!'
(to one person) (\{tí-tú·le\} 'forget')
\(\emptyset\) : (after an s-class theme)

\{wílé· ke?éyk e k\} : /wílé·ke?éyk/ 'run!'
(\{wílé\} 'run'; \{ke?éyk\} 'go')
\(\emptyset\) : (after a c-class theme)

\{'i-psqí lénhe e k\} : /?ipsqiléhn/ 'walk down!'
(to one person) (\{léhn\} 'down')
\[\text{n}\]:

\{hi e k\} : /hîn/ 'speak!' (to one person)

\{hi\} 'speak')

\[\text{n}\]:

\{'e hekî e k\} : /?ehêkin/ 'look it over!' (to one person)  \{hekî\} 'see'

\(\emptyset\) : (with \{i\} plural)

\{'e wi hekî i k\} : /?ewihekitx/ 'look over each one of them!' (to more than one person)

\{wi\} distributive prefix

\(\emptyset\) : (with locative)

\{kú* s m e\} : /kú'm/ 'come!' (to one person)

\{kú*\} 'go'; \{m\} toward the speaker

\{kú* s mi\} : /kú*mtx/ 'come!' (to more than one person)
639. Inflectional suffix complex and verb constructions.

639.1 Inflectional suffix complex (isc).

Of the four classes of inflectional suffixes, 
< m > class (locative) is optional, and the rest are 
obligatory. The order of the four suffix classes varies 
depending on the tense-modal element involved.

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<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. frequentative remote past</td>
<td>638.8</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>14. imperative</td>
<td>638.9</td>
<td>x</td>
<td>φ</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

ø : non-occurrence

[ ] : optional
For tense-modals 6, 10 and 14, the position of the optional class of locatives is based on locative 1 (637) alone; for the tense-modal 5, it is based on locative 2 (637) alone. Locatives, particularly locative 2, occur infrequently.

Of the fourteen tense-modal suffixes, five (2, 3, 6, 7, 9) occur without singula-plural distinction. For these five tenses, the number distinction is indicated by the presence or absence of the plural subject prefix (633). Accordingly, if the paradigm is completely filled out, the theoretically possible inflectional suffix combinations are 2 (number of members of <e> class) x 3 (possibilities of locatives: locative 1, locative 2, no locatives) x (14 - 5) + 3 x 5 = 69. In the present corpus, only 39 combinations are found possibly due either to infrequency of certain combinations or skewed paradigm.
The distribution of the 39 combinations are:

<table>
<thead>
<tr>
<th>tense-modals</th>
<th>no locatives</th>
<th>locative 1: {m}</th>
<th>locative 2: {ki}</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>sg.</td>
<td>pl.</td>
<td>sg.</td>
</tr>
<tr>
<td>1. indicative present</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>2. indicative perfect</td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>3. indicative indef. past</td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>4. indicative recent past</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>5. indicative remote past</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>6. indicative future</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>7. conditional present</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>8. conditional perfect</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>9. conditional past</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>10. frequentative present</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>11. frequentative indef. past</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>12. frequentative recent past</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>13. frequentative remote past</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>14. imperative</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>
The verb constructions in which the inflectional affix classes above participate are:

Vg = general verb

Vg : [hi] [pe] [ne·s] gvT isc

(isc = inflectional suffix complex 639.1)

Example: < hi > < pe > < ne·s > gvT < s > < e > < k >

\{ hi pe ne·s qe?én s e \}

\| hi pe ne·s qe?én n e \|

/ hipana·sqa?ánna /

they respected us

Vg : [pe·] gvT isc

Example: < pe· > gvT < s > < e > < k >

gvS < etk >

\{ pe· kú· ú· s i ne \}

\| pe kiy ú· s i ne \|

/ pekiyú·sine /

they went to them

Vg : [hi] sT

Example: < hi > sT

\{ hi té?c \}

\| hi té?c \|

/ hitá?c /

it is good
Vc = copulative verb

\[ Vc : \{ hi \} cvT \text{ isc} \]

Example: \(< hi \> \ cvT \ < s > \ < e > \ < k > \)

\{ hi \ wē\cdot \ s \}
\| hi\cdot \ \ we \ \ s \| \\
/ \ hī\cdot wes \ / \\
he \ is
710. Particle stems.

There are fifteen stem classes

<table>
<thead>
<tr>
<th>class</th>
<th>examples of members</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>710.1 adverbial modifiers</td>
<td>{qu\textsubscript{11}}</td>
<td>awfully, terribly</td>
</tr>
<tr>
<td></td>
<td>{\textquoteright u}</td>
<td>very</td>
</tr>
<tr>
<td>710.2 comparatives</td>
<td>{q\textsubscript{c}etu}</td>
<td>more</td>
</tr>
<tr>
<td></td>
<td>{tu\textsubscript{c}sk}</td>
<td>more</td>
</tr>
<tr>
<td>710.3 relative</td>
<td>{ke\textsubscript{c}}</td>
<td>which, that etc.</td>
</tr>
<tr>
<td>710.4 indefinite</td>
<td>{ku\textsubscript{c}}</td>
<td>maybe, possibly</td>
</tr>
<tr>
<td>710.5 negatives</td>
<td>{ce\textsubscript{c}ye}</td>
<td>not (to possess)</td>
</tr>
<tr>
<td></td>
<td>{we\textsubscript{c}\textsubscript{u}tu}</td>
<td>no, not</td>
</tr>
<tr>
<td></td>
<td>{we\textsubscript{c}cu}</td>
<td>no longer</td>
</tr>
<tr>
<td></td>
<td>{mi\textsubscript{c}s}</td>
<td>not</td>
</tr>
<tr>
<td>710.6 coordinating connectives</td>
<td>{ke\textsubscript{c}}</td>
<td>and</td>
</tr>
<tr>
<td></td>
<td>{m\textsubscript{c}tu}</td>
<td>but</td>
</tr>
<tr>
<td></td>
<td>{\textquoteright e\textsubscript{c}tu}</td>
<td>then</td>
</tr>
<tr>
<td></td>
<td>{ke\textsubscript{c}w\textsubscript{c}e}</td>
<td>then</td>
</tr>
<tr>
<td></td>
<td>{we\textsubscript{c}q}</td>
<td>and</td>
</tr>
<tr>
<td>class</td>
<td>examples of members</td>
<td>meaning</td>
</tr>
<tr>
<td>-------</td>
<td>---------------------</td>
<td>---------</td>
</tr>
<tr>
<td>710.7 subordinating connectives</td>
<td>{ineki'k}</td>
<td>although</td>
</tr>
<tr>
<td></td>
<td>{etke}</td>
<td>because</td>
</tr>
<tr>
<td></td>
<td>{cellu}</td>
<td>if</td>
</tr>
<tr>
<td></td>
<td>{qu'c}</td>
<td>as soon as</td>
</tr>
<tr>
<td></td>
<td>{qece}</td>
<td>if, even when</td>
</tr>
<tr>
<td>710.8 question particle (Q)</td>
<td>{we't}</td>
<td>(question marker)</td>
</tr>
<tr>
<td>710.9 interrogatives</td>
<td>{mine}</td>
<td>where</td>
</tr>
<tr>
<td></td>
<td>{mec}</td>
<td>how much</td>
</tr>
<tr>
<td>710.10 final particle</td>
<td>{ne'cë}</td>
<td>isn't it?</td>
</tr>
<tr>
<td>710.11 hortatory (H)</td>
<td>{ke}</td>
<td>let me/us</td>
</tr>
<tr>
<td>710.12 prenominal</td>
<td>{iske}</td>
<td>like</td>
</tr>
<tr>
<td>710.13 interjectory</td>
<td>{e'hë}</td>
<td>yes</td>
</tr>
<tr>
<td>710.14 adverbial particles</td>
<td>{we'ti'sk}</td>
<td>yesterday, tomorrow</td>
</tr>
<tr>
<td></td>
<td>{wë'qu}</td>
<td>now</td>
</tr>
<tr>
<td></td>
<td>{e'pqë}</td>
<td>exactly</td>
</tr>
<tr>
<td></td>
<td>{kë'le}</td>
<td>just</td>
</tr>
<tr>
<td></td>
<td>{qece}</td>
<td>even</td>
</tr>
<tr>
<td></td>
<td>{kun'ku}</td>
<td>always</td>
</tr>
<tr>
<td></td>
<td>{ku'ðs}</td>
<td>thus</td>
</tr>
<tr>
<td>710.15 pronominal</td>
<td>{e'}</td>
<td>you (sg.)</td>
</tr>
</tbody>
</table>
720. Suffixes.

Suffixes occur with the following stems: relative {ke}, indefinite {kúʔ}, negative {miʔs}, question particle {we·t}, interrogatives {mine} and {mec}, adverbial particle {qece}, and pronominal {'e·}. The two kinds of suffixes are pronominal and plural suffixes. The latter is found with {'e·} 'you (sg.)' and the former with the rest.

721. Pronominal suffixes.

The pronominal suffixes of particles are in two major sets: (1) one indicating only the subject, and (2) the other indicating both subject and object.

721.1 The subject suffix set has the following membership and allomorphs:

<table>
<thead>
<tr>
<th>types: la</th>
<th>1b</th>
<th>2a</th>
<th>2b</th>
</tr>
</thead>
<tbody>
<tr>
<td>{k} 1st person sg.</td>
<td>e·k</td>
<td>kek</td>
<td>·k</td>
</tr>
<tr>
<td>{m} 2nd person sg.</td>
<td>m</td>
<td>m</td>
<td></td>
</tr>
<tr>
<td>{nm} 1st person pl.</td>
<td>e·nm</td>
<td>ke·nm</td>
<td>·nm</td>
</tr>
<tr>
<td>{pem} 2nd person pl.</td>
<td>pem</td>
<td>pem</td>
<td></td>
</tr>
</tbody>
</table>

The set la occurs with {miʔs} 'not' and {we·t} question particle; 1b with {mine} 'where' and {mec} 'how much'; 2a with {qece} 'even, even when' and {ke} relative;
2b with \{kú?\} 'maybe, possibly.'

\{k\} may occur with a plural subject morpheme in the same sentence, e.g., /wé·te·x kusi·x/ 'do we go?' (\{we·t\} question particle; /kusi·x/ 'we go'). In such a case, the second person is not included in the 'we.' When the second person is included, \{nm\} is used.

Examples of type 1a:

\|e·k\|
/mi?se·x ?i·n manma?i kiyú?./ 'I cannot go'
(\{mi?s\} 'not'; \{'i·n\} 'I'; \{menme?i\} 'how,' 'in any way'; \{kú\} 'go'; \{u\} future 638.6)

\|e·nm\|
/mi?se·nm nú·n manma?i pekiyú?./ 'we cannot go in any way.' (\{nú·n\} 'we'; \{pe\} plural subject prefix)

The type 1a does not occur with second or third person subject:

/mi?s ?i·m manma?i kiyú?./ 'you (sg.) cannot go in any way.'
/mi?s ?ipí manma?i hikiyú?./ 'he cannot go in any way.'
/mi?s ?imé manma?i pekiyú?./ 'you (pl.) cannot go in any way.'
/miʔs ʔimé manmaʔi hipekiyûʔ./ 'they cannot
go in any way.'

Examples of type 1b:

||kek||:
/minekex wé·s./ 'where am I?' ({mine} 'where')

||ke·nm||:
/mineke·nm wisí·x./ 'where are we?'

In the following examples, {k} is represented by freely
alternating ||kek|| and ||e·k||:
/mackex we kícuγ./ 'how much money do I have?'
({mec} 'how much'; ||we|| an allomorph of {wé·} 'be'; {kícuγ} 'metal,' 'money')
/mace·x we kícuγ./ 'how much money do I have?'

Examples of type 2a:

|| ·k||:
/qece·x ʔi·n kú·se./ 'even I am going.'
({qece} 'even')

||m||:
/qecem ʔi·m kú·se./ 'even you (sg.) are going.'

|| ·nm||:
/qece·nm nú·n kusi·x./ 'even we are going.'
\[\text{||pem||:} \]
\[
/\text{pecepem } ?i\text{m}\text{é }\text{kusi } \text{x.}/ \text{even you (pl.) are going.} \]

Examples of type 2b:

\[\text{||k||:} \]
\[
/\text{kú}\text{x }\text{we }\text{t kiyú }\text{?}/ \text{I might go!} \quad (\{\text{kú}\text{x}\}) \text{ indefinite;}
\quad \{\text{we }\text{t}\} \text{ meaning uncertain; } \{\text{kú }\text{}\}'\text{go}; \{\text{u }\text{?}\}
\quad \text{future 638.6})
\]

\[\text{||m||:} \]
\[
/\text{kú}\text{m }\text{we }\text{t kiyú }\text{?}/ \text{you (sg.) might go.}
\]

\[\text{||nenm||:} \]
\[
/\text{kú}\text{nenm }\text{we }\text{t pekiyú }\text{?}/ \text{we (including you) might go.}
\]

\[\text{||pem||:} \]
\[
/\text{kú}\text{pem }\text{we }\text{t pekiyú }\text{?}/ \text{you (pl.) might go.}
\]
The subject-object suffix set has the following membership and allomorphs:

<table>
<thead>
<tr>
<th>Types</th>
<th>3a</th>
<th>3b</th>
</tr>
</thead>
<tbody>
<tr>
<td>{k}</td>
<td>1st person sg. e•k</td>
<td>k</td>
</tr>
<tr>
<td>{m}</td>
<td>2nd person sg. m</td>
<td>m</td>
</tr>
<tr>
<td>{nm}</td>
<td>1st person pl. e•nm</td>
<td>nm</td>
</tr>
<tr>
<td>{pem}</td>
<td>2nd person pl. epe</td>
<td>pe (before {mek}) pem (elsewhere)</td>
</tr>
</tbody>
</table>

{mek} 1st person subject and 2nd person object mek (after {pem}) mek

{pem} in 3a is found only before {mek}. {k}, {m}, {nm} and {pem} are found either as the subject or the object.

{mek} indicates that the subject is in the first person and the object in the second person.

The subject-object pronominal suffixes are used to express the following combinations of subject and object. In the following notation, 2s-1p, for example, indicates that the morpheme is used when the subject is second person singular and the object is first person plural.

{k}: 1s-3s, 1s-3p, 3s-1s, 3p-1s
{m}: 2s-1s, 2s-1p, 2s-3p, 3s-2s, 3p-2s, 2s-3s
{nm}: 3s-1p, 1p-3s, 1p-3p, 3p-1p
{pem}: 3s-2p, 2p-1s, 2p-3s, 2p-1p, 2p-3p, 3p-2p
{mek}: 1s-2s, 1p-2s
{pem}{mek}: 1s-2p, 1p-2p

The set 3a occurs with {we·t} question particle; and 3b with {ke} relative particle.

Examples of type 3a:

\|e·k\|
/\text{we·te·x}\?etwï·kce./ 'Shall I go with him?'
('e' third person object prefix 631;
{tïwi·k} 'accompany,' 'follow')
/\text{we·te·x}\?ené·stiwikce./ 'Shall I go with them?'
({ne·s} plural object prefix 634)
/\text{we·te·x}\ hitwï·kce./ 'Would he go with me?'
({hi} third person subject prefix 631)
/\text{we·te·x}\ hitwï·kcix./ 'Would they go with me?'

\|e·nm\|
/\text{we·te·nm}\ hitwï·kce./ 'Would he go with us?'
/\text{we·te·nm}\ ?etwï·kcix./ 'Shall we go with him?'
/\text{we·te·nm}\ ?ené·stiwikcix./ 'Shall we go with them?'
/\text{we·te·nm}\ hiné·stiwikcix./ 'Would they go with us?'

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\[\text{\textbf{emek}}:\]
\[\text{/we·temex tiwi·kce./ 'Shall I go with you (sg.)?'}\]
\[\text{/we·temex tiwi·kcix./ 'Shall we go with you (sg.)?'}\]

\[\text{\textbf{epe mek}}:\]
\[\text{/we·tepemex tiwi·kce./ 'Shall I go with you (sg.)?'}\]
\[\text{/we·tepemex tiwi·kcix./ 'Shall we go with you (pl.)?'}\]

\textbf{Examples of 3b:}

\[\text{\textbf{k}:}\]
\[\text{/kex ka· ?ewniye tī·?mes/ 'when I gave him the book ...' (\{kē·\} 'and' and means 'when' with \{ke\}; \{ińi·\} 'give'; \{tī·?mes\} 'book')}\]
\[\text{/kex ka· ?enē·čniye tī·?mes/ 'when I gave them the book ...' (\{ne·s\} plural object prefix 634)}\]

\[\text{\textbf{m}:}\]
\[\text{/kem ka· ?ini·me tī·?mes/ 'when you (sg.) gave me the book ...' (\{m\} locative 1, 637)}\]
\[\text{/kem ka· né·čhime tī·?mes/ 'when you (sg.) gave us the book ...'}\]

\[\text{\textbf{nm}:}\]
\[\text{/kenm ka· hiné·čniye tī·?mes/ 'when he gave us the book ...'}\]
\[\text{/kenm ka· ?epe?niye tī·?mes/ 'when we gave him the book ...'} (\{pe\} plural subject prefix 633)\]

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\[\text{pe pem\|:}\]
\[
/\text{kepem ka· pe?niye ti·?mes/ 'when you (pl.) gave me the book ...'}
\]
\[
/\text{kepem ka· ?epe?niye ti·?mes/ 'when you (pl.) gave him/them the book ...'}
\]
\[\text{mek\|:}\]
\[
/\text{kemex ka· ?iniye ti·?mes/ 'when I gave you (sg.) the book ...'}
\]
\[
/\text{kemex ka· pe?niye ti·?mes/ 'when we gave you (sg.) the book ...'}
\]
\[\text{pe mek\|:}\]
\[
/\text{kepemex ka· ?iniye ti·?mes/ 'when I gave you (pl.) the book ...'}
\]
\[
/\text{kepemex ka· pe?niye ti·?mes/ 'when we gave you (pl.) the book ...'}
\]

722. Plural suffix.

The single plural suffix \{tk\} occurs after \{'é\}'

'you (sg.),' e.g.,

/\text{?imé ?é·tx panáhpayo?/ 'you (pl.) will bring it'}
730. Particle constructions.

The question word (QW) and hortatory word (HW) have the following constructions:

QW: Q PS

HW: H PS.

In the above notation Q is question particle, H hortatory particle, PS pronominal suffixes. Examples are given in 821.
CHAPTER THREE

800. SYNTAX

810. The tactic units of the sentence are:

I (interjections)
C (connectives)
At (attributives)
S (subjects)
O (objects)
L (locatives)
Vc (copula)
Vg (general verbs)
Vp (possessive verbs).

These are described in order in the sections which follow.

811. Interjections (I).

The following are members of interjections:

1. Interjectory particle (710.13).

2. A construction involving the class of vocative suffixes,
   < e > (535):  I: sT e (536).

812. Connectives (C).

The two subdivisions of this unit are: (1) coordinating
and (2) subordinating connectives.
812.1 The coordinating connectives (Cc) are coterminous with the class listed in 710.6 as coordinating connective particles.

812.2 The subordinating connectives (Cs) are:
1. Subordinating connective particles in 710.7.
2. A construction involving a relative particle (710.3) with appropriate pronominal suffixes (721), e.g.,
   {ke ke·} 'when'
   {ke ku pe} 'where' 'at which place'
   {ke mìne} 'where' 'at which place'
   {ke mi k} 'where' 'to which place'
   {ke kuʔús} 'as'
   {ke ki wéy1} 'as long as'

813. Attributives (At).
   The following are found as constituents of attributives:
   1. substantive themes (sT) in which general noun stems (nS), numeral stems (nuS), demonstrative stems (dS), or adjective stems (aS) occur as constituents. These substantive themes are At1, At2, At3, and At4 respectively.
   2. a substantive theme followed by < nim > 531 (At 5).
   3. a substantive theme with < 'éyn > 534, or < k > 533 (At 6).
4. a substantive theme in which a verb theme (vT) and < 'e't > occur as constituents (At7).

5. an adverbial modifier 710.1 (At8).

6. a construction of a substantive theme and a comparative particle 710.2 (At9).

7. a construction with an indefinite particle 710.4 (At10).

8. a construction with a prenominal particle 710.12 (At11).

9. an adverbial particle {ku²ús} 'thus' (At12).

814. Expanded substantive themes (esT).

In this section, constructions involving substantive themes (sT) 520 as heads and extending over more than one morphological word, namely, expanded substantive themes (esT) will be discussed.

While all six subclasses of substantive stems - general noun stems (nS), numeral stems (nuS), kinship term stems (kS), personal pronoun stems (ppS), demonstrative stems (dS), and adjective stems (aS) - occur as heads in substantive themes, in an expanded substantive theme a dS or aS does not occur as head of construction.

814.1 Expanded general noun themes seldom involve more than six morphological words. The expansion is mostly regressive, however, frequently in personal names (with
At7 or At7, cf. 813) a head may precede, for example,

```
esT: sT At4
/ʔiceyé·ye ʔapsi·n/ 'Coyote With-Flint'
(ʔáps/ 'flint')
esT: sT At7
/wiyetené·t ʔilpílp/ 'Red Sun' (ʔilpílp/ 'red')
```

For other expansions to the right, see examples with At6, At11 and At12 below. In some cases the order is not rigid, e.g.,

```
esT: At1 At5 sT f At1 sT At5
/yox ʔipnim ʔini·t/ f /yox ʔini·t ʔipnim/
'that house of his' (ʔipnim/ 'his'; ʔini·t/
'house')
```

Other examples are:

```
esT: At1 sT
/titó·qan ʔiwé·pne/ 'Indian wife'
esT: At2 sT
/pá·xlo· háham/ 'five men'
esT: At3 sT
/ki· ʔiskit/ 'this road'
esT: At4 sT
/ʔilxní·we titó·qan/ 'many Indians'
esT: At5 sT
/ʔipnim niyáʔc/ 'his child'
```
/wapayataʔwáˑt Angusx/ 'assistant to Angus'

/qeqéˑrites kúˑs/ 'whiskey' (/{qeqéˑwi} 'be drunk'; {kúˑs} 'water')

/ʔo qiˑwniˑx/ 'very old man' (/{qiˑwn} 'old man')

/qétu himéˑqis wéˑtes/ 'bigger land' (/{himéˑqis} 'big')

/kúʔ maċ ?iniˑt/ 'some house'

/náˑqc hekip̄eʔ iske cicámx/ 'one looking like negro' (/{néˑqc} 'one'; {hekip̄e} 'seem'; {'iske} 'as, like'; {cicámx} 'negro')

/ʔipnim kúc̄kuc miyáʔc/ 'his small child'

/naqc hiˑkey lálx/ 'a cup of coffee' (/{hiˑkey} 'cup'; {lálx} 'coffee')

/ʔo qétu táʔc tiwéˑt/ 'much better medicineman'

/{teʔc} 'good'; {tiwéˑt} 'medicineman'
814.2 Expanded numeral themes.

The numeral system of the language is multiplicative and quinary-decimal. The multiplicative and quinary systems are indicated by affixes within morphological word boundaries, and are dealt with in 520 (pp. 76f.). Therefore, all the digits, 20, 300, 5000 etc. are covered under sT with nuS as the head. The others such as 21, 310, 5432 are expressed by expanded numeral themes. A connective particle \{weq\} (710.6) participates in this construction.

\texttt{esT: nuT \{weq\} nuT}

\texttt{/pú\textcdot timt waşı ná\textcdot qcwa/ 'eleven (men)'}

Along with the expanded numeral theme, there is a constructional doublet \texttt{/pú\textcdot timwe waşı ná\textcdot qcwa/ 'eleven (men)'} with classifiers occurring with each word in concord.
814.3 Expanded kinship term themes involve only personal pronoun stems with \{nim\}, e.g.,

\text{esT: At5 kT}

/\text{?ipn}im \text{pist}/ 'his father'

This construction provides the language with the possibility of doublets, e.g., /\text{na?t6}t/ 'my father' and /\text{?i}·\text{nim} \text{pist}/ 'my father.' The latter periphrastic form is more frequently used in a figurative, rather than factual father-son relationship, e.g., in religious usage.

814.4 Expanded personal pronoun themes occur only in the following form:

\text{esT: ppT At2}

/\text{nú·n \text{lepu}}\text{?}/ 'we two.'

815. Subject (S) and object (O).

The simple or unexpanded subject has an optional \{nim\} 531 and the simple object has an optional \{ne\} 532 as one of the constituents, the other being a substantive theme (ST), i.e.,

S: ST [nim]
O: ST [ne].

The subject with \{nim\} is found when the verb occurs with \{hi\} 631 or with \{pe \} 632. Elsewhere, the subject
is without \( \{\text{nim}\} \). The object with \( \{\text{ne}\} \) is found when the verb occurs with \( \{e\} \) 631 or \( \{\text{pe}\} \) 632. Elsewhere, the object is without \( \{\text{ne}\} \).

The expanded subject and object are:

\[
\begin{align*}
S: & \quad \text{esT } \{\text{nim}\} \\
O: & \quad \text{esT } \{\text{ne}\}.
\end{align*}
\]

Besides, the object may be expanded in the following way.

\[
O': O \ Vf
\]

/\(\text{ipné} \ \text{hiwe?npíse}\)/ 'him singing' (literally 'him he-sings') as in /\(\text{fi.n} \ \text{?amé?ya} \ \text{ipné} \ \text{hiwe?npíse}\)/ 'I hear him singing'

816. Locatives (L).

The following occur as members of the locative class.

1. adverbial particles 710.14, e.g.,

/\(\text{wá?sx}\)/ 'tomorrow,' 'yesterday'

/\(\text{wá?qo}\)/ 'now'

/\(\text{ka?la}\)/ 'just'

2. a substantive theme (ST) or an expanded substantive theme (esT) with \( \{\text{\"yn}\} \) 534, or \( \{k\} \) 533, e.g.,

/\(\text{piké?pe}\)/ 'at mother's' (/\(\text{pike}\)/ 'mother')

/\(\text{matni?ski kú?ski}\)/ 'with boiling water'

(\(\{\text{mét}\} \ 'boil'; \{\text{kú?s}\} \ 'water'; \{\text{ki}\} \) 533)
3. a verb theme with <e·t> class of suffixes (523.2), e.g.,
   /?ú·yit/ 'at first' ({'ú·yi} 'begin')

4. a construction involving a prenominal particle as one of the constituents (710.12), e.g.,
   /?iske ?á·la/ 'like fire' ({'lé} 'fire')
   /ká?la ?iske wé·qit/ 'just like rain'
     ({ké?le} 'just' 710.14; {wé·qi} 'rain (vb.)')

5. a construction involving an indefinite particle {kú?}
   710.4, e.g.,
   /kú? masi/ 'I don't know how long' ({mesi}
     'how long') as in /kú? masi kú·se/ 'I am going away for indefinite length of time'

6. a numeral theme with {éhem} 'times' (521.2), e.g.,
   /mitáham/ 'three times'

7. a construction involving a relative particle (710.3), and {ku?ús} 'thus,' e.g.,
   /ke ku?ús téhes/ 'like ice' ({téhes} 'ice')

8. a construction with adverbial modifier {qu} (710.1) and adjective themes, e.g.,
   /qo ?ilxniní/ 'very much' ({'iléxni} 'much,' 'many'; {nik} intensifier 521.2)

9. a negative particle (710.5) or a construction involving a negative particle, e.g.,
   /wé·tu/ 'not'
10. a pronominal particle with optional plural suffix (722), e.g.,

/ʔé/ 'you (sg.)' in /wi·ce ʔé/ 'you are crying'

11. a verb theme with one of the following two suffixes:

{'} (locative formant 1), {?yí} (locative formant 2),

e.g.,

/hipstú·y/ 'enough' ({hipstú·y} 'be satiated')

/weceʔyí/ 'on horse back' ({we·ce} 'ride a horse')

817. Finite verbs (Vf).

The finite verbs may be divided into general verbs (Vg), copula (Vc) and possessive verbs (Vp).

817.1 General verbs (Vg).

The simple or unexpanded verbs are found in three types of construction (639.2):

Vg : [hi] [pe] [ne·s] gvT isc

Vg : [pe·] gvT isc

Vg : [hi] st.

Expanded general verb includes one obligatory general verb, an optional general verb in the same person, number, and tense-modes, and optional objects.
Vg' : Vg Vg
/hí?psílëhneñecem hiku·tecem/ 'he came down
to get water' (literally 'he-came-down
he-came-after-water')
/kú·tx wileli·kitx/ 'run away!' (to more than
one person) (literally 'go! run!')

Vg' : Vg Vg O
/?íspsíli·kcene wiye?énpñeñe kapó·/ 'I walked
carrying coat' (literally 'I-walked I-carried
coat')

Vg' : Vg O Vg
/hicapá·íaqyayya hú·kux hihínaqiya/ 'he finished
drying hair' (literally 'he-dried hair
he-finished')

Vg' : Vg O
/?íné·ku·ye konyá/ 'I drank that'

Vg' : Vg O O
/hí?nìiyé ?í·né le?éptit waç ná·qc wa?wa·íam/
'he gave me twenty-one trout' ({le?éptit
weq né·qc} 'twenty-one,' {we?wé·íem} 'trout')

Vg' : O Vg
/mitáwna hiná·swalawqaqa/ 'he hanged three'

Vg' : O O Vg
/síkem titó·qana hiná·spaçoyqana/ 'he stole
horses from Indians' (literally 'horse
from-Indian he-stole')
Vg' : O₁ Vg O₂ (O₁ and O₂ constituting an expanded object)
/konmaná hiná·swalawqaqa yú?cmene/ 'he hanged
those poor ones' (literally 'those he-hanged
poor (pl. obj.)')

817.2 Copula (Vc).
The copulative verb construction is:
Vc : [hi] [pe] vcT isc.
A copula is not expanded.

817.3 Possessive verb (Vp).
A possessive verb (Vp) has a copula and an object
without {ne} as constituents.
Vp : Vc O
/?ú·s lepit mamá?yac/ 'he has two children'

820. The clause (CL).
A clause is preceded by silence, {,}, or {.} and
followed by either of the latter two, and contains one
obligatory verb (Vg, Vc, or Vp), and optional subject
and locatives.

There are following types of clauses:
(1) general clause (CLg) CLg : [S] Vg [L]
(2) copulative clause (CLc) CLc : [S] Vc S [L]
(3) possessive clause (CLp) CLp : [S] Vp O [L]
A subject in a copulative clause always occurs without \{nim\} 531, and a subject in a possessive clause always occurs with \{nim\}.

CL : CLg + CLc + CLp

Examples:

CLg : Vg

/hiwi·ne/ 'he cried'

CLg : S Vg

/ʔi·n wi·ne/ 'I cried'

CLg : Vg S

/ha·niya Chpaman/ 'Chapman made'

CLg : S Vg L

/ʔi·n ke je·hipe la·ʔám/ 'I too ate all'

CLg : S Vg L L

/kú·s hiwé·lece jilé·xni wé·qitkiñix/

'water runs high from rain'

CLg : Vg L

/ʔamći·sa ći·qipx/ 'I heard the talk'

CLg : L Vg

/kú·mtx wiske·jynimtx kiné·px/ 'come here!'

(Vg : Vg Vg)

CLg : L L Vg

/ki· kulé·wit taxc piʔamxno?/ 'we'll soon have a meeting this evening'
The two types of derivative clauses are:

(1) interrogative clause (CLi)  
Examples:
/wé.te.x kú.se/ 'can I go?'
/wé.temex lálkiní.se/ 'shall I give you coffee?'

821. The derivative clause.

The two types of derivative clauses are:
(2) hortatory clause (CLh)  

Examples:
/kex kú·s/ 'let me go'
/ke·mex ?i·n ?ínis/ 'let me give you'

In a hortatory clause, the verb is most frequently in the indicative perfect 638.2.

822. The dependent clause (CLd).

In a dependent clause (CLd), any of the clauses may occur in constituency with a subordinating connective (Cs) 710.7.

CLd : Cs CL
/qéce ?iⁿtò·tapmaʔá pó·pćiʔawna/ 'even when they killed your fathers'
/?etke we·s waqi·ma/ 'because I am old'
/ka ká· hinúxne/ 'when he died'
/ke mípx pekiyúʔ/ 'wherever we will go'
/ke kuʔús ?ipeli·kt hiʔlé·sece/
   'as a thunder rolls'
/ke kiwáyl ki· té·mux hiwekúʔ/ 'as long as this footprint will be here'
830. The phrase (Ph).

The following construction types are phrases.

831. Interjective phrase (IPh). I (811) followed by {,} or {.}.

/ʔe·hé./ 'Yes.'
/qalácaʔ./ 'Grandfather!'

832. General phrase (GPh). S, O, or L followed by {,} or {.}.

/wé·tu./ 'No.'
/páʔys wé·tu neʔé./ 'Perhaps not, huh?'

840. The sentence (SEN).

One of the two immediate constituents of a sentence is {.} (which in turn may be in IC with a final particle 710.10), the other being one of the following:

841. The minor sentence. Any phrase noted above.

SEN: IPh.

/ʔe·hé./ 'Yes.'

SEN: GPh.

/ʔimé·cteʔqeni·n./ '(man's name).'
842. The major sentence. Any construction with an obligatory clause (CL), or derivative clause, and optional dependent clause (CLd) and phrases (Ph).

SEN : CL.

/hiwi·ne./ 'He cried.'
/hiná·swalawqaqa mitá·wna ?etke./ 'He hanged three already.'

SEN : IPh CL.

/?e·hé, qoÆc ?iná·ta?latwisa./ 'Yes, I am already tired from talking.'

SEN : GPh CL.

/wá·qo, hiné·steqekiyu·six./ 'Now, they are after us.'

SEN : CL CLd.

/?i·n ?eslé·wqitwece há·cwala, ka ká· ?imé hi?nakaksix hipt./ 'I watch the child, while they are gathering food.' CL and CLd in this sentence are reversible.

SEN : CLd CL.

/?ineki·x ?ipi hiwé·ke wileke?yke?wé·t, métu čawi·n wé·tu ?ipním hi?pé·twixne ?i·ne./ 'Even though he was a runner, he was unable to overtake me.'
When more than one CL occurs in a sentence, one of the constituents may be a coordinating connective (Cc) 710.6.

SEN: Cc CL Cc CL.
/ká· wá·qo pu·qú·pe pipísne ka· ¿ipi
hi?nekehte té·pul./ 'He broke the bone
and took out the marrow.'

850. Concord and agreement

851. Concord. When morphologically appropriate, affixal elements occur distributively with every member in a substantive expansion, with the exceptions noted in expanded substantive themes (esT).

With {ki'nik} 'from' 533:
/koní·x ?ini·ttalamki'nikix/ 'from the roof
of that house' (literally 'from-that from-house-roof')

With {nim} (possessive-nominative) 531:
/kúckucnim mamaya?ásnim kó·maynin/ 'children's
disease' (literally 'small's children's disease')

With {ne} (objective) 532:
/?á·yatona siké·mne/ 'mare (object case)'
(literally 'female (object case) horse (object case)')
With \{pe\} 'at' 534:

/konyá ya?wi·cpa kú·spe/ 'in that cold water'
(literally 'in-that in-cold in-water')

852. Agreement. When there is an objective prefix \{e\} (631), or subject-object prefix \{pe\} (632) in the finite verb, the object in the sentence occurs with an object suffix \{ne\} 532, e.g.,

/tiwi·kce ki·?iskit./ 'I am following this road.'
/etwi·kce kínye ?iskine./ 'I am following this road.'

/sayqica miyá?c./ 'I admire a child (mine).'
/asayqica miya?ásna./ 'I admire a child (his).'

When three persons are involved expressed by an affective or benefactive suffix \{é·y\} 620 in the finite verb, the following agreement is observed.

/ki·met ka· pó·pci?yawcana miya?ásna kúksnim./
'Then they killed Cook's son.'

/ki·met ka· pó·pci?yawna?ysana kúksne miyá?c./
'Then they killed Cook's son' (they dared to, they went so far as to, they killed his son causing him to suffer)
The following is the opening section of a long text on the Nez Perce War of 1877, as told by Mrs. Agnes Moses (18687-1960). Mrs. Moses was one of the last monolingual speakers of this language. Her text is selected as indicative of the state of the language relatively little influenced by English. The analysis was made posthumously with the assistance of Mrs. Elizabeth Wilson.

910. Phonemic transcription.

1. ?ú·yitiwé·ye pí·wapci·yawn ha·niya cépmin.
2. mitá·wna hiná·swalawqaqa himí·snim hu·sus ka· ipcéyé·ye ?apsí·sna ka· ná·qc ?attó·la?ysa. 3. cépmin ká?lo hiwé·ke so·yá·po. 4. cépmin konmaná hiná·swalawqaqa ká?lo lilkúx yú·cmena. 5. ?iwé·pneki hiná·ssiyawna. 6. ká?la titó·qan ?iwé·pne ?ewé·ke, cépmin we?níkí·n so·yá·po. 7. tá·mnaqahtqínm há·ma ?ewé·ke himí·snim hu·sus.
920. Free translation.

1. At first the war started and Chapman\textsuperscript{1} started it. 2. He hanged three men; Wolf's Head, Coyote With-Flint, and the third I have forgotten. 3. Chapman was just a white man. 4. Chapman hanged those poor ones for no reason. 5. Because of his wife he was suspicious. 6. This white man named Chapman had an Indian wife. 7. Wolf's Head was Tá·ʔmnaqahqt'it's husband.

930. Analysis.

The text is given in phonemic, morphophonemic, and morphemic notations. Tactical classes and their constructions are indicated with reference to pertinent sections by numbers in parentheses.

\textsuperscript{1}This is probably Arthur L Chapman, who fired at the Indians with the flag of truce (McWhorter 1940: 56) and was the official interpreter at Chief Joseph's surrender (Howard and McGrath 1941: 282).
1. beginning it became war he made Chapman.
/ 'ú·yi·t'iwič'·ye + pi·wapciʔyawn + na·niya + cépmin .
|| 'ú·yi·t + hi wič'·ye + pi·wep ciʔyew n + hi he·niye + cépmin .
|| 'ú·yi·t + hi wič'·eye + pi·wep ciʔyew t + hi he·ni e + cépmin .
< gvS ?é·t hi gvS isc pi·aprxi * gvM ?é·t hi gvS isc nS

* aprx: adverbial prefix
2. three he hanged Wolf's Head and Coyote With-Flint

/ mitâ'wna + hiná·swalawqaqa + himi·snim + hú·sus + ka· + 'iceyé·ye + 'apsí·sna
|| mité·'w ne + hi né·s welewqeq e + him hi·s nim + hú·sus + ke· + 'iceyé·ye + 'eps hi·s ne
{ mité·'w ne + hi né·s welewqeq e + him hi'n nim + hú·sus + ke· + 'iceyé·ye + 'eps hi'n ne
< nuS we ne hi ne·s gvS isc nS 'éyn nim nS Cc nS nS 'éyn ne
and one I forgot

/ ka· + ná·qc + ?att6·1a?ysa
|| ke· + né·qc + 'e tituí·le ?ys e
{ ke· + né·qc + 'e tituí·le é·ys e

< Cc nuS hi gvS etk isc

| sT (522) | gvT (622.1)

| O (536) | Vg (639.2)

Vg (817.1)

(CLg)

CLg (820)

SEN(842)

CL(820)
3. Chapman just he was white man

/ cépmín + ké?1o + hiwé·ke + so'yá·po.

| cépmín + ké?1u + hi wé·ke + su'yé·pe we |
| cépmín + ké?1u + hi wé·e + su'yé·pe we |

< ns

hí cvís išc

ST (522)
CVT (622.2)
S (536)

S (536)
I (816)

S (536)

S (816)

S (536)

CLC (820)

SEN (842)
4. Chapman those he hanged just for nothing poor(pl.)

/ cépmin + konmaná + hiná·swalawqaq + ká?lo + lilkúx + yú?cme ne.

\\ cépmin + kun me né + hi né·s weléwqeq e + ké?lu + lilkúx + yú?c me ne.

{ cépmin + ku me ne + hi ne·s welé·wqeq e + ké?lu + lilkúx + yú?c me ne.

< nS dS me ne hi ne·s gVS isc nS me ne

sT (522) sT (522) gVT (622.1) sT (522)

O (536) Vg (639.2) O (536)

S(815) Vg(817) L(816) L(816)

CLg(820)

SEN(842)
5. because of wife he suspected

/ 'i̱wé·pneki hindá·ssiyawna .
∥ 'i̱wé·pne ki + hi né·s siyewe ne .
{ 'i̱wé·p ki + hi ne·s siyé·wse .
< kS k. hi ne·s gVS isc.

sT (522)
L (536)
CLg (820)
SBN (842)

gvT (622.1)
Vg (639.2)
6. just Indian wife he had Chapman named white man

/ká'la + titó'qan + ?iwé'pne + ?ewé'ke + cépmin + we?nikí'n + so'yá'po'.

|| ké?le + titú'qen + 'iwé'p ne + 'e wé'ke + cépmin + we?nik i'n + su'yé' pe we.

| ké?le + titú'qen + 'iwé'p ne + 'e wé'e + cépmin + we?nik i'n + su'yé' pe we. |  

< nS kS ne hi cvS isc nS gvS ?é·t nS 'éyn we |

sT (522) sT (522) cvT (622.2) sT (522) gvT (622.1) sT (522)

| 0 (536) Vc (639.2) At (813.3) |

Vp (817.3) esT (814)

L(816.1) S(815)

CLp(820)

SBN(842)
7. (personal name)'s husband was Wolf's head

/ té·ʔmnaqahtqim + há·ma + ʔewé·ke + him·i·snim + hú·sus .
∥ té·ʔmneqeq̓t̓q̓it nm + hé·me + 'e wé·ke + him hi·n n im + hú·sus .
{ té·ʔmneqeq̓t̓q̓it nm + hé·me + 'e wé·e + him hi·n n im + hú·sus .
<

\[\begin{array}{c}
\text{nS} \\
\text{nim} \\
\text{kS} \\
\text{hi cvS isc} \\
\text{nS ḧyn nm} \\
\text{nS}
\end{array}\]

\[\begin{array}{c}
sT (522) \\
sT (522) \\
\text{sT (622.2)} \\
sT (522) \\
sT (522)
\end{array}\]

\[\begin{array}{c}
\text{At (536)} \\
\text{Vc (639.2)} \\
\text{At (536)} \\
\text{esT (814.1)} \\
\text{S (815)} \\
\text{S (815)} \\
\text{CLc (820)} \\
\text{SBN (842)}
\end{array}\]