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A Grammar of Diegueño: The Mesa Grande Dialect

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A Grammar of Diegueño: The Mesa Grande Dialect

By

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DISSERTATION

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William Bright

Mary R. Haas

Committee in Charge

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Date

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INTRODUCTION

The term Diegueño is meant to designate the Indians who were under the jurisdiction of Mission San Diego de Alcala, in Southern California, as well as their language. Since this group coincides remarkably closely with the linguistic division and has been used consistently in the literature, it seems appropriate to retain it rather than attempt to replace it by some other designation (for some other suggested terms, see Joel 1964, and Winter 1957). Only if further study should reveal that more than one language is covered by the term Diegueño and that what is now called Diegueño is not itself a valid subgrouping would a change in terminology become mandatory. Diegueño, as defined above, is the westernmost language of the Yuman linguistic family, geographically centered around the present location of San Diego, California. The exact geographic territory occupied by Diegueño speakers requires clarification. Standard sources (Kroeber 1925, Waterman 1910) locate them throughout most of San Diego County and adjacent areas of Baja California. A somewhat more precise delimitation is now possible on the basis of field observations. Diegueño territory comprises all of San Diego County south of 33°15' latitude, most of Imperial County south of the same line exclusive of the easternmost section along the Colorado River, and the adjacent areas of Northern Baja California not further south than about 60 miles south of the Mexican border.

This corresponds to the area normally assigned to them in the literature, plus the territory assigned by Kroeber (1925) to the mysterious Kamia. It seems now quite certain that the Kamia were none other than Diegueño bands which regularly moved into the interior valley during the winter to return to their mountain home territory in eastern San Diego County at other times of the year. The term Kamia is obviously the equivalent of what I recorded as /kumɔya·y/ 'Diegueño', a term by which (according to some of my informants) the Yumas or Cocopas referred to their western neighbors. Whatever the origin of the name, however, there need not be any more mystery about a vanished group called Kamia. Additional confirmation of the above explanation (which is based on informants' recollections) may be found in the fact that some Diegueños now live among the Yumas and Cocopas whose territory lies east of the so-called Kamia area. It seems likely that some of them at least were among those who came to the interior valley some winter and kept moving eastward rather than returning to the west. Others are said to have been abducted by Yumas and Cocopas when the latter used to raid Diegueño territory.

The close relationship of Diegueño to other languages of the Yuman family has always been recognized since the languages are quite similar and cognates can readily be found by inspection. In Kroeber's subgrouping (Kroeber 1943), Diegueño is said to belong to the California group, together

with Akwa'ala (now called Paipai, see Joel 1964) and Kiliwa. Joel's (1964) revised classification considers Paipai and Kiliwa to be quite separate from Diegueño, apparently leaving the latter as a subgroup by itself. Definitive subgrouping within the Yuman family will probably have to await the availability of more extensive data on all the languages involved.

Another unsolved problem is that of dialect division. All authorities agree that, within Diegueño, there are at least two main dialect areas, Northern and Southern Diegueño for Kroeber, Western and Eastern for Waterman, Ipai and Tipai for Joel. In spite of the different terms, the divisions are essentially the same for all writers. On the basis of my own field observations, the only statement that can be made with any degree of assurance at the moment is that there is a great deal of dialect variation within Diegueño territory. Tentatively, however, I believe that three main dialect areas must be recognized. A first area, corresponding to Kroeber's Northern Diegueño, includes certainly the dialects of Mesa Grande and Santa Isabel (probably also San Pasqual). A second area, corresponding to the northermost part of Kroeber's Southern Diegueño, includes certainly the dialects of Campo, Manzanita, Cuyapaipe, Jamul. A third area, which I will temporarily call Mexican, includes certainly the dialect of San Jose de la Zorra, and probably those of Neji, Ha'a, La Huerta. Intermediate between

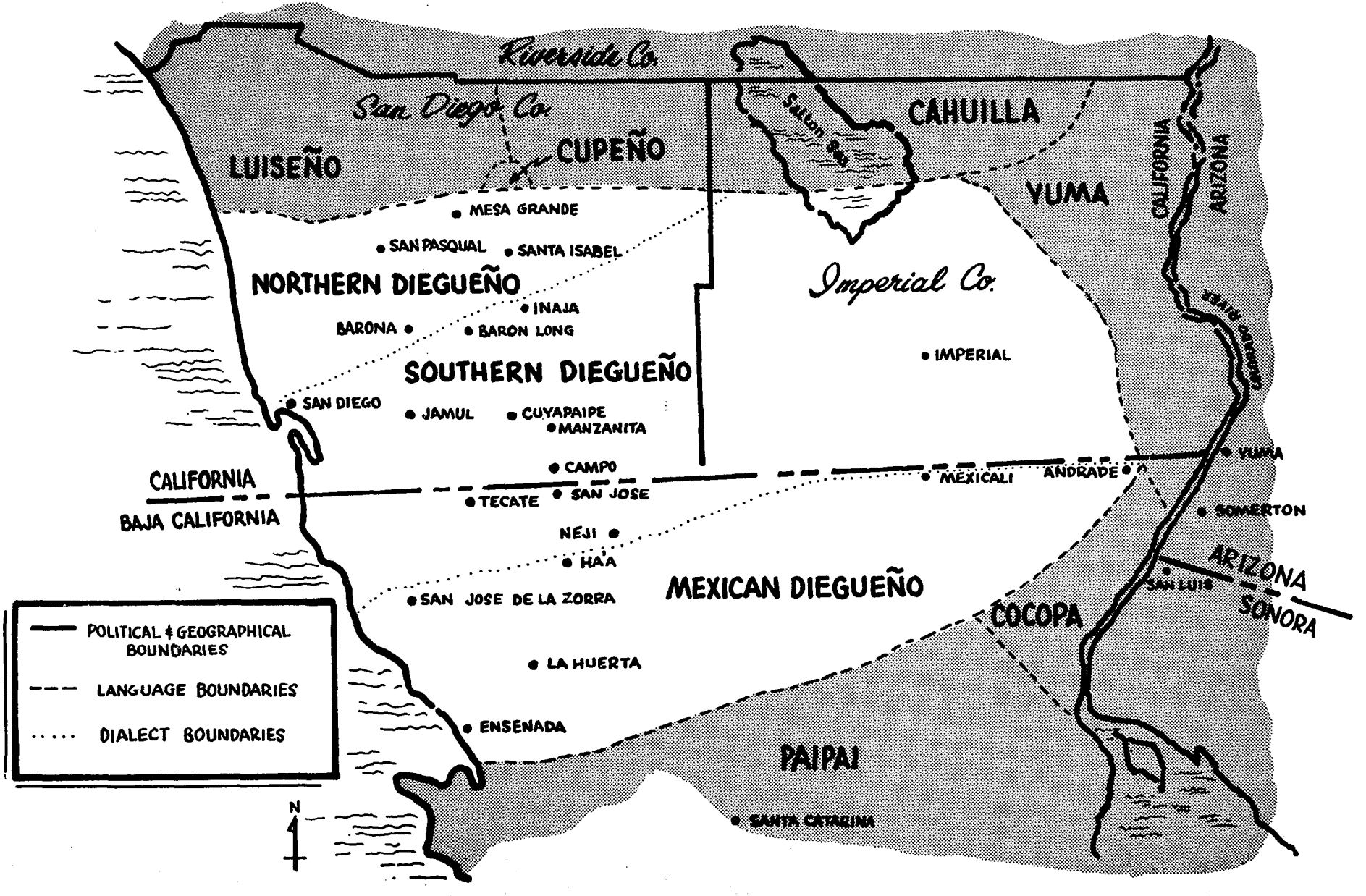
Northern and Southern in varying degrees would be Barona and Baron Long (both originally Capitan Grande), and Inaja. Intermediate between Southern and Mexican is probably the dialect of San Jose. It seems preferable at this point not to try any more precise statement as it is hoped that the results of a thorough dialect survey of the area which is now underway will allow a clearer picture to emerge in the not too distant future. The enclosed map summarizes the above statements.

Although some data have already been collected from a number of the localities mentioned above, the present grammar is based only on the Mesa Grande dialect, which is considered typical of the Northern dialect area. The data on which this description is based were collected during two three-month field trips, the first in the spring of 1963, the second in the spring of 1964. In addition, many details have been rechecked with informants at various times during 1965. At the present time, there are probably no more than a dozen speakers of the Mesa Grande dialect. My two main informants were Mr. Ted Couro of Escondido (76 years old), and Mrs. Christina Hutcheson of San Diego (85 years old), both natives of Mesa Grande. Their willingness to spend with me the long hours needed for elicitation, their intelligence, patience, unfailing memory, humor, and friendship represent the major contribution to this project and my indebtedness to them is immeasurable.

Although there exists an extensive ethnographic literature concerning the Diegueño Indians, their language has been unaccountably neglected. The only work devoted to it specifically is a short article by Kroeber and Harrington (1914) dealing only with the phonetics. An article by Law (1961) includes some of Winter's field data on Diegueño, unfortunately with some serious errors in transcription. A sketch of the phonemic system of Diegueño (based on the Inaja dialect) has just been published by Bright (1965). Other items containing linguistic information consist only of word lists, all fairly old and mostly of rather poor quality. The bibliography which follows therefore lists only such works as have been referred to in this Introduction as well as the basic bibliographic reference (Murdock, 1960-61) where all ethnographic works regarding the Diegueño are listed. A second section of the bibliography lists all unpublished Diegueño material outside of my own notes which I have either been able to consult or of whose existence I am certain.

So many people have contributed to making the present study possible that acknowledgements must of necessity remain incomplete. To my main informants, Ted Couro and Christina Hutcheson, and to all my other Indian friends, I owe not only the data for this grammar, but some of the most rewarding personal experiences of a lifetime. To Mrs. Florence Shipek, anthropologist, who has worked with the

Diegueño Indians for some eight years, I owe introductions into the Indian community which contributed greatly to making my initial contacts free of difficulties; to her intimate knowledge of the culture I owe many valuable insights. Professor William Bright provided me with names of prospective informants before I undertook my first field trip and was also kind enough to read the first draft of this grammar with great care and to give detailed suggestions for improvement. Professor Madison Beeler also read the manuscript and offered valuable comments. Most of all, I wish to express my deep gratitude to Professor Mary R. Haas, who first awakened my interest in American Indian languages, suggested Diegueño as a topic when I decided to try my hand at field work, arranged for support of my field expenses through the Survey of California Indian Languages at the University of California, Berkeley, and unfailingly provided support and encouragement through every phase of my work. Other sources of financial support must be acknowledged: a Cooperative Graduate Fellowship from the National Science Foundation for the academic year 1963-64 and an Advanced Graduate Fellowship in Linguistics from the American Council of Learned Societies for the academic year 1964-65. Finally, loving thanks go to my husband who has bolstered in every possible way my often failing determination to pursue this work to completion.


Riverside Co.
San Diego Co.
Salton Sea
CAHUILLA
LUISEÑO
CUPEÑO
YUMA
CALIFORNIA
ARIZONA
MESA GRANDE
SAN PASQUAL
SANTA ISABEL
NORTHERN DIEGUEÑO
Imperial Co.
INAJA
BARONA
BARON LONG
IMPERIAL
COLORADO RIVER
SOUTHERN DIEGUEÑO
SAN DIEGO
JAMUL
CUYAPAIPE
MANZANITA
YUMA
CAMPO
CALIFORNIA
MEXICALI
ANDRADE
TECATE
SAN JOSE
BAJA CALIFORNIA
SOMERTON
NEJI
HAA
ARIZONA
SAN LUIS
MEXICAN DIEGUEÑO
SAN JOSE DE LA ZORRA
COCOPA
SONORA
LA HUERTA
ENSENADA
PAIPAI
SANTA CATARINA
POLITICAL & GEOGRAPHICAL BOUNDARIES
LANGUAGE BOUNDARIES
DIALECT BOUNDARIES
N

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MS No.

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1159 Gabb, W. M., J. R. Bartlett, and J. S. Helmsing, Comparative vocabulary of H-taam (near St. Tomas, 1867, Gabb), Coco-Maricopa (Bartlett), and Cutchán (1876, Helmsing) 6 pp.

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1145 Henshaw, H. R., Diegueno vocabulary (San Diego, 1884) 52 pp.

1126 Mowry, Lt. Sylvester, Diegano vocabulary of 171 terms (Fort Yuma, 1856) 7 pp.

1627 ? Vocabulary of 180 words of the Dieguina language of California (in volume containing brief vocabularies of many tribes, pp. 77-81).

3436 Volume 3, 2-page Diegueno vocabulary in volume containing brief vocabulary of many tribes.

1143 Henshaw, H. W., Vocabulary of Santa Isabel and Mesa Grande dialects (1893) 60 pp.

1137 Barker, J. C., Vocabulary recorded at Santo Tomas Mission, Lower California (1876) 9 pp.

b. Manuscript held in the Boas Collection, American Philosophical Society, Philadelphia (a microfilm copy is in my possession).

Gifford, Edward N. Vocabulary of Five Yuman Languages (1917) 1 p. (Three of the so-called Yuman languages listed are undoubtedly Diegueño. They are identified as Northern Diegueño (Mesa Grande), Southern Diegueño (Guyayapipa), and Kamia (just below Andrade, Lower California). The latter, confirming statements made in the above Introduction concerning the Kamia, is almost identical to Southern Diegueño.)

c. Other sources.

More recently, the following people have, to my certain knowledge, collected some Diegueño linguistic material.

Professor Werner Winter while associated with the University of Texas, and Professor William Bright, University of California, Los Angeles, collected word lists in San Diego County.

Mrs. Judith Hicks (née [Judith] Joel), a student of Professor H. Hoijer at the University of California, Los Angeles, collected some word lists at La Huerta, San Jose de la Zorra, and San Jose during her stay in Baja California while studying Paipai.

A. S. Hayes, while at the University of California, Berkeley, spent approximately six months in Diegueño territory some ten years ago and collected a good deal of material, mostly on tape, which is held in the archives of the Survey of California Indian Languages, University of California, Berkeley. I have had access to this material as well as to a tentative unpublished phonemic analysis written by Hayes. This differs considerably from the analysis presented in this grammar, due in part to different linguistic orientation and in part to dialect variations.

Prof. J.N. Tidwell, of San Diego State College, San Diego, was kind enough to let me listen to some taped Diegueño material which he collected and to show me his transcription of it.

A fairly old word list which is held in the Archives of the Museum of Man in San Diego, was kindly made available to me for reproduction by Mr. Clark Brot, Curator of Collections. A number of wax cylinders said to contain Diegueño material are also held at the Museum of Man. Arrangements are now in progress to have their contents transferred to magnetic tape at the Language Learning Center of the University of California, San Diego.

Some notes collected by J. P. Harrington in Diegueño territory are held at the Linguistics Department, University of California, Berkeley.

Mrs. Florence Shipek, anthropologist, of Point Loma, also has collected a number of Diegueño forms while studying the ethnobotany of the region.

I understand that some records and other material collected around Mesa Grande were donated to the Museum of the American Indian in New York. I have not been able to check whether they have any linguistic material on Diegueño in their archives.

INTRODUCTION TO THE GRAMMAR

The present grammar constitutes a first description of the Mesa Grande dialect of the Diegueño language, based on field observations. The body of data collected is of sufficient scope to allow the hope that the most pervasive and regular patterns of the language have been observed, though it cannot justify the claim of being a "complete" grammar. Nor is it conceived as a generative grammar in the strict sense, since the task of ascertaining whether all utterances which could be generated by the application of its statements would be acceptable to native speakers is of such magnitude as to be impractical, and since I cannot claim to have acquired an active command of the language sufficient to allow me to make decisions of this type.

While the description is grounded in the conceptual framework of contemporary linguistic theory, it is not intended to follow any particular "school". The solutions to various problems of analysis adopted in this description were based on two guiding principles: descriptive accuracy and maximum generality. By descriptive accuracy I mean that the description aims at all times to account for the data inasmuch as this is accessible to me through direct observation. Maximum generality is to be understood as "simplicity", by which I mean overall simplicity within the framework of the total structure rather than specific simplicity of an individual statement. Nor are semantic considerations

excluded from the presentation, if they are felt to be relevant and to complement formal criteria. All languages obviously have a phonological, morphological, syntactic, and semantic aspect but I do not conceive of these as separate, airtight systems in a strict hierarchical arrangement. Rather, I envisage the divisions of a grammar into phonology, morphology, etc., as alternate ways of looking at the data, justified only insofar as each contributes insights into the structure of the language as a whole and allows greater generality of statements. For example, the unit "word" which, in Diegueño, requires for its full definition morphological and semantic considerations in addition to phonological ones, is nevertheless freely used in phonology since this is felt to account for the facts with greater ease.

While the techniques of analysis employed are the by now standard ones of contrast, distribution, substitution, etc., the description will take these for granted. A discursive style has been adopted as better suited for use by linguists in general and not only those of a particular persuasion, but is supplemented, wherever the material lends itself to it, by formulaic or tabular summaries. In general, the terminology employed has a deliberately old-fashioned ring, using familiar and conventional terms which, though some might be vague in an absolute sense, should be unambiguous when complemented by their definition and specific use within the description. The decision to proceed in this fashion

was based on practical considerations as well as personal preferences. The emphasis is on the language and on straightforward presentation of the facts. It should be emphasized that I do not make any claims of definitiveness for the grammar in whole or in part. This is a first description based on obviously limited acquaintance and should be left open for subsequent improvements. An over-rigorous framework was therefore not felt to be suitable as it might tend to minimize the areas of uncertainty by forcing arbitrary decisions and overgeneralizations which might impede further progress.

100 PHONEMICS

110 Theoretical Remarks

When a linguist first approaches the study of an unrecorded language, he is inevitably faced with the problem of devising a notation, a writing system, that will allow him to collect, study, analyze, and present the data. For this purpose phonemic theory provides a framework whose advantages are obvious to anyone who has dealt with the prephonemic and the phonemic literature. A writing system on phonemic principles combines descriptive accuracy with simplicity in a most satisfying way. Rules for converting to the phonetic representation are, on the whole, fairly straightforward and easy to remember, while the elimination of redundancies allows the other structural units to emerge unimpeded. It is not denied that a morphophonemic writing system serves this purpose also and, for some languages, may do so better than phonemics, with the reservation that only phonologically conditioned alternations be included. It is felt, however, that for languages with an average amount of morphophonemic alternations the number and complexity of rules for converting directly to the phonetic representation could make such additional demands on memory and manipulation that the gain in simplicity achieved in one direction may not contribute to the overall simplicity of the whole. Since the collection and presentation of texts is an indispensable part of a first description, these considerations are, I feel, of considerable

importance. The fact that there are phenomena which are not easily handled by phonemic theory (and Diegueño is no exception, see for example 142.1 and 142.2) is not a sufficient reason to reject its usefulness and its ability to account for a large part of the data. What it does suggest is that established criteria be modified or relaxed sufficiently to handle a larger amount of data. Furthermore, the identification of irregularities is as much the task of the linguist as the uncovering of broad regular patterns.

The notation proposed for writing Diegueño is therefore phonemic. Assignment of phones to phonemes is based on the standard criteria of complementary distribution and phonetic similarity. The criterion of biuniqueness, however, requires some comment since it may be interpreted in more than one way. In its most rigid form, it may be stated as follows: "Every token of the same phone type must be assigned to the same phoneme." Situations where a literal application of this rule gives unsatisfactory results have been reported for several languages. They are particularly numerous in Diegueño, where an application of the biuniqueness principle as just stated would force the recognition for a large number of forms of several phonemic shapes in free variation with each other, thus resulting in undue complication of the

description. A more relaxed interpretation of biuniqueness, first proposed by Bloch,* may be stated as follows: "Several tokens of a phone type may be assigned to more than one

*Bernard Bloch, Phonemic Overlapping. American Speech 16:278-84(1941). Reprinted in Readings in Linguistics, ed. by Martin Joos, New York, 1958. pp. 93-96.

phoneme, but only if they occur in non-contrastive distribution." In other words, a phone [ɔ] may be assigned, say to a phoneme /u/ in the environment X__Y, and to a phoneme /o/ in all other environments. Note that unambiguous conversion from the phonetic to the phonemic notation and vice versa is maintained which in my understanding is precisely what is meant by biuniqueness. In view of the greater flexibility of this second interpretation and its better suitability to the material described, it has been adopted in this grammar.

120 The word

In order to adequately describe Diegueño phonemes, it is necessary to establish the minimum unit within which they contrast, i.e. the word. This is required by the fact that allophony is controlled, not only by the immediate phonemic environment, but also by the position of the phone within the word and relative to stress which, in turn, is predictable within the word. The word, then, needs to be defined as unambiguously as possible. That it cannot be characterized

by phonological criteria alone should not detract from its validity as a unit, since it is quite obvious that in order to determine the contrastive elements of phonology, the least we have to know is that the forms within which they occur are meaningful contrasting elements of the language. Known loanwords are left out of consideration in the main body of the phonemic description. They are discussed separately in section 180 and the reasons for this division are given at that point.

The Diegueño word is defined as follows:

a) It is recognized by native speakers as a meaningful unit of their language and can be produced in isolation in the normal course of elicitation.

b) It conforms to the morphological definition of word as summarized in 310.

c) It contains one and only one vowel which is distinctly more prominent in loudness and pitch than any of the other vowels in the word, and is here called "stressed". Typically, this vowel is the last full vowel of the form, i.e. any vowel except /ə/. If the last vowel is /ə/, the preceding full vowel is stressed. A short vowel in word-final position is never stressed. When a word ends in a short vowel, the full vowel immediately preceding it is the stressed one. Thus, given words of the structure, CVCV·, CVCVC, CVCVCəC, CVCVCəCa, they are predictably stressed CVCV́·, CVCV́C, CVCV́CəC,

CVCV́CəCa. Only a very few words do not conform to this pattern and are found to contain the juncture phoneme /+/ (see 160, 856, and 857.2).

130 General subphonemic phenomena within the word

The following section describes a few phenomena of a subphonemic nature which are better treated separately from individual phonemes, as they are of a general character and are not restricted to individual phonemes. They can then be omitted from the rest of the presentation.

131 Stress

Diegueño is a strongly stressed language, but stress is not phonemic since its placement within the word is predictable. It is, however, an important part of the phonology, since it conditions the distribution of vowels and also affects the allophony of consonants (for full details, see the description of individual phonemes below). The description of stress may best be achieved by separating two components: loudness and pitch.

131.1 Loudness

Loudness is the component which most clearly differentiates stressed vowels from unstressed ones. Among vowels preceding the stressed vowel, long vowels tend to be somewhat louder than short vowels. Unstressed vowels in initial syllables in words of more than two syllables tend to be slightly louder than other unstressed vowels. Vowels following a stressed vowel have reduced stress, i.e. are less prominent than vowels preceding the stressed vowel.

131.2 Pitch

While a stressed vowel can clearly be identified by its relative degree of loudness, it also shows relative differences in pitch. The following description of pitch applies strictly to words produced in isolation in the normal course of elicitation, as this is felt to be least subject to expressive modifications. Even under these circumstances some variations were observed which seem to have a correlation with the general mood of the informant. The following statements, therefore, describe only the most commonly observed pitch patterns within the word.

Variations in pitch are associated with length according to the following patterns.

In all examples in this section, the forms are written phonemically, with additional diacritics to indicate loudness and pitch (ˊ = loudness, numbers represent relative pitch levels, from 0 'lowest' to 3 'highest').

i. Words with stress on the last vowel.

a) When all vowels in the word are short, or when only the stressed vowel is long (with the exception of cases described in b)), the stressed syllable is on a higher pitch than preceding ones (for a definition of syllable, see 171). These, in turn, are roughly on an even, lower pitch level.

Thus,

1 1 3 acəpác	'he took it out'
1 1 3 xaṭəpá·	'coyote'
1 3 ʔəmát	'land'
1 3 ʔəmú·	'wild sheep'
1 3 ʔəxmá·ɨ	'squirrel'
1 1 1 3 ṣəxəpətúnp	'he kneels'

Alternately, and this seems to be correlated with a general feeling of boredom or fatigue, the pitch may actually be lower on the stressed syllable than on the rest of the word. The same remark may be made for all other patterns too, and will therefore not be repeated.

b) Syllables containing long unstressed vowels or a short vowel followed by /ʔ/ are higher in pitch than those described in a). The pitch level may be the same as that of the stressed syllable or slightly lower.

2 3 ʔa·ṣá·	'bird'
2 3 a·kʷál	'he licks'
1 3 3 ʔəmɨ·wáṇ	'I'm tired'
2 1 1 3 a·kəṛətí·p	'in a row, lined up'
2 3 kʷaʔmá·y	'the high one'
3 3 kʷaʔṣáṣ	'the beautiful one'
3 1 3 taʔnʸəwáy	'we are there'
3 3 taʔám	'I'm around'

c) A stressed syllable containing a short vowel followed by word-final /ʔ/ is always higher in pitch than preceding parts of the word. This is apparently directly related to the imperative contour /!/ (see 160), since short stressed vowels followed by /ʔ/ occur only in imperative forms.

kəwiʔ	'do it!'
kí·maʔ	'dance!'
kəṣú·cuʔ	'poke the fire!'

ii. Words with stress on other than last vowel.

In this case, syllables preceding the stressed one follow the patterns described above, while syllables following the stressed one are lower in pitch than any of those which precede it.

ʔəná·vək	'if we go'
ʔəmáti	'on the ground'
mí·cá·a	'do you remember?'

132 Lengthening of consonants

In intervocalic position, certain consonants are occasionally longer than in other positions, and at first I often recorded geminate consonants. This feature seems to be restricted to very careful speech and was rarely recorded in texts. It appears to be nothing more than an emphasis of a feature characteristic of all consonants, i.e. their being fortis and clearly released (see 141). When the word has more than one intervocalic consonant, this feature, if present at all, will be associated with the first

intervocalic consonant in the word. It was not recorded after a long vowel. Nor does it seem to affect all consonants. It was recorded for all stops except /q/ and /ʔ/, and also for /s/, /m/, /l/, /ɬ/, and /r̥/. In addition, a similar lengthening was observed in final position after a short vowel, but only for /n/ and /r̥/.

Examples are written phonemically, with only the added length in phonetic brackets.

cəp[·]ap	'four'
xat̥[·]əpa·	'coyote'
tək[·]əsa·	'jaw'
xaɬ[·]əwa·	'cheeks'
wər̥[·]ap	'it hurts'
ʔəxin[·]	'another'
ʔəs[·]an	'my younger sister'
ʔən[·]əmu·y	'my mother's younger sister'
ət[·]u·	'belly'
xəc[·]ur̥	'cold'
ʔək^{w}[·]ak	'deer'
ʔəm[·]u·	'wild sheep'
al[·]əmi·	'beard'
ʔəkur̥[·]	'far'

140 The phonemes

The chart below lists the phonemes according to point of articulation (horizontal row) and manner of articulation

(vertical row) for consonants, and according to a front-back axis (horizontal row) and a high-low axis (vertical row) for vowels.

	Bi-labial	Dental	Al-veolar	Palatal	Velar	Labio-velar	Post-velar	Glot-tal
Consonants								
Stops	p	t	ṭ	c	k	k^w	q	ʔ
Spirants	v	s	ṣ		x	x^w		
Nasals	m	n	ṇ	n^y				
Laterals								
Voiced			l	l^y				
Voiceless			ɬ	$ɬ^y$				
r-like		r	ṛ					
Semi-vowels	w			y				

Vowels	Front	Central	Back
High	i		u
Mid		ə	o
Low		a	

Vowel length: /·/

Juncture: /+/

Emphasis: /ˊ/

Intonation contours: /./, /,/, /;/, /!/

141 Consonants

The statements made below describe the allophony as exhibited in words pronounced in isolation, disregarding the phenomena described under 130. A few additional allophonic variations occurring in texts are summarized in 150.

Except where specifically indicated for a particular phoneme, all consonants are fortis, i.e. articulated with great muscular tension, and clearly released. Stops are unaspirated; stops and spirants (except /v/) are voiceless; /v/, nasals, r-like phonemes, and semivowels are voiced. Only in the area of laterals is the voiced-voiceless contrast distinctive.

141.1 Stops

/p/ is bilabial. In final position, it occasionally has a slightly aspirated allophone, which is in free variation with the nonaspirated allophone. When following a stressed vowel and in turn followed by /m/, it is unreleased.

From this point on, all examples, unless otherwise specified, are in phonemic notation.

pəca·y	'daughter (man speaking)'
ʔup	'tobacco'
cəpap	'four'
kətopm	'throw a round object away!'

/t/ is apico-dental, optionally slightly aspirated in final position. When it follows a stressed vowel and is in turn followed by /c/, it is unreleased.

təkəsa·	'chin, jaw'	ʔətu·	'my belly'
ʔəmat	'land'	ʔəta·t	'my father'
		ʔəta·tc	'my father (subject)'

/ṭ/ is apico-alveolar or -postalveolar, optionally slightly aspirated in final position. It does not occur in word-initial position.

xaṭəpa· 'coyote' kəṭuk 'jump!'

ʔəx^{w}aṭ 'red, blood, ripe' ʔəxaṭ 'dog, domestic animal'

/c/ is the affricate [t^{š}], listed with stops for reasons of patterning and distribution. If it were analyzed as a cluster, it would leave a gap both in the stop series and in the palatal series, which are the most highly differentiated series in the language.

cəmiɬ^{y} 'ant' cəpəsi· 'liver'

a·canp 'he got off' ʔi·k^{w}ic 'man'

/k/ is dorso-velar, optionally slightly aspirated in final position. When it follows a stressed vowel and is in turn followed by /p/, it is unreleased. Forms of this shape were at first recorded without /k/ at all, as it is almost inaudible in that position. However, when these forms are repeated without the velar closure, they are never accepted by informants.

kətu·ɬ 'north' ʔi·ku· 'big'

ʔək^{w}ak 'deer' ṣi·yukp 'proud'

/k^{w}/ is dorso-velar with bilabial release. The possibility of analyzing it as */kw/ was seriously entertained, as it would reduce the phonemic inventory and would be unambiguous. The present solution was adopted on grounds of distribution, since */kw/ (as well as */xw/ which patterns

like it) would be the only permissible initial clusters. The description of medial clusters would also be unnecessarily complicated. It never occurs syllable-final.

$k^{w}ay?ku\cdot$	'the big one, chief'
$ək^{w}a\cdot$	'horn'
$xək^{w}an^{y}$	'child'

/q/ is post-velar, fairly rare, and not too easily distinguished from /k/. It is unambiguously present only in the speech of my oldest informant. It is never in initial position and was not recorded before /i/ or /i·/ or in other than stressed syllables. It is suggested that this phoneme is disappearing from the language.

?a·səqup	'I hug'	?əqu̱	'long'
?əsuq	'tule (var.)'	aq	'bone'
$?ən^{y}a\underline{ł}q$	'I swallow'		

/?/ is glottal. It is very common in initial position, may occur intervocalically and as first member of a consonant cluster, in final position only after a stressed short vowel.

?əta·t	'my father'	$n^{y}a?a\cdot m$	'when I go'
$k^{w}a?k^{w}as$	'the yellow one'	kəsi?	'drink!'

In the speech of Mr. Couro, a glottal stop after a short unstressed vowel is often replaced by length. This is particularly interesting in view of the fact that long unstressed vowels and short unstressed vowels followed by /?/ share the same pitch pattern (131.2b). Other dialects which I have had

occasion to hear appear to make much more frequent use of the glottal stop.

141.2 Spirants

/v/, the bilabial lenis voiced spirant [β], occupies a rather odd position in the system. It occurs only in certain suffixes (see 700), i.e. in position after the stressed syllable of the word, and is always followed by a vowel. This oddity is somewhat mitigated by a consideration of the behavior of some stops and spirants in word-final position in connected discourse (see 150), where they can occur very lenis and even voiced. The possibility of assigning this phone either to the phoneme /p/ or to the phoneme /w/ presents itself, as no true minimal pairs occur. However, sequences of /pv/ and /wv/ have been recorded and it seems more appropriate to retain /v/ as a separate phoneme. In so doing, it becomes possible to account for two apparent exceptions to the stress position rule, if it is recalled that /v/ only occurs after stress. These two forms are: pil^{y}vay 'right away, right now', n^{y}imvay 'anyway', both with stress on the first syllable in spite of the fact that the final syllable has a full nonfinal vowel (see 120c). After /m/, /v/ may have an allophone [b], freely varying with [β].

ʔəxa·vəc	'the water (subject)'
ʔi·k^{w}icvəc	'the man (subject)'
kuṭapvi	'in the ravine'
ʔəxa·vi	'in the water'

təwamvək	'if he is around'
kun^{y}a·wvəc	'the jack rabbit (subject)'

/s/ is apico-dental.

si̪^{y}k	'salty'	su·na̪t	'he plays'
pa·sin^{y}	'his wife'	ʔək^{w}as	'yellow'

/s̪/ is apico-alveolar or -postalveolar, pronounced with great tenseness, with the apex almost touching the back of the alveolar ridge, which gives it a distinctive "whistling" quality.

s̪əxuk	'ten'	s̪u·xu·	'he steals'
ʔəs̪as̪	'beautiful'	ʔa·s̪a·	'bird'

/x/ is dorso-velar, with no perceptible allophonic differences, though it is occasionally somewhat fronted before or after /i/ or /i·/.

xəma·	'he sleeps'	ʔəxa·	'water'
ʔəxu·	'my nose'	wənax	'heavy'
xu·ma·y	'son (man speaking)'	xi·wa·t̪	'bush (sp.)'

One pair of forms, however, was thought at first to be evidence for a second spirant phoneme in the velar area following the pattern already established for stops in connection with the phonemes /k/ and /q/. Phonetic recordings of these two forms are: [ʔəxpá·] 'eagle' and [ʔaxpá·] 'prickly pear', or [ʔixpá·] vs [ʔəxpá·], or [ʔəx̂pá·] vs [ʔəxpá·]. What always distinguishes the two forms is that the word for 'eagle' has a feature of frontness either in the first vowel or in the spirant which distinguishes it from

the word for 'prickly pear'. In fast speech, where the initial /ʔ/ as well as the following vowel may be omitted altogether, I find it completely impossible to differentiate the two forms phonetically. However, since Mesa Grande informants consistently keep the two forms distinct when pronounced in isolation, they are phonemicized /ʔixpa·/ 'eagle' and /ʔəxpa·/ 'prickly pear'. A Santa Isabel informant declared the two forms to be homonymous. Of interest also is the fact that in the southern dialect the word for 'eagle' is recorded as [s̥pa·]. The alternation between [x] and [s̥] affects a certain number of other forms across dialects.

/x^w/ is dorso-velar with labial release. It patterns in all respects like /k^w/ and all remarks made for /k^w/ apply in this case also, except that /x^w/ is much rarer in word-initial position. This is probably fortuitous since /k^w/ is the representation of a very common morpheme.

$x^wa\dot{+}^y$	'quickly'	ʔəx^{w}a·	'stranger'
ʔəx^{w}i·	'I smell'	məx^{w}a·	'badger'

141.3 Nasals

/m/ is bilabial. Before /p/ it is unreleased. In word-final clusters, when preceded by a stressed vowel plus /p/, it is syllabic [m̥]. Before /t/, it is sometimes released in the manner of a stop [m^p].

məx^{w}a·	'badger'	məmi·	'you cried'
ʔəl^{y}ma·m	'little one, child'	ʔəmpi$\dot{+}$	'ashes'
kətopm	'toss a round object!'	ʔəmtan̥	'naked'

/n/ is apicodental. It is always clearly released and, before /k/ sometimes heard with release in the manner of a stop [n^t].

nəmas	'racoon'	ʔənəpa·w	'my father's father'
ʔəna·mx	'let's go'	ʔəmi·wan̥	'lazy'
ʔəxpank	'whale'	təkəwank	'turned over'

/n̥/ is apico-alveolar or -postalveolar. It never occurs before /i/ or /i·/ and rarely in initial position.

n̥əmi·	'he is mad'	wəman̥	'he gets up'
a·n̥ak	'he ties a long object'	xun̥	'dark'

/n^y/ is lamino-palatal.

n^yəmta·y	'mountain lion'	ʔən^{y}a·	'I, day'
ʔəman^y	'I spread it out'	sin^y	'woman'

141.4 Laterals

/l/ is apico-alveolar or -postalveolar, and voiced.

ləmis	'fur'	ʔəlu·	'I go away'
xəlul	'he plays the flute'	a·k^{w}al	'he licks'

/ɬ/ is formed in the same articulatory position as /l/, but is a voiceless lateral spirant.

ɬəxup	'hole'	wəɬic	'he is bad'
ʔaɬ	'wide'	ʔəquɬ	'long'

/l^y/ is lamino-palatal and voiced. It was not recorded in initial position, except in a word which was identified as belonging to the Santa Isabel dialect, /l^{y}ayk/ 'light in weight' for which the Mesa Grande equivalent is /wəl^{y}ask/.

əmil^{y} 'foot, leg' ʔəwil^{y} 'rock'

wəl^{y}ak 'he lies down' ʔəl^{y}əmis 'several small things'

/ɬ^{y}/ is formed in the same articulatory position as /l^{y}/, but is a voiceless lateral spirant. It is rare in word-initial position.

ɬ^{y}əpəwaṛ 'he can't do it' xəɬ^{y}a· 'moon'

kaɬ^{y}əx^{w}i·w 'skunk' ʔəmpiɬ^{y} 'willow (var.)'

141.5 r-like phonemes

/r/ is a voiced apico-postdental trill. It is of rather rare occurrence.

wəra·w 'sharp' ki·xa·r 'he complains'

/ṛ/ is an apico-alveolar or -postalveolar voiced resonant, articulated in the same position as /ṣ/, but with much less tension. Its acoustic perception is somewhat similar to that of English /r/, but more tense and occasionally somewhat spirantized, especially in initial position and before or after /i/ or /i·/.

ṛəwi· 'alike' kuṛak 'old man'

ʔəkuṛ 'far' təpək^{w}i·ṛp 'whirling'

141.6 Semivowels

The semivowels /w/ and /y/ occur only before and after vowels. They are consonantal in syllable-initial position. Otherwise they are part of the vocalic nucleus and form diphthongs with the preceding vowel.

/w/ is consonantal [w] in syllable-initial position. Elsewhere, it is [U̯]. The latter does not occur in unstressed syllables.

wənak	'he sits'	kəwi?	'do it!'
xa·wka	'hello'	wənu·w	'he runs'

/y/ is consonantal [y] in syllable-initial position. Elsewhere, it is [I̯]. It is fairly rare in that position in unstressed syllables.

yaq	'it lies'	əyi·w	'eye'
k^{w}ay?ku·	'the big one, chief'	?əma·y	'high'

(For more examples of semivowels in vocalic nuclei, see 142.)

142 Vowels

Vowels occur either short or with length /·/. Both short and long vowels may combine with /w/ and /y/ to form diphthongs when the latter are in other than syllable-initial position. Some restrictions to this general statement will be found below. The vocalic units of Diegueño may best be described as forming two distinct, though overlapping systems: stressed vowels and unstressed vowels, differing both in inventory and allophony. Stressed vowels, whether short or long, in addition to having the stress characteristics described in 131, are stable in quality and their allophony can be readily described. This characteristic is also shared by unstressed long vowels. Short unstressed vowels, on the other hand, are often considerably reduced and unstable in quality. Under certain conditions which are not

as yet fully understood (see, however, 210), some of them may be omitted altogether. This latter feature seems to vary somewhat from dialect to dialect and even from speaker to speaker within the same dialect, and is definitely more frequent in fast speech. On the basis of material collected from various dialects, Mesa Grande speech seems to retain more vowels than other dialects. Initial vowels are pronounced with a clearly audible aspirated onset.

142.1 Stressed vowels

Stressed vowels are /i, a, u, o/. They may all be short or long, and all of them except /o o·/ form diphthongs when followed in the same syllable by /w/ and /y/. Not all combinations have been recorded. A full inventory of diphthongs is /ay, a·y, aw, a·w, uy, u·y, uw, u·w, iw, i·w/. This leaves a gap of */iy/ and */i·y/; although a few forms were at first recorded with /i·y/, these were found on longer acquaintance to be instances of /i·/. The allophony of stressed vowels is as follows.

/i/ is [I˙] or [E] when preceded by /m/ or /p/ and immediately followed by /ɬ/ or /l/, [I] elsewhere. It is particularly short in the diphthong /iw/ which sometimes alternates with /u·/ (see 220), especially after /s̟/ or /y/.

n^{y}iɬ^{y}	'black'	ʔi·k^{w}ic	'man'
ʔəmpiɬ	'ashes'	ʔəmiɬ	'meadow'
xəmilx	'he is young'	ləmis	'fur'
xəpəsiw	'green'	a·yiw	'he brings'

/i·/ is normally [e·]. In final position, it is [I·] after a /w/ or a labiovelar; elsewhere in final position [e·] varies freely with [I·].

ʔəkʷi·	'rain'	wi·	'he said'
wəmi·	'he cries'	apəsi·w	'a lot, very'
ṛi·	'placid, quiet'	a·kəṛəti·p	'in a row'

/a/ has the following allophones:

[ʌ] before /ṛ/,

[ɛ] before /y/, slightly more central [ɛ˃] when the preceding consonant is /p/, /k/, or /x/.

[ɑ] before /ṭ, ṇ, ɬ/,

slightly rounded [ɒ] between /w/ and /m, k, x/,

[a] elsewhere.

ʔəxaṛ	'wet'	ʔaṛ	'I want'
məlay	'he died'	wənʸay	'he hunts'
ʔi·pay	'person, Indian'	ti·kay	'he asks'
ʔəxaṭ	'dog'	wəmaṇ	'he got up'
ʔi·paɬ	'summer'	təwam	'he was around'
xəwak	'two'	səwax	'husky'
ʔəmat	'earth'	təkəmak	'Mesa Grande'

/a·/ is [a·] everywhere.

əkʷa·	'horn'	kukʷa·yp	'meat'
ʔəta·t	'my father'	wəra·w	'sharp'
sa·y	'dry'	ʔa·w	'fire'

/u/ is [o] before /w/. It is [ɔ] in the following environments: (see however, the discussion of /o/ and /o·/ below).

1) when preceding or following /q/,

2) in initial position, after /ʔ/, an alveolar, or /x/, and at the same time followed by an alveolar, or /x/, or /y/. In most of these cases it varies freely with [U], except before /y/, where it is always [ɔ].

/u/ has the allophone [U] in all other cases.

wənuw	'he runs'	a·cuq	'he mashes'
a·səqup	'he hugs'	xuṇ	'dark, night'
ux	'he coughs'	ʔuy wi·	'there is nothing'
cəxuləxul	'he gargles'	ʔəlul	'spherical'
n^{y}ipxuṭ	'not that'	ʔərur̥	'circular'
ʔəkuɬ	'I climb'	n^{y}a·pum	'then'

/u·/ is [ɔ·] in the same environments where /u/ has the allophone [ɔ] (see, however, discussion of /o and /o·/ below). It is [o·] elsewhere, but in final position, [o·] may vary freely with [U·]. Some speakers consistently prefer the higher allophone, others the lower.

ʔəxu·	'my nose'
ʔənəmu·y	'my father's younger sister'
cəpəɬu·yk	'it's boiling over'
ʔəwu·w	'I see'
ʔi·ku·c	'big (subject)'

The phonemes /o/ and /o·/ require special discussion, but may be treated together as all remarks are equally applicable to both. Except for a few forms, the vowels described so far account for all the vocalic contrasts in stressed position. One minimal pair, however, exhibits an

additional contrast which makes the new distinction imperative, i.e. [ʔətú· ~ ʔətó·] 'my belly', vs [ʔətó· ~ ʔətɔ́·] 'I hit him with a stick'. The symbol "~" is here used to indicate variations from one speaker to another, but within each idiolect the two forms consistently contrast. In this and a few other cases also involving short vowels, the phonemes /o/ and /o·/ seem fully justified as representations of the phones [ɔ] and [ɔ·] (the latter alternating in final position with [o·] for some speakers). However, a number of forms were recorded with these phones in environments where no contrast with /u/ and /u·/ was found and where the immediate environment allows their unambiguous assignment to these phonemes. If this solution is adopted, and it is my distinct preference in view of the restricted occurrence of the /o/ phonemes, we have a situation where the same phone is assigned sometimes to one phoneme, sometimes to another, but in conformity with the definition of biuniqueness adopted in 110. When statements of distribution are taken into account, the proposed phonemic transcription is quite unambiguous and seems to me to better reflect the structure of the language. The following forms (and their paradigms) are a full list of recorded instances of /o/ and /o·/.

xəno·	'he is sick'	kuxnoc	'the sick one'
wəto·m	'he pays'	ʔətopm	'I throw'
ʔətopk	'I toss'	nəso·m	'It is all over'
ʔəto·	'I hit him with a stick'		

It is probably significant that in all these cases, /o(·)/ occurs following a dental consonant. Note also that the existence of forms such as

tap	'to put down round objects'
na·	'they go'
u·ta·m	'he takes away a bunch'

prevent assignment of the phones [ɔ] and [ɔ·] to the phonemes /a/ and /a·/ respectively.

142.2 Unstressed vowels

142.21 Before stress

142.211 Long vowels and diphthongs

Long unstressed vowels have the same quality as long stressed vowels, but /o·/ never occurs unstressed. Only /ay/ and /a·y/ among the diphthongs were recorded in that position.

ʔəmi·waṇ	'he is tired'
a·kaṭ	'he cuts (with long instrument)'
cəmu·xuy	'it is steamy'
mayʔpaṭ	'you are alive'
təpu·su·l^{y}p	'he swings'
ʔi·pay	'person'
əta·ṛa·w	'he heats it'
ma·yki·wayk	'he forgets'

142.212 Short vowels

Unstressed short vowels represent the most elusive part of the phonology. They are generally reduced and unstable, tending to be centralized toward [ə] with variations in quality often predictable on the basis of the environment. Some short unstressed vowels, however, have a quality which cannot be predicted from the environment and contrast with other short unstressed vowels, so that the tendency to neutralize short vowel contrasts in unstressed position is not unvarying. In order to account for the facts, the following vocalic system is recognized for unstressed vowels: /i, a, u, ə/, the first three representing cases where the vowel quality cannot be predicted from its environment, [I], [a], and [U] phonetically. Unstressed occurrences of /i/, /a/, and /u/ are not too common, but the following examples illustrate the attested contrasts:

ʔacək^{W}i·	'we are big'	ʔəcək^{W}i·	'they are big'
ukəna·	'he tells someone'	əkəna·	'he tells a story'
ʔixpa·	'eagle'	ʔəxpa·	'prickly pear'

/ə/ is then the one phoneme which is always unstressed, never long, and accounts for all cases of unstressed vowels whose quality is either [ə] or is predictable from its environment. The possibility of eliminating the phoneme /ə/ altogether is a very attractive one, as its presence is often predictable. However, an attempt to state rules which would make [ə] predictable from a phonotactic point of view

(i.e. on the basis of permissible and nonpermissible consonant clusters) had to be abandoned since there are forms which exhibit medial consonant clusters which are never separated by [ə], while others show the same consonants with intervening [ə]. Thus,

məspil^{y} 'sparrow hawk' always has [sp], while

məsəpiṛ 'you are strong' typically has [səp], but may be reduced to [sp] in very fast speech.

pəɬ^{y}ta·y 'sagebrush' always has [ɬ^{y}t], whereas

pəɬ^{y}əṭap 'it explodes' always has [ɬ^{y}əṭ].

It is interesting to note that inseparable clusters occur mostly in nouns, although even by this criterion there are exceptions. Thus, xəmən^{y}a·w 'shoes, sandals' is

[xamIn^{y}á·U̯] ~ [xəmən^{y}á·U̯] ~

[xamn^{y}á·U̯] ~ [xəmn^{y}á·U̯]

A compromise solution might have been never to write a predictable vowel in the first syllable of words beginning in a consonant, since there are no initial clusters and the presence of the vowel is completely predictable in that position. However, since prefixation is a very productive process in the language, this solution would force us to write a stem without vowel in unprefixed forms, but with a vowel in prefixed forms. For example, /xəma·/ 'he sleeps' could be written */xma·/ and the phonetic form must contain a vowel between the consonants since no initial clusters are allowed. /məxəma·/ 'you sleep' would then have to be written

*/mxəma·/ to differentiate it from /kəxmaʔ/ 'sleep!' which in the alternate notation would be */kxmaʔ/.

For reasons of consistency, therefore, the more redundant solution of writing a vowel wherever it is present phonetically was adopted.

The allophony of the phoneme /ə/ may now be stated.

[I] ~ [ə] before palatals, and after palatals when the following consonant is a bilabial, labiovelar, or velar. Between palatals, [I] is much more frequent than [ə].

[ɛ] ~ [ə] before dentals. Between dentals, [ɛ] is much more frequent than [ə].

[a] ~ [ə] before velars, and after velars when the following consonant is not a palatal.

[U] ~ [ə] before /w/ unless the following vowel is /u(·)/, and after /w/.

[ə] elsewhere.

Since some of the environments as stated overlap, one might expect three-way alternations and, indeed

[I] ~ [U] ~ [ə] is attested when preceded by /w/ and followed by a palatal or the reverse.

No clear-cut statement can be made as to what might influence the choice between the variants in any one case. The following trends, however, have been observed. In words of more than two syllables, or in words of two syllables with medial consonant cluster, the non-ə variant tends to be more common

in initial syllables, but the higher variant in terms of articulation tends to be more common when the stressed vowel of the word is /i(·)/ or /u(·)/ (i.e. a high vowel), while the lower variant is more frequent when the stressed vowel is /a(·)/ (i.e. a low vowel). Other factors which cannot be clearly defined may be at work and may involve speed, dialect mixture, personal idiosyncrasies, syntactic context. Variations of this kind are very difficult to handle in an unambiguous way, and the above discussion tries to come as close as is possible to a statement which will accurately cover the phonetic facts.

Some additional difficulties remain. For example, a fairly limited number of forms (but sufficient to represent more than isolated exceptions) were recorded consistently with a phone [a] in environments where [a] ~ [ə] is predictable. Adherence to the biuniqueness principle followed elsewhere in this description would force us to phonemicize this as /ə/. However, and for purely practical reasons, i.e. recoverability of phonetic reality and unambiguous identification of these cases if some better solution becomes available in the future, I propose to write these forms with /a/, just as if the [a] quality were not predictable in that environment. For example, I will write /xaɬəwa·/ 'cheeks' and not */xəɬəwa·/ for phonetic [xaɬəwá·] ~ [xaɬʊwá·]. (Here again the forms in question are mostly nouns.) This should be understood as a temporary solution.

It is interesting to note that the problem of short unstressed vowels seems to present equivalent difficulties in other Yuman languages. For Yuma, Halpern (IJAL 12:25-33, 1946) proposes to assign predictable unstressed vowels to /a/, but still finds it necessary to set up a phoneme /ə/ in post-stress position. For Walapai, Redden (IJAL 32:1-16, 1966) assigns various occurrences of [ə] to different phonemes depending on the environment. Only Winter, again for Walapai (IJAL 32:17-40, 1966), admits the difficulty of describing this situation by conventional methods. He states:

> "It is not easy to accommodate these facts in terms of standard theory. A rejection of the assumption of partial overlap of allophones and phonemes results in the setting up of a very high number of allomorphic doublets, its acceptance, in uncertainties in the phonemic analysis: if [a] is recognized as an allophone of both /a/ and /ə/, a sequence [pak] (with weak stress) can obviously not be phonemicized in an unambiguous way."

I cannot think of a more concise way of stating the problem, which obviously is very similar to the Diegueño one.

Examples of /ə/ before stress:

ʔipəwi·	'wild lilac'
ʔəmat	'land, earth'
ʔəwa·	'house'
wəcu·w	'he makes it'
ʔən^{y}a·wup	'we'

ʔətal^y	'my mother'
ʔənəmu·y	'my mother's younger sister'
əwu·w	'he sees it'
ʔəwil^y	'rock'
n^yəxay	'juice, soup'
ʔəqułˑ	'it is long'
n^yəwa·yp	'he lives'
ʔəcu·y	'my husband'
cəcəmac	'they taste'
ʔəl^yəmis	'they are little'
cəpəsi·	'liver'
ʔəcəku·	'my father's younger brother'
ʔətətəxi·łˑ	'we drag it'
kətxi·	'gopher'
kəpṣuw	'wait!'
xəma·	'he sleeps'
wənuw	'he runs'
nəməsa·p	'morning'

In reduplicated forms which have to be considered as one word when they only have one stressed vowel, the quality of the stressed vowel is maintained in unstressed position.

paˑłpaˑł	'torch'
xirkəxirk	'striped'
lukəluk	'shining'
pinəpi·n	'lukewarm'
marəma·r	'fast'

142.22 After stress

The general pattern is for words to be strêssed on the last syllable. However, the morphology allows the addition to such forms of a number of suffixes which in some cases add unstressed syllables after the stressed one. Vowels in this position are even more reduced than in prestress position. The only vowel between consonants is /ə/. Other vowels appear only in word-final position. Phonetic values are as follows:

/a/ is always [a].

/u/ is always [ɔ].

/i/ is always [ɛ].

/ə/ is [I] before palatals (only /c/ and /ɬ^{y}/ are possible), [U] between velars (only k_x is attested), [ə] elsewhere. One suffix, of very rare occurrence, contains the diphthong /ay/.

ʔəna·vək	'if we go'
ʔəxana	'is it good?'
ʔi·k^{w}icvəc	'the man (subject)'
kuṭapvi	'in the ravine'
wa·mxɬ^{y}a	'would he go?'
ʔəmatvu	'the ground (specifically)'
ʔəwa·vəɬ^{y}	'into the house'
pil^{y}vay	'right now'
ʔəna·məx	'we will go'
n^{y}aʔəṛakək	'when I will be an old man'

143 Minimal pairs

In order to substantiate the validity of the phonemes described in 141 and 142, a few minimal pairs, near minimal pairs, or forms exhibiting the phonemes in question in similar environments are given below to illustrate contrasts between those units which are similar enough phonetically to warrant their possible candidacy as allophones of the same phoneme.

/p/ - /w/ - /v/:	pənak	'they sit'
	wənak	'he sits'
	əma·wą	'is it not?'
	ʔa·vi	'in my mouth'
	kəna·pa	'does he tell?'
	ʔəna·vək	'if we go'
/t/ - /ṭ/:	kətuk	'carry it on your back!'
	kəṭuk	'jump!'
	ʔəmat	'land, earth'
	ʔəmaṭ	'I think'
/k/ - /k^w/:	kəyu·w	'get it!'
	k^wəyu·w	'he who gets'
/x/ - /x^w/:	ʔəxa·	'water'
	ʔəx^wa·	'stranger, enemy'
/k/ - /q/:	ʔək^wak	'deer'
	ʔəxk^waq	'bitter'
	aq	'bone'

/ʔ/ - Zero:	ʔa·k^{w}al	'I lick'
	a·k^{w}al	'he licks'
/s/ - /s̤/:	k^{w}ənməsa·p	'star'
	k^{w}ənməs̤ap	'the white one'
/n/ - /n̤/:	ʔəman	'I fly'
	ʔəman̤	'I get up'
	ʔənak	'I sit'
	ʔa·n̤ak	'I tie it'
/n/ - /n^{y}/:	ʔəman	'I fly'
	ʔəman^{y}	'I spread it out to dry'
/l/ - /l^{y}/:	xəlul	'he plays the flute'
	ʔəsul^{y}	'my older brother'
/ɬ/ - /ɬ^{y}/:	ʔəmiɬ	'meadow'
	ʔəmiɬ^{y}	'head louse'
/l/ - /ɬ/:	xəmal	'clover'
	xəmaɬ	'his ear'
/l^{y}/ - /ɬ^{y}/:	n^{y}il^{y}	'black'
	n^{y}iɬ^{y}	'very black'
/r/ - /r̤/:	wəra·w	'it is sharp'
	wər̤a·w	'it is hot'
/i/ - /i·/:	wəɬic	'he is bad'
	wəɬi·c	'they are bad'
/a/ - /a·/:	ku·kap	'he goes around'
	ku·ka·p	'they go around'
/o/ - /o·/:	xənoc	'they are sick'
	xəno·c	'he is sick (plus syntactic affix)'

/u/ - /o/:	no good examples available in view of rarity of /o/.	
/u·/ - /o·/:	ʔətu·	'my belly'
	ʔəto·	'I hit him (with stick)'
/i/ - /ə/:	ʔixpa·	'eagle'
	ʔəxpa·	'prickly pear'
	ʔipəwi·	'wild lilac'
	ʔəpəma·n	'we fly'
/a/ - /ə/:	ʔacəpac	'I take it away'
	ʔəcəpak	'I come out'
/u/ - /ə/:	ʔukəna·	'I tell someone'
	ʔəkəna·	'I tell a story'

150 Subphonemic modifications in connected speech

In addition to the allophony described above which accounts for words in citation forms, a few additional subphonemic modifications which appear to be optional were recorded in texts. They are as follows.

a) In word-final position, when following a long vowel or a voiced consonant, some consonants may have very lenis or voiced allophones. Only the following alternations have been observed.

/c/: [$t^{\check{s}}$] ~ [$d^{\check{z}}$] ~ [d^{y}] ~ [d]

/k/: [k] ~ [g]

/s/: [s] ~ [z] ~ ([y] this only in the speech of Mr. Couro.)

The following sentence illustrates all three.

ʔəny̆a·c ʔəkəna·k taʔwa·s. 'I'm about to tell a story.'

Other examples are:

ʔi·kw̆ic ʔəxinc təwams. 'There was a man around.'

ʔi·ku·c apəsi·w. 'He is very big.'

b) In fast speech, when there is no pause before the word, words with initial /ʔə/ may omit this syllable altogether. The frequency of this feature varies from speaker to speaker. Other alternations involving initial /ʔə/ are discussed in 240.

c) Again in fast speech, when there is no pause between the words, a final consonant of one word merges with an initial identical consonant of the next word. Phonetically, this consonant may be long or short.

pu·wk kəwa·kəm 'He went back to the south.'
\/
[k(·)]

ny̆aumanəm məwu·wx. 'When he flies, you will see him.'
\/
[m(·)]

160 Intonation contours

A complete study of intonational patterns in connected discourse is well beyond the limits of this study since it would necessitate an investigation in depth of various styles of speech from a larger number of speakers than were available, in order to determine with any degree of certainty the limits between personal idiosyncrasies and general trends.

Within the corpus collected, there are considerable variations from speaker to speaker, from text to text, from day to day. One informant speaks almost in a complete monotone when recording texts, which is probably a personal reaction to the artificial situation involving the use of a tape recorder.

The contours described below describe a neutral style. They may be said to apply to sentences in isolation, as they would be spoken as single utterances lifted out of the texts. Within connected discourse, other variations may be introduced. For example, while some texts give the impression of being spoken in sentences, clearly separated by pauses and ending in falling intonation, others seem to be structured in large units, or paragraphs within which intonational clues to the ends and beginnings of sentences may be absent, or where intonational contours usually associated with the ends of sentences and pauses may appear in other locations. This situation often made it difficult when analyzing texts to determine sentence boundaries in cases where the semantic and syntactic indications were ambiguous.

A sentence containing no internal pause will typically have an intonation contour starting on a medium pitch level gradually rising to a peak coinciding with the stressed syllable of the word chosen for greatest emphasis (although in a few cases it was recorded on a syllable containing an unstressed long vowel), then gradually decreasing in pitch to the end of the sentence. The fall in pitch may be rapid

if the emphasized syllable is close to the end of the sentence (it may of course be the last syllable in some cases), but it may also cover a fairly long stretch of speech, in which case the pitch level of the last segment may be considerably lower than that of the beginning. This contour is indicated by /./ following the last word of the sentence. A normal peak will occur on the stressed syllable of the inflected verb of the predicate (810) and in this case is not marked. When a peak occurs in any other position indicating particular emphasis on a word other than the inflected verb, the appropriate form is marked by /'/.

A sentence may also consist of several contours of the above type, one succeeding the other; in such cases each one is separated from the next by a slight pause, indicated by /;/. The drop in pitch before /;/ is not as low as that preceding /./.

Any sentence of the two types described above may also be preceded by one or more phrases starting on a medium pitch and rising to a high sustained pitch. This contour is marked by /,/.

Imperative sentences are pronounced with greater than normal forcefulness in a staccato manner, with each word more clearly separated from others, each stressed syllable on a high, even pitch, sharply broken at the end of the word and often accompanied by a glottal stricture. This is

indicated by /!/. In stories, short quoted passages are often characterized by the /!/ contour.

Examples of contours:

kəwu·w kəwu·w n^yipi paʔa· kaɬ^{y}əx^{w}i·w ʔəxinc!

'Look, look, there goes a skunk!'

puy n^yataʔn^yəwayəm, n^ya·pum ʔi·cacvu trava·xvəc nəso·mkəx.

'When we were there, then I think that the work must have been over.'

ʔən^{y}a·wupc ʔəpəma·ṇ, ʔəl^{y}maṣ pəma·ṇ.

'We got up and the children got up also.'

á·vu u·ṭaq. 'He opened his mouth.'

In addition, a few common constructions of two morphological words normally coalesce into a one-word phrase resulting in loss of stress on the last morphological word with concomitant reductions in phonological shape and falling pitch on that segment (for additional details see 856 and 857.2). In such cases, the two words are said to be separated by the juncture /+/ which indicates that the following segment is unstressed and therefore phonologically incorporated in the preceding word.

ʔa·ṣa·c+is (= ʔa·ṣa·c yis)	'It's a bird.'
wi·c+is (= wi·c yis)	'He did say it.'
ʔa·ṣa·c+u (= ʔaṣa·c yu·)	'It is a bird?'
ma·məx+məyu (= ma·məx məyu·)	'Are you going away?'
ʔən^{y}a+mac (= ʔən^{y}a· n^yəmac)	'Me too.'

170 Distribution of phonemes

171 Canonical forms

The great majority of Diegueño words are disyllabic or trisyllabic, though words as long as five syllables have been found and monosyllabic words are not infrequent. The majority of words begin with a single consonant. No initial consonant clusters have been recorded except in the one form /stikm/ 'a little bit' (<ʔəstik 'to be little'). Forms with initial vowels occur but are much rarer than those beginning in a consonant. Medially before stress, clusters of no more than two consonants occur, though again there is one exception involving the same root as shown in the initial consonant cluster example above: /k^{w}aʔstik/ 'the little one'. A great simplification in syllable canon is achieved by assigning syllable division to the position between the two consonants of a cluster. When there is only one consonant intervocalically, it belongs to the following syllable. All syllables of the word preceding the stress then have a structure which can be summarized by the following formula, which takes into account the distributional restrictions on vowels described in 142.21.

$$(C)\ \left\{\begin{array}{l} V(\cdot) \\ ə \\ a(\cdot)y \end{array}\right\}\ (C)$$

where C is any consonant (with a few restrictions as in 172.1), V is any of the unstressed vowels /a, i, u/.

For stressed syllables, if we discount for the moment all suffixed material, a similar formula may be obtained:

$$(C)\ \left\{\begin{matrix} V(\cdot)\ (S) \\ o(\cdot) \end{matrix}\right\}\ (C)$$

where C is any consonant (with some restrictions as in 172), V is any of the stressed vowels /a, i, u/ and S is one of the semivowels /w/ and /y/. To this may then be added several consonantal suffixes forming clusters of up to four consonants immediately following the stressed vowel nucleus (for the types of clusters allowed, see 172.2). A maximum of two additional unstressed vowels may appear after the stressed one.

Since the possible consonant clusters are determined by the shape and position class of the suffixes, they are best described in the morphology.

172 Restricted phonemes and clusters

172.1 Consonants

A few consonants show some restrictions in distribution, this limits to some extent the generality of the canonical forms above. The following statements describe these restrictions:

/ṭ/ does not occur word-initially nor as first member of prestress clusters. Its most common occurrence is immediately following the stressed vowel.

/k^w/ and/x^w/ only occur in syllable-initial position and are therefore never first members of consonant clusters. They do not occur after a stressed vowel.

/q/ is of very rare occurrence. It was never recorded word-initially, before /i/ or /i·/, or in other than stressed syllables.

/ʔ/ occurs most commonly in word-initial position, never as second member of prestress consonant clusters. After stress, it occurs only in word-final position immediately following a short stressed vowel.

/v/ occurs only after stress, never before another consonant.

/s̤/ is of fairly rare occurrence and enters into few consonant clusters.

/n̤/ is very rare in word-initial position and was never recorded before /i/ or /i·/. Its most common occurrence is immediately following a stressed vowel, and it is therefore rare in prestress clusters.

/l^y/ was not recorded in word-initial position in the Mesa Grande dialect.

/r/ is of very rare occurence and was never recorded in word-initial position.

172.2 Consonant clusters

172.21 Prestress clusters

Consonant clusters do not occur word-initially. Prestress clusters of no more than two consonants are permitted and occur quite frequently, though words containing more than one prestress consonant cluster are very rare. Except for the restrictions of occurrence on individual phonemes, no structural restrictions seem to operate, with the exception that geminate clusters do not occur. Both homorganic and nonhomorganic clusters are possible and members of any articulatory series may combine with members of any other, with the exception that laterals and r-like phonemes do not form clusters with each other.

The following chart summarized the prestress clusters recorded. Nonpermissible clusters (summarizing the above statements of restriction of occurrence) are denoted by 0. The vertical row lists first members of clusters, the horizontal row second members. /v/ has been omitted from the chart altogether since it never occurs in prestressed position. /w/ and /y/ are omitted from the list of first members, since in that position they can only be part of diphthongs. Attested clusters are marked by X, "-" indicates nonattested clusters whose absence is probably fortuitous since there appear to be no structural reasons for their absence in view of the fact that two noninitial consonants separated by /ə/ are potential clusters, /ə/ being in many cases omissible

(cf. 212). One example is given for each recorded cluster. They are arranged in the order in which they appear on the chart, reading from left to right beginning with the top row.

Prestress Consonant Clusters

	p	t	ṭ	c	k	q	k^w	ʔ	s	ṣ	x	x^w	m	n	ṇ	n^y	l	l^y	ɬ	$ɬ^y$	r	ṛ	w	y
p	O	-	-	-	X	-	X	O	X	X	X	-	X	X	-	X	-	X	-	-	X	X	X	X
t	X	O	-	X	X	-	X	O	X	-	X	X	X	X	X	X	X	X	X	-	X	-	X	X
ṭ	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
c	X	X	X	O	X	-	X	O	X	X	X	X	X	X	X	-	-	-	-	-	-	X	X	X
k	X	-	-	-	O	-	-	O	-	-	X	-	X	X	-	-	-	-	-	-	-	X	O	-
q	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
k^w	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
ʔ	X	-	-	-	X	X	X	O	-	X	X	-	X	X	-	-	X	-	-	-	-	X	X	X
s	X	X	-	-	X	X	X	O	O	-	X	X	-	-	-	X	-	-	-	-	-	-	X	-
ṣ	-	X	-	-	-	-	-	O	-	O	-	-	-	-	-	-	-	-	-	-	-	-	-	-
x	X	X	-	X	X	-	X	O	X	-	O	-	X	X	X	X	X	-	-	-	-	X	O	X
x^w	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
m	X	X	-	X	X	-	X	O	X	X	-	-	O	-	-	X	X	-	-	-	-	X	X	X
n	-	X	-	X	-	-	-	O	-	-	-	-	X	O	-	-	-	-	-	-	-	-	-	-
ṇ	O	O	X	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
n^y	X	-	-	X	X	-	-	O	-	-	-	-	X	-	-	O	-	-	-	-	-	-	X	O
l	X	X	-	-	X	X	X	O	-	-	X	-	X	-	-	-	O	O	O	O	O	O	X	O
l^y	X	-	-	-	-	-	-	O	-	-	X	-	X	-	-	-	O	O	O	O	O	O	-	O
ɬ	X	X	-	X	X	-	X	O	X	-	X	X	-	-	-	-	O	O	O	O	O	O	-	O
$ɬ^y$	X	X	-	X	X	-	X	O	-	-	X	-	X	X	-	-	O	O	O	O	O	O	-	O
r	-	-	-	X	X	-	X	O	-	-	-	-	-	-	-	-	O	O	O	O	O	O	-	-
ṛ	X	X	-	X	X	-	-	O	-	-	X	-	-	-	-	-	O	O	O	O	O	O	X	-

Examples of prestress consonant clusters.

pC:	kəpki?	'say it!'
	?əpk^{w}aɬ	'large hawk'
	?əpsi·	'bush (sp.)'
	kəpṣuw	'wait!'
	kupxa·ɬ	'oak (var.)'
	kəpma·ṇ	'get up! (pl.)'
	kəpnak	'sit! (pl.)'
	kəpn^{y}a?	'press on it (with hand)!'
	kəpl^{y}a·k	'lie down! (pl.)'
	?əprak ?əprak	'wobble'
	kusəpṛi·p	'that which is spread out'
	kəpwam	'sit down! (pl.)'
	kəpyuṛ	'sew!'
tC:	mətpa·w	'yellow jacket'
	kətətca·ɬ	'split it! (pl.)'
	tətkəwank	'they upset it'
	kəɬətk^{w}i·s	'wring it out! (pl.)'
	matsay	'desert'
	k^{w}ətxəmi·	'the old people'
	matx^{w}aṭ	'clay'
	tətmac	'they tried'
	tətna·yc	'they are late'
	n^{y}akumətn^{y}a·ɬ^{y}	'the day after'
	kətətṇa·k	'tie a knot! (pl.)'
	kətətl^{y}ak	'lay him down (pl.)'

	kətluk	'bend it!'
	kətɬax	'tell a lie!'
	a·trap	'they whipped him'
	kətətwam	'take a round object away! (pl.)'
	kətətyu·t	'scare them!'
cC:	xacpəṣa·w	'fern'
	kəcto?	'hit him (with fist)!'
	kucṭa·q	'open it! (pl.)'
	kəckəwa·y	'they wander'
	kəpəckwi·ɬ	'pass! (pl.)'
	kəpəcsi·c	'milk (a cow)! (pl.)'
	kəpəcṣuw	'wait! (pl.)'
	cəcxəta·ṭ	'they crawl'
	kəcx^{w}aɬ	'scrub it! (pl.)'
	k^{w}acmu·c	'warrior'
	kəkəcnap	'tell! (pl.)'
	kacn̩a·k	'tie (a bundle)! (pl.)'
	kacr̩uw	'make a fire! (pl.)'
	kəkacwi·n̩	'hold it down with foot! (pl.)'
	kəpəcyu·r̩	'sew! (pl.)'
kC:	kəkpuw	'step on it!'
	kənəkxap	'come in! (pl.)'
	kətəkmap	'sun yourself!'
	kukna·p	'teller'
	?əkr̩ayk ?əkr̩ayk	'bob up and down'

ʔC:	mayʔpay	'you are an Indian'
	k^{w}ayʔku·	'the big one'
	k^{w}aʔk^{w}as	'the yellow one'
	k^{w}aʔqu̱	'the long one'
	k^{w}aʔṣaṣ	'the pretty one'
	k^{w}aʔxan	'the good one'
	k^{w}aʔma·y	'the high one'
	k^{w}aʔna·y	'wire grass'
	k^{w}aʔlul	'the spherical one'
	k^{w}aʔṛuṛ	'the circular one'
	k^{w}aʔwiṛ	'the hard one'
	taʔyu·ws	'I am standing'
sC:	məspil^{y}	'sparrow hawk'
	astu·qu·p	'they hug'
	ʔa·skay	'pot'
	ka·squp	'hug him!'
	kəsk^{w}iʔ	'give up!'
	məsxəṛa·y	'sand'
	kəsx^{w}an	'scratch him!'
	ʔəsn^{y}a·w	'oak, acorn (var.)'
	kuswax	'heavy beard'
	ʔəṣtəpi·ṭ	'we close it'
xC:	ʔəxpu·q	'clover'
	ʔəxta·y	'crow'
	ʔəxci·	'whiskbroom'
	ʔəxkal^{y}	'my daughter's child'

	kuxk^{w}an^{y}	'parents'
	kəxsak	'scratch (for itch)!'
	kuxma·p	'the blind one'
	kəxn̥a?	'scratch!'
	kuxnoc	'the sick one'
	kəxn^{y}a?	'put your hand on it!'
	kətəxlak	'hook it!'
	?əxr̥a·r̥	'puff up'
	kuxyan	'the one who carries (something) on shoulder'
mC:	kumput̥	'short person'
	?əmtan̥	'naked'
	kumci·łp	'the wrinkled one'
	kamkac	'California poppy'
	kəsəmk^{w}ir	'use fire drill!'
	k^{w}amsa·y	'shade, shelter (from rain)'
	s̥əmn^{y}a·y	'pine (var.)'
	kumlay	'the dead one'
	kusəmr̥ay	'the drunk'
	kumwas	'the soft one'
	kumyulk	'the sweet one'
nC:	xantak	'frog'
	pancək^{w}a·y	'their mother's brother'
	kənkəwayk	'go back and forth! (pl.)'
	k^{w}ənməsa·p	'star'
n̥C:	?ən̥t̥u·mi·p	'we got mad'

n^yC:	ʔən^{y}puˑɬ	'basket hat'
	ʔən^{y}cəwiˑc	'ours'
	kun^{y}kuˑy	'old woman'
	kun^{y}miˑ	'he teases'
	təkən^{y}way	'stay there! (pl.)'
lC:	xalpuṣuˑk	'humming bird'
	kutaltal^y	'spine'
	milkasup	'sweep pea'
	kuxəlqay	'the smooth one'
	k^{w}ilkwil	'weak'
	k^{w}əlxup	'little hole'
	k^{w}əlmisp	'the bearded one'
	walwal	'in a hurry'
	ʔal^{y}paˑym	'slowly'
l^yC:	k^{w}əl^{y}xiˑw	'turning dark'
	kal^{y}muˑ	'mortar'
ɬC:	ʔəɬpaˑy	'rascal, peculiar'
	xəɬtuṭ	'black widow spider'
	miɬciṣ	'white man'
	kuɬkuk	'hunchback'
	kəɬk^{w}is	'wring it out!'
	xaɬsic	'lemonade berry'
	k^{w}əɬxup	'large hole'
	kaˑɬx^{w}as	'wash it!'

ɬ^{y}C:	təɬ^{y}pu·	'roadrunner'
	xəɬ^{y}ta·	'head'
	pəɬ^{y}ca·	'sumac'
	xəɬ^{y}ka·y	'pine (var.)'
	ʔəɬ^{y}k^{w}anan	'Santa Isabel'
	k^{w}əɬ^{y}xi·w	'silver'
	xaɬ^{y}məṣa·	'shadow'
	ʔəɬ^{y}nac	'worse (sick)'
rC:	apərcəwi·	'he compares'
	kurkur	'little owl'
	k^{w}irk^{w}ir	'revolve'
ṛC:	ʔəṛpu·	'pine (var.)'
	kuṛtu·wi·p	'those that are alike'
	məṛcuyi·p	'they are ashamed'
	kuṛka·	'space between fingers'
	paṛxa·w	'fox'
	kuṛwi·	'likeness'

172.22 Poststress clusters

Following the stressed vowel, clusters of up to four consonants may occur. There appear to be no phonological restrictions as to the kinds of clusters produced (see, however, 211), but occurring clusters are predictable from the shape and position class of the various suffixes. Their description is therefore best provided in the morphology and will not be repeated here (see 425, 433, and 700 for details). A few examples chosen particularly with clusters not possible

before stress will illustrate some of the possibilities. In this list of examples, some of the meanings of the suffixes have been omitted from the English translation. Full details are given in the Morphology and Syntax.

ci·maɬ^{y}xs	'he will tell a lie'
yuɬpx	'he will get ready'
wən^{y}aɬq	'he swallows it'
paṭk	'broken'
ʔəkuṛs	'it is far away'
win^{y}s	'he gives it'
ʔucəx^{w}i·ṭs	'we took it away'
a·tuqmxs	'he will spill it'
n^{y}iɬ^{y}xs	'it will be black'
wiṇps	'it moves slightly'
ʔəma·n^{y}cxs	'we will spread it out'
ʔu·ma·ṭpx	'we will think'
xək^{w}an^{y}ps	'she gave birth'
əwupxs	'they will look there'
ʔəyipxɬ^{y}	'I (want) to see'
n^{y}aʔəxəmilxc	'when I was young, I...'
mu·yuxvu	'why'
wəsa·wxɬ^{y}a	'would he eat?'
kin^{y}pɬ^{y}a	'would he give it away?'

172.3 Vowel clusters

The general distributional properties of vowels and diphthongs have already been described in 142. A few vowel clusters forming two syllables have been recorded. They never involve diphthongs. The following types are possible: a) unstressed vowel + stressed vowel. No combinations involving /i/ or /i·/ or /o/ and /o·/ have been recorded, and /ə/ does not occur in clusters of this type. Attested are: /a·a/, /aa·/, /u·u/, /a·u/, and /u·u·/.

a·ap	'he lays a long object down'
aa·	'he takes it'
nətu·urp	'they know'
a·uɬ	'he lays a long thing on top'
xu·u·p	'they are full'

b) unstressed vowel + unstressed vowel. This occurs only in forms involving the prefix /n^{y}a/ 'when' when this comes to stand before an initial vowel. In this case, the second vowel maintains the aspirated onset it had in initial position.

n^{y}aəwu·w	'when he saw it'
n^{y}aa·puɬ	'when he swims'
n^{y}ai·ma·	'when he dances'
n^{y}au·ṭaq	'when he opens it'

Note also the three-vowel cluster

n^{y}aa·ap	'when he lays a long object down'

c) stressed vowel + unstressed vowel. Only V·+ a are possible.

təməwa·a 'are you sitting?'

180 Loanwords

The status of loans in a phonological description is always a problem. The position is taken here that they are better considered as outside the main phonological system of the language, in view of the following considerations.

The overwhelming majority of loans are from Spanish. Being Mission Indians, the Diegueño have had intimate contact with Spanish for several generations. No Diegueño speaker today is completely ignorant of Spanish and most of them speak the language fluently. It is therefore not surprising that the vocabulary is thoroughly permeated with Spanish loans. However, I have not met a single Diegueño speaker who would not spontaneously point out the Spanish words in his or her speech. Spanish loans have even replaced native forms and people will often make statements of the type: "That was a Spanish word I used just now. I know we have a word for it in our language, I remember that my grandmother had a word for it, but I have forgotten it." The speakers' conscious recognition of loans and the general lack of distortion of Spanish sounds are the main reasons for keeping them separate from the rest of the language. Although this is not directly relevant in a synchronic

description, it was also felt that an emphasis on the native structure as far as this can be extracted from the present situation would make the description more useful for future comparative studies of Yuman languages. Diegueño in general, and the Mesa Grande dialect even more rapidly, is doomed to extinction in the not too distant future. Except for a few remote villages in Baja California, there are practically no young Diegueño speakers. If loans were incorporated into the phonological system, the phonemic inventory would have to be increased and this would also make the total picture of the system appear much more like that of Spanish than it really is.

It is clear, on the other hand, that this solution is not entirely satisfactory, as some Spanish words have become integrated into the phonological and morphological systems in a variety of ways. While individual sounds not occurring in native forms give speakers no trouble, Spanish loans are modified to fit the native stress pattern in a completely predictable way. A simple rule will predict the shape of the loanword. Take the Spanish form and omit everything following the stressed syllable, beginning with the vowel following the Spanish stress. Usually, the stressed vowel is lengthened. Thus /travaxa·r/ Sp. trabajar 'to work', but /trava·x/ Sp. trabajo 'work (noun)'. Morphologically, Spanish loans are assimilated to the most likely native form class and may be modified accordingly. They may even be

analyzed into more than one morpheme when the Spanish form is monomorphemic. Thus [tɛnér] Sp. tener 'to have' is reanalyzed in Diegueño as composed of a prefix /tə/ and a root /nar/ and forms a plural [tɛtná·rc], like other native forms of this particular structure. A few Spanish nouns have been borrowed with the article incorporated into them: [lapwɛ́rt] 'door', [lamɛ́·s] 'table'.

English is of course another source of interference. In this case, however, since exposure is more recent and since in all cases the forms occur in the same shape as in the speakers' normal English pronunciation, English loans are best considered to be still English words and will simply be rendered in normal English spelling. They may, however, take some of the less incorporated affixes, which will be separated from the English form by a hyphen. Thus Federation-vəc 'the Federation (i.e. The Mission Indian Federation)'.

In order to deal with Spanish sounds which do not occur in the native system and also with those whose distribution does not conform to the native pattern, a few additional symbols are required. Spanish loans may therefore be considered to be written in a broad phonetic notation. Additional symbols used are as follows.

"v" for [β] in prestress position, plus "b, d, f, g, ɣ, ð, ŋ" for consonants, "e(·)" for [ɛ(·)], and "o(·)" for [ɔ(·)] in unstressed position, for vowels.

If these had been incorporated into the main phonemic system, the following problems would occur. The distribution of /v/ would be changed, "d" and "g" would interfere with the allophony of /c/ and /k/ (see 150), and the vowel system would have to be considerably changed. Statements about consonant clusters would have to be amended, particularly in initial position. All loans will be identified as such in the Lexicon.

va·k	'cow'
kava·y	'horse'
bu·r	'donkey'
baye·n	'Ballena (place name)'
du·ls	'candy'
frixo·l	'beans'
gayen	'chicken'
laɣun	'lake'
ʔeskondi·ǫ	'Escondido'
tapa·ŋk	'platform'

190 Summary

For ease in cross reference, all general statements made so far can be summarized formulaically. The statements of allophony are made in the form /A/ X_Y [a], which may be read: The phoneme /A/, in the environment between X and Y is represented phonetically as [a]. The following abbreviations are used:

C = any consonant

V = any stressed vowel whether short or long. When relevant, length is indicated by /·/.

= position of word boundary

--- = elsewhere, or everywhere.

X = any consonant or consonant cluster possible in that position.

Numbers in parentheses refer to the section of the description where the relevant phenomena are discussed.

Stops (141.1)

/p/	_#	[p] ~ [p^h]
	V_m	[p']
	---	[p]
/t/	_#	[t] ~ [t^h]
	V_c	[t']
	---	[t]
/ṭ/	_#	[ṭ] ~ [$ṭ^h$]
	---	[ṭ]
/c/	C(vd) / V· }	_# [$t^{\check{s}}$] ~ [$d^{\check{z}}$] ~ [d^y] ~ [d] (150)
	---	[$t^{\check{s}}$]
/k/	_#	[k] ~ [k^h]
	C(vd) / V· }	_# [k^h] ~ [k] ~ [g] (150)
	V_p	[k']
	---	[k]
/k^w/	---	[k^w]

/q/ --- [q]

/ʔ/ --- [ʔ]

Spirants (141.2)

/v/ m_ [b]

--- [β]

/s/ C(vd)__# [s] ~ [z] ~ ([y]) (150)
V·

--- [s]

/s̤/ --- [s̤]

/x/ _i(·) [x] ~ [x̂]

--- [x]

/x^w/ --- [x^w]

Nasals (141.3)

/m/ _p [m']

Vp_ [m̥]

_t [m] ~ [m^p]

--- [m]

/n/ _k [n] ~ [n^t]

--- [n]

/n̤/ --- [n̤]

/n^y/ --- [n^y]

Laterals (141.4)

/l/ --- [l]

/l^y/ --- [l^y]

/ɬ/ --- [ɬ]

/$ɬ^y$/ --- [$ɬ^y$]

r-like phonemes (141.5)

/r/	---	[r̃]
/r̥/	---	[r̥] ~ [r̥^{ɣ}]

Semivowels (141.6)

/w/	V_{#, C}	[U̯]
	---	[w]
/y/	V_{#, C}	[I̯]
	---	[y]

Stressed vowels (142.1)

/i/	{m, p}_{ɪ̈, l}	[I] ~ [E]
	---	[I]
/i·/	{w_w, k_w, x_w}_#	[i·]
	---#	[e·] ~ [i·]
	---	[e·]
/a/	_r̥	[ʌ]
	{p, k, x}_y	[ɛˀ]
	--- y	[ɛ]
	_{t̤, n̤, ɪ̈}	[ɑ]
	w _{m, k, x}	[ɔ]
	---	[a]
/a·/	---	[a·]

/u/ _ w [o]

q_, _q,
#,ʔ,x,
alveolar } ___ { x, y
alveolar [ɔ] (~ [U] except _y)
--- [U]

/u·/ #,ʔ,x,
alveolar } — { x, y,
alveolar [ɔ·] (~ [o·], except _y)

_# [ɔ·] ~ [o·]

--- [o·]

/o/ --- [ɔ]

/o·/ ___# [ɔ·] ~ [o·]

--- [ɔ·]

Unstressed vowels (142.2)

/i·/ like stressed /i·/

/a·/ like stressed /a·/

/u·/ like stressed /u·/

/i/ VX__# [ɛ]

--- [I]

/u/ VX __# [ɔ]

--- [U]

/a/ --- [a]

/ə/ ___palatals
palatals__ { bilabials, labiovelars, velars } [I] ~ [ə]

___ dentals [ɛ] ~ [ə]

___ wu(·) [ə]

---- w
w __ } [U] ~ [ə]

__velar, postvelar
velar __ C-palatal } [a] ~ [ə]

--- [ə]

VX__ {C, y} [I]

V(X)_x [U]

VX--- [ə]

Intonation contours (160) /. , ; !/

Emphatic /ˊ/ (160)

Juncture /+/ (160)

Syllable Cannon (171)

Prestress syllables (C) {V̆ -ə(·), ə, a(·)y} (C) (V̆ = unstressed vowel)

Stressed syllables (C) {V-o(·)(S), o(·)} (C) (S = semivowel)

Symbols used only in Spanish loans (180)

b, d, f, g, ɣ, ö, ŋ, e(·).

200 MORPHOPHONEMICS

This section lists the rules required for linking the morphemic structure of words to their phonemic shape. Alternations involving only a single morpheme or a very restricted area of the morphology are not included here but are stated in the appropriate section of the Morphology.

In some cases, the order of application of the rules is fixed; this will be specifically stated when relevant. Each rule will also indicate whether its application is obligatory or optional. Forms between ⫞ ⫟ are in morphemic representation, those between || || are in morphophonemic representation, those between / / are in phonemic representation. When several steps are required for arriving at the phonemic forms, i.e. when more than one rule applies to a single form, every step is written between || ||, except the final phonemic representation which is written between / /.

210 Rules which account for the presence or absence of /ə/

Although sometimes predictable phonemically (142.212), the phoneme /ə/ was established to account unambiguously for the phonemic shape of Diegueño words. Morphophonemically, however, only very few cases of underlying (morphophonemic) ||ə|| need be postulated, while the rules below make all other cases of /ə/ predictable. The few cases where ||ə|| is retained morphophonemically occur mainly in nouns which, as will be shown in 500, are less readily analyzable synchronically than verbs. It is suggested that more

work is required in this area and that,as the morpheme structure of nouns is better understood, it will eventually be possible to eliminate the morphophoneme ||ə|| altogether.

211 Insertion of /ə/.

Rule 1. Insertion of /ə/ before the stressed syllable.

a) In analyzable forms, insert /ə/ between consonants at morpheme boundaries.

ɬt-x-m-k^{w}i·ɬ-pɬ 'to be tangled up', where ɬtɬ, ɬxɬ, ɬmɬ are stem-forming verbal prefixes (424) > /təxəmək^{w}i·ɬp/.

ɬp-ɬ^{y}-ṭapɬ 'to explode', where ɬpɬ, ɬɬ^{y}ɬ are stem-forming verbal prefixes (424) > /pəɬ^{y}əṭap/.

ɬm-ṉ-mi·ɬ 'you are angry', where ɬmɬ is a personal prefix (431) and ɬṉɬ is a stem-forming verbal prefix (424) > /məṉəmi·/.

b) In unanalyzable stems insert /ə/ between the first two members of initial consonant clusters.

ɬxməna^{y}a·wɬ 'shoes, sandals' > /xəməna^{y}a·w/

ɬlmisɬ 'fur' > /ləmis/

ɬtɬ^{y}pu·ɬ 'roadrunner' > /təɬ^{y}pu·/

ɬtkəsa·ɬ 'chin, jaw' > /təkəsa·/

Both sections of rule 1 are obligatory and apply before any of the other morphophonemic rules given below.

Rule 2. Insertion of /ə/ after the stressed syllable.

After the stressed syllable, /ə/ is inserted obligatorily between two identical consonants. Optionally /ə/ may be inserted between ||m|| and a following consonant which is not a stop, or between any consonant and ||m||.

⟨n^{y}a-ʔ-a··-m-m⟩ 'when I go away', where ⟨n^{y}a⟩ is the syntactic prefix 'when', ⟨ʔ⟩ is 'I', ⟨a·⟩ 'go', ⟨m⟩ 'directional' stem-forming verbal suffix, ⟨(və)m⟩ syntactic affix, > /n^{y}aʔa·məm/

⟨ʔ-a··-m-x⟩ 'I will go away', where ⟨x⟩ is future > /ʔa·məx/ ~ /ʔa·mx/

⟨yip-m⟩ 'as he was hearing' > /yipəm/ ~ /yipm/

212 Elision of ||ə||

Several rules are required to account for elision of ||ə|| as conditions differ for different morphological situations. They apply only before the stressed syllable.

Rule 3. Any plural verb stem formed by infixation of ⟨c⟩ 'collective plural' which, after application of rule 1 has four or more syllables, has a phonemic shape shorter by one syllable. This is achieved by eliding the ||ə|| from the second syllable. In other words, when a plural verb stem has the shape ||CəCəCV(CV)CV́..|| (C = any consonant, V = any vowel, ́= stress), its phonemic shape is /CəCCV(CV)CV́../. This rule applies also to plural verb stems of the shape ||CətəNV́..|| (where ||t|| is an allomorph of ⟨c⟩, and N is a nasal), which are phonemically /CətNV́../. It is possible that, if further research permits a better analysis of nouns, this rule may be further generalized. This is suggested by the fact that nouns of three syllables or more often have a phonological structure similar to that

of the plural verb stems accounted for by this rule. This rule is obligatory.

In the following examples, the full details concerning the meaning of the various prefixes and other morphological elements have been simplified. They are dealt with fully in 400.

ɬp‡ 'verb prefix' + ɬn^{y}‡ 'verb prefix' + ɬc‡ 'coll. pl.' + ɬwi·n̓‡ 'dis.pl. of ɬwin̓‡.' + rule 1 > ||pən^{y}əcəwi·n̓|| + rule 3 > /pən^{y}cəwi·n̓/ 'they hold it down with the hand'.

ɬc‡ 'verb prefix' + ɬc‡ 'coll. pl.' + ɬx‡ 'verb prefix + ɬta·t̓‡ 'dist.pl. of ɬtat̓‡' + rule 1> ||cəcəxəta·t̓|| + rule 3 > /cəcxəta·t̓/ 'they crawl'

ɬt‡ 'verb prefix' + ɬc‡ (with ||t|| allomorph) 'coll.pl.' + ɬx‡ 'verb prefix' + ɬwa·lk‡ 'dist.pl. of ɬwalk‡' + rule 1 > ||tətəxəwa·lk|| + rule 3 > /tətxəwa·lk/ 'they dip'

ɬt‡ 'verb prefix' + ɬc‡ (with ||t|| allomorph) 'coll.pl.' + ɬmac‡ 'dist.pl. of ɬma·ʔ‡' + rule 1 > ||təməmac|| + rule 3 > /tətmac/ 'they try'

Rule 4. In words formed with the prefixes ɬk^{w}‡ 'nominalizer' or ɬk‡ 'imperative', a ||ə|| occurring in the first syllable of an underlying disyllabic stem is omitted unless the resulting form would have an unpermissible consonant cluster or a three-consonant cluster. When the underlying stem has more than two syllables but only one ||ə||, this ||ə|| is omitted with the same restrictions. When a polysyllabic underlying stem contains two successive

syllables with ||ə||, one or the other ||ə|| is omitted (again with the same restrictions). In some cases, both possibilities were recorded, in others only one, but no rule can be stated to predict which of the two ||ə||'s is omitted. Formulaically, when following ⟨k^W⟩ 'nominalizer' or ⟨k⟩ 'imperative', the following alternations occur.

$\|C_1 ə C_2 \acute{V}..\|$ $/C_1 C_2 \acute{V}../$

$\|C_1 ə C_2 V C\acute{V}..\|$ $/C_1 C_2 V C\acute{V}../$

$\|CVC_1 ə C_2 \acute{V}..\|$ $/CVC_1 C_2 \acute{V}../$

$\|C_1 ə C_2 ə C_3 V ..\|$ $/C_1 C_2 ə C_3 \acute{V}../ \sim /C_1 ə C_2\ C_3 \acute{V}../$

Rule 4 is obligatory.

Examples

⟨k^W⟩ + ⟨n̥-mi·⟩ 'to get mad', with ||ku|| allomorph of ⟨k^W⟩ (527.23) + rule 1 > ||kun̥əmi·|| + rule 4 > /kun̥mi·/ 'the mean one'

⟨k^W⟩ + ⟨m-ti·pulp⟩ 'to be poor', with ||ku|| allomorph of ⟨k^W⟩ + rule 1 > ||kumətiˑpulp|| + rule 4 > /kumtiˑpulp/ 'orphan'

⟨k^W⟩ + ⟨n-m-s̥ap⟩ 'to be white' + rule 1 > ||k^Wənəməs̥ap|| + rule 4 > /k^Wənməs̥ap/ (or with ||ku|| allomorph of ⟨k^W⟩ + rule 4 > /kunəms̥ap/) 'the white one'

⟨k⟩ + ⟨c-to·⟩ 'to hit with fist' + rule 1 > ||kəcətoˑ|| + rule 4 (and vowel shortening required by ⟨k⟩) > ||kəcto|| + rule 10 (see below) > /kəcto?/ 'hit him with your fist!'

⟨k⟩ + ⟨t-k-wank⟩ 'to turn around' + rule 1 > ||kətəkəwank|| + rule 4 > /kətkəwank/ 'turn around!'

⟨k⟩ + ⟨a·c-m-u-ya·w⟩ 'to show' + rule 1 > ||ka·cəmuya·w|| + rule 4 > /ka·cmuya·w/ 'show him!'

Note that in these cases it would appear from the examples that rule 1 is not necessary everywhere since the actual forms often are almost identical to the morphemic representation. The reason rule 1 is required in full is simply that it accounts very simply for all forms of stems when not preceded by ⟨k^w⟩ or ⟨k⟩.

Rule 5. In forms of the shape ||CVʔəCV..||, the ||ə|| is always omitted, i.e. they have the phonemic shape /CVʔCV../.

⟨m⟩ 'you' + ⟨ʔ-xan⟩ 'to be good' + rule 1 > ||məʔəxan|| + rule 11.d > ||maʔəxan|| + rule 5 > /maʔxan/.

Rule 5 is obligatory, except in extremely careful and slow speech, where an occasional /ə/ was recorded.

Rule 6. In fast speech, polysyllabic forms containing /ə/ in noninitial syllable (and not already covered by one of the above rules) may optionally elide a /ə/ under the conditions specified in rule 4. The frequency of such reduced forms varies from speaker to speaker and, within the same idiolect, from occasion to occasion. A general though not very precise rule might be that any /ə/ in noninitial syllable may be omitted if the resulting form does not exhibit a nonpermissible consonant cluster or a three-consonant cluster. Except in the examples listed below, all forms cited in this grammar are given in their fullest shape.

/xəmən^{y}a·w/ ~ /xəmn^{y}a·w/ 'shoes, sandals'

/cəpəṣa·w/ ~ /cəpṣa·w/ 'rib'

/ʔəməti·pulp/ ~ /ʔəmti·pulp/ 'I am poor'

220 Alternations involving /k^{w}/, /x^{w}/, and /w/

Rule 7. There is no phonemic contrast between [k^{w}] and [kw] or between [x^{w}] and [xw]. Morphophonemic sequences ||kw|| and ||xw|| are therefore always represented phonemically as /k^{w}/ and /x^{w}/ respectively.

{k^{w}} 'nominalizer' + {x-wak} 'to be two' with ||ku|| allomorph of {k^{w}} + rule 1 > ||kuxəwak|| + rule 4 > ||kuxwak|| + rule 7 > /kux^{w}ak/ 'the two, both'

{k} 'imperative' + {nəkəwayk} 'plural stem of {pu·wk} + rule 1 > ||kənəkəwayk|| + rule 4 > ||kənəkwayk|| + rule 7 > /kənək^{w}ayk/ 'you all come back!'

Rule 8. The morphophonemic sequences ||x^{w}í||, ||k^{w}í||, and ||íw|| (where "́" indicates that this applies to stressed vowels), may have the phonemic representations /xu/, /ku/, and /u/ respectively, alternating with /k^{w}i/, /x^{w}i/, and /iw/. In some cases, both forms were recorded. In others, only the form with /u/ is attested. Rule 8 applies before rule 9 when relevant.

{p-x^{w}im} 'to lose' + rule 1 > ||pəx^{w}im|| + rule 8 > /pəxum/ ~ /pəx^{w}im/

{ʔi·k^{w}i} 'to be big' + rule 8 > ||ʔi·ku|| + rule 9 > /ʔi·ku·/.

⟨-yiw⟩ 'to come' + rule 8 > ‖-yu‖ + rule 9 > /əyu·/ (/əyiw/ is also attested (see 422)). (For a discussion of forms marked ‖-‖ (bound forms), see 422 and 522.12.)

230 Short stressed vowels

No word ends in a short stressed vowel (120). Morphological evidence, however, makes it clear that a number of forms should be considered as having underlying forms ending in such a vowel. Two separate rules account for the facts, each referring to a particular level of word structuring.

Rule 9. The final vowel of some stems may be considered morphophonemically short in order to understand the relationship of such stems with other derived forms. The rule is that this short vowel is lengthened in final position of the inner structure of the word, i.e. the vowel is also long before any additional inflectional or syntactic suffixes which may be added. There are only a few forms which unambiguously require this formulation synchronically. The statement is made here since it appears to be important historically. In both Cocopa and Yuma, final stressed short vowels are possible and it appears that the lengthening of final stressed vowels is a Diegueño innovation.

⟨x-mi⟩ 'to grow up' (cf. /xəmilx/ 'to be young') + rule 1 > ‖xəmi‖ + rule 9 > /xəmi·/. When followed by the inflectional suffix ⟨x⟩ 'future' or by the syntactic suffix ⟨vək⟩ 'if', the forms are /xəmi·x/ 'he will grow up', /xəmi·vək/ 'if he grows up'

{?i·k^{W}i} 'to be big' (cf. /?i·k^{W}ic/ 'man', /?əcək^{W}i·/ 'they are big') + rule 8 > ||?i·ku|| + rule 9 > /?i·ku·/ (note /?i·ku·c/ with syntactic affix {(və)c} 'he is big (+ syntactic information)'

Rule 10. In the one area of the morphology which requires shortening of a final long vowel (i.e. imperative forms, for which see 431), a final /?/ is automatically added. This rule applies only in absolute word-final position, since, when an inflectional suffix, the /?/ is not present.

{k} 'imperative' + {a·} 'to go' > ||ka·|| + shortening required by {k} > ||ka|| + rule 10 > /ka?/. When used with the negative {-ma·w} which requires the preceding verb to take the future suffix {x}, we get /kax kəma·w/ 'don't go!'

{k} 'imperative' + {-mi·} 'to cry' > ||kəmi·|| + shortening required by {k} > ||kəmi|| + rule 10 > /kəmi?/ 'cry!'

240 Alternations involving ||?||

In the small class of verbs which have stem-initial /?/ (see 423), the following rule accounts for forms of these verbs inflected for first or second person or nominalized by the prefix {k^{W}}.

Rule 11.

a) A morphophonemic sequence ||?ə?ə|| is represented phonemically by /?a·/.

{?} 'first person prefix' + {?-xan} 'to be good + rule 1 > ||?ə?əxan|| + rule 11a > /?a·xan/ 'I am good'

‡ʔ‡ 'first person prefix' + ‡ʔ-xar̤‡ 'to be wet' + rule 1> ||ʔ əʔ əxar̤|| + rule 11a > /ʔa·xar̤/ 'I am wet'

b) A morphophonemic sequence ||ʔ əʔi·|| is represented phonemically by /ʔa·y/.

‡ʔ‡ 'first person prefix'+ ‡ʔi·paṭ‡ 'to be alive' + rule 1 > ||ʔ əʔi·paṭ|| + rule 11b > /ʔa·ypaṭ/ 'I am alive'

‡ʔ‡ 'first person prefix' + ‡ʔi·xa·ṭ‡ 'to be greedy' + rule 1 > ||ʔ əʔi·xa·ṭ|| + rule 11b > /ʔa·yxa·ṭ/ 'I am greedy'

c) A morphophonemic sequence ||C$^{-ʔ}$ əʔi·|| is represented phonemically by /C$^{-ʔ}$ayʔ/.

‡m‡ 'second person prefix' + ‡ʔi·paṭ‡ 'to be alive' + rule 1 > ||məʔi·paṭ|| + rule 11c > /mayʔpaṭ/ 'you are alive'

‡k^{W}‡ 'nominalizer' + ‡ʔi·ku·‡ 'to be big' (actually ‡ʔi·k^{W}i‡ + rule 8) + rule 1 > ||k^{W}əʔi·ku·|| + rule 11c > /k^{W}ayʔku·/ 'the big one'

d) In all other cases of ||C$^{-ʔ}$ əʔ||, the phonemic representation is /C$^{-ʔ}$aʔ/

‡m‡ 'second person prefix' + ‡ʔ-xan‡ 'to be good' + rule 1 > ||məʔ əxan|| + rule 5 > ||məʔxan|| + rule 11d > /maʔxan/

‡k^{W}‡ 'nominalizer' + ‡ʔ-xan‡ 'to be good' + rule 1 > ||k^{W}əʔ əxan|| + rule 5 > ||k^{W}əʔxan|| + rule 11d > /k^{W}aʔxan/ 'the good one'

250 Alternations involving ||əyə||, ||əwə||, and ||u·||.

Rule 12. Morphophonemic sequences ||əyə|| and ||əwə|| are represented by /i·/ and /u·/ respectively, although in some forms /əyə/ was recorded also, apparently in free variation with /i·/.

/i·puk/ ~ /əyəpuk/ 'neck'

/i·wi·k/ ~ /əyəwi·k/ 'right (hand)'

/i·wiɬ/ ~ /əyəwiɬ/ 'crotch'

⟨t⟩ 'progressive' + ⟨w⟩ 'third person' + ⟨-yu·w⟩ 'to stand' + rule 1 > ‖təwəyu·w‖ + rule 12 > /tu·yu·w/ 'he is standing'

⟨t⟩ 'progressive' + ⟨w⟩ 'third person' + ⟨-yaq⟩ 'to lie (position)' + rule 1 > ‖təwəyaq‖ + rule 12 > /tu·yaq/ 'he is lying'

Sometimes, the rule seems to be reversed, at least in the case of ‖u·‖, which may be represented phonemically by /əw/ probably to avoid nonpermissible vowel clusters. All examples recorded occur before ‖a(·)‖ or ‖i‖.

⟨u·⟩ 'plural' + ⟨amp⟩ 'to walk' + rule 12 > /əwamp/ 'to walk, pl.stem'

⟨u·⟩ 'plural' + ⟨aṛ⟩ 'to want' + ⟨p⟩ 'plural' + rule 12 + root vowel lengthening (dist. pl.) > /əwa·ṛp/ 'to want, plural stem'

⟨u·⟩ 'plural' + ⟨y-ip⟩ 'to hear' > /yəwip/ 'to hear, plural stem'

In the following sections of this grammar, whenever any of the above rules are referred to, the following notation will be used: "mp 6", which is to be read "morphophonemic rule 6".

260 Metathesis

In a few cases, forms were recorded at different times with a different ordering of the same phonemes. These cases of metathesis are submorphemic as they do not affect the meaning of the form and are therefore mentioned here. This type of alternation has been noted across languages in the Yuman family also. A number of examples were found when comparing Diegueño and Cocopa. Interestingly enough, all forms showing metathesis contain the phoneme /x/ and in all but one the metathesis involves this phoneme. The only examples are:

/məxətun/ ~ /xəmətun/ 'his knee'

/kətxi·/ ~ /təkxi·/ 'gopher'

/təxəmul^{y}/ ~ /xətəmul^{y}/ 'small basket'

/xəcu̱r/ ~ /cəxu̱r/ 'it is cold'

270 Formulaic summary of morphophonemic rules

The following formulas summarize the rules discussed in this section in order to allow easy reference to them.

Rule 1. a) At morpheme boundaries ||C|| __C..V́ /Cə/ (oblig.)

b) Elsewhere ||CC|| #__ /CəC/ (oblig.)

Apply rule 1 before following rules.

Rule 2. $||C_1C_1||$ V́..__ $/C_1əC_1/$ (oblig.)

$||mC^{-stop}||$ V́..__ $/məC^{-stop}/$ (optional)

||Cm|| V́..__ /Cəm/ (optional)

Rule 3. {c} 'coll.pl.' verb stems: ||CəCəCV(CV)CV́..|| ---
(oblig.) /CəCCV(CV)CV́./
||CətəNV́..|| --- /CətNV́../

Rule 4. After {k^{W}} 'nominalizer' ||C$_1$əC$_2$V́..|| --- /C$_1$C$_2$V́../
or {k} 'imperative': ||C$_1$əC$_2$VCV́..|| --- /C$_1$C$_2$VCV́../
(oblig.) ||CVC$_1$əC$_2$V́..|| --- /CVC$_1$C$_2$V́../
||C$_1$əC$_2$əC$_3$V́..|| --- /C$_1$C$_2$əC$_3$V́../
or /C$_1$əC$_2$C$_3$V́../

Rule 5. ||CVʔəCV..|| --- /CVʔCV../ (oblig.)

Rule 6. After ||CV|| not covered by rule 4, apply rule 4 (option.)

Rule 7. ||kw|| --- /k^{W}/ (oblig.)
||xw|| --- /x^{W}/ (oblig.)

Rule 8. ||x^{W}í|| --- /xu/ (opt.)
||k^{W}í|| --- /ku/ (opt.)
||íw|| --- /u/ (opt.)

Rule 9. In inner structure: ||V́|| __# /V·/

Rule 10. After {k} 'imperative' plus shortening: ||V́|| __# /Vʔ/

Rule 11. With {ʔ} 'first person', {m} 'second person' {k} 'imperative', or {k^{W}} 'nominalizer';

a) ||ʔəʔə|| --- /ʔa·/ (oblig.)

b) ||ʔəʔi·|| --- /ʔa·y/ (oblig.)

c) ||C$^{-ʔ}$əʔi·|| --- /C$^{-ʔ}$ayʔ/ (oblig.)

d) ||C$^{-ʔ}$əʔ|| --- /C$^{-ʔ}$aʔ/ (oblig.)

Rule 12. ||əyə|| --- /i·/ (opt.)

||əwə|| --- /u·/ (oblig.)

||u·|| ___a(·), i/əw/ (oblig.)

300 INTRODUCTION TO THE MORPHOLOGY

310 The "word"

Morphology is here conceived in the traditional sense of the study of word-formation, as opposed to syntax, which will deal with the larger units (sentences) into which words are arranged. Thus, the basic unit of the morphology is the morpheme, and its largest unit the word.

From a morphological point of view, the Diegueño word contains at least one unanalyzable root morpheme. Some root morphemes may occur as free forms and therefore also function as words, but more typically, the word consists of a root (or more than one in the case of nominal compounds) combined with a variety of affixes or other morphological processes (see 340 below). Every word has one stressed vowel (120), which is always the last vowel of the root if the word contains only one, or the last vowel of the last root if several are united into a compound. Affixes are never stressed. There are no inherently unstressed words, although in some constructions, some inherently stressed forms are reduced and in effect incorporated into the preceding word phonologically (see 160, 856, 857.2). Affixes and their required positions with respect to the root will be described in detail in the following chapters. They serve to delimit the word and also to some extent define the major word classes.

320 Word classes

The two major word classes of Diegueño are the verb and the noun. A third class of interjections completes the classification. Interjections are distinct from both nouns and verbs by being invariable, i.e., they cannot be modified by any of the morphological processes. They are also few in number. Nouns and verbs, on the other hand, can be modified by a variety of morphological processes. They share some formal characteristics, but also differ enough in form and in function to warrant this division into two major classes. Typically, verbs are more readily analyzable into their constituent morphemes, while most nouns, if analyzable at all, show a greater fusion of elements which often resists synchronic segmentation. Some morphological modifications apply only to verbs and thus provide morphological criteria for separating the two classes (see 410, 510).

330 Structural layers

The study of Diegueño word formation reveals three structural layers which account for words of various types. Each is characterized by specific morphological processes with different structural functions.

331 Inner structure

The inner structure of words centers around root morphemes, formally characterized by having a stressed vowel, and the morphological processes which may modify such roots to form stems. Stem formation is the most complex area of the morphology and all morphological processes

described below apply in stem formation. Semantically, the processes modify the meaning of the roots. Stems are derived forms and constitute the lexical inventory of the language.

332 Outer structure

In this layer, the stems of 331 are the basic units. These may be modified only by prefixation and suffixation to form inflected forms. Semantically, the prefixes and suffixes of the outer structure add to stems notions of person, tense, aspect.

333 Peripheral structure

Inflected forms of 332 may be further modified, again by prefixes and suffixes, to indicate their syntactic function within the sentence.

340 Morphological processes

In order to give a general characterization of the morphology, the various types of morphological processes encountered will be briefly surveyed.

341 Affixation

Affixation is by far the most common of all morphological processes and applies in all three of the structural layers accounting for word formation. Prefixation and suffixation are highly developed. Prefixes and suffixes are clearly distinct in their grammatical functions and no case has been found where a prefix may also be used as a suffix or vice-versa.

True infixation is not present since, according to the view of word formation here presented, it would apply only to an element infixed into the root. While modifications of the root occur and might be considered a special kind of infixation, they will be defined as separate processes and designated by a more precise term. The term infix will, however, be used in the description of verb formation as a convenient label for particular elements and their position within the prefix structure.

342 Ablaut

The term ablaut will be used here in the usual sense of alternations between phonemes of various types, but is also used to cover alternations between short and long vowels which, rigorously speaking, since length is identified as a separate phoneme, might be considered a case of true infixation. The decision to group these two phenomena under the same heading has been adopted here since they occur in the same area of the morphology.

342.1 Vocalic ablaut

Quantitative vocalic ablaut (alternation of short with long vowels of the same quality) is one of the widely used processes in the formation of a type of plural verb stems and nouns.

Qualitative ablaut affects only the vowels /a(·)/ and /u(·)/ which are seen to alternate with each other in a few verbs when they are part of diphthongs with /w/. In these

forms qualitative ablaut seems to be related to quantitative ablaut. It also occurs in some unusual forms which do not conform to the more general patterns of derivation.

342.2 Consonantal ablaut

Consonantal ablaut characterizes sets of forms related both in form and meaning, and denotes a difference in size. This type of sound symbolism affects mostly the pairs of voiced and voiceless laterals, although some of the other resonants also exhibit a similar alternation (see 620).

343 Reduplication

Reduplicated forms are fairly common and the process appears to be productive. When they can be unambiguously identified, the nonreduplicated forms on which they are based are always verbs. Reduplication of forms of more than two syllables is not attested. Reduplicated forms all share a semantic component of iteration or seriality (see 610). They may be either verbs or nouns and are subject to the application of the same morphological processes that apply to the particular class to which they belong.

344 Compounding

Compounding is here defined as the process of word formation which joins into a single word more than one root. Only the last root of such a word retains its inherent stress. It is not attested in verbs and clear cases of nominal compounds are not very numerous. Historically, a large number of Diegueño nouns are probably compounds, but a high degree

of phonological reduction of unstressed elements prevents their synchronic identification (see 521). Reduplication (343) is a special case of compounding but is considered a separate process since, unlike compounds, it is productive and has a very specialized semantic function.

345 Suppletion

Only a few cases of suppletion were found, and these mostly in verbs. A few plural verb stems show no resemblance in form to their corresponding nonplural stems and are therefore labeled suppletive (see 428.3, Class I).

346 Unmarked forms

A number of cases raise the question of the possible identification of a zero process, i.e. a process not overtly marked, or a zero morph. For example, some verbs have an overt prefix denoting third person subject (and object), while the corresponding forms of all other verbs are identical with the stem. The position is here taken that, in morphology, the recognition of zero elements is never absolutely necessary and forms of the type just mentioned will be considered unmarked for third person. Unmarked forms are usually ambiguous. Thus a verb stem with no overt person marker may be syntactically either an inflected verb form or a noun. Only the context can provide the clue as to which of these two possibilities is correct in any specific instance, even taking the context into account, some ambiguities may remain.

But a certain amount of ambiguity seems to be an intrinsic part of language structure and I feel it is important to point out the particular area of the structure where it occurs. Indeed, I should like to suggest that ambiguity is an essential ingredient of language productivity. Some instances of unmarked forms are discussed in 718 and 842.21.

400 THE VERB

410 General

The structure of Diegueño verb forms represents the most elaborate as well as the most productive aspect of the morphology. Every verb form consists of at least a central morpheme or root, typically of the phonological shape (C)V($\begin{smallmatrix}C\\S\end{smallmatrix}$) (with a few of the shape CCV($\begin{smallmatrix}C\\S\end{smallmatrix}$), where C is any consonant, V is any stressed vowel (short or long), and S is one of the semivowels /w/ and /y/. While the great majority of verbs are structured around a single root, a few of them are suggestive of root compounding, though the synchronic evidence is never clear enough to allow unequivocal segmentation. This description, therefore, will recognize in these cases verb roots of greater phonological complexity than the norm described above. The only clearly analyzable compound roots are formed by reduplication (see 610).

Verb stems are formed from roots by affixation of a number of stem-forming morphemes. These modify the semantic content of the stem and also determine a number of further formal modifications which it may undergo. The set of stems constitutes the lexical inventory of verbs in the language. By additional modifications any stem may form one or more "plural" stems, which in turn are subject to the same additional modifications as other stems.

Any verb stem as defined above may enter into the composition of finite verb forms by addition of a number of inflectional affixes which do not change the meaning of the stem, but specify person (for subject and object), some aspectual notions, and tense (future).

Finally, inflected verb forms may be further modified by more peripheral affixes which have syntactic function. These are described in 700. Since some syntactic affixes occur only with verbs, a verb form may be defined as any form which may combine with these affixes, i.e. the prefix /n^{y}a/ 'when' and the suffix /s/ 'mild emphatic'.

420 Inner structure of verb forms

421 Free root stems

Typically, stems of this type conform to the canonical shape of roots, except that they never have two consonants initially, hence they have the shape (C)V($\frac{C}{S}$). A few end in an unanalyzable consonant cluster, and a few much longer forms are included here for which no synchronic segmentation is possible. Here also belong some well-integrated loan words from Spanish which behave in all respects like native root stems. A full list of elicited forms belonging to this category follows. When no prefix is required, these stems may occur as free forms, i.e. words.

ʔa±	'to be wide'
yaq	'to be lying'
puṛ	'to get to the top'
ya·s	'to breathe'
wi·	'to do'
paṭk	'to be broken' (= ⌈paṭ⌉ + ⌈k⌉, see 425.2)
yu±p	'to get ready' (= probably ⌈yu±⌉+⌈p⌉, see 425.2)
ki·xa·r	'to complain'
vende·r (Sp.)	'to sell'
pu·wk	'to come back'
pa·	'to be there'
yip	'to hear' (perhaps y-ip, see 428.3Va)
yaṛ	'to run away'
sa·y	'to be dry'
ma·yki·wayk	'to forget'
travaxa·r (Sp)	'to work'
a·ps	'to yawn'
ip	'to bark'
ux	'to cough'
a·	'to go'
i·	'to say'
in^{y}	'to give'
is	'to sneeze'
amp	'to walk'
aṛ	'to want'

422 Bound root stems

These stems have the same phonological shape as those of 421, but may never occur as free forms. In those cases where a prefix is not required, they add an initial /ə/. To differentiate them from other types of stem, they are represented with initial hyphen"-". These stems are extremely numerous and only a few examples are given as illustration.

-yix	'to carry on one's back	-n^{y}ay	'to hunt'
-si·	'to drink'	-maṭ	'to think'
-wu·w	'to see'	-x^{w}ic	'to hate'
-ɨic	'to be bad'	-nuw	'to run'

423 Single prefix stems

The bulk of Diegueño verb stems are formed by the addition to a root of one of a variety of prefixes. While the meanings of these prefixes cannot be covered by a single descriptive term, they fall mostly in the category of instrumentals or causatives. Similarly, the meaning of a particular prefix cannot always be clearly established, especially if it occurs with roots not attested in other stems. In spite of these problems all the prefixes are described in this section since the stems in question exhibit the same formal characteristics. All prefixes recorded are discussed below in alphabetical order. Examples are given and an attempt is made to identify their semantic content as far as the data permit. In some cases, roots are attested as root stems as well as prefix stems, in others only prefix stems are

attested. The same root may combine with several of the prefixes to form new stems, but no complete set (of a root which combines will the full list of prefixes) is attested. For examples of some typical sets, see 427.

In the examples below, whenever a consonantal prefix has the phonemic shape /Cə/, this is due to application of mp 1. Because of its very frequent occurrence, this alternation is noted here once and for all.

a) The prefix ɬa·ɬ generally indicates that the action denoted by the root is performed on or by means of <u>one</u> long object (or alternately a large, hard, or sharp object). People are included in the long object class. Typical examples are:

a·ap 'to lay down a long object'

a·kaṭ 'to cut with a knife'

a·maɬ 'to sweep'

a·naṛ 'to lower a long object, to drown someone'

a·maṛ 'to cover over a long object, to bury someone'

a·uɬ 'to lay a long object on top of'

a·x^{w}iɬ 'to put someone in jail'

In some cases, the reference to a long object is not clear, probably due in part to inadequate possibilities of translation into English as well as to semantic extension in Diegueño. It should be emphasized that throughout the description of stem affixes, the greatest weight is assigned to formal similarities rather than semantic ones, though

problems of homonymy vs polysemy are quite frequent in the morphology. The position is here taken that, unless semantic information is overwhelmingly in favor of homonymy, formal identity is the best clue to morphemic identity. A few examples will indicate the semantic range:

a·pak 'to smoke in puffs'

a·puɬ 'to swim'

a·ṛa·w 'to make a fire, to burn'

a·tu· 'to pour liquids'

a·sip 'to smoke in smooth breaths'

a·taq 'to pour solids'

a·yay 'to mix two things together'

Stems with ⟨a·⟩ prefix are very numerous.

b) The prefix ⟨c⟩ added to a root specifies an action performed on or by means of an indefinitely large number (a bunch) of small (round) objects (also objects soft in consistency or liquids) or an action characterized by repetitive small motions. The emphasis is on an aggregate, a mass, rather than on individual items. Stems in ⟨c⟩ are quite numerous, and a few examples follow.

cəmaɬ 'to rub lightly, to wash'

cəpiṭ 'to cover a bunch'

cəyum 'to spread a sheet'

cək^{w}i· 'to lasso'

cəxuləxul 'to gargle' (for reduplication, see 610)

cuɬ· 'to put several on top'

cəx^{w}iɬ 'to put several in jail'

cəwu·w 'to yield, bear fruit'

Two stems of this type have bound forms:

-cap 'to get through eating or drinking'

-caṭm 'to shove'

b') The prefix ⁅cu·⁆ denotes an action performed by mouth, often of a repetitive nature. The possibility presents itself of further segmenting this prefix into ⁅c⁆ + ⁅u·⁆, since it shares with ⁅c⁆ the repetitive connotation. Its semantic connection with ⁅u·⁆ (see s) below) is not clear, however, and no particular simplification is achieved; hence ⁅cu·⁆ is considered a unit prefix. The following examples represent the full list of stems of this type which have been recorded.

cu·kaṭ 'to bite off'

cu·paṛ 'to emit a victory yell'

cu·kuw 'to bite'

cu·ya·y 'to hum'

cu·sip 'to smoke (e.g. a pipe)'

cu·k^{w}aṛ 'to preach, to brag'

cu·xi· 'to call, to name'

cu·xuṛ 'to chew noisily, to eat hard brittle things'

cu·k^{w}iṣ 'to chatter (like squirrel)'

cu·ɬup 'to boil'

Reminiscent of this category are two stems with prefixes ⁅ci·⁆ (⁅c⁆ + ⁅i·⁆?) and ⁅ca·⁆ (⁅c⁆ + ⁅a·⁆?)

ci·ma⁅^{y} 'to lie, fib'

ca·xa·y 'to praise, to brag'

c) The prefix ⁅i·⁆ is attested in three stems; no semantic value can be assigned to it. This same prefix may be present in some of the alternate forms of other prefixes (i.e. ⁅ci·⁆ above).

i·ca· 'to think' i·xa⁅^{y}p 'to hurry up'

i·ma· 'to dance'

d) The prefix ⁅k⁆ has a somewhat dubious status. Only a few stems exhibit it, no specific semantic content can be assigned to it, and it mostly occurs with roots not attested elsewhere. It is listed here, however, since stems exhibiting it behave like other prefix stems. The structural similarities will become apparent in the discussion of plural stems (428). A full list of recorded examples follows.

kəpuw 'to step on' kətuy 'to be comfortable, at ease'

kəna·p 'to tell' kəna·m 'to call'

kin^{y}p 'to give away' (cf in^{y} 'to give')

e) The prefix ⁅ku·⁆ (⁅k⁆ + ⁅u·ʔ⁆) denotes that the action of the root is performed by the foot (or feet) or by the leg (or legs). The following is a full list of elicited stems of this type.

ku·xuṇ 'to put feet into something (e.g. hole, box)'

ku·kap 'to go around something'

ku·to· 'to kick with the feet'

ku·naɬʸ 'to move one's foot'

ku·yum 'to sun one's feet'

ku·up 'to put on one's legs, to wear'

Semantically related to the above is a prefix ⁅ka·⁆ (⁅k⁆ + ⁅a·ʔ⁆), exhibited in only one stem.

ka·wiṇ 'to hold down with the foot'

f) The prefix ⁅ɬ⁆ is of very rare occurrence, and seems to indicate that the action denoted by the root distorts an object out of its normal state or shape. It was recorded only in the following two stems.

ɬəkʷis 'to wring out, squeeze out'

ɬəkuk 'to be hunched, crooked, humped'

g) The prefix ⁅ɬʸ⁆, attested in only two stems, may be semantically related to ⁅ɬ⁆, but with emphasis on the behavior of human beings.

ɬʸi·pay 'to misbehave' (cf. ʔi·pay 'person'?)

ɬʸəpu·waṛ 'to be unable to do something' (may be further segmentable, cf. aṛ 'to want')

h) The prefix {m} occurs mainly with stems denoting qualities. Stems of this type usually require an English adjective for their translation. A full list of recorded stems of this type follows.

məwal	'to be limp, weak'
mən^{y}a·y	'to be soft to the touch, to be tender'
məl^{y}ay	'not to know how, to be ignorant'
məwal^{y}	'to be soft in consistency'
mənuṭk	'to be thick'
məpuṭk	'to be short (object)'
məyulk	'to be sweet'
məci·ɬp	'to have a wrinkled face'

Less clear semantically are

məlay	'to die'
mən^{y}u·p	'to tussle'
məwi·	'to do what'

i) The prefix {n} was recorded in three stems indicating completion.

nəwaṭ	'to finish'
nəso·m	'to be all over, all gone, altogether'
nuṛ	'to know'

j) The prefix {n^{y}} is attested in a few stems, no exact semantic content can be assigned to it, though it may be noted that all verb stems containing {n^{y}} refer to a bodily state of human beings. A full list of recorded forms of this type follows.

n^{y}əmay 'to grow up (girl)'

n^{y}əwa·yp 'to live' (derived from -wa· 'to be sitting')

n^{y}i·war 'to be hungry' (ɬn^{y}ɬ + ɬi·ɬ + ɬarɬ 'to want'?)

n^{y}əku·y 'to be old (woman)'

k) The prefix ɬṇɬ, with undefined semantic content, occurs in one stem.

ṇəmi· 'to be angry, mad' (cf. -mi· 'to cry'?)

l) The prefix ɬpɬ indicates that the action denoted by the stem involves the application of pressure (either actively or simply by virtue of inherent weight). A full list of recorded stems of this kind follows.

pən^{y}a· 'to press, rub with hand'

pəsuw 'to wait'

pəyu·r 'to sew'

pəsi· 'to milk'

pətax 'to clap hands'

pək^{w}a·y 'to be ready to leave the nest'

pəmiɬ 'to carry (like bucket)'

pəsit 'to break wind'

pəsiw 'to urinate'

pəx^{w}im 'to loose, to grab and miss'

pəwam 'to rest'

pək^{w}iɬ^{y} 'to pass by, cross'

m) The prefix ɬrɬ is attested in only two stems and cannot be assigned specific semantic content.

rəwi· 'to be alike' (cf. wi· 'to do'?) rak 'to be old (man)'

n) The prefix ɬsɬ indicates that the action denoted by the root induces a change in condition. A full list of stems of this type is given.

səx^{w}an	'to scratch'
səkap	'to be half full, not quite full'
səl^{y}uwəl^{y}u·	'to tickle'
səpiṛ	'to be strong'
səkaṇ	'to be first, ahead'
sək^{w}i·ṛp	'to be tied around something'

o) The prefix ɬsu·ɬ (ɬsɬ + ɬu·ɬʔ) occurs in two stems denoting playful activities.

su·na·r	'to play with toys'
su·naṭ	'to play (e.g. cards)'

p) The prefixes ɬsɬ, ɬsu·ɬ, and ɬsa·ɬ do not appear to have different meanings, nor is there any way to predict which of the three forms will occur. Typically, stems formed with these prefixes refer to an action performed by means of an instrument held in the hand, or simply by hand. A full list follows.

ṣəwi·	'to cook acorn mush'
ṣəki·łk	'to be tubercular'
ṣu·kaṭ	'to chop off (with fork)'
ṣu·piṭ	'to close, shut'
ṣu·x^{w}aṛ	'to dilute, stir up'
ṣu·yul	'to add a stick to the fire'
ṣu·k^{w}iłp	'to wrap a baby in cradleboard'

ṣu·xaṭp	'to be stuck straight up'
ṣəwu·	'to wind (like tape)'
ṣu·xu·	'to steal'
ṣa·wal	'to stir'
ṣa·waṭp	'to die (several)'
ṣu·cu·	'to poke the fire'
ṣu·tu·r	'to make roll'
ṣu·tu·rp	'to roll, turn like wheel'

Formally similar is ṣi·yukp 'to be proud'.

q) The prefixes ɬtɬ and ɬta·ɬ seem to share the same meaning 'general causative'. ɬtɬ is more common than ɬta·ɬ. A full list of stems of this type follows.

təxi·ɬ	'to drag'
təxiɬp	'to be dressed'
təluk	'to bend'
təxi·r	'to rake'
təpaɬ^{y}	'to knot, piece together'
təpiṇ	'to be dull (like knife)'
tupm	'to throw away'
tuɬp	'to ride'
ta·wiṇ	'to iron'
ta·xar	'to sprinkle, soak' (cf. ʔəxar 'to be wet')
tənay	'to be late'
təmuləmulp	'to roll something around'
təma·	'to try'
təpaɬ	'to put on top'

təpuṛ	'to reach the top'
tum	'to throw'
tupk	'to toss'
tap	'to put down a round object'
ta·wa·m	'to take a round thing away'

Formally related is ti·kay 'to ask for something'

A few stems with the prefix {ta·} have bound forms and all share the specialized causative meaning of 'to make something acquire a certain quality'. A full list follows.

-ta·ṛa·w	'to heat, warm'
-ta·slp	'to put out fire'
-ta·l^{y}ak	'to lay someone down'
-ta·pin	'to warm something up'
-ta·say	'to dry'
-ta·n^{y}iɬ^{y}	'to make black'

r) The prefix {tu·} denotes that the action of the root is performed by or on a small, solid, round object or that it causes an object or objects to acquire these characteristics. There are many stems in this category, only a few typical examples are listed.

tu·kaṭ	'to cut with scissors or axe, to cut in chunks'
tu·miɬ	'to hang (small round object)'
tu·x^{w}iɬ	'to attach, fit, connect, button'
tu·pa·	'to crack acorns'
tu·yum	'to put a round small object in sun'

tu·uɬ 'to put on (e.g. a hat)'

tu·maṛ 'to cover over a small object'

tu·caɬ 'to split something'

s) The prefix {tu·} is another causative, differentiated from {t} by its more active aspect, i.e. 'to cause an event or action to occur'. There are many stems of this type. A few examples follow.

u·ṣa· 'to stab'

u·ṭap 'to tear something'

u·uɬ 'to pile up'

u·maṇ 'to lift up'

u·cur 'to tear off a small piece'

t) The prefix {u} is perhaps an alternate of {u·}. It was recorded only in four stems, each containing also other prefixes, and seems to indicate that the action is directed to a human being.

ukəna· 'to tell someone'

ukun^{y}əmi· 'to mistreat someone'

un^{y}əway 'to be a friend'

utətəpac 'to take someone out'

u) The prefix {x} does not have a clear semantic range. Forms exhibiting it fall into two distinct categories, and perhaps two sepatate morphemes {x} are involved, i.e. {x$_1$} indicating that the action denoted by the root is performed by the hand or arm,

$\text{-}x_2\text{-}$ rather vague in meaning, possibly emphasizing the performance of an action or mildly causative, perhaps best even not segmentable when no clear evidence is available.

The identification of two separate prefixes is in this case supported by historical evidence, as Northern Diegueño /x/ corresponds in some cases to [s̩] or [š] in southern dialects and other Yuman languages, in others to [x]. A few examples follow.

Examples of $\text{-}x_1\text{-}$

xəkiṭ	'to poke, to nudge with finger'
xəyan	'to carry in arms'
xən^{y}a·	'to touch'
xətu·	'to get, to pick up'
xək^{w}a·l	'to shell (e.g. peas)'

Examples of $\text{-}x_2\text{-}$

xəno·	'to be sick'
xəma·	'to sleep'
xəmay	'to look for, to find'
xəcap	'to wake oneself up'
xəlul	'to play the flute'
xə±^{y}a·y	'to smell good'
xəmilx	'to be young (man)'
xəṛa·ṛ	'to lift oneself up, to creep up on'

Formally related are

xi·nu±^{y}p	'to be cute, silly'
xi·k^{w}al^{y}	'to talk baby talk'
xa·wiṇ	'to hold on to'

v) The prefixes {?} and {?i·} ({?} + {i·?}) form verb stems which may be called 'adjectival', since they have some nominal characteristics (see 523.2a). Formally also, an initial /?/ is much more a nominal characteristic than a verbal one. There is no doubt about the fact that they are verbs, however, since they share with verbs all inflectional possibilities. Stems of this type are fairly numerous, a few examples follow. As a rule, they are best translated into English by the verb 'to be' + adjective.

?əmtaṇ	'to be naked' (i.e. {?} + {-mtaṇ})
?əxink	'to be alone'
?əxan	'to be good'
?əxaṛ	'to be wet' (cf. ?əxa· 'water')
?əx^{W}aṭ	'to be red'
?əxk^{W}aq	'to be bitter'
?i·ku·	'to be big'
?i·paṭ	'to be alive'
?i·walp	'to be in plain sight'

424 Multiple prefix stems

A large number of stems appear to be formed by the addition of more than one of the prefixes described above. This statement is based on their phonological shape rather than their semantic content, as it is rarely possible to see the connection between the meanings of the prefixes as described above and the resulting combinations. This is not very surprising in view of the difficulty of assigning semantic

content to some of the prefixes and the lack of a clear meaning for the roots when they are not attested in other stems. A few clear cases, however, are obviously segmentable and the others are included in view of the formal similarities. The order of the prefixes is fixed for each stem, but no discernable pattern emerges when different stems are compared. For example, both the sequences ⟨c-k⟩ and ⟨k-c⟩, ⟨x-p⟩ and ⟨p-x⟩ occur. An attempt to assign the prefixes to various position classes had to be abandoned as no structurally significant patterns emerge. Attested combinations are described below with examples. In all cases, a full list of recorded stems is given.

a) ⟨a-c⟩

The presence of a prefix ⟨a⟩ is not attested in single prefix stems. It appears formally related to the prefix ⟨a·⟩ which is regularly shortened in plural stems (see 428.2a), and the combination ac- is identical in shape with the form of plural stems of ⟨a·⟩ prefix stems. It appears likely, therefore, that stems of this type are historically collective plural stems and that the nonplural stems have been lost. This is confirmed by the fact that none of them forms a collective plural stem. (For details on plural stems, see 428).

acəkaṭ 'to cut into pieces' (cf. a·kaṭ 'to cut with knife')

acək^{w}ir 'to tease'

acəwaṛ 'to want but hesitate'

acəpac 'to take away from, out of'

acəxa·r̥ 'to have diarrhea' (cf. ʔəxar̥ 'to be wet')

acəpay 'to believe'

acəwir̥ 'to smear'

Note also acxu·ka·yp 'to trade (a-c-x-u··-ka·y-p, cf. perhaps xəkay 'to cross over' or xaʔkay 'part of it, half'), where the length of the stressed vowel may be likened to the distributive plural form of stems. Note also that this stem does not form a plural stem, and that the absence of /ə/ between /c/ and /x/ may be accounted for by mp 3.

b) {a-p}

apək^{W}ir̥p 'to be going around' (a-p-k^{W}ir̥-p)

apəsi· 'to strain' (cf. pəsi· 'to milk', and also əsi· 'to drink')

apəsi·w 'to be very, to force'

apək^{W}ilp 'to turn around (a half turn)' (note sound symbolism relating the roots k^{W}ir̥ and k^{W}il, see 620)

Note also apər̥cəwi· 'to correct, compare, try on, make alike' (cf. r̥əwi· 'to be alike')

c) {a-k}

akək^{W}i· 'to ask'

akəna· 'to tell a story' (cf. kəna·p 'to tell')

akəwi· 'to follow'

akəxap 'to bring in'

d) [a-ɬ]

aɬəx^{w}as 'to wash'

e) [a-s]

asək^{w}i· 'to give up, quit' (cf. akək^{w}i· 'to ask')

asəmilp 'to be turned over (in bed)' (cf. səmiləmil 'to be rolling')

f) [a-x]

axəwalk 'to dip' (cf. təxəwalk 'to dip')

g) [a·ˀc-m-u]

a·cəmuya·w 'to show, teach' (cf. u·ya·w 'to know' also -ya·w 'to have')

h) [a·-k]

a·kəwank 'to turn something over'

a·kəwanp 'to turn oneself over (in bed)'

i) [a·-ku·]

a·ku·xap 'to catch up with' (cf. -xap 'to go in')

j) [a·-k-r̓]

a·kər̓əti·p 'to be in a line, in a row'

k) [a·-s]

a·səwa·y 'to fly in a circular motion, to bank'

a·səqup 'to hug'

l) [c-k]

cəkəxap 'to bring in several' (cf. -xap 'to go in' and its plural stem nəkəxap)

m) {c-p}

cəpəɬu·yk 'to be boiling (over)'

cəpəsi· 'to suck' (cf. -si· 'to drink', pesi· 'to milk')

n) {c-x}

cəxəkar 'to part hair'

cəxətaṭ 'to crawl'

cəxəpiɬ 'to be sticky'

cəxəṛi· 'to push'

o) {c-m-u·}

cəmu·xuy 'to be steamy' (cf. -xuy 'to smoke, be smokey')

p) {k-c}

kəcəṣa· 'to spur' (cf. -ṣa· 'to sting')

q) {k-k}

kəkəway 'to wander, go back and forth'

r) {k-p}

kəpəwa·y 'to go uphill' (cf. a·səwa·y 'to bank')

kəpəkuw 'to meet someone'

s) {k-x}

kəxətuṭ 'to stumble'

Note that all the forms with {k} refer to some action performed by the foot or leg, relating them to the {ku·} prefix. This relation is made clearer when compared with the form of the prefix {ku·} in some plural stems, when the vowel is reduced to /ə/ (see 428.2a).

t) {m-t-a·} and {m-t-i·}

məta·waṛ 'to be tired, to be short of the mark' (cf. aṛ 'to want')

məti·pulp 'to be poor'

u) {m-ṣa·}

məṣa·ki·ɬ 'to have lung trouble' (cf. ṣəki·ɬk 'to be tubercular')

v) {m-ṛ}

məṛəyi· 'to be ashamed'

w) {m-x}

məxəya·y 'to be afraid'

x) {n-m}

nəməṣiw 'to be smelly, gamey'

nəməṣap 'to be white'

y) {p-n^{y}}

pən^{y}ətax 'to clap hands' (ɛf. pətax 'to clap hands')

pən^{y}a·wiṇ 'to hold down with the hand' (cf. ta·wiṇ 'to iron', and xa·wiṇ 'to hold on to'

pən^{y}ənaṛ 'to drown somebody' (cf. a·naṛ 'to lower a long object, to drown someone')

z) {p-n^{y}-k}

pən^{y}kəwank 'to turn sideways, to sprain' (cf. təkəwank 'to be turned over, upset'

aa) [p-ɬ^{y}]

pəɬ^{y}əma· 'to be done, cooked' (cf. -ma· 'to eat soft things')

pəɬ^{y}ətap 'to explode' (cf. kutap 'ravine', and -tap 'to tear')

bb) [p-r]

pərəwi· 'to be together, to be like that' (cf. rəwi· 'to be alike')

cc) [p-x]

pəxk^{w}i· 'to be standing' (one would expect *pəxək^{w}i· which is not attested)

dd) [s-k]

səkəwank 'to turn wrong side out' (cf. təkəwank 'to be turned over, upset')

ee) [s-m]

səmərа·y 'to be crazy'

səməray 'to be drunk'

ff) [s-k]

səkəwank 'to turn something over with an instrument'

gg) [s-p]

səpəruw 'to make it flare, to open umbrella'

səpu·wa·wp 'to walk with a cane'

Note also səxəpətunp 'to kneel' (cf. məxətun 'knee')

hh) ⟨t-k⟩

təkəwank 'to be turned over, upset'

təkəxap 'to bring in one' (cf. -xap 'to go in' and cəkəxap 'to bring in several')

təkəmak 'to shelter' (cf. -mak 'to be behind')

ii) ⟨t-l⟩, ⟨t-ɬ⟩, ⟨t-ṛ⟩

In the following examples, /l/, /ɬ/, and /ṛ/ may be seen to be related by sound symbolism (for which see 620).

tələwik 'to be bent, crooked'

təɬəwikp 'to be crooked (large)'

təṛəkukp 'to be twisted, out of shape'

təɬəkukp 'to be crooked, not straight'

The difference in meaning between these forms is not at all clear.

jj) ⟨t-p⟩

təpək^{W}ilp 'to turn around and come back'

təpək^{W}ir 'to wind'

təpək^{W}irp 'to be spinning (like top)'

təpək^{W}i·ṛp 'to be whirling'

təpəɬat 'to make something stick'

kk) ⟨t-p-u·⟩

təpu·su·l^{y}p 'to swing'

ll) ⟨t-t⟩

tətəpac 'to take out a round object' (this again looks like a collective plural form with the ||t|| allomorph of the collective morpheme ⟨c⟩ (see 428.11b)).

mm) ⟨t-x⟩

təxəwalk 'to dip'

təxəlak 'to hook'

təxəlumk 'to sink in'

nn) ⟨t-x-a·⟩

təxa·cap 'to wake someone up'

oo) ⟨t-x-m⟩

təxəmək^{w}i·ɬp 'to be tangled up' (cf. təpək^{w}ilp 'to turn around and come back')

təxəmək^{w}an 'to wrap a ball'

pp) ⟨u··c⟩

u·cəxur 'to point (with finger), to take aim'

u·cəx^{w}i·ṭ 'to take away from someone'

qq) ⟨u··t⟩

u·ta·m 'to take several things' (cf. aa· 'to take')

u·təyiw 'to bring several things' (cf. a·yiw 'to bring')

u·təpiṭ 'to cover something' (cf. ṣu·piṭ 'to shut')

rr) ⟨x-l⟩

xələk^{w}in 'to pinch'

xələqay 'to be smooth'

xələṭuk 'to be straight'

ss) ⟨x-l^{y}⟩

xəl^{y}əpay 'to be near'

tt) ⟨x-ɬ⟩

xəɬəxam 'to squeeze out of shape'

uu) [x-ɬ^{y}]

xəɬ^{y}əmiṇ 'to burn someone' (cf. pəɬ^{y}əmiṇ 'to be cooked')

vv) [x-m]

xəməkʷan 'to wrap a long thing'

ww) [x-p]

xəpəsu·y 'to blow'

xx) [x-t]

xətəsiɬ^{y} 'to be rough to the touch' (cf. ʔəsiɬ^{y}k 'to be salty')

425 Suffix stems

Additional nonplural stems may be formed by the addition of suffixes. These suffixes may be affixed to both prefix stems and root stems. There is no obvious reason to consider this a separate layer of constituents from that of prefixes, and they should therefore be understood to belong to the same layer of structuring. They are listed after the prefixes simply for ease in exposition. Some stems with suffixes have already been listed as examples of stems with prefixes, though they have not always be pointed out, since suffixes were not under consideration in that section.

Two sets of suffixes may be identified on formal and semantic grounds. They appear, however, to be mutually exclusive and therefore belong to only one position class, immediately following the verb root. The situation is somewhat confused by the fact that phonologically only three forms are

involved, another example of the problem of homonymy vs. polysemy in the language. In this particular case, however, the meanings are clearly distinct and therefore two suffixes are identified. The preference for this analysis is substantiated by the fact that they form a set with either one or the other suffix in that position class.

425.1 Directionals

A suffix {m} denotes that the action is directed away from a point of reference. This suffix has both formal and semantic similarity with the syntactic suffix {(və)m} (712). In this case the criterion for separating them is that they belong to different position classes although this is not altogether satisfactory.

A suffix {k}, also similar in form and meaning to a syntactic suffix {(və)k} (713), indicates that the action is directed toward a point of reference.

aa·m	'to take away' (cf. aa· 'to take')
a·m	'to go away' (cf. a· 'to go')
cəpam	'to go out'
cəpak	'to come out'
kəna·m	'to call' (cf. akəna· 'to tell')
tupm	'to throw a round thing away'
tupk	'to toss a round thing (this way)'
a·tuqm	'to squirt, to spill'
a·ṛapm	'to throw a stick away'
pu·wk	'to come back'

um 'to look over there'

uk 'to look this way'

425.2 Passives

Two suffixes add to the root or stem the notion of 'being in the state resulting from the action denoted by the root or stem'. The difference in meaning between the two may be described as follows:

{k} 'be in a state resulting from an action induced by some outside agency',

{p} 'be in a state resulting from a self-induced or spontaneous action or event'.

In some cases, where a -k or -p does not follow a consonant, it is not clear whether it should be considered as one of these suffixes or as part of the root, as the meaning of the stem is not always a sufficient clue and other formal criteria may be lacking.

a·kəwanp 'to be turned over'

a·kəwank 'to turn it over'

a·ṣup 'to drop, land'

a·ṣuk 'to fall off'

tu·yump 'to be lying in the sun'

tu·yumk 'to gather together'

pəx^{w}imp 'to be lost, sour, spoiled'

pəxumk (=pəx^{w}imk) 'to be guilty'.

a·cəmuya·wp 'to be a teacher' (cf. a·cəmuya·w 'to show')

ṣu·xu·p 'to be a thief' (cf. ṣu·xu· 'to steal')

məxəya·yp 'to be a coward' (cf. məxəyay 'to be afraid')

Note also məxəyayp 'to be fierce, frightening'

ṣu·piṭp 'to be closed' (cf. ṣu·piṭ 'to close')

təkəmakp 'to be sheltered' (cf. təkəmak 'to shelter')

paṭk 'to be broken'

u·ṣa·k 'to stab' (cf. u·ṣa· 'to stab, prick')

xəṛa·ṛk 'to be swollen' (cf. xəṛa·ṛ 'to lift oneself up')

təxi·ɬp 'to be dressed' (cf. təxi·ɬ 'to drag', also təxi·ɬ 'clothes')

426 Irregularly derived stems

A few stems show evidence of being derived from either verbs or nouns by irregular modifications not accounted for above. These are probably traces of archaic derivational processes no longer productive in the language. In the following examples, which represent a full list of such forms, the unusual modifications are underlined.

n^{y}əwa·yp 'to live' (cf. wa· 'to be sitting' + prefix {n^{y}} + suffix {p})

ʔəxaṛ 'to be wet' (cf. ʔəxa· 'water')

yu·xan 'to make something good' (cf. ʔəxan 'to be good')

xayu·ma·y 'to be foggy' (cf. xa·ma· 'fog')

ʔi·xa·ṭ 'to be greedy' (cf. ʔəxaṭ 'dog, domesticated animal')

ʔəmi·piɬp 'to be ashy' (cf. ʔəmpiɬ 'ashes')

xəmilx 'to be young' (cf. xəmi· (⟨x-mi⟩ + mp 9) 'to grow up')

yu·xuy 'to be first, ahead' (cf. -xuy 'to smoke out'?)

a·ṛa·w 'to keep warm' (cf. ʔa·w 'fire' and prefix ⟨a·⟩)

427 Sets of stems derived from a single root

In order to validate the analysis of verb stems presented above and to substantiate the segmentability of the affixes, a few sets based on a single root are presented together. An attempt was made to provide evidence for at least all prefixes of section 423 and all suffixes of section 425. A couple of sets are of dubious semantic validity. They will be pointed out as they are listed.

⟨mił⟩

a·mił 'to hang (long object)'

pəmił 'to carry (like bucket)'

tu·mił 'to hang (small round object)'

⟨ma·⟩ (semantic unity dubious)

-ma· 'to taste, try'

i·ma· 'to dance'

xəma· 'to sleep'

⟨wi·⟩

wi· 'to do'

ṛəwi· 'to be alike'

məwi· 'to do what'

ṣəwi· 'to make acorn mush'

pəṛəwi· 'to be together, like that'

{na•}

kəna•p 'to tell a story'

akəna• 'to tell'

ukəna• 'to tell someone'

kəna•m 'to call'

{pa}

pa• 'to be there' (perhaps mp 9)

pam 'to get there'

cəpam 'to go out'

cəpak 'to come out'

acəpac 'to be off, out, away' (this looks like a plural stem)

{xap}

-xap 'to go in'

akəxap 'to bring in'

a•ku•xap 'to catch up with'

cəkəxap 'to bring in small objects'

təkəxap 'to bring in a small round object'

{cap}

xəcap 'to wake oneself up'

təxa•cap 'to wake someone up'

-cap 'to get through eating or drinking'

(It should be remembered that the last form is segmentable into {c} + {ap}, which suggests that the last two sets are actually based on a single root {ap}.)

{win̥}

ka•win̥ 'to hold down with foot'

ta•win̥ 'to iron'

xa•win̥ 'to hold on to'

pən^{y}a•win̥ 'to hold down with hand' (cf. also pən^{y}a• 'to press' and xən^{y}a• 'to touch')

{xi•ɬ}

a•xi•ɬ 'to drag a long object'

cəxi•ɬ 'to drag a bunch of objects'

təxi•ɬ 'to drag'

{x^{w}aɬ}

-x^{w}aɬ 'to dig'

cəx^{w}aɬ 'to scrub'

-ca•x^{w}aɬ 'to make shut up'

{xun̥}

ʔəxun̥ 'to put in, add'

ku•xun̥ 'to put feet in'

tu•xun̥ 'to drop something in'

{x^{w}a(•)r̥}

a•x^{w}a•r̥ 'to scrape with knife'

cəx^{w}a•r̥ 'to erode, wash away'

cəx^{w}ar̥ 'to scour'

su•x^{w}ar̥ 'to mix, stir up'

tu•x^{w}ar̥ 'to scrape with hoe'

{k^{W}ar̓}

cu·k^{W}ar̓ 'to preach, to brag'

u·k^{W}ar̓p 'to quarrel'

{pay} (semantic unity unclear)

ɬ^{y}i·pay 'to play tricks, make believe'

-pay 'to carry on head'

acəpay 'to believe'

u·pay 'to pick up and carry on shoulder'

{kuk}

ɬəkuk 'to be crooked, hunched'

tər̓əkukp 'to be twisted out of shape'

təɬəkukp 'to be crooked, not straight'

{wat̓}

a·wat̓ 'to kill several'

s̓a·wat̓p 'several to be dead'

nəwat̓ 'to finish'

{in^{y}}

in^{y} 'to give'

kin^{y}p 'to give away'

{k^{W}ir̓}

xək^{W}ir̓ 'to weave'

sək^{W}i·r̓p 'to be tied around something'

{k^{W}i}

ʔi·ku· 'to be big' (see mp 8 and 9)

n^{y}əku·y 'to be an old woman' ({n^{y}} + {k^{W}i} (+ {y}?) + mp 8 and 9)

{mi·}

-mi· 'to cry'

nəmi· 'to get angry, mad'

{xar·} (cf. ʔəxa· 'water')

ʔəxar· 'to be wet'

ta·xar· 'to sprinkle, soak'

{pur·}

pur· 'to get to the top'

təpur· 'to reach the top'

{ra·w} (cf. ʔa·w 'fire')

a·ra·w 'to make a fire'

-ta·ra·w 'to heat, warm'

428 Plural stems

Before describing the formal apparatus of the formation of plural stems, the term plural itself requires some clarification, since it is not used here as a complete synonym for the notion of plurality as in a language like English. It might have been better, perhaps, not to use the term at all, but it appears to be the simplest and most expressive cover term for these categories all of which involve some aspect of plurality. The following remarks should make its use in this grammar unambiguous.

The term "singular" will not be used in this description. Whenever the distinction between the two types of stems needs to be specified, I will refer to nonplural and plural stems for the following reasons. The category of plurality is not

an obligatory grammatical one in Diegueño in that a nonplural form is essentially neutral with respect to number. This remark applies to both verbs and nouns. The context usually will provide the information needed to determine whether one or more entities are involved. This is actually a problem of translation into English where a decision has to be made in terms of number. Needless to say, plurality can also be expressed in Diegueño by separate lexical units, such as the numerals, or forms meaning 'many', or by one of the plural personal pronouns which are the only forms in the language where a distinction between singular and plural is apparent. This is also the only area where one might speak of a grammatical concord as plural pronouns usually (at least for first and second person) require the presence of a plural verb stem.

In some cases, though not all, two separate plural stems can be formed from a nonplural stem. On the basis of a few clear cases, two types may be identified: a collective plural and a distributive plural.

Collective plurals denote collectivity of subject or object, i.e. several subjects collectively performing an action (on one object), or one subject performing an action on a collectivity of objects, or several subjects collectively performing an action on a collectivity of objects. When pressed for a more specific translation than 'They do such and such.' informants typically respond with expressions such as 'A bunch of them'.

Distributive plurals denote that several subjects individually perform an action (each on one object), or one or more subjects perform an action on a series of objects or repeatedly (on one or more objects) or the action is extended or amplified.

A large number of stems (probably the majority) combine the two notions and denote for example that several subjects collectively perform an action repeatedly, etc.

These semantic distinctions, as already noted, are based on a few clear cases where two distinct plural stems occur, but cannot always be clearly identified in the many cases where only one plural stem exists as the phonological shape of the nonplural stem frequently determines automatically the shape of the plural stem.

The total system of plural stems therefore appears to be the result of two opposing trends, one of semantic differentiation and one of formal criteria tending to obscure the former. Formal criteria seem to be the most productive but cannot of themselves account for all the facts. This situation has obvious historical implications which are not, however, relevant in the present grammar.

A few additional remarks are in order before presenting the analysis of plural stems so as to place it in its proper perspective. Although plural stems occur in the textual material collected (which is indeed the source of their identification), their number was not sufficient to provide

an understanding of the general rules governing their formation. A systematic attempt was therefore made to elicit directly the plural stems of all verbs recorded. In view of the large number of forms involved, it was not always possible to obtain them in some natural context. As a result, even though some distinct patterns did emerge from this investigation, it cannot be claimed that all possible stems of the verbs in question have been recorded. The artificiality of the elicitation situation as well as the oddness or rarity of the semantic content undoubtedly inhibited the performance of informants. It became quite clear that in some cases informants were producing the forms in question perhaps for the first time. However, the informants' response in this situation (with all its obvious drawbacks) was extremely valuable, since the differences in response could often be correlated directly to the patterns disclosed by analysis and these helped confirm their validity. For example, some forms whose semantic oddity was freely commented on by informants, were nevertheless produced readily and were found to conform to the most productive and predictable patterns of plural stem formation. In this class may be listed also some attempted predictions on my part which the informant would accept as perfectly correct, but with comments to the effect that they had never heard them used.

On the other hand, conflicting forms recorded on different occasions proved either to be both possible but with semantic differences, or to reflect uncertainties as to the class involved, the informant deciding upon reflection that one of them was indeed correct.

It should also be pointed out that the Mesa Grande dialect is no longer the everyday language of anyone, as speakers are few and scattered and all speak English fluently, so that the influence of English speech habits on the native pattern should not be discounted. A comparison of the responses of speakers of other dialects who use the language regularly should prove extremely interesting.

428.1 Processes of plural stem formation

Eight separate formal processes are associated with the formation of plural stems, but more than one may be and often is involved in the formation of a single stem. On the basis of a few clear cases, an attempt can also be made to associate each one with a specific semantic aspect of plurality, but the semantic labels should not be considered as generally valid, since formal criteria requiring the presence of one or the other of these elements seem to override the semantic distinctions in a large number of cases. They are described individually below and their possible combinations will serve as the basis for a further classification of verbs beyond that already presented of prefix and nonprefix stems.

The processes involved may be divided into primary and secondary processes. Primary processes are the best attested ones and also those to which a reasonably specific semantic content may be assigned. Secondary processes are those which do not appear to carry any semantic content beyond their association with plural stems. Typically, secondary processes are not sole markers of plural stems but occur in conjunction with one of the primary processes.

428.11 Primary processes

Six of the eight processes are primary. They are:

a) Quantitative ablaut, i.e. lengthening or shortening of the stressed vowel of the nonplural stem, depending on whether this vowel is itself short or long. In clear cases, quantitative ablaut is semantically associated with the distributive aspect of plurality, but applies regularly to unanalyzable or root stems not included in some more restricted class.

b) Infixation of {c} to prefix stems. In multiple prefix stems where a noninitial prefix is a palatal, {c} is infixed into the nonplural stem directly after the palatal prefix, in all other cases it is infixed after the first prefix of the nonplural stem. Only four exceptions to this general rule have been found. They all involve multiple prefix stems with a noninitial prefix {k}, though other multiple prefix stems with {k} follow the regular pattern. They are given below in their nonplural and plural stems and their class

membership (see 428.3) is indicated by a Roman numeral. An arrow → points from the nonplural stem to the plural stem derived from it. The translation refers to the nonplural stem only. This practice will be followed throughout this chapter unless otherwise specified.

akək^{w}i· → akəcəwi·c VI bii 'to ask'

akəna· → akəcəna·c VI bii 'to tell a story'

akəwi· → akəcewic VI cii 'to follow'

a·ku·xap → akəcəxa·p VI ciii 'to catch up with'

Another exception is pəni· → cəpəni·c VI bii 'to pull toward oneself'

The ⟨c⟩ infix has the following allomorphs:

||ṭ|| when the preceding prefix has the shape ||ṇ||

||t|| when the preceding prefix consists of a dental, and alveolar, or ||x||

||c|| elsewhere.

c) Prefixation of ⟨p⟩ is associated only with a class of verbs denoting position.

d) Prefixation of ⟨n⟩ is associated only with a class of verbs denoting motion. It is the only process of plural stem formation which never combines in the same stem with any of the other processes.

e) Infixation of ⟨u·⟩ immediately preceding the verb root occurs only with stems denoting an intellectual activity, a state of mind, sensory perceptions, or self-induced actions or states.

f) Suffixation of {p} occurs usually but not always in conjunction with process e) and with stems of the same semantic area as described under e). Note the formal similarity of this plural-forming suffix with the passive suffix {p} of 425.2 as well as its nonoccurrence after passive suffixes. A few stems which form their plural stem by suffixation of {p} alone prevent this process being considered as part of process e).

428.12 Secondary processes

a) Qualitative ablaut affects only the stressed vowel of some stems containing the diphthongs /a(·)w/ and /u(·)w/. The process consists of replacing /a/ by /u/ in the plural stem or vice-versa. It is secondary since it never occurs as the only overt marker of a plural stem, affects rather few forms, and does not seem to have independent semantic content.

b) Suffixation of {c} is very common and almost completely predictable on phonological grounds. Some exeptions to this predictable aspect as well as the presence of two stems where suffixation of {c} is the only overt marker of plurality prevent this from being an automatic rule and necessitate recognition of suffixation of {c} as a separate process. It is normally used in conjunction with one of the other processes and no specific semantic content can be assigned to it.

The rules for suffixation of {c} may now be stated. All nonplural stems ending in a vowel and belonging to classes II and VI (see 428.3) automatically add {c} to the plural stem. In addition, a number of stems ending in a voiced consonant and belonging to classes II and VI also add {c} to the plural stem. A number of exceptions make it necessary to identify subclasses to account for the presence or absence of {c} in the plural stem. It is suggested that the process is becoming increasingly predictable, since all Spanish loans of the proper phonological shape automatically add {c} to their plural stems. Four exceptions concerning stems with final vowels should be noted here. It may be significant that they all involve the vowel /i·/.

ṇəmi· → ṇəṭəmi· 'to be mad, angry' VIbi

ʔi·ku· {ʔi·kʷi} plus mp 8 and 9 → ʔəcəkʷi· 'to be big'
VIciii

xəmi·{xəmi} + mp 9 → xəṭəmi· 'to grow up (of male)'
VIciii

nʸəku·y (<nʸ-kʷi·-y) → nʸəcəkʷi· 'to be an old woman'
VIciii

428.2 General rules of plural stem formation

It is convenient to state here two rules which account for additional modifications observed in plural stems over and above those accounted for by the general morphophonemic rules and the eight processes just described, since they apply to plural stems regardless of their class membership.

Rule a)

When a plural stem formed by infixation of {c} has a long vowel in the first syllable, this vowel is shortened to the corresponding short vowel if in stem-initial position and if its quality cannot be predicted from the following consonant, to /ə/ elsewhere. This rule does not apply if the plural stem has the same number of syllables as the nonplural stem.

a·ap → a·cap 'to lay a long object down'

a·uɬ → a·cu·ɬ 'to lay a long object on top of'

a·miɬ → acəmi·ɬ 'to hang a long object'

cu·kaṭ → cəcəka·ṭ 'to bite off'

i·ma· → əcəma·c 'to dance'

ṣu·piṭ → ṣətəpi·ṭ 'to close,shut'

ta·xaṛ → tətəxa·ṛ 'to sprinkle, soak'

ti·ka·y → tətəka·y 'to ask for something'

Note that this rule may be considered to apply also in those cases where a long /u·/ of a nonplural stem seems to be maintained in the plural stem, as these forms belong to the large class of stems requiring infixation of {u·} in the plural stem. It is therefore assumed in these cases that the /u·/ of the nonplural stem is first reduced according to rule a) and then the {u·} infix is added. This is actually attested by the pair

tu·yuɬ → tətəyuɬ 'to hide small round objects'

tu·yuɬp → tətu·yuɬp 'to hide oneself'

It may eventually be possible to state this rule in more general terms (and probably then include it in the morphophonemics) since it seems to account for the form ʔacəkʷi· 'we are big' which would otherwise be an exception, since, according to the various rules involved, it is expected as *ʔa·cəkʷi·. (The derivation of this form is as follows: {ʔi·kʷi} 'to be big' + infixation of {c} and mp 1 > ||ʔi·cəkʷi|| + mp 9 > ||ʔi·cəkʷi·|| + normal application of plural rule a) > ||ʔəcəkʷi·|| + {ʔ} 'first person and mp 1 > ||ʔəʔəcəkʷi·|| + mp 11a > ||ʔa·cəkʷi·|| + second application of plural rule a) > /ʔacəkʷi·/)

Rule b) Bound prefix stems which form their plural stem by infixation of {c} or any other process resulting in the addition of a syllable have free plural stems.

-cap → cəca·p 'to get through (eating or drinking)'

-caṭm → cəca·ṭm 'to shove'

-ta·sip → tətəsi·p 'to put out a fire'

-maṭ → u·ma·ṭp 'to think'

-wam → pəwam 'to rest'

428.3 Verb classes

With the formal apparatus fully described it is now possible to proceed with the identification of verb classes, as based on the formal processes of plural formation which they require. It seems advantageous, however, to first account for a group of verbs which do not form a plural stem, and which I will call the Zero class.

Class Zero

A fairly large number of verbs do not form a plural stem. No formal characteristics separate these verbs from others and they must therefore be identified in the lexicon as belonging to the zero class. Attempts on my part to form plural stems from these stems by analogy with other stems of the same type were greeted with mixed feelings and remarks such as: "I guess that would be correct, but nobody would ever use it." A few examples will illustrate various types of stems in this class.

-k^{w}a·	'to hook, to crochet'
-k^{w}i·c	'to tattoo'
-ɬ^{y}i·m	'to buck (of a horse)'
-ta·x^{w}at̓	'to make red'
-ta·n^{y}iɬ^{y}	'to make black'
acxu·ka·yp	'to trade'
acəwar̓	'to want, but hesitate doing'
apəsi·	'to strain, squeeze liquid through'
apəsi·w	'to be very much, to force'
a·səwa·y	'to bank, fly in a circular motion'
cu·k^{w}ar̓	'to preach, to brag'
cu·k^{w}is̓	'to chatter (like squirrel)'
məwas	'to be soft'
məci·ɬp	'to be wrinkled (in face)'

The other classes include only stems which have formally distinct plural stems. The descriptive order adopted is from the most restricted to the more general class, with the result that the last class described, i.e. the most productive, may be called regular and contains all verbs not accounted for by the previous classes. It is of course impossible to list all recorded examples in the case of classes with large membership. This information belongs in the lexicon, where each verb stem will be listed with its class membership. In the case of verb stems which form more than one plural stem, they will be listed in the lexicon as belonging to as many classes as they have plural stems.

Class I: Suppletive stems

A few nonplural stems have corresponding plural stems which show no formal resemblances to the nonplural stem. A full list of examples follows:

pam → nəkəmic 'to get there'

puˑwk → nəkəwayk 'to come back'

ʔəstik → ʔəl^{y}əmis 'to be little'

məlay → ṣaˑwaṭp 'to die'

Class II: Verbs of motion (unspecified as to direction) and bodily position.

All verbs in this class form a plural stem by prefixation of ⟨p⟩. Although all members of this class fit into the semantic range indicated above, the reverse is not true since a verb like -nuw 'to run' (and others which one might expect

to belong to this class on semantic grounds) do not form plural stems in this manner. Three subclasses may be identified. The examples below represent the full list of recorded members of this class.

IIa. With no additional modification

-wam → pəwam 'to rest' yaṛ → pəyaṛ 'to run away'

-l^{y}ak → pəl^{y}ak 'to lie down' -nak → pənak 'to sit'

-naɬ → pənaɬ 'to fall (of people)' -naṛ → pənaṛ 'to drown'

IIb. With quantitative ablaut

-man → pəma·n 'to fly'

-maṇ → pəma·ṇ 'to get up (from reclining position)'

xəma· → pəxəmac 'to sleep' (with suffixation of {c} automatic after a stem-final vowel)

IIc. With quantitative ablaut and infixation of {c}

xəta·t → pəcxətat 'to stand up (from sitting position)'

(note application of mp 3 and the fact that the plural prefix {p} has the {c} infixed after it, like other nonplural prefixes.)

Class III: Verbs of directed motion

All verbs in this class form plural stems by prefixation of {n}. They may be divided into two subclasses: a regular subclass where prefixation of {n} is the only modification, and an irregular subclass, where the plural stems exhibit some unusual modifications. The examples below represent the full list of recorded members of this class.

IIIa. Regular

a· → na· 'to go'

a·m → na·m 'to go away (⟨a·⟩ 'go' + ⟨m⟩ 'directional')

t-am (where ⟨t⟩ is outer structure prefix 'progressive')→ tənam 'to be there, to be around'

-yi·w → nəyi·w 'to come'

-yi·wk → nəyi·wk 'to come toward, away from' (where ⟨k⟩ is directional suffix)

-can → nəcan 'to go down'

yum → nəyum 'to be in the direction of, with'

pək^{w}iɬ^{y} → nəpək^{w}iɬ^{y} 'to pass by, cross over'

pur̥ → nəpur̥ 'to get to the top'

-kuɬ → nəkuɬ 'to climb'

xəkay → nəxəkay 'to cross over'

IIIb. Irregular

cəpak → nətəpack 'to come out'

cəpam → nətəpacm 'to go out'

(These two verbs exhibit several peculiarities. First, the prefix ⟨c⟩ follows the allomorphy of the infix ⟨c⟩ by having a variant /t/ after a dental prefix. Second, the plural stems show suffixation of ⟨c⟩ in an unusual way. In all other cases, suffixation of ⟨c⟩ is always in stem-final position and follows a vowel or a voiced consonant. In this case, it may be assumed that the basic stem for both forms is ⟨cəpa⟩ with a plural stem ⟨nətəpac⟩ to which are then added the directional suffixes ⟨k⟩ and ⟨m⟩)

-xap → nəkəxap 'to go in' (the presence of {k} in the plural stem or its absence in the nonplural stem is unexplained)

Note also that two of the suppletive plural stems of Class I belong here formally and semantically: nəkəwayk 'to come back (pl. stem)' and nəkəmic 'to get there (pl. stem)'.

Class IV. Plural stems with {p} suffix

The members of this class overlap semantically to some extent with those of Class V below, i.e. they denote self-induced or spontaneous states or actions. They do not share with Class V the formal process of infixation of {u·}. They are relatively few in number and fall into two subclasses. A full list or recorded members of this class is given below.

IVa. With quantitative ablaut

p-yu· → p-yupc 'to be that way' (where {p} is the outer structure demonstrative prefix. Suffixation of {c} is unexpected and unexplained.)

-wi· → -wip 'to do'

i· → ip 'to say'

-wu·w → -wup 'to see' (loss of -w in plural is unexplained)

u·say → u·sa·yp 'to laugh'

um → -wupm 'to look out there' (um is probably a reduced form of *-wu·(w)-m, i.e. the stem 'to see' as above, plus the directional suffix {m}. The position of this suffix in the plural stem parallels that of the irregular stems of Class IIIb. If more evidence becomes available to suggest that this is a regular phenomenon, then it would appear that the formation of plural stems might have to be accounted for before that of suffix stems, at least in the case of directional suffixes.

IVb. With vocalic ablaut and infixation of {c}

u·ya·w → ucəyu·wp 'to know' (note application of plural rule 428.2a) and qualitative ablaut not accompanied by quantitative ablaut.)

nəwaṭ → nətəwa·ṭp 'to finish' (also recorded is nətəwaṭp. Informants translate nətəwa·ṭp as 'they're finished' and nətəwaṭp as 'they're through')

Class V. Verbs of intellectual activity, emotional states, self-induced or spontaneous states, passives.

Verbs of this class form their plural stems by infixation of {u·} immediately before the verb root. This is the main process defining this class. In addition, they take suffixation of {p} when the nonplural stem does not end in /p/ or /k/,

in which case the suffix is omitted. The similarity both semantic and formal of this {p} suffix with the nonplural passive stem suffix {p} is inescapable. There is, in fact, some convincing evidence for identifying the two as the same morpheme. Many nonplural members of Class V are clearly passive forms themselves and in a few cases of nonpassive stems for which a plural stem with {p} was found, an additional nonplural stem--a passive one--was later discovered and thus found to be the true source of the plural stem. Whether the {p} suffix of Class IV verbs should also be considered the same morpheme is less clear and this cannot be settled unambiguously on the basis of the available data. Stems of Class V are quite numerous and fall into several subclasses. A few examples will illustrate the various types.

Va. With no additional modifications

acək^{w}ir → acu·k^{w}irp	'to make fun of'
xəmay → xu·mayp	'to look for'
acəpay → acu·payp	'to believe' (see also Vb; acu·payp is translated 'they believe in')
kətuy → ku·tuyp	'to be at ease, comfortable'
xup → xu·up	'to be full (from eating)'
i·ca· → yuca·p	'to think, remember' is somewhat irregular in form but obviously fits into this class.
amp → -wamp	'to walk' (see mp 12)

yip → yəwip 'to hear' (see mp 12). This suggests that the root is {ip} with a prefix {y} unattested elsewhere.

Vb. With quantitative ablaut

acəpay→ acu·pa·yp 'to believe' (the plural form is translated 'they believe (various things)', see also Va)

-maṭ → u·ma·ṭp 'to think' (plural rule b)

-x^{w}ic → u·x^{w}i·cp 'to hate' (plural rule b)

-mir → u·mi·rp 'to like' (plural rule b)

aṛ → -wa·ṛp 'to want' (mp 12)

xəcu·ṛ → xu·cuṛp 'to be cold'

xəcal^{y}p → xu·ca·l^{y}p 'to be happy'

xəcap → xu·ca·p 'to wake oneself up'

təxəlakp → təxu·la·kp 'to be hooked'

ṣəxəpətunp → ṣəxəpu·tu·np 'to kneel'

Vc. With infixation of {c}

Stems of this subclass are the most numerous of Class V.

-kun^{y}əmi· → -kun^{y}cu·mi·p 'to mistreat' (note application of mp 3, and nonapplication of plural rule b, since the number of syllables of the plural stem is the same as that in the nonplural stem. Rule b obviously applies after the regular morphophonemic rules.)

məṛəyi· → məṛcu·yi·p 'to be ashamed' (mp 3)

pəxk^{w}i· → pəcxu·k^{w}i·p 'to stand, stop' (mp 3)

cu·xuṛ → cəcu·xuṛp 'to crunch' (plural rule a)

nuṛ → nətu·uṛp 'to know'

ṇəmi· → ṇəṭu·mi·p 'to get mad' (also ṇəṭəmi· 'to be mean, pl.')

ṛəwi· → ṛətu·wi·p 'to be alike'

səməray → sətmu·rayp 'to be drunk' (mp 3)

Vd. With vocalic ablaut and infixation of {c}

təpək^{w}i·ṛp → tətpu·k^{w}iṛp 'to be whirling' (mp 3)

təxəlumk → tətxu·lu·mk 'to be saturated' (mp 3)

ʔi·walp → ʔəcu·wa·lp 'to be in plain sight' (plural rule a)

i·xaɬ^{y}p → əcu·xa·ɬ^{y}p 'to hurry up' (plural rule a)

təkəmakp → tətku·ma·kp 'to be shelterd' (mp 3)

cu·kuw → cəcu·kawp 'to bite' (plural rule a)

kəpəkuw → kəcpu·ka·wp 'to meet' (mp 3)

Note that in the last two verbs, which appear to be formed on the same root, one has only qualitative ablaut, the other quantitative as well, which shows that the two processes of ablaut are independent of each other.

Class VI. Regular verbs

All verbs not accounted for by the above classes belong to Class VI and may be called regular verbs. A number of subclasses define the processes involved in their plural stem formation.

VIa. With vocalic ablaut

To this class belong all nonprefix stems not previously accounted for, a few irregular prefix stems and some unanalyzable longer stems. Several types may be identified.

i. With quantitative and qualitative ablaut

-sa·w → -suw 'to eat'

-nuw → -na·w 'to run'

ii. With quantitative ablaut only

-yix → -yi·x 'to carry on one's back'

-cac → -ca·c 'to spread out (e.g. blanket)'

-ɬic → -ɬi·c 'to be bad'

-pap →-pa·p 'to bake'

in^{y} → $i·n^{y}$ 'to give'

səkaṇ → səka·ṇ 'to be first, ahead'

su·naṭ → su·na·ṭ 'to play (e.g. cards)'

$xi·nul^{y}p$ → $xi·nu·l^{y}p$ 'to be cute, silly'

ma·yki·wayk → ma·yki·wa·yk 'to forget'

cəmaɬ 'to rub lightly' → cəma·ɬ 'to rub in long strokes, to flood' (also cəcəma·ɬ with apparently the same meaning)

təṭəpac → təṭəpa·c 'to take out a round, solid object'

cəcəpac → cəcəpa·c 'to take out a bunch'

(the above two forms probably already contain the collective plural ⟨c⟩ in what appears to be a nonplural form.)

-təxəmac → -təxa·mac 'to put to sleep' (lengthening here seems to have been transferred to a preceding syllable. This is the only example of this type recorded.)

iii. With qualitative ablaut and suffixation of {c},

-yu·w → -ya·wc 'to have got, to take'

a·cəmuyu·w → a·cəmuya·wc 'to show'

ʔəcəyu·w → ʔəcəya·wc 'to sing'

iv. With qualitative and quantitative ablaut and suffixation of {c}

-ta·ra·w → -ta·ruwc 'to heat, warm up'

-cuw → -ca·wc 'to make'

v. With quantitative ablaut and suffixation of {c}

-wa·w → -wawc 'to holler'

-ma· → -mac 'to eat soft things'

-to· → -toc 'to hit with stick'

-si· → -sic 'to drink'

-wiṛ → -wi·ṛc 'to be hard'

-man^{y} → -ma·n^{y}c 'to spread out'

-xuy → -xu·yc 'to smoke out, fumigate'

-to·m → -tomc 'to pay'

-ta·say → -ta·sa·yc 'to make dry' (tətəsayc is also recorded)

ki·xa·r → ki·xarc 'to complain'

su·na·r → su·nal^{y}c 'to play with toys' (the alternation r:l^{y} is unexplained)

xəyan → xəya·nc 'to carry in one's arms'

vende·r → venderc 'to sell' (Spanish loan)

travaxa·r → travaxarc 'to work' (Spanish loan)

Two exceptions may be noted here of stems which form their plural stem only by suffixation of {c}. They both have a long vowel in the nonplural stem.

acəxa·r̥ → acəxa·r̥c 'to have diarrhea'

-ya·w → -ya·wc 'to pick from vine'

VIb. With infixation of {c}

These are all prefix stems, but far less numerous than those in VIc below. They are of two types.

i. With no other modification.

n̥əmi· → n̥əṯəmi· 'to be mad, angry'

xəmi· → xəṯəmi· 'to grow up (boy)'

pəs̥uw → pəcəs̥uw 'to wait'

a·ap → a·cap 'to lay a long object down'

məl^{y}ay → məcəl^{y}ay 'to not know how'

a·r̥apm → acər̥apm 'to throw a stick' (plural rule a)

ii. With suffixation of {c}

u·ni·w → ucəni·wc 'to be against, opposed' (plural rule a)

i·ma· → əcəma·c 'to dance' (plural rule a)

pəni· → cəpeni·c 'to pull toward oneself' (note the irregular position of {c} which is here prefixed to the stem. This is the only example recorded.)

VIc. With vocalic ablaut and infixation of {c}.

This is the most productive class for prefix stems. The list of elicited forms is very long and informants never have difficulty producing them or accepting them as normal forms. In fact, when hesitation occurs, it is always in the case where two separate plural stems exist, one of which belongs to this class. It seems evident that there is a leveling trend at work tending to incorporate as many verbs as possible into this group.

Several types may be identified.

i. With both quantitative and qualitative ablaut

a·ṛa·w → acəṛuw 'to heat, warm' (plural rule a)

kəpuw → kəcəpa·w 'to step on'

ii. With quantitative ablaut and suffixation of {c}

təma· → tətmac 'to try' (mp 3)

tənay → tətna·yc 'to be late' (mp 3)

təner → tətna·rc 'to have' (Spanish loan) (mp 3)

cək^{w}a· → cəcək^{w}ac 'to put down a bunch of soft things'

cəto· → cəcətoc 'to hit with a round object'

iii. With quantative ablaut

a·ku·xap → akəcəxa·p 'to catch up with' (note abnormal position of {c} and double application of plural rule a)

a·yuɬ → acəyu·ɬ 'to hide something' (plural rule a)

u·x^{w}aq → ucəx^{w}a·q 'to break, crack something' (plural rule a)

yu·xan → yucəxa·n 'to make good' (plural rule a but with retention of vowel quality)

ta·wiṇ → təṭəwi·ṇ 'to iron' (plural rule a)

u·saw → ucəsa·w 'to make someone eat' (plural rule a)

ṣa·wal → ṣəṭəwa·l 'to stir' (plural rule a)

xəpil → xəṭəpi·l 'to spread on face, to use make-up'

428.4 Evidence for Semantic Distinctions

As must be clear by now, the exact semantic notions expressed by verb stems grouped together under the label "plural" are not always transparent. In order to justify to some extent the semantic statements made earlier, the present section will present some of the evidence on which the analysis is based. This consists of pairs or sets of plural stems derived from a single nonplural stem. Translations and forms are given in the third person to allow a more concrete semantic interpretation.

a) Contrasts between [ṭp] (bodily position or nondirected motion), [ṭn] (directed motion) and other processes.

ku·kap 'he goes around (e.g. the house)' → nəkap 'they go around (e.g. the house)'

→ ku·ka·p 'they are (distributed) around (e.g. the house), in a stationary manner'

puṛ 'he reaches the top' → nəpuṛ 'they reach the top'

vs

təpuṛ 'he brings to the top, i.e. he causes something to reach the top' → təṭəpu·ṛ 'they bring it (them) to the top'

wəkuɬ 'he climbs' → nəkuɬ 'they climb (e.g. they are climbing the mountain)'

wəku·ɬ 'they climb (e.g. each one climbs a separate tree)'

wənaṛ 'he drowns' → pənaṛ 'they drowned'

wəna·ṛc 'they (each one) drowned'

Thus it seems clear that [p̚] and [n̚] place emphasis on the kind of action, whereas other processes emphasize other aspects.

b) Contrast between -u·-...-p (intellectual, emotional, self-induced, passive states) and other processes.

n̥əmi· 'he gets mad, angry' → n̥ət̥əmi· 'they are mean (by nature)'

n̥ət̥u·mi·p 'they get mad (induced state)'

cəto· 'he hits (with fist)' → cəcətoc 'they hit (with fist)'

vs

cəto·p 'he bumps against something' → cəcu·to·p 'they bump against something'

ʔi·walp 'he (it) is in plain sight' → ʔi·wa·lp 'they are in plain sight, i.e. they each may be seen clearly' → ʔicu·wa·lp 'they are showing (themselves)'

cəpəsi· 'he sucks' → cəcpəsi·c and cəcpu·sicp 'they suck' (upon reflection, the informant decided cəcpu·sicp was the more correct form of the two)

The following set is not too clear semantically, but is listed because of its productivity.

apəkʷilp 'it's turning (like the hand of a clock)

→ apəkʷi·lp 'it's turning (keeps turning?) round and round'

→ acpəkʷi·lp 'they are turning (keep turning?) round and round'

→ acpu·kʷilp 'they went round and round'

c) Contrast between ⟨c⟩ (collective) and vocalic ablaut (distributive)

əta·say 'he dried it' → əta·sa·yc 'they each dried one'

tətəsayc 'they (in a bunch) dried it'

acəpay 'he believes (it)' → acu·payp 'they believe in (e.g. God)'

→ acu·pa·yp 'they believe (the things they are told)'

a·kaṭ 'he cuts with knife' → acəkaṭ 'he cuts into pieces'

→ acəka·ṭ 'they cut with knife or into pieces'

(Note that a theoretically possible *a·ka·ṭ is not attested, as plural stems of a·- prefix stems always have the -c- infix, confirming the overlap of formal with semantic conditioning factors.)

u·caɬ 'he splits it' → u·ca·ɬ 'they each split one thing, or he splits it several times'

→ ucəca·ɬ 'they (a bunch) each split one, or they (together) split it several times'

ti·kay 'he asks for something' → ti·ka·yp 'he is (or they are) a beggar (beggars)' i.e. to be in a state resulting from repeatedly asking for things.

→ təṭəka·y 'they ask for something (or things)'

ci·maɬ^{y} 'he fibs, he tells tall tales'

→ ci·ma·ɬ^{y} and also cəcu·ma·ɬ^{y}p (The second form, collected from one informant, was rejected by another as 'slang'. It seems clear that the first informant considered this verb to belong to the category of intellectual, emotional or self-induced actions, whereas the other did not. Neither one of the two plural stems is in common use.)

One additional remark is in order at this point. There is some evidence that a certain amount of dialect mixture is at work here. For example, a form nəṭəwa·ṭ elicited once as the plural stem of nəwaṭ 'to finish' was later rejected by the same informant as belonging to the Barona dialect and then replaced by the (more correct) pair nəṭəwaṭp''they're through, and nəṭəwa·ṭp 'they finished'.

Attempts to generalize the illustrated distinctions to the whole body of plural stems are somewhat inconclusive and point to the tentative nature of my statements. The

sources of the difficulties are summarized here since they suggest the direction which further investigations might take.

1. Lack of sufficiently clear contexts and difficulty of translation into English. This suggests a program of text elicitation centering on some carefully selected topics.

2. Dialect mixture. A study of other dialects should be particularly interesting in this area.

3. Rarity of the situations in which a large number of these forms would be used in a natural way. This obstacle, of course, cannot be eliminated, but, if kept in mind, might provide a criterion for selecting the data on which final conclusions should rest.

4. Historical developments. While it is obvious that synchronic description is a necessary prerequisite for historical studies, especially for languages with no earlier documents, it should not be forgotten that, at a later stage, historical information can provide valuable insights into synchronic phenomena. In this case, the synchronic situation is highly suggestive of conflicting historical tendencies. When more descriptive information becomes available on other Yuman languages and comparative studies are undertaken, I am convinced that the results will be illuminating from a synchronic point of view also.

429 Summary of inner structure of verb forms

A general formula may be constructed to account for the inner structure of verb forms, summarizing the preceding description. This formula is meant to account for the maximum possible expansion of a verb root. While no single form exhibits all possibilities simultaneously, the position of each element may be determined by comparison of several forms. Deviations from the order of elements indicated in the formula are rare and have been noted in their proper place.

The formula describes the structure from left to right, i.e. from the first possible prefix position toward the root and from the root outward to last suffix position. Only the root position needs to be filled at all times. The formula is then as follows (the symbol + indicates 'may be followed by')

{p}, {n} plural prefixes

+

initial prefix

+

palatal prefix

+

{c} 'collective plural'

+

noninitial prefix(es)

+

{u·} plural infix

+

root with or without vocalic ablaut

+

{c} (predictable phonologically in some cases)

+

directional suffixes, or

passive suffixes, or

{p} plural suffix.

Verb stems may occur as free forms with nominal function (see 527.2). In this function, bound stems add initial /ə/. When not used in nominal functions, verb stems require the addition of personal prefixes to form inflected verb forms (see 430 below).

430 Outer structure of verb forms

The outer structure of verb forms consists of the addition to verb stems (420) of inflectional prefixes and suffixes as well as a small set of aspectual prefixes.

431 Personal prefixes

An inflected verb form, i.e. occurring in texts as a word representing either all or part of a verb phrase, must consist of at least a verb stem preceded by one of a set of personal prefixes (with the exception of the third person of many verbs which is unmarked) distinguishing the person of the subject (first, second, third, or second imperative) as well as--when appropriate--the person of the direct object (first, second, or third). No reference to gender or number is involved. For ease of presentation, the translation will be given by the simplest English equivalent, i.e. 'I, you, he' but these should be interpreted as cover terms, the correct English equivalent being determined by the context. Thus 'I' means both 'I' and 'we', 'you' is 'you' or 'you all',

'he' is 'he, she, it, they', 'you!' indicates the imperative. The full list of the prefixes is given below. Forms in parentheses indicate that the reference to object is optional.

{ʔ} 'I...(him)'

{m} 'you...(him), he...you'

{k} plus shortening of the stressed vowel of the root if it is stem-final 'you!...(him)'

{w} 'he...(him)' is prefixed to free root stems with initial vowel and to bound root stems. When a stem of this type begins with /u·(·)/ or /w/, {w} is zero. When a bound root stem has the shape -mV(C), {w} may have an allomorph /u/, i.e. the phonemic shape of such forms is /wəmV(C)/ (with application of mp 1) ~ /umV(C)/.

For all other verb stems, there is no overt third person prefix.

{n^y} 'I ... you', or 'he...me'

{ʔ-n^y-m} 'you...me'

{ʔ-n^y-k} plus shortening of the stressed vowel of the root if it is stem-final 'you!...me'

It is clear that the last two prefixes consist of three morphemes each, all of which occur elsewhere alone as personal prefixes. The morphemes involved are therefore {ʔ} 'first person', {m} 'second person', {k} plus shortening of stem-final vowel 'imperative second person', {w} 'third person', and {n^y} to which it is difficult to assign a meaning, but which is identical in form with a {n^y} 'general

possessive' (see 532) which combines with some of the same personal morphemes to form nominal possessive prefixes. The order of the elements indicates the syntactic function, i.e. first position 'object', second position 'general, indefinite(?)', third position 'subject'. This explains the ambiguity of m- which, if interpreted as being in first position, i.e. object, is 'he...you', if interpreted as third position, i.e. subject, is 'you...(him)'. The ambiguous n^y- remains irregular, but might be interpreted as a reduced form of the expected but unattested *?-n^y 'he...me' and *m-n^y-? 'I...you'.

In the examples below, application of mp 1 (insertion of /ə/ between consonants at morpheme boundaries) is noted once and for all.

from ⟨a·⟩ 'to go', plural stem ⟨na·⟩

?a· 'I go', ma· 'you go', ka? (mp 10) 'go!', wa· 'he goes'

?ənа· 'we go', mənа· 'you all go', kənа? (mp 10) 'you all go!'

na· 'they go' (note that since the plural stem is formed by the addition of the prefix, it is no longer a root stem, and is therefore not marked for third person.)

from ⟨a·⟩ 'to go' + ⟨m⟩ 'away' (directional suffix)

?a·m 'I go away', ma·m 'you go away, ka·m 'go away!' etc.

from {-nak} 'to sit', plural stem {p-nak}

ʔənak 'I sit', mənak 'you sit', kənak 'sit!', wənak 'he sits'

ʔəpənak 'we sit', məpənak 'you all sit', kəpnak (mp 4) 'you all sit!', pənak 'they sit'

from {-mi·} 'to cry', plural stem {-mic}

wəmi· ~ umi· 'he cries', kəmiʔ (mp 10) 'cry!', wəmic ~ umic 'they cry'

from {ux} 'to cough', plural stem {u·x}

ux 'he coughs', u·x 'they cough', ʔux 'I cough'

from {-wu·w} 'to look at, to see'

ʔəwu·w 'I see (him)', kəwu·w 'look at him!', əwu·w 'he sees it'

from {-to·} 'to hit'

ʔəto· 'I hit him', kətoʔ (mp 10) 'hit him!', wəto· 'he hit him'

from {c} prefix and {-to·} 'to hit', i.e. 'to hit with fist'

ʔəcəto· 'I punch him', n^{y}əcəto· 'I punch you, he punched me', ʔən^{y}əməcəto· 'you punch me', ʔənəkəctoʔ (mp 4 and 10) 'punch me!', kəctox kəma·w 'don't punch him!'

from {ʔ-xan} 'to be good'

ʔa·xan 'I am good' (mp 11a)

maʔxan 'you are good' (mp 5 and 11d)

kaʔxan 'be good!' (mp 5 and 11d)

ʔəxan 'he is good'

from {ʔ-i··kʷi} 'to be big' plural stem {ʔ-i··c-kʷi·} +
plural rule a ʔa·yku· 'I am big' (mp 8, 9, 11b)
may?ku· 'you are big' (mp 8, 9, 11c)
ʔi·ku· 'he is big' (mp 8, 9)
ʔacəkʷi· 'we are big' (mp 11a, plural rule a)
ʔəcəkʷi· 'they are big'

With a few stems in ʔ- (which have both verbal and nominal characteristics) personal prefixes have been recorded for first and second person which are formally identical with the nominal possessive prefixes. This is unpredictable, since most stems in ʔ- follow the general rule. Two full sets are:

from {ʔ-ɬpa·y} 'to be a rascal'
ʔəɬpa·y 'he is a rascal'
ʔənʸaʔəɬpa·y 'I am a rascal' (mp 11d)
maʔəɬpa·y 'you are a rascal' (mp 11d)

from {ʔ-xʷin} 'to be the same'
ʔəxʷin 'he is the same'
ʔənʸaʔxʷin 'I am the same' (mp 11d)
mənʸaʔxʷin 'you are the same' (mp 11d)

431.1 Transitive and intransitive verbs

Since some of the personal prefixes described in 431 overtly mark direct object, they provide a criterion for identifying transitive and intransitive verbs, i.e. intransitive verbs are those which cannot take personal prefixes marking object. In the lexicon, each verb should be

identified as either transitive or intransitive, although at this writing it is not possible to so label every verb with assurance, as no systematic attempt was made to check every verb recorded for transitivity.

432 Aspectual prefixes

A few verbs are formed with prefixes of a different position class from those previously described in that their position in inflected forms is before the personal prefixes. Although they show some formal resemblances to some of the other prefixes, their meaning is quite distinct.

432.1 The prefix {t} 'progressive' forms a set of verbs indicating an action in progress, best translated by 'to be.. ing'. These verbs are characterized by their use both as main verbs of predications and as a type of auxiliary indicating the position in which the subject of the main verb finds itself while performing the action denoted by the main verb. The full list is given below. All verbs in this class are intransitive.

{t-wa·} 'to be sitting, to be staying there, to be there'

ta?wa· 'I am sitting' (mp 5 and 11d)

təməwa· 'you are sitting'

təkəwa? 'stay there!' (mp 10)

təwa· 'he is sitting'

{t-pa} 'to be getting there'

ta?pa· 'I'm getting there' (mp 9,5,11d)

{t-pam} 'to be getting there'

təpam 'he is getting there'

{t--yu·w} 'to be standing there' (--indicates that the root has the characteristics of a bound stem)

ta?yu·w 'I am standing there' (mp 5, 11d)

təməyu·w 'you are standing there'

tu·yu·w 'he is standing there' (mp 12)

{t--yaq} 'to be lying there'

ta?yaq 'I am lying there' (mp 5, 11d)

tu·yaq 'he is lying there' (mp 12)

All the above distinctions are neutralized in the plural stem {t-n^{y}-way} which serves as plural stem for all of them.

ta?n^{y}əway 'we were there' (mp 5, 11d)

təkən^{y}way 'you all stay there!' (mp 4)

Other verbs in this class are:

{t-a·} 'to be going' (cf. a· 'to go')

ta?a· 'I'm going' (mp 11d)

təwa· 'he is going'

təna· 'they are going'

{t-am} 'to be around' (maybe from a· 'to go')

ta?am 'I am around' (mp 11d)

tənam 'they are around'

{t--yiw} 'to be coming' (cf. -yiw 'to come')

ta?yiw 'I am coming' (mp 5,11d) ta?nəyiw 'we are coming' (mp 5,11d)

tu·yiw 'he is coming' (mp 12)

432.2 The prefix {p} adds a demonstrative meaning to the stem. All verbs in this class are intransitive.

{p--yu·} 'to be that way, to be the same'

pu·yu· 'he is that way' (mp 12)

pu·yupc 'they are that way' (mp 12)

{p--yuy} 'to be next, to be like that too'

pəməyuy 'you are next'

pu·yuy 'he is next' (mp 12)

{p-wi·} 'to do that'

pəwi· 'he does that'

{p-i·} 'to say that'

pəwi· 'he says that'

pəwip 'they say that'

A prefix {pa} seems to be slightly different from {p} in that it has the meaning 'there'. Full paradigms are not available. {pa-yu·w} 'to be there standing'

pa?yu·w 'there he stands' (note the /?/ probably inserted to preserve the quality of the preceding vowel)

{pa-a·} 'to go there'

pa?a· 'there he goes' (note again the /?/, maybe it is part of the prefix)

{pa-yiw} 'to be coming there'

pa?yiw 'there he comes'

panəyiw 'there they come'

It should be noted that there is a good deal of homonymy in the inflection of several of these verbs and that their exact meaning in texts is often difficult to ascertain.

432.3 Other prefixes

Two additional verbs fit into this formal categroy, though it is impossible to assign a meaning to the prefix, as it is only attested in these forms. They are:

{ʔ-c--yu·w} 'to sing'

əckəyu·w 'sing' ʔəcwəyu·w 'he sings'

ʔəcəya·wc 'we sing' (note the absence of {ʔ} 'first person' and the fact that in no form in the language was the sequence Cʔ recorded. With more examples of this kind, an additional morphophonemic rule might be required)

{ɬ^{y}i--ya·w} 'to fool, to lead astray'

ɬ^{y}iʔəya·w 'I fooled him' ɬ^{y}iwəya·w 'he fooled him'

No plural stem exists for this verb.

433 The future suffix {x}

All inflected forms listed so far are somewhat neutral with respect to tense. All one can say about them is that they are nonfuture. They may refer to present or to past time depending on the context. The future is expressed by a suffix {x} added to any of the verb forms so far described. It indicates that an action is expected to take place at a future time with respect to the time of other actions in the context, or has already started but will continue in the

future, or that an action or event is not occurring, has not occurred, or will not occur, as is attested by the obligatory presence of {x} with any verb form followed by the negative verb {-ma·w} 'to not'.

ʔa·x	'I will go'
wəca·wcx	'they were about to make it'
warx uma·w	'he doesn't want to'
ʔa·x ʔəma·wx	'I won't go'

435 Summary of outer structure of verb forms

The structure of inflected verb forms may now be summarized by the formula

Aspectual prefix + personal prefix(es) + verb stem + future {x}.

500 THE NOUN

510 Introduction

The distinction between nouns and verbs in Diegueño is basically a syntactic one, but some formal differences also separate the two classes. (For a definition of verb forms, see 410). In the case of nouns, they may be defined as such forms which never combine with the syntactic prefix {n^{y}a} 'when' and the syntactic suffix {s} 'mild emphatic'. A number of forms as they occur in texts are formally ambiguous. Since verbs may be nominalized (see 700 and 800) and since the same syntactic suffixes occur with both nouns and verbs, syntactic information is not always sufficient to identify the underlying form unambiguously. It is quite possible, however, that the difficulty resides not in the structure of Diegueño as such, but is rather a failure on my part to properly separate problems of description from problems of translation.

Nevertheless, and while nouns show striking resemblances to verbs (which will be pointed out in the appropriate sections below), they are in the majority of cases distinct enough in structure to leave no doubt as to their separate status as a form class.

The structural framework which was found to best characterize verbs was also found applicable to nouns and has the additional advantage of highlighting both the differences and the similarities between the two classes.

520 Inner Structure of nouns

521 Compounds

The great majority of nouns are not readily analyzable synchronically, although they often give the impression (particularly for those of more than two syllables) of being compounds, the basic elements of which are not always attested or so distorted in shape and meaning as to make their analysis impracticable. Compounding, therefore, does not appear to be a productive process, except perhaps in the specialized case of reduplicated forms, which are clearly analyzable (see 610). So few of these, however, are nouns that to speak of a productive process would be a contradiction in terms, particularly since, in most cases, the underlying non-reduplicated form is not attested. Some examples are:

kurkur	'ground owl, clan name'
ʔuʔu·	'horned owl'
wiṛəwiṛ ~ wiṛəwi·ṛ	'wing'
xaṛkxa·ṛk	'mushroom'
xulkəxulk	'cricket'
xəlampu·la·mp	'cottonwood tree' (This is formally reminiscent of a plural verb stem of Class Vb and suggests its verbal origin historically.)

Other compounds are of three types:

521.1 Phrasal compounds, which clearly represent a nominal phrase, i.e. were recorded sometimes as two words (with two stresses) and sometimes as one word (single stress), the latter case being subject at times also to other phonological reductions as a result of the loss of stress. Only a few clear-cut examples of this type were found:

ʔa·ṣa· k^{w}ila·w ~ ʔəṣa·k^{w}ila·w ~ ṣa·k^{w}ila·w 'mockingbird' (the form k^{w}ila·w is suggestive of derivation from a nonattested verb stem *ila·w plus the nominalizing prefix [k^{w}] for which see 527.23).

ʔəxa· sa·ɬ ~ ʔəxa·sa·ɬ ~ xasa·ɬ 'waterfall' (ʔəxa· 'water' plus sa·ɬ which, though it occurs in this one phrase as a free form, is not attested in other contexts)

ʔəxa· tuy ~ ʔəxa·tuy 'middle of the water, Catalina Island' (tuy in turn is derived from -tu· 'belly, center', see 527.1)

ʔəxa· cəpṣa·w ~ xacpəṣa·w 'fern' (ʔəxa· 'water' ~ cəpṣa·w 'rib')

521.2 True compounds, where all elements are analyzable, i.e. attested either as free forms or in other compounds. Compounding is usually accompanied by a certain amount of reduction of unstressed vowels (shortening, omission, or reduction to /ə/). Some consonants are also occasionally omitted. Initial nouns sporadically have the ʔ- of the free form, noninitial elements (verbs and nouns) always have the form without ʔ-. No exact rule can be stated for these

modifications, as the number of true compounds is limited and the amount of reduction varies from form to form. A complete list of clear cases follows.

aləmi· 'beard' (a· 'mouth' + ləmis 'fur')

mati·x^{w}a·y 'battleground, Mataguay (place name)' (ʔəmat 'land, earth' + ʔi·x^{w}a·y 'battle' cf. ʔəxwa· 'stranger', cf. əx^{w}ic 'to hate')

matətay 'mountain' (ʔəmat 'land, earth', *ʔətay 'big', which is recognized by Mesa Grande speakers as an old word now occurring only in compounds, but still occurring as a free form in other dialects.)

məxətun ~ mi·xətun (~ xəmətun) 'knee' (-mil^{y} 'leg, foot' + *xətun not attested as free form but present also in 'elbow', obviously with same semantic content)

saɬ^{y}xətun 'elbow' (-saɬ^{y} 'arm, hand' + xətun, see above)

ʔəwiyaq 'gopher snake' (ʔəwi· 'rattlesnake' + -yaq 'to lie' or aq 'bone'?)

ʔəwi·naɬ^{y} 'San Felipe (place name)' (ʔəwil^{y} 'rock' + naɬ^{y} 'moving'. The etymology was provided by the informant and is confirmed by other examples, e.g. 'knee' where final /l^{y}/ disappears. (Other dialects and related languages often have corresponding forms without final /l^{y}/)

ʔəwi·apa·yp 'learning rock, Cuyapaipe (place name)', (ʔəwil^{y} 'rock' (cf. above) + a·pa·yp 'to lean (long object) against')

xəɬ^{y}ta·mak 'back of head' (xəɬ^{y}ta· 'head' + -mak 'to be behind, in back of')

saɬ^{y}əmak 'shoulder blade' (-saɬ^{y} 'arm, hand' + -mak 'to be behind, in back of')

ʔəciɬic 'devil' (i·cix 'heart, chest' + -ɬic 'to be bad')

mateəwiṛ 'hard earth, clan name' (ʔəmat 'earth' + ʔəwiṛ 'to be hard')

mateək^{w}as 'light colored clay' (ʔəmat 'earth' + ʔək^{w}as 'to be yellow'

matx^{w}aṭ 'clay (red)' (ʔəmat 'earth' + ʔəx^{w}aṭ 'to be red')

matsay 'desert' (ʔəmat 'earth' + sa·y 'to be dry')

n^{y}əmta·y 'mountain lion' (n^{y}əmi· 'wildcat' + *ʔətay 'big', cf. 'mountain' above)

ʔəxa·siɬ^{y} 'ocean' (ʔəxa· 'water' + ʔəsil^{y} 'salt', where the alternations between /l^{y}/ and /ɬ^{y}/ is a case of sound symbolism for which see 620)

521.3 Probable compounds, where only one element can be identified or where etymology is somewhat dubious. Examples are:

ʔən^{y}ak^{w}ik 'east wind, wind storm' (probably ʔən^{y}a·k 'east' + ʔəwik 'west' with elision of /ʔə/ in the second element + morphophonemic rule 7. The actual meaning therefore seems to be 'from east to west')

mil^{y}əpu· 'navel' (-mil^{y} (?) 'leg' + *-pu· unattested in isolation, but recurrent in mi±^{y}əpu· 'umbilical cord' (i.e. 'big navel') by sound symbolism and in anəpu· 'rectum')

sal^{y}əx^{w}uw 'fingernail' (-sal^{y} 'little hand' related to -sa±^{y} 'hand, arm' by sound symbolism + unidentified element)

sal^{y}əx^{w}at 'armpit' (-sal^{y} 'little hand, arm', cf. preceding form, + unidentified element)

səmta·y 'oak, acorn (big variety)' (*səm 'unattested' + *?əta·y 'big')

sa?i· 'buzzard' (?a·ṣa· 'bird' plus unidentified element)

xaṭəpa· 'coyote' (?əxaṭ 'dog, domesticated animal' + perhaps ?i·pac 'man, fellow' a form considered to be slang by Mesa Grande speakers, but commonly used in other dialects. Since Coyote is one of the main characters in the mythology, this etymology does not appear to be farfetched.)

Many other nouns are suggestive of compounding, but will not be identified as such for lack of reasonably certain etymologies.

522 Nouns whose structure parallels that of verb stems

By far the great majority of nouns fall into this category, and are formally comparable to verb stems described in 421-425. The parallelism is not complete. While the evidence for identifying verb prefixes as separate morphemes

is fairly convincing, this is not the case for nouns. It is therefore not suggested that the same morphemes are involved, at least from a synchronic point of view. Nevertheless, the fact remains that nouns show recurrent partials identical in form with some of the verb prefixes and their description on the basis of these similarities is meant to point this out unambiguously.

522.1 Root nouns

Nouns of one syllable (like verbs of the same type) are few. It should be noted also that very few nouns begin in a vowel, as opposed to verbs where this pattern is quite common. Among nouns beginning in a vowel, by far the greatest number belong to the class of body parts, which take possessive prefixes different in form from those of other nouns and more similar to the verbal personal prefixes (for which see 431). All this suggests that they may be of verbal origin. On the other hand, nouns with initial /ʔ/ are very common, while only a small class of verbs (which in turn have some nominal characteristics) exhibit this.

As in the case of verbs, however, the /ʔ/ is analyzed as a prefix and will be discussed below. A fair number of noun roots have the shape -CCV(C) which is rare in verbs. The consequence is that mp 1 never applies, i.e. the consonant cluster cannot be broken by insertion of /ə/. It is suggested, however, that these roots may prove to be historically segmentable.

522.11 Free root nouns

These are very few (as is also the case for free root verb stems, 421). The full list of recorded examples follows.

a·	'mouth'	aq	'bone'
iɬ	'worm'	sin^{y}	'woman'
yir̥	'side, shore'		

522.12 Bound root nouns

As with verbal bound root stems (422) bound root nouns add an initial /ə/ when used as free forms without prefix. They are few (while corresponding verb stems are very numerous) and the majority are body parts. They are probably of verbal origin.

-tu·	'belly'	-ya·w	'tooth, teeth'
-ma·t	'body'	-mil^{y}	'foot, leg'
-n^{y}aɬ^{y}	'throat'	-saɬ^{y}	'hand, arm'
-xu·	'nose'	-yiw ~ -yu·	'eye(s)'
-k^{w}a·	'horn'	-miɬ^{y}	'head louse'
		-n^{y}i·p	'belt'

523 Prefix nouns

These are very numerous and show recurrent partials identical in shape with some of the verbal prefixes. No attempt will be made, however, to draw semantic parallels with verbal prefixes. The difficulty lies mostly in the fact that the elements acting as noun roots are mostly not attested in other forms.

523.1 Vocalic prefixes

a) {a·} a·waɬ 'branch'

b) {u·} u·k^{w}iɬ 'rabbit skin blanket' (cf. a·k^{w}i·ɬp 'to wind around (like vine)'

u·k^{w}in 'acorn hopper'

u·n^{y}a· 'road'

c) {i·} (or ‖əyə‖?) see mp 12

i·wi· ~ əyəwi·	'shoulder'	i·yac	'seed'
i·wiɬ ~ əyəwiɬ	'crotch'	i·cix	'heart'
i·puk ~ əyəpuk	'neck'	i·wi·k	'right (hand)'

523.2 Consonantal prefixes

a) {ʔ}

Verbs with {ʔ} prefix have nominal characteristics (423v). Since many nouns have initial /ʔ/, this suggests the presence of the same morpheme {ʔ} with the approximate meaning: 'the following form has nominal characteristics'. With verbs, it is a verb-stem formant; with nouns, it identifies a nominal free form. In other words, a noun form of this type, when cited in isolation, always has /ʔ-/. When preceded by a prefix, or another element to form a compound, or when noninitial in a sentence and not preceded by a pause, the /ʔ-/ is absent. In compound-initial position, a noun may retain the /ʔ-/ (see 521.2), but in most cases it is lost. It should be noted that nouns in /ʔ-/ are typically disyllabic.

ʔa·w	'fire'	ʔil^{y}	'wood, tree'
ʔur	'egg'	ʔup	'tobacco'
ʔəma·	'yucca plant'	ʔəxa·	'water'
ʔəwik	'west'	ʔəxta·	'cane, bamboo'
ʔəxta·y	'crow'	ʔəmpiɬ	'ashes'
ʔəmaɬk	'woodrat'	ʔəpxi·	'greasewood'
ʔəxpi·	'metate'	ʔəxpu·q	'clover'

b) ⟨ʔ-a·⟩

ʔa·skay	'pot, olla'	ʔa·sa·	'bird'
ʔa·tim	'bow'	ʔa·ku·ɬ	'yucca stem and flowers'
ʔa·xma·	'quail'		

c) ⟨ʔ-i·⟩

ʔi·ta·y	'brush, timber'	ʔi·pay	'Indian, person'

d) ⟨c⟩

cəkuɬk	'hole through something'
cəkulk	'little hole through something'

The two forms above are obviously of verbal origin as attested by the existence of the form k^{w}əckuɬk 'hole through something' with the nominalizing prefix ⟨k^{w}⟩, for which see 527.23.

cəmiɬ^{y}	'very small ant'
cəx^{w}a·ɬ	'lungs'

e) ⟨k⟩

kətu·ɬ	'north'	kəruk	'anniversary of death ceremony'
kəsark	'left (hand)'	kətix	'charcoal'
kətxi·	'gopher'	kəwa·k	'south'

f) {l} and {ɬ}

ləmis 'fur'

ɬəxup 'hole, cave' (also probably of verbal origin in view of k^{w}əɬxup, with nominalizing prefix {k^{w}} 'hole, cave')

g) Nouns in {m}

məkay	'mouse'	məṛa·y	'mirage'
məx^{w}a·	'badger'		

h) Nouns in {n}

nəmas	'raccoon'	nəṣa·w	'black oak'

i) Nouns in {n^{y}}

n^{y}əxay	'juice, soup'	n^{y}əmi·	'wild cat'

j) Nouns in {p}

pəɬ^{y}ta·y	'sagebrush'	pa·ṛxa·w	'fox'
pəxa·	'gut'	pəxma·	'sinew, root'

k) Nouns in {ṣ}

ṣəca·k	'screech owl'	ṣəṛuk	'rainbow'
ṣi·muɬ	'clan, group of people who have the same name'	ṣu·luk	'lightning'
		ṣu·ɬuw	'thunder'

l) Nouns in {t}

təmṣa·	'shade from sun'	təxi·ɬ^{y}	'clothes'
tu·maw	'grasshopper'		

m) Nouns in [x]

xəsiɬ^{y}	'manzanita'	xəyuɬ	'tail'
xəmaɬ	'ear'	xəɬ^{y}ta·	'head'
xa·k^{w}al	'lizard'	xu·ɬuy	'war dance'

n) Multiple prefix nouns

Some polysyllablic nouns are formally reminiscent of multiple prefix verb stems.

cəpəsi·	'liver'	cəpəsa·w	'rib'
apəyaṛ	'hat'	xəməṇ^{y}a·w	'sandals, shoes'
təkəsa·	'chin, jaw'	təxəmul^{y} ~ xətəmul^{y}	'cap-size basket'
xətayil^{y}	'large flat winnowing basket'		

524 Suffix nouns

A few nouns clearly contain the passive suffixes already identified for verb stem formation (425.2)

cəkuɬk	'hole through something'	a·tu·ɬp	'saddle'
ʔəya·yp	'wind'	ʔəxpank	'whale'
ʔəmaɬk	'woodrat'	xəckuɬk	'wolf'

ʔək^{w}ak 'deer' is probably -k^{w}a· 'horn' (i.e. [-k^{w}a] + mp 9), plus -p, i.e. 'horned'

525 Nouns with other recurrent partials

A few additional recurrent partials typical of nouns may be noted.

a) mil^{y}-, miɬ^{y}, mil-, possibly related to -mil^{y} 'leg, foot'

mil^{y}a·pan 'bat'

miɬ^{y}cək^{w}u·w ~ xaɬcək^{w}u·w 'daddy long legs'

milkasup 'sweet pea'

b) məs-, məc-, mostly in names of insects or birds

məsxal^{y}əwi·	'little black ant'
məcxal^{y}əwi·	'very tiny ant'
məcxaɬəxaɬ	'large black ant'
məsxa·l^{y}ap	'butterfly'
məsxapu·l^{y}	'fly'
məspil^{y}	'sparrow hawk'
məswiṛ	'hawk (sp.)'

but also

məsxaṛa·y	'sand'

c) xal-, xaɬ-, xaɬ^{y}-

xalasi·	'willow'
xalpuṣu·k	'humming bird'
xaləpu·	'carrying net'
xaɬəwa·	'cheeks'
xaɬcipuk	'louse'
xaɬtuṭ	'black widow spider'
xaɬ^{y}məṣa·	'shadow'

Note also

xaɬ^{y}a·	'moon'
xaɬ^{y}a·w	'cottontail rabbit'
xaɬ^{y}ka·y	'pine tree (var.)'

526 Kinship terms

Kinship terms are dealt with in a separate section since they show some evidence of a specific internal structure peculiar to them and suggest at least a partial analysis. I have taken into consideration only the best attested terms, by which I mean those I have been able to obtain agreement on

from more than one informant. Other forms which I obtained, although they may occur in most idiolects, seem to be reinterpreted by each informant to suit his own needs. This is perhaps correlated to the change in social structure brought about by acculturation, where the exact reckoning of distant relationships is no longer as clearly defined as it once was.

While a complete morphemic analysis is not practical in view of the fact that it would leave a large number of unaccounted for residues, a few generalizations may be made. The forms listed as bound obligatorily take a possessive prefix (see 531).

a) A prefix {n} denotes all consanguineal relatives of older generations than ego, except for parents. Occasionally, the reciprocal term (used by the relative in question to refer to ego) is attested and has the same form without the prefix {n}.

-nəwis	'Fa Ol Br'	-wit	'Fa Ol Br So'
-nəsil^{y}	'Mo Ol Si'		
-nəmu·y	'Mo Yo Si, stepmother'		
-nək^{w}a·y	'Mo Br'		
-nəka·c	'Fa Si'	-ka·c	'Br So, Hu Si So'
-nəpa·w	'Fa Fa'		
-nəma·w	'Fa Mo'		
-nək^{w}a·w	'Mo Fa'		
-nəkal^{y}	'Mo Mo'		
-nəmu·s	'Great grandparent'	-mu·s	'great grandchild'

The only exception is

-ciku· 'Fa Yo Br, stepfather'

b) An element {n^y} is present in several of the terms referring to in-laws.

-n^yəmu·n 'Si-in-law'

-n^yəku· 'Br-in-law'

-u·n^yi· 'Mo-in-law', 'Fa-in-law'

-u·n^ya·y 'Da-in-law'

Note, however, kuxka·w 'son-in-law'

u·xu· 'a reciprocal term used by ego's parents to refer to ego's spouse's parents'

c) An element {a(·)w} occurs in many terms denoting a relative separated from ego by two generations.

-nək^{w}a·w 'Mo Fa'

-nəma·^{w} 'Fa Mo'

-nəpa·w 'Fa Fa'

-aw 'So Child'

Note, however, kuxka·w 'So-in-law'

-l^ya·w 'Yo Si Ch, stepdaughter (woman speaking)'

d) Other kinship terms which do not appear to be further analyzable are:

-ta·t 'father'

-tal^y 'mother'

-camal^y 'Ol Br'

-sul^{y} 'Yo Br'

-can^{y} 'Ol Si'

-san 'Yo Si'

pəca·y 'Da (man speaking)'

xu·ma·y 'So (man speaking)' (cf. xəmi· 'to grow up (boy)')

xək^{w}an^{y} 'So or Da (woman speaking)' (cf. xək^{w}an^{y} 'to give birth')

-sin^{y} 'wife' (cf. sin^{y} 'woman')

-cu·y 'husband'

-xkal^{y} 'Da Ch'

527 Other derived nouns

While many of the nouns described above may be derived from other forms either not recorded or no longer in existence, many other nouns show an obvious relationship to other known forms and are therefore described separately.

527.1 Nouns derived from nouns

Very few examples of this type were found. The only fairly clear cases are:

ʔi·x^{w}a·y 'war' (cf. ʔəx^{w}a· 'stranger', and -x^{w}ic 'to hate')

ʔətuy 'middle' (cf. -tu· 'belly (center)')

ʔən^{y}a·k 'east' (cf. ʔən^{y}a· 'sun, day' + ɬ(v.ə)kɬ 'from' (see 713)

527.2 Nouns derived from verbs

527.21 Nouns derived from verb forms without any formal modification, the noun form being identical to the verb stem

from which it is derived. In some contexts, their identification as nouns or verbs is not always possible unambiguously.

a·lap	'snow, to snow'
xəkʷanʸ	'woman's child, to give birth'
xətat	'back (body part), to stand up'
ca·wi·s	'mildew, to be mildewed'
cəxu·r̥	'hail, to hail'
ci·maɬʸ	'mild lie, to lie, to fib'
cəxuləxul	'windpipe, to gargle'
ʔəma·y	'sky, to be above, to be high up'
-kʷa·	'horn, to hook, to crochet'
ʔəxʷaṯ	'blood, to be red'
nʸəmay	'breast, pubescent girl, to grow up (girl)'
s̥əwi·	'acorn mush, to boil acorn meal'
təpur̥	'the top, to reach the top'
xəlul	'flute, to play the flute'

This particular type of derivation appears to be quite productive, though it is perhaps better regarded as a specific case of verb forms being used in nominal function (for which see 710 and 842.2).

527.22 Nouns derived from verbs with some formal modification.

ʔəxʷa·	'stranger' (cf. -xʷic 'to hate')
ci·pam	'spring (season)' (cf. cəpam 'to come out')
cixic	'name' (cf. cu·xi· 'to call, to name')
xi·cur̥	'winter' (cf. xəcur̥ 'to be cold')

ʔi·paɬ 'summer' (cf. paɬ 'to make dust')

ʔi·k^{w}ic 'man' (cf. ʔi·ku·, i.e. {ʔi·k^{w}i} + mp 8, 9 'to be big')

pa·wam 'lodge' (cf. pəwam 'to rest')

ʔu·xuy 'smoke' (cf. -xuy 'to make smoke, to smoke out')

paʔyuṛ 'needle' (cf. pəyuṛ 'to sew')

ta·l^{y}ak 'bed' (cf. -l^{y}ak 'to lie down')

təpəṣa· 'knife' (cf. -ṣa· 'to stab')

xu·ma·y 'son (man speaking)' (cf. xəmi· 'to grow up (boy)')

Many other nouns probably fit into this category historically, but cannot be identified by synchronic criteria. The lack of any consistent pattern in the formal modifications probably identifies these forms (as well as those of 527.1) as survivals of earlier productive derivational processes.

527.23 Nouns derived from verbs by prefixation of the nominalizing prefix {k^{w}}.

This is the only truly productive overt derivation process. A very large number of forms of this type were recorded, many others were suggested by me and invariably found acceptable by informants. The formation may be described as follows. To any semantically appropriate verb stem described in section 420 (inner structure of verb forms) may be prefixed the morpheme {k^{w}}, with allomorphs ||k|| before ||u(·)||, and ||k^{w}|| ~ ||ku|| elsewhere, producing a noun with the meaning 'the one who....'. These forms belong

unambiguously to the noun class and are subject to all modifications applicable to nouns. It may be pointed out that this provides independent confirmation for the inner structural layer of verbs as the {k^{W}} prefix can occur only with forms corresponding to the inner structure of verbs. No forms of this type were found derived from verbs with aspectual prefixes (432) except from the verb {ʔ-c--yu·w} 'to sing' which was listed in that category, but exhibits a nonrecurrent prefix. Both ʔəck^{W}əyu·w and k^{W}əcyu·w were recorded for 'the one who sings, singer', but the first is considered more correct. The following examples will illustrate a variety of nouns of this type (including those derived from plural verb stems) as well as the operation of some of the morphophonemic rules. The morphophonemic forms given are those obtained after automatic application of mp 1.

kuxəpṣi·wc ||ku·xəpəṣi·wc|| + mp 4 'the green ones' (<xəpəṣi·wc plural stem of xəpəṣiw 'to be green')

k^{W}aʔəl^{y}mis ||k^{W}əʔəl^{y}əmis|| + mp 4, 11d 'the small ones' (<ʔəl^{y}əmis suppletive plural stem of ʔəstik 'to be small')

k^{W}ən^{y}cək^{W}i· ||k^{W}ən^{y}əcək^{W}i·y|| + mp 4 and loss of y, since diphthongs of the shape */i·y/ do not occur 'old women' (< n^{y}əcək^{W}i· plural stem of n^{y}əku·y ||n^{y}ək^{W}iy|| 'to be an old woman')

k^{W}ətxəmi· ||k^{W}ətəxəmi·|| + mp 4 'the old folks' (< təxəmi· plural stem of xəmi· 'to grow up')

$k^{W}ar$ ||$k^{W}ar$|| 'he who wants' (< ar 'to want')

kupa· ||kupa·|| 'he who came, he who got there' (< pa· 'to get there')

kurak ||kurak|| 'old man' (< rak 'to be an old man')

$k^{W}a?qu\dot{t}$ ||k^{W}ə?ə$qu\dot{t}$|| + mp 4, lld 'the long one' (< ?ə$qu\dot{t}$ 'to be long')

$k^{W}a?kur$ ||k^{W}ə?əkur|| + mp 4, lld 'the distant one, the one long ago' (< ?əkur 'to be far, long ago')

ku$\dot{t}$ic ||ku$\dot{t}$ic|| (< -$\dot{t}$ic 'to be bad') 'the bad one'

kuxyan ||kuxəyan|| + mp 4 'soldier', i.e. the one who carries (rifle) in his arms' (< xəyan 'to carry in arms')

ku·cut ||ku·cut|| 'chief, boss' (< u·cut 'to order, send')

kumlay ||kuməlay|| + mp 4 'the dead one, corpse' (< məlay 'to die')

kumti·pulp ||kuməti·pulp|| + mp 4 'orphan' (< məti·pulp 'to be poor')

kumyulk ||kuməyulk|| + mp 4 'sugar' (< məyulk 'to be sweet') etc.

In addition, many nouns appear to be older formations of this type where the underlying verb cannot be identified synchronically. Typically, they refer to plants, animals, and persons and this suggests that they were originally descriptive in meaning.

Thus,

kulaṣa·ṣ 'bluejay' (perhaps from ʔəṣaṣ 'to be pretty, beautiful, though k^{w}aʔṣaṣ 'the pretty one' is also attested)

kun^{y}a·w 'jackrabbit'

ku$\dot{ł}^{y}$a·ṭuk 'meadow lark'

kupxa·ł 'white oak'

ku·xik 'manzanita'

ku·pa·y 'poison oak'

k^{w}aʔna·y 'wire grass'

kuca·n 'Yuma Indians'

kumǝya·y 'Diegueño Indians'

kusǝya·y 'medicine man'

kuk^{w}a·yp 'meat'

k^{w}ǝ$\dot{ł}^{y}$xi·w 'silver'

528 Plural nouns

Formal marking of plurality is not obligatory in the language. General remarks about the notion "plural" in verbs apply also to nouns, with the additional restriction that overt plural noun forms are very rare indeed. The one major exception is the case of nouns with {k^{w}} prefix which are derived from verb stems, nonplural and plural. They are therefore not true noun plurals, but rather plural verb stems nominalized. They need not concern us here.

Among other nouns, kinship terms (and not even all of these) are susceptible to plural formation. This as well as the possessive prefix structure (531) suggests that kinship terms are more closely related to verbs than other nouns. Only a few other nouns have a plural form, and there is reason to believe that these also are of verbal origin. Processes of plural noun formation parallel those of plural verb stem formation, though not all the processes are attested for nouns. Only quantitative ablaut and infixation of ɬcɬ, with simultaneous suffixation of ɬcɬ in some cases have been recorded. In view of the paucity of examples, the distinction between collective and distributive plurals is even more difficult to ascertain than for verbs. A plural noun form therefore can only be said to call specific attention to plurality, since nonplural forms are neutral with respect to number. In possessed forms, however, the plural form seems distinctly collective in meaning since for example the plural form of 'mother' (which is an inalienably possessed noun) means, not 'mothers' but 'their mother', i.e. it indicates plurality of possessor, while plurality of possessed is unmarked.

The only examples of plural nouns which are not kinship terms are given below. They all seem to be of verbal origin.

ʔəxi·nk 'a few' (< ʔəxink 'one, to be one')

xəwa·k 'twins' (< xəwak 'two, to be two')

ɬəxu·p 'holes, caves' (< ɬəxup 'hole, cave'. Note again k^{w}əɬxup 'hole' as evidence for verbal origin)

ʔi·kʷi·c 'men' (< ʔi·kʷic 'man', cf. ʔi·ku· 'to be big')

ʔi·pa·yc 'Indians, people' (< ʔi·pay 'Indian, person' cf. ʔi·pat 'to be alive' and note also that may?pay means, not 'your people' but 'you people')

kustəyay 'medicine men' (< kusəya·y 'medicine man', apparently with nominalizing prefix [kʷ] plus a verb stem not attested synchronically).

si·nʸ 'women' (< sinʸ 'woman' This is the only one where no evidence of verbal origin can be found.)

A few other plural nouns were recorded only in their possessive forms.

nʸəcəpu·ɬ (< nʸəpu·ɬ 'his basket cap') 'their basket cap(s)'

nʸəcəma·t (< nʸəmat 'his land', cf. ʔəmat 'land') 'their land(s)'

mənʸcəwa· (< mənʸəwa· 'your house', cf. ʔəwa· 'house') 'your family's house'

All plural forms recorded for kinship terms are given below. For consistency they are given in the third person possessive.

pa·su·lʸc (< pa·sulʸ 'his Yo Br') 'their Yo Br'

pa· sa·nc (< pa·san 'his Yo Si') 'their Yo Si'

pa·ta·lʸc (< pa·talʸ 'his Mo') 'their Mo'

pancəka·l^{y} (+ mp 3. < panəkal^{y} 'his Mo Mo') 'their Mo Mo'

pancək^{w}a·y (+ mp 3. < panək^{w}a·y 'his Mo Br')'their Mo Br'

nətəma·w (< panəma·w 'his Fa Mo') 'their Fa Mo'

nətəmu·ṣ (< panəmu·ṣ 'his great grandparent') 'their great grandparents'

nətəpa·w (< panəpa·w 'his Fa Fa') 'their Fa Fa'

nətəsi·l^{y} (< panəsil^{y} 'his Mo Ol Si') 'their Mo Ol Si'

nətəwi·s(<panəwis 'his Fa Ol Br) 'their Fa Ol Br'

pəcəcay (< pəca·y 'his Da') 'their Da'

It should be noted that all plural forms which take the ‖t‖ allomorph of the {c} morpheme delete the third person possessive marker, while those which take ‖c‖ maintain it.

A single body part was recorded with a plural form, which is also aberrant in that it has the possessive prefix normally associated with kinship terms:

nətəpaɬ (panəpaɬ 'his tongue', normally ənəpaɬ which was also recorded) 'their tongue'

530 Outer Structure of nouns: Possessive Prefixes

Any noun as described above can enter into the formation of possessive forms differentiated for first, second, and third person. Not all nouns have the same possessive forms, and two main classes must be recognized: kinship terms and body parts on the one hand, and all other nouns on the other.

531 Kinship terms and body parts

Nouns belonging to this class form their possessives in the same manner for first and second person, by prefixation

of the personal morphemes {ʔ} 'first person, i.e. my, our' and {m} 'second person, i.e. your', which have already been discussed in the verb morphology (421). Thus:

ʔəta·l^{y}	'my mother'	məta·l^{y}	'your mother'
ʔəta·l^{y}c	'our mother'	məta·l^{y}c	'your (pl.) mother'
ʔətu·	'my belly'	mətu·	'your belly'
ʔa·	'my mouth'	ma·	'your mouth'
ʔəxəɬ^{y}ta·	'my head, hair'	məxəɬ^{y}ta·	'your head, hair'

For the third person, body parts are treated separately from kinship terms.

For body parts, there is no formal third person possessive marker (cf. the unmarked third person of many verbs), and a body part noun without possessive prefix seems to be ambiguous in meaning. Thus, xəɬ^{y}ta· seems to mean both 'his head' and 'head', although the distinction may be more a result of English usage than any ambiguity in the language itself. If that is the case, and this is indeed likely, it may then be said that body parts are inalienably possessed and that a form like xəɬ^{y}ta· means 'his, someone's head', with zero third person prefix. The only reason for hesitation is that kinship terms have an overt marker for the third possessive. The aberrant form panəpaɬ besides ənəpal, both meaning 'his tongue' should again be noted. This is, however, the only case of a body part taking the same third person prefix as a kinship term. The informant insisted in this case that they are completely interchangeable.

Bound kinship terms, on the other hand, form the third person possessive by prefixation of {pa·} (reduced to ||pa-|| when the resulting form has more than two syllables. The process is similar to that described in plural rule a, 428.2). This is probably related to the demonstrative pəya· 'this'. Thus:

pa·ta·t (< -ta·t 'father') 'his father'

panəma·w (< -nəma·w 'Fa Mo') 'his Fa Mo'

It should be noted again that third person possessive forms of plural kinship terms containing the ||t|| allomorph of the plural morpheme {c} do not take any possessive prefix.

Note also three forms belonging to two classes:

sin^y 'woman' can occur as a free form, but also as

ʔəsin^y 'my wife' məsin^y 'your wife' pa·sin^y 'his wife'

xu·ma·y 'son (man speaking)' paxu·ma·y 'his son'

Bound kinship terms therefore are clearly inalienably possessed forms.

532 Other nouns

All other nouns have possessive forms obtained by prefixation of the same elements as for body parts immediately followed by {n^y}, which can be defined as a general possessive for all nouns which are not inherently inalienably possessed (cf. the morpheme {n^y} in verbal prefix, 431). The actual forms are {ʔ-n^y} 'my, our', {m-n^y} 'your', {n^y} 'his, their, somebody's'.

Examples: (Note the use of the bound form of the noun with possessive prefixes)

ʔəwa· 'house' (root {-wa·}

ʔən^{y}əwa· 'my house'

mən^{y}əwa· 'your house'

n^{y}əwa· 'his house'

mən^{y}cəwa· 'your family's house'

ʔəxaṭ 'dog, pet' (root {-xaṭ})

ʔən^{y}əxaṭ 'my dog,pet'

mən^{y}əxaṭ 'your dog, pet'

n^{y}əxaṭ 'his dog, pet'

It should be noted that occasional deviations from the above pattern have been recorded. For example, a form ʔən^{y}ta·t was recorded besides the normal ʔəta·t for 'my father', obviously an analogical formation tending to incorporate a member of the kinship term class into the larger class of other nouns.

533 Summary of outer structure of nouns

The following chart summarizes the modifications to noun stems described above, and their position classes.

Possessive	Indefinite possessive	Noun stem
{ʔ}, {m}, {pa·}	-	Kinship terms
{ʔ}, {m}, ∅	-	Body parts
{ʔ}, {m}, ∅	{n^{y}}	Other nouns
-	-	Pronouns

540 Pronouns

Pronouns are a special subclass of nouns which share all nominal syntactic characteristics. They may be divided into personal pronouns, interrogative pronouns, and demonstratives. Demonstratives and interrogatives have no structural layer corresponding to the outer structure of nouns, personal pronouns might be said to have an outer structure involving personal morphemes, but no possessive forms, which seems to relate them more to verbs than to nouns.

541 Personal pronouns

True personal pronouns exist only for first and second person. They have both singular and plural forms. They are:

ʔən^{y}a·	'I'	ʔən^{y}awup	'we'
ma·	'you'	mən^{y}awup	'you all'

The morphemes {ʔ} 'first person' and {m} 'second person' already identified as verbal prefixes are clearly present. To pursue the analysis further by isolating a morpheme {n^{y}} (cf. again verbal prefixes, 431, and possessive prefixes, 530) is less convincing, though suggestive. Note also the formal similarities of the plural forms to plural verb stems of Class Vb (see 428.3)

While the use of these pronouns is never obligatory since the inflected verb form specifies the person of the subject (and optionally object), the redundant constructions with both pronouns and inflected verb form are not unusual, perhaps by analogy with English constructions.

Another personal pronoun is n^{y}a·mat 'all' which combines with the personal morphemes into ʔən^{y}a·mat 'we all' and mən^{y}a·mat 'you all'.

542 Interrogative pronouns

Interrogative pronouns are ma·p 'who' and ʔu·c 'what'. Other interrogative words are discussed in 742.

Both personal and interrogative pronouns have the syntactic function of noun phrases (see 820).

543 Demonstratives

While there are no true third person personal pronouns, demonstratives are commonly used in this function as well as in that of true demonstratives modifying a noun. The most common demonstratives are:

pəya·	'this'	pəyap	'these'
pu·	'that'	pup	'those'

The plural forms are reminiscent of plural verb stems of Class IV, a type of plural formation not attested in nouns. Of the two, pu· 'that' seems to be the more general in meaning and is most commonly used as third person pronoun, i.e. 'he, she, it'.

A third demonstrative n^{y}ip 'that (other) one' is used much less frequently, does not have a plural form, and its use in the Mesa Grande dialect may well be a case of dialect mixture, as it seems to be of much more frequent occurrence in adjoining dialects. Note again the occurrence of an element n^{y}-. This is one of the most common recurrent

partials in the language. It is not, however, always advantageous to segment it synchronically. In this case, for example, the residue -ip does not recur elsewhere as a meaningful element and this analysis would only complicate the description without providing any useful insight.

600 OTHER ASPECTS OF WORD FORMATION

610 Reduplication

A fairly large number of reduplicated forms have been recorded. In many cases, both the simple (nonreduplicated) and the reduplicated forms are attested, though in others only a reduplicated form was found. Reduplicated forms on the whole share the meaning of 'distributed all over, all around, over and over, back and forth, etc.', i.e. they convey the idea of iteration of action or series of objects or phenomena. On the basis of examples where the non-reduplicated form is attested, it appears that the process is applied to verbs only, but never to forms of more than two syllables. The reduplicated form itself may be either a verb or a noun and is subject to the appropriate modifications undergone by members of these two classes. A number of them, however, were never recorded with affixes, but appear to be used only in set phrases (idiomatic expressions) where they are invariable (see 812.2). It is often difficult to provide appropriate English translations for many of them and informants vary considerably in their attempts to convey the proper meaning. Apparently they can be used in a variety of contexts which determine the interpretation of the word. These forms are very difficult to elicit but seem to be quite numerous (as shown by the fairly large number of them found in texts). No attempt was made to elicit a complete list or to record them in a wide variety of contexts. As a

result, the meanings cited must often be considered as tentative. It is not known how productive this process is, as no attempt was made to find out whether all verb forms of two syllables or less can indeed be reduplicated.

Formally, reduplicated forms are of two main types.

1. Complete reduplication resulting in a two-word phrase, i.e. where each element retains the word stress.

2. Reduplication resulting in one word, with concomitant loss of stress on the first element. In these cases, the syllable of the first element corresponding to the stressed syllable of the second element bears what might be called a secondary stress since it is slightly more stressed than ordinary unstressed syllables. The occurrence of this secondary stress is predictable in this type of reduplicated forms and is left unmarked.

Within each group, two subclasses may be identified.

a) Simple reduplication, where both elements have the same phonological shape.

b) Reduplication plus lengthening of the stressed vowel in the second element. This is reminiscent of the formation of distributive plurals of verb forms. Forms of this type, however, do not seem to have a more distributive meaning than those without lengthening, although some difference of meaning must be involved as shown by two examples where reduplicated forms of both type a) and type b) were found for the same underlying form, i.e. from ʔəx^{w}at̓ 'red, to be red, blood'

$x^{W}a\dot{t}\ni x^{W}a\dot{t}$ 'to be very cold', presumably so cold that one's blood is thinned. There is also an expression ?əyay $x^{W}a\dot{t}\ni x^{W}a\dot{t}$ 'I am angry' (presumably 'the blood in my heart is disturbed')

?ə$x^{W}a\dot{t}\ni x^{W}a\cdot t$ 'to be reddish'

pałpał 'torch, making smoke, making smoke rings'

pałpa·ł 'stacked one on top of the other'

A plural verb stem may itself be reduplicated as is shown by the following set:

yar 'one to be circular'

yaṛəyaṛ 'one to be circular all around'

ya·ṛc 'several to be circular'

ya·ṛcəya·ṛc 'several to be circular all around, several to be going around like circular objects'

Examples of the various kinds of reduplicated forms are given below.

611 Complete reduplication

1. Monosyllabic underlying forms. These are all of the shape ?V(·)C and type a) above. A full list of recorded ones follows.

?iṛ ?iṛ 'to be rough (in action)'

?iṇ ?iṇ 'to be moving around'

?a·ṭ ?a·ṭ 'to rock back and forth like a rocking horse'

ii. Disyllabic underlying forms. (full list)

a) Simple reduplication

kuɬa·ɬ kuɬa·ɬ 'to go up and down (like when riding a horse)'

b) With vowel lengthening

ɬəxup ɬəxu·p 'holes all over' (cf. ɬəxup 'hole, cave')

səkap səka·p 'half and half, to be more than half full' (cf. sekap 'to be half')

xəkaɬ xəka·ɬ 'to be scalloped, uneven at the edges, to have teeth missing'

612 With reduced stress

a) Simple reduplication

i. Monosyllabic underlying forms

kurkur 'ground owl'

paɬpaɬ 'torch, making smoke, smoke rings'

pilpil 'flare, flicker'

k^{W}ilk^{W}il 'dangling (small object)'

k^{W}iɬk^{W}iɬ 'dangling (large object)'

walwal 'hurrying' (note also walwal i· 'to be quiet, to shut up')

xi·lxi·l 'gradually, lagging behind'

yuṛyuṛ 'to grab everything'

In many cases, an epenthetic /ə/ is inserted between the two elements, apparently following mp 1. Examples of this type are quite numerous and only a few will be listed.

k^{W}irək^{W}ir	'revolve, whiff, odor'
xirkəxirk	'to be striped in straight stripes'
cam̥əcam̥	'to sparkle, be very bright'
sakəsak	'to be itchy'
xulkəxulk	'cricket'

ii. Disyllabic underlying forms. All of these have a first syllable of the shape ʔəC. In this case, the second element omits /ʔ/.

ʔəkr̥aykəkr̥ayk	'to move backwards, as when startled, to nod'
ʔəpr̥akəpr̥ak	'to walk in a peculiar, choppy manner, guinea hen cry'
ʔəcwilkəcwilk	'to wiggle'
ʔəxmirkəxmirk	'to chuckle, to raise eyebrows, to have a dubious, mocking expression'

b) With vowel lengthening

These are less numerous, all formed on a monysyllabic underlying form.

k^{W}alk^{W}a·l	'light in color, thin (like gravy), diluted, also thin (like paper)'
paɬpa·ɬ	'stacked on top of each other' (cf. paɬpaɬ above).

With epenthetic /ə/

marəma·r	'faintly, fast'
pinəpi·n	'lukewarm'
wiṛəwi·ṛ	'wing'

In addition a few reduplicated forms have been recorded with prefixes and suffixes.

cəxuləxul	'to gargle' (prefix ⟨c⟩ see 423)
kupilpil	'the very end of something high, the edge of a precipice' (prefix ⟨k^w⟩ see 527.23)
səmiləmilp	'to roll like a log' (prefix ⟨s⟩ 423, suffix ⟨p⟩ 425.2)
təmuləmulp	'to roll like a round object' (prefix ⟨t⟩ 423, suffix ⟨p⟩ 425.2)
səmiṇəmiṇp	'to roll over and over' (prefix ⟨s⟩ 423, suffix ⟨p⟩ 425.2)
səl^{y}uwəl^{y}u·	'to tickle' (prefix ⟨s⟩ 423)
xəlampu·la·mp	'cottonwood tree' (prefix ⟨x⟩ 423, the form suggests a root ⟨lam⟩ + ⟨p⟩ 425.2 + plural formation of Class V, 428.3)

620 Sound Symbolism

A number of words occur in minimal sets sharing a common element of form and meaning, and differing only by one consonant phoneme, more typically by a single feature of one phoneme. This type of alternation occurs most frequently with resonants, and involves (with one exception)

only phonemes in the dental, alveolar, and palatal series. The only productive alternation (which is also the only case where a precise meaning can be attached to the process) is that between voiced laterals and the corresponding voiceless phonemes. This is particularly interesting in view of the fact that this is the only area of the phonemic system where the voiced/voiceless contrast is phonemic. The phonemic contrasts involving all laterals are fully attested by minimal pairs not exhibiting this type of sound symbolism, so that there is no possibility of considering this as a subphonemic phenomenon. The meaning distinction is one of size; forms with voiced laterals imply smallness, those with voiceless laterals bigness or intensity.

nʸilʸ	'to be black'	nʸiɬʸ	'to be very black'
ʔəsilʸ	'salt'	ʔəxa·siɬʸ	'ocean (salt water)'
	(note also ʔəsiɬʸk 'salty')		
əsalʸ	'little hand'	əsaɬʸ	'hand, arm'
milʸəpu·	'navel'	miɬʸəpu·	'umbilical cord'
cəkulk	'little hole through something'	cəkuɬk	'big hole through something'
əxu· kʷəlxup	'nostril'	ɬəxup	'hole (larger)'
likəlik	'long-necked, in small drops'	ɬikəɬik	'long-necked (larger), in big drops'
xəmul	'to gather little objects'	xəmuɬ	'to gather sticks'

salǝsal	'like lace, perforated with small holes'
saɬ	'fringed, ragged, hanging down'
saɬǝsaɬ	'full of big holes'
tǝlǝwik	'crooked, bent'
tǝɬǝwik	'crooked, bent (large)'
-tul	'to light small light'
-tuɬp	'to be lit up (large)'
xa·k^{w}al	'lizard (sp.)'
xǝcǝk^{w}a·ɬ	'lizard, large (sp.)'

Alternations involving other phonemes are fairly common, but no single one is attested by many examples. The forms involved all appear to have a semantic similarity, but if it is of the same kind as in the case of the laterals, it is not always clear from the English translation. A full list of these sets is given to illustrate the range of this phenomenon.

/r ~ ṛ/	-ra·w	'to be sharp'
	-ṛa·w	'to be hot'
	yaryar	'circular (small)'
	yaṛyaṛ	'circular (large)'
/n ~ ṇ/	-man	'to fly'
	-maṇ	'to get up'
/t ~ ṭ/	This is the only example involving stops.	
	a·tim	'bow'
	-ṭim	'to shoot'

/ṛ ~ ṇ/	ʔəmta·ṛ	'open space'
	ʔəmtaṇ	'to be naked'
/l ~ r/	acəya·l	'to slice (small slices)'
	a·yar	'to cut off a slab'
/ṛ ~ ɬ/	təṛəkukp	'twisted out of shape'
	təɬəkukp	'crooked, not straight'
	təxi·ṛ	'to rake'
	təxi·ɬ	'to drag'
/ɬ ~ n/	ʔən^{y}pu·ɬ	'cap-like basket'
	ʔən^{y}pu·n	'basket (larger)'
/ṭ → l^{y}/	su·naṭ	'to play (like cards)'
	su·nal^{y}	'to play (baby talk)'
/ɬ ~ l^{y}/	məwaɬ	'weak, limp, paralized'
	məwal^{y}p	'soft (in consistency)'
	(note also məwas 'tender')	
/l ~ l^{y} ~ ṇ/	səmiləmilp	'roll like log'
	səmil^{y}	'roll over quickly'
	səmiṇəmiṇp	'roll back and forth'
/l^{y} ~ l ~ n^{y}/	xi·k^{w}al^{y}	'baby talk'
	xək^{w}a·l	'baby'
	xək^{w}an^{y}	'to give birth'
/r ~ ṛ ~ l ~ ɬ/		
	k^{w}ir	'to spin (like top)'
	xək^{w}iṛ	'to weave'
	k^{w}ilk^{w}il	'flutter'
	k^{w}iɬk^{w}iɬ	'swinging, dangling'

It might be suggested that these forms are of particular interest from a historical point of view. It is clear from an examination of the other two Yuman languages for which data is available to me that the correspondences among resonants are much less regular than in other areas of the phonemic system. The Diegueño evidence suggests that alternations between resonants may at one time have been a productive process which may have left different traces in the different languages. An even more far-reaching implication might be that this may account for the origin of the highly differentiated series of alveolar and palatalized consonants in Yuman languages, a situation which is not shared by other Hokan groups.

700 SYNTACTIC AFFIXES

This chapter deals with an aspect of Dieguẽño grammar which is not, rigorously speaking, an integral part of morphology or syntax, but rather belongs to both. The lack of clear distinction between morphology and syntax has often been observed for other languages and does not require extensive discussion. In the present grammar, since none of the phenomena described involve free forms, the decision to treat them as part of morphology is a fairly obvious one and in conformity with the traditional definition of morphology as the study of word formation, leaving to syntax only the arrangements of words into the larger units, sentences. The description, however, cannot avoid the use of some syntactic information, since the meaning and function of the affixes in question can be fully understood only by taking into account relations they specify between the forms to which they are affixed and other words in the sentence in which they occur. On the other hand, in order to avoid awkward repetitions, syntactic details are kept to a strict minimum, and cross references are provided to the appropriate sections of the Syntax.

Syntactic affixes are of two kinds: nominal and verbal, i.e. nominal affixes impart to the form a nominal function and verbal affixes impart to it a verbal function, regardless of whether the original word is itself a verb or a noun. Some syntactic affixes, however, occur only with verbs. For clarity in exposition, in the examples listed from here on,

syntactic affixes are separated from the rest of the word by "=". This symbol has no phonemic meaning.

710 Nominal syntactic affixes

There are six suffixes in this class and one prefix. All suffixes may combine with any noun or verb as described in the preceding chapters to produce a form which has the following characteristics:

a) it acquires a nominal function,

b) the relation of this form to the predicate with which it is in immediate constituency is specified by the particular suffix selected.

When affixed to nouns, these suffixes allow the formation for each noun of a set of forms or paradigm which may be compared to the case system of languages such as Latin, in that they may specify such syntactic function as " subject" or add notions of position or direction. When affixed to verbs, they nominalize the whole clause of which the verb in question is the predicate, thus subordinating it to the main predicate of the sentence. Such constructions are best translated into English by subordinate clauses. Each of the suffixes will be discussed in detail below. Typically, they have two alternate forms, one of which contains the phoneme /v/, the other where this phoneme is absent. It may be recalled that this phoneme only occurs in syllables following the word stress. As a matter of fact, it only occurs in these nominal syntactic suffixes. The two alternants (with or without /v/) are

sometimes in free variation, sometimes conditioned by the form class to which they are affixed and sometimes even appear to have slightly different meanings. The full details will be given below for each suffix.

711 The suffix ⟨(və)c⟩

The general statement can be made that this suffix occurs only with forms which have "subject" function.

The ||c|| alternant is the more general of the two and combines freely with both nouns and verbs. With nouns, it indicates that the noun in question is the subject of the clause in which it appears.

xaṭəpa·=c wa·m=s. 'Coyote went away.'

Coyote=subject he-went-away=indeed.

ʔən^{y}a·=c ʔa·x. 'I will go.'

I=subject I-go-will.

sin^{y}=c ʔəcwəyu·=m ʔəyip=s.

woman=subject she-sings=suffix 712 I-heard-it=indeed.

'I heard the woman sing.'

With verbs, it indicates that the subject of the verb is the same as that of the verb with which it is in immediate constituency (see 842.2 for details), except when the reference is to a future event, in which case the suffix ||k|| (713.1) is used.

ʔamp n^{y}a=taʔam=c, ʔəwu·w=s.

I-walk when=I-am-around=subject I-(him)-saw=indeed.

'As I was walking, I saw him.'

n^{y}a=ʔəxəmilx=c, ʔamp=s;

When=I-am-young=subj. I-walk=indeed;

n^{y}a=ʔən^{y}əku·y=c, ʔampx ʔəma·w=s.

when=I-am-old-woman=subj. I-walk-will I-not=indeed.

'When I was young, I used to walk; now that I am an old woman, I don't walk anymore.'

n^{y}a=pa·=c, wəl^{y}ak=c xəma·=s.

when=he-gets-there=subj. he-lies-down=subj. he-sleeps=indeed

'When he got there, he lay down and went to sleep.'

The exact syntactic relations will be clarified in 842.2, since they require an understanding of the immediate constituency of the sentence, which is discussed in that section.

The ||vəc|| alternant is used most commonly with nouns. In some cases, it seems to be in free variation with ||c||, but in most cases it seems to add a more definite meaning, which is best translated by the English definite article or a demonstrative. Thus, sin^{y}vəc is 'the specific woman (subject) referred to', while sin^{y}c is more likely to mean 'a woman (subject)'.

ʔi·k^{w}ic=vəc wi·=s. 'The man said.'

man=the-subj. he-said=indeed.

ʔəma·y ʔəxa·=vəc ʔəmat wəcuw. 'God made the earth.'

high water=the-subj. earth he-made-it

kun^{y}ku·y=vəc wəmi·=s. 'The old woman cried.'

old-woman=the-subj. she cried=indeed.

As in the last example, nouns formed with the {k^{w}} nominalizing prefix (527.23) typically take the ||vəc|| alternant and pronouns were recorded only with the ||c|| alternant.

Only one example of the ||vəc|| alternant used with a verb was recorded. In this example, the word order is also unusual.

n^{y}i· ʔəkuṛx uma·w=s, məlay=vəc.

not-at-all it-is-far-will it-is-not=indeed he-died=the-subj.

'It hasn't been long since he died.'

Some instances of subject nouns without a suffix have been recorded (718).

712 The suffix {(və)m}

With nouns, the two forms of the suffix occur apparently in free variation with each other. Informants state that the two forms are exactly the same in meaning and examination of specific instances of both forms in texts confirms this statement. Semantically, this suffix covers the following range:

a) direction away from point of reference and toward the object denoted by the noun to which it is suffixed, i.e. 'to, towards (away from here)'. Note the similarity in form and meaning with the directional verb suffix {m} (425).

ʔəwa·=vəm. 'to the house'

house=towards.

təkəmak=vəm 'to Mesa Grande.'

Mesa-Grande=towards

With pronouns only the short form ||m|| is attested.

pəya·=m 'to this one, this way'

pu·=m 'to that one, that way'

b) instrumental, 'by means of, with'

əmil^{y}=əm (mp 1) wəna·w. 'He ran on foot.'

foot=with he runs

ʔəmat=əm (mp 1) a·yay. 'mixed with earth.'

earth=with it-is-mixed.

With verbs, the suffix always has the short form ||m|| and indicates that the verb to which it is affixed has a different subject than the verb with which it is in immediate constituency (842.2). English translations of this construction vary greatly. A few typical examples will illustrate the possibilities.

ʔəto·=m wəṛap=s. 'I hit him so that he hurts, or

I-hit-him=||m|| he-hurts=indeed. he hurts because I hit him.'

ʔən^{y}a·=c ʔəwi=m a·ṣup=s. 'I made it fall.'

I=subject I-make-it=||m|| it(long object)-falls=indeed.

n^{y}a=ʔa·m=əm (mp 1) ʔək^{w}i·=s. 'When I left, it started to rain'

when=I-go-away=||m|| it-rains=indeed.

tu·yu·w=m ʔum=s. 'I saw him standing there.'

he-is-standing=||m|| I-look-there=indeed.

ʔəwa· ʔi·ku=m wəcuw. 'He made a big house.'
house is-big=||m|| he-made-it.
xək^{w}an^{y} xəmuk=əm (mp 1) təner. 'She has three children.'
child are-three=||m|| she-has-them.
ʔəxa· stik=əm (mp 1) a·tu·. 'They poured a little water.'
water is-little=||m|| they-pour-it.
tənam=əm (mp 1) pəɬ^{y}əma·=m acəpac.
they-are-there=||m|| it-is-done=||m|| they-take-it-off.
'They were there, and when it got cooked, they took it off.'
ʔəl^{y}maṣ xəwak=c ʔəṣaṣ=əm (mp 1) təner.
little-ones they-are-two=subj. they-are-beautiful=||m|| she-has-them.
'She has two beautiful children.'

713 The suffix {(və)k}

With nouns the two forms of the suffix are in free variation. It has the meaning 'direction toward a point of reference and away from the location or object denoted by the noun to which it is affixed', i.e. 'from...to here'. Note the similarity in form and meaning with the directional verbal suffix {k} (425.1).

ʔəwa·=vək. 'from the house to here'
təkəmak=vək 'from Mesa Grande to here'
sin^{y} ʔəxin pəmiɬ ta·yu· xəɬ^{y}ta·=vək.
woman one he-carries-her he-comes-away head-hair=from (to him).
'He was carrying the woman away by the hair.'

With verbs, the situation is somewhat more complex, as both forms occur, but this time with separate (though related) meanings. Perhaps the ||k|| alternant should be considered as a separate suffix as it seems to belong to a separate position class. It is discussed separately below. The suffix ||vək||, when used with verbs, has the meaning 'if'. The head predicate in this case is always in the future.

mat n^{y}ətoˑ=vək ʔacəmucx.
each-other he-me-hits=if we-kill-him-will.
'If he picks a fight with me, we'll kill him.'

wəpinx umaˑw=vək ʔaˑx ʔəmaˑwx.
it-is-warm-will it-is-not=if I-go-will I-am-not-will.
'If it is warm, I won't go.'

713.1 The suffix ||k|| with verbs

This suffix indicates that the action denoted by the verb it is affixed to will occur in the future, but precedes the action denoted by the head predicate, which, in these constructions, is in the future, except when it is an imperative form.

n^{y}aʔaˑm=k ʔəpuˑwkx ʔəmaˑwx.
when=I-go-away=||k|| I-come-back-will I-am-not-will.
'When I go away, I won't come back.'

ʔəxəmuˑ=k ʔənaˑmx. 'We are moving away.'
we-move-away=||k|| we-go-away-will.

n^{y}aʔaˑm=k=əm (mp 1) kəsaˑw!
when=I-go-away=||k||=||m|| you-all-eat!
'After I go away, you can all eat.'

The last example shows that the suffix ||k|| can occur before the suffix ||m|| (712). This is the only recorded example of two nominal syntactic affixes co-occurring in the same form.

714 The suffix {(və)ɬ^{y}}

With nouns, the two forms of the suffix are in free variation with meaning 'motion into', or 'position inside'.

ʔəwa·=vəɬ^{y} ~ ʔəwa·=ɬ^{y} 'into the house, inside the house'

ʔəwa=ɬ^{y} ʔəcam=s. 'I left it inside the house.'

house=inside I-leave-it=indeed.

ʔəwa·=ɬ^{y} ka·m! 'Go into the house! Go home!'

house=into go-away!

ʔən^{y}a·k=ɬ^{y} ku·yum. 'He is going east.'

east=into he-is-in-the-direction-of.

With verbs, only the form ||ɬ^{y}|| is attested, which imparts a desiderative meaning to the verb to which it is affixed. The head predicate in this case is always aṛ 'to want' and the construction is translated 'to want to...'

wəsa·w=ɬ^{y} waṛ=s. 'He wants to eat.'

he-eats=to he-wants=indeed.

ʔəwu·wx=ɬ^{y} ʔaṛx ʔəma·w=s. 'I don't want to see it.'

I-see-it-will=to I-want-will I-not=indeed.

a·ṛapm=ɬ^{y} əwa·ṛp. 'They wanted him to throw it.'

he-throws-long-object=to they-want.

A construction of this kind without predicate is attested (see also 722.1 and 857.1).

wəsa·wx=ɬ^{y}=a. 'Would he eat?'

he-eats-will=to=question.

715 The suffix {(v)i}

With nouns, the two forms are in free variation, with locative meaning 'in, at, on'.

n^{y}əwa·=vi wəca·wc. 'They made it at his house.'

his-house=at they-made-it.

təkəmak=vi 'At Mesa Grande'

ʔəmat=i 'on the ground'

With verbs, few examples were recorded, all with the ||vi|| alternant, and meaning 'at the place where'

ʔəwil^{y}=vi u·x^{w}aɬ=vi ʔi·walp=c

rock=in he-digs=at-the-place-where it-is-in-plain-sight=subj.

apəsi·w. 'At the place where he dug in the rock, it can be

it-is-very-much. seen very clearly.'

wəcuw=vi. 'At the place where he made it.'

716 The suffix {vu}

This suffix was recorded only in the form with /v/. With both nouns and verbs, it makes the meaning more specific. It usually remains untranslated in English, but may be conveyed by 'specific, specifically'. With nouns it comes close to the meaning of the English definite article. It therefore parallels the suffix ||vəc|| (711) as it seems to perform the same function, with the difference that, while ||vəc|| refers to

"subject", {vu} only refers to "object". With verbs, it simply makes the meaning more specific.

ʔəwa·=vu wəcuw. 'He made the specfic house.'
house=specific he-makes-it.
(note ʔəwa· wəcuw. 'He builds houses, he is a builder.'
house he-makes-it.)

kuṛak=vu ʔəpəcəṣuwx. 'We will wait for the old man.'
old-man=specific we-wait-for-him-will.

kupxa·ɬ=vu tu·pa· 'They cracked white oak acorns.'
white-oak-acorn=specific they-crack-acorns.

ʔixpa·=vu ʔa·ṣa·=c yis. 'The eagle is a bird.'
eagle=specific bird=subject is-indeed.

ʔəṇuṛ=s ʔu·c ʔaṛ=vu. 'I know what I want.'
I-know-it=indeed what I-want=specifically.

ʔən^{y}a·=c ʔi·ca·=s puy taʔn^{y}əway=vu.
I=subject I-remember=indeed there we-are-there=specifically.
'I remember that we were there.'

ʔsay=vu ʔa·skay=vi a·tu·
the-leached=specific olla=in they-pour-it.
'They poured the leached material into an olla.'

717 The prefix {n^{y}a}

The prefix {n^{y}a} 'when, as, after" occurs only with verbs. The verb to which it is prefixed may also have some of the suffixes described above. Attested as co-occurring with {n^{y}a} are ||c|| (711), ||m|| (712), ||k|| (713.1), or unmarked forms as in 718.b. No other prefix may precede it within the word and

morphophonemic rules do not apply at the boundary between {n^{y}a} and the rest of the word.

n^{y}a=nəkəmic=əc (mp 1), tu·pa. 'When they got back, they cracked acorns.'

when=they-get-back=subj. they-crack-acorns.

n^{y}a=pəɬ^{y}əma·=m, n^{y}a·pum acəpac. 'When it was cooked, they took it off.'

when=it-is-done=||m|| then they-take-it-off.

n^{y}a=ʔa·m=k, ʔəpu·wkx. 'After I go away, I will come back.'

when=I-go-away=||k|| I-come-back-will.

ʔi·paɬ n^{y}a=nəso·m, kupxa·ɬ wəmu·ɬ.

summer when=it-is-all-over white-oak-acorns they-gather-it.

'When the summer was over, they gathered white oak acorns.'

ʔamp n^{y}a=taʔam=c, ʔəwu·w=s.

I-walk when=I-am-around=subj. I-see-him=indeed.

'As I was walking, I saw him.'

As shown in the last example, when the verb consists of an auxiliary verb phrase (see 813), {n^{y}a} is prefixed to the auxiliary, i.e. the last word of the phrase.

718 Unmarked forms

Some unmarked forms should be discussed here also, as they function within the same categories. Unmarked syntactically are:

a) Nouns when they are the direct object of a verb.

ʔəwa· wəcuw. 'He made a house.'

house he-makes-it.

pu· wi·=s. 'He said that.'

that he-said-it=indeed

b) Noun phrases (see 820) or nominalized clauses referring to time, reminiscent of the accusative of time in Latin.

kupiɬ^{y} xəmuk na·=s. 'They were gone three days.'

day are-three they-go=indeed.

wəpiɬ^{y} ʔəkuṛ apəsi·w=s. 'It is a very long day.'

day it-is-far it-is-very=indeed.

ʔi·paɬ n^{y}a=cəpam ʔəna·m=s. 'When the summer was over, we left.'

summer when=it-goes-in we-go-away=indeed.

c) Terms of address

xa·wka margari·t təmuwa·=a. 'Hello, Margaret, how are you?'

hello Margaret you-are-sitting=question.

mayʔpay kəyəwip! 'Listen, all you people!'

you-people you-all-listen!

d) The subject of an intransitive verb may be left unmarked.

ʔi·pay n^{y}əcəwayp tən^{y}əway. 'The Indians were living there.'

Indians they-live they-are.

e) Also unmarked are words belonging to a phrase containing another word which is marked. For details, see 842.2.

In careless and fast speech, many of the forms described above are often left unmarked, but informants will usually add the appropriate affixes if asked to repeat the utterance more slowly.

720 Verbal suffixes

721 The suffix {kəx}

This suffix occurs freely with both verbs and nouns. The resulting form has the function of a verb, so that a noun with the suffix {kəx} may function as the head predicate of a sentence. Semantically, it conveys doubt or imprecision. In translation, it is usually rendered by 'It must have been.., probably.'

ʔa·n^{y}=kəx. 'It must be about a year.'

ʔəwa·=kəx. 'It must be a house.'

Darrow kuṛak=vu xu·ma·y=kəx. 'He must be old man Darrow's son.'

Darrow old-man=specific man's-son=must be.

ʔa·n^{y} cəpamx uma·w=kəx. 'It hasn't been a year yet.'

year it-goes-in-will it-is-not=must be.

722 Terminal verbal suffixes

The following suffixes are those which are always in absolute word-final position, i.e. can never be followed by any other suffixes.

722.1 The suffix {na}

This suffix occurs only with verbs, and only with imperative forms. Its meaning is one of gentle insistence 'do, come on'. It is of fairly rare occurrence.

kəwu·w=na! 'Do look at it!'

kum=na! 'Come on, look over there!'

722.2 The suffix {a}

This suffix occurs only with verbs including those described in 721 above. It represents one way of forming interrogative sentences (857).

ma·y n^{y}əway=a. 'Where are they?'

ma·=c ma·yp=a. 'Do you talk?'

you=subject you-talk=question.

əxan=a. 'Is it good?'

mi·ca·=a. 'Do you remember?'

nur=kəx=a. 'Would he know?'

he-knows=maybe=question.

ʔa·n^{y} muʔyum ʔən^{y}cəwayp taʔn^{y}əway=a.

year how-much we-live we-are-there=question.

'How many years have we been living there?'

In addition, constructions of the structure "verb + ||ɬ^{y}|| + {a}" have already been mentioned in 714 and represent the only case where {a} follows a nominalizing suffix. It seems likely that these constructions are shortened forms of a phrase containing the verb ar 'to want'. For example, I have recorded wəsa·wɬ^{y}a. 'Would he eat?', whereas sentences like *wəsa·wɬ^{y} wara. 'Would he want to eat?' were not recorded, although the noninterrogative wəsa·wɬ^{y} war 'He wants to eat.' is attested (cf. 714).

722.3 The suffix {s}

This suffix occurs only after the last word of a head predicate and has a mild emphatic meaning. It is usually

best left untranslated in English, as it often occurs in contexts where an English emphatic construction is not appropriate. It seems to indicate simply a slightly more positive attitude on the part of the speaker to what he is saying than when the suffix is absent. This suffix is of extremely frequent occurrence.

ʔaṛ=s.	'I want it.'	yip=s.	'He heard it.'
wi·=s.	'He said it.'	cəpak=s.	'He came out.'

ʔəwa·=kəx=s. 'It must be a house.'

wənak təwa·=s. 'He was sitting.'

730 Summary of syntactic affix structure

The table below summarizes the various possible combinations of syntactic affixes and their position classes.

Prefix	Base form	Suffixes	
		Position 1	Position 2
---	Noun or Verb	Nominal suffixes 711-716	---
{n^{y}a}717	Verb	‖c‖711, ‖m‖712, or ‖k‖713 or unmarked 718	---
---	Noun or Verb	{kəx}721	{a}722.2 or {s}722.3
---	Verb	---	{a}722.2 or {s}722.3
---	Verb(imperative)	---	{na}722.1

740 Specialized uses of nominal syntactic suffixes

A number of forms usually translated by English adverbs are actually nouns or verbs with syntactic suffixes and specialized meaning, since the same form often occurs with several of the syntactic suffixes to form defective paradigms with the suffixes described in 711-716. Some appear to have nominal underlying forms, some verbal ones, though the distinction in this case is not always clear. The only criterion for separating them into nominal and verbal underlying forms is that some of them also occur with verbal inflectional affixes (e.g. {x} 'future').

741 Nominal underlying forms

The demonstrative pronouns pəya· 'this' and pu· 'that' serve as base for sets of forms with directional and locational meanings. Thus, from pəya·:

pəya·m 'this way, in this direction'

pəyi· 'here' probably a contraction from {pəya·} + {(v)i}

Perhaps related to pəya· in a less obvious way are

pi·l^{y} 'now'

n^{y}ipil^{y} 'now'

pil^{y}vay and n^{y}ipil^{y}vay 'just now, right now, right away'

The suffix {vay} of the last two forms is attested only in one other form (n^{y}imvay, for which see below). Its meaning is not clear.

From pu· 'that'

puy 'there' probably a contraction of {pu·} + {(v)i}, plus reduction of /i/ to /y/

puyi 'over there' probably from {puy} + {(v)i}, in which case the form may contain two instances of the {(v)i} suffix

pu·m 'to there, that way, in that direction'

pu·ɬ^{y} 'right there'

pu·k 'from there'

From n^{y}ip 'that (other) one'

n^{y}ip 'right close'

n^{y}ipi 'there'

Other forms with an initial element n^{y}- (possibly related to the prefix {n^{y}a} 'when' or to the noun ʔən^{y}a· 'day' are

n^{y}uk 'already' n^{y}imvay ~ n^{y}umvay 'somehow, anyhow'

n^{y}u·ɬ^{y} 'right there' ʔən^{y}a·m 'previously'

n^{y}a·pum 'then' (While this is the most commonly used form translated as 'then', several others were recorded, i.e. n^{y}a·wim, n^{y}a·xm, n^{y}a·wi·, n^{y}a·wi·k, n^{y}a·wi·km.)

n^{y}in^{y}uyc, n^{y}in^{y}uyəm 'again'

From ma·y 'where?' an almost complete paradigm was recorded.

ma·yəm (mp 1) 'where to?'

ma·yvi 'where at?'

ma·yk 'where from?'

ma·yvu 'which one (specifically)?' (not subject)

ma·yvəc 'which one (subject)?'

ma·y itself (cf. puy) may be a reduction of an earlier *ma·(v)i (cf. ma·p 'who?')

Note also ma?yum 'when?' and may 'plus, and'

742 Verbal underlying forms

The following sets appear to have verbal underlying forms. A verb root *ar̤ (homonymous with ar̤ 'to want') seems to convey an indefinite notion of time or place when combined with a prefix {n^{y}a·} (cf. ?ən^{y}a· 'day'). The following forms were recorded. I am indebted to Prof. W. Bright for the observation that this is reminiscent of Spanish cual<u>quiera</u> 'any', donde<u>quiera</u> 'anywhere', etc. based on querer 'to want, wish, love'.

n^{y}a·ar̤ (kupiɬ^{y}) 'some (day)'

n^{y}a·war̤ 'sometimes'

n^{y}a·k^{w}ar̤ 'some one', where k^{w} is obviously the nominalizing prefix)

n^{y}a·?ar̤k 'sometime, I'll...'

n^{y}a·war̤k 'sometime, he'll...'

n^{y}a·arvəm 'to anywhere'

n^{y}a·ar̤vi 'at anywhere'

Perhaps derived from the same verb root are

?i·wa·r̤, ?i·wa·r̤p, ?i·wa·r̤m 'after a while'

From the verb root yu· 'to be' combining on the one hand with a prefix {mu(·)}, perhaps meaning 'how, why' and on the other with a prefix {pu} 'that way' (cf. pu· 'that') are derived the following forms.

mu·yu·	'how?'	mu·yu·c	'how (did he..)?'
mu?yu·k	'how (will he..)?'	mu?yu·vək	'if it somehow happens'
mu?yum ~ mu·yuxvu	'why?'	mu?yum	'how much?'
mu·yum	'how many?'	ma·yum	'how many (did he give)?'
kumyuc	'what kind of..?'		

pu?yu·, pu?yu·c, pu?yu·k, pu?yu·m 'that way (manner), like that' in different syntactic constructions.

pu?yux 'it will be that way'

pu?yu·kəx 'it must be that way'

Probably derived from the verb tənay 'to be late' are

təna·y ~ təna·ɬ^{y} 'yesterday'

743 Undetermined base form

Of undetermined origin are the following

ma·yka·c	'daybreak'
ma·ykaɬ^{y}	'before daybreak'
ma·ykaɬ^{y}m	'early'
ma·yka·m	'at daybreak'
mətən^{y}a·ɬ^{y}	'tomorrow'
n^{y}akumətn^{y}a·ɬ^{y}	'day after tomorrow' probably earlier compound of ?ən^{y}a· 'day' and mətən^{y}a·ɬ^{y} 'tomorrow' with nominalizing prefix {k^{w}} which would point to a verbal origin.

xəya·y	'long ago'
xəya·ym	'very long ago'
xəyaɬ^{y}	'recently'
n^{y}in^{y}uyc ~ n^{y}in^{y}uym	'again'
i·nuyp ~ i·nuyp(v)ək	'maybe'
ʔəsal^{y}m	'just starting'
ʔal^{y}pa·ym	'slowly'
yu·piṭ ~ yu·piṭm	'suddenly'

750 Interjections

A few remaining forms do not belong to any of the word types described. They are all interjections and do not enter into true syntactic constructions with other words. The most common are:

lak	'say!, hey!'	xu·	'OK'
xa·	'yes'	ʔu·xayiʔ	'thank you'

əə̃ which deviates from the regular phonological pattern of the language. It conveys general agreement on the part of the hearer with what is being said. It is typically used by members of an audience listening to a story. It represents an unobtrusive way for the audience to convey its appreciation of the story, and it reinforces the desire of the teller to continue the recital as it assures him of the undivided attention of the audience.

xawka 'Hello!' is formally similar to question forms with the suffix {a} (see 722.2).

800 SYNTAX

In this chapter are described the various constructions which the words analyzed in the morphology may enter into. In order to best account for constructions, it is occasionally necessary to modify to some extent the classification of words presented in the morphology. Classes not previously identified will be defined as they are first introduced. In all cases where a class of forms identified in the morphology is relevant from a syntactic point of view, the terms already used will be applied without redefinition but with cross reference to the section in which they were first presented.

Sentences are here defined as those units of discourse normally bounded by the /./ or /!/ contours. In connected texts, the /./ contour is sometimes replaced by /,/ or /;/, obviously in order to maintain the continuity of the narrative. However, when slower repetitions are obtained, the division into sentences can usually be ascertained without difficulty, though some ambiguities remain.

Sentences may be divided into two types:

1. Major sentences which comprise the largest part of all text material collected, and are characterized by the obligatory presence of a predicate or inflected verb phrase (see 810). Since this chapter will be concerned mostly with this type of sentence, major sentences will be referred to simply as "sentences".

2. Minor sentences, consisting of interjections or utterances which are in some sense incomplete and require a consideration of a larger context to account for their syntactic structure.

The most general characterization of Diegueño sentences is that they are structured around a head predicate which, when not further modified, may itself be a sentence. Alternately, a predicate may be modified by a variety of nominal satellites. A sentence may contain more than one predicate (each optionally modified by nominal satellites), in which case it may be called a compound sentence (see 843), i.e. it is composed of as many sentences as there are predicates, united under a single /./ or /!/ contour.

The predicate consists of any one of the constructions described in 810. Nominal satellites may be noun phrases (820), adverbials (830) or nominalized sentences (842.2).

Generally speaking, word order is not rigidly prescribed in Diegueño. This is not surprising since, as noted in 700, there are a number of overt syntactic affixes which specify syntactic relations within the sentence and allow unambiguous identification of function not dependent on word order. However, the majority of sentences show recurrent patterns of word order which allows some statement of "normal" word order. It is interesting to note that, within sentences exhibiting normal word order, syntactic affixes may at times be omitted. Thus, in syntax as well as in morphology, the analysis reveals two opposing trends: 1) overt marking of syntactic relations

with concomitant freedom of word order, and 2) some restrictions in word order with greater freedom in the use of syntactic markers. The latter trend may have been brought about or at least reinforced by constant contact with Spanish and English.

For ease of presentation, constructions will be listed in increasing order of complexity.

810 The Predicate or inflected verb phrase

Since this section deals only with the internal constituency of the predicate, examples will be given without syntactic affixes, i.e. in the form the predicate takes in declarative (nonemphatic) sentences (see 840).

For syntactic purposes, verbs (as described in 400) may be divided into two classes: auxiliaries, i.e. all verbs formed with the outer structure prefix {t} 'progressive' (see 421); and verbs proper, or simply verbs, i.e. all other verbs described in 400.

811 One-word predicates

Any inflected verb or auxiliary, i.e. any verb inflected for person (see 431) and optionally for tense ({x} 'future' 433), may function syntactically as a predicate and, if not further modified, as a sentence. It should be recalled that an inflected verb form specifies subject in all cases and object when relevant. All one-word examples in 431 and 432 illustrate this type of predicate which need not be further exemplified.

812 Two-word predicates

Phrases of this type function in all respects like a one-word predicate, i.e. no additional words or syntactic affixes may be inserted between the two words. These phrases therefore **act syntactically** like a single word, and only the second word is inflected.

812.1 Reflexive verb phrases

Some inflected transitive verbs may form a reflexive (or reciprocal) verb phrase with a preceding word mat 'self, each other'. In many cases, an English reflexive equivalent is not appropriate, but the following examples will illustrate the reflexive meaning when compared with the equivalent non-reflexive form.

mat a·x^{w}ar̤ 'he shaves' vs. a·x^{w}ar̤ 'he scrapes (with knife)'

mat pəs̤uw 'he is careful' vs. pəs̤uw 'he waits'

mat ʔəpəcəx^{w}i·m 'we are lost' vs. ʔəpəcəx^{w}i·m 'we lost(it)'

mat u·ni·w 'he gambles' vs. u·ni·w 'he is against(someone)'

mat wəto· 'he fought him' vs. wəto· 'he hit him(with stick)'

mat n^{y}əto· 'he fought with me'

812.2 Phrases containing the verb i· 'to say'

Very common are verb phrases consisting of an uninflected verb form followed by an inflected form of the verb i· 'to say'. In many cases, the uninflected verb is a reduplicated form (see 610). Semantically, they may be considered as idioms since the meaning of such expressions is not always deducible from the meaning of their parts. The verb i· 'to say' is used here somewhat like the English verb 'to go'

in expressions of the type 'Pop goes the weasel'. In many cases, the verb used here in uninflected form is not attested in any other constructions.

cac wi· 'it is scattered' vs. wəcac 'he spreads it out'

xuṇ wi· 'it is getting dark' vs. xuṇ 'it's dark'

wal wi· 'he is quick'

walwal wi· 'he is hurrying up'

maṛ wi· 'she blushes'

piɬ^{y} wi· 'it is hot' vs. wəpiɬ^{y} 'it is hot'

ʔiṛ ʔiṛ wi· 'he is rough'

x^{w}aɬ^{y} wi· 'he keeps quiet'

Naming expressions are also of this type, usually in conjunction with the verb cu·xi· 'to call (something by a name)'

təkəmak wi· cu·xi· 'they call it Mesa Grande'

Rosalie wi· cu·xi· 'they called her Rosalie'

These expressions are obviously a specialized case of the general construction composed of nominal object satellite plus predicate (841), since the naming expressions obviously contain a noun and an uninflected verb form has nominal function. They are described here, however, because of their idiomatic character and because no additional satellite may be inserted between the constituents.

There is a single case of a construction where the verb i· 'to say' is in initial position and uninflected:

i· ay 'to talk'

i· ʔay 'I talk to him'

i· n^{y}ay 'I talk to you, He talks to me'

etc.

813 Auxiliary verb phrases

Any verb phrase described in 811 and 812 may form an auxiliary verb phrase of the structure "inflected verb phrase + inflected auxiliary". Both verb and auxiliary are identically inflected for person with the restriction that auxiliaries, which are all intransitive, are never inflected for object. When the reference is to a plural subject, the auxiliary always has the plural stem, while the preceding verb may have either the plural or the nonplural stem. All auxiliaries denote a continuous action indicated by the prefix {t} 'progressive' as well as the position (standing, sitting, lying, or in motion) the subject assumes during the performance of the action denoted by the preceding verb. Of all auxiliaries, {t-wa·} 'to be sitting' is the more general and may be used in cases where the notion of sitting is not relevant, i.e. simply 'to be'. In most cases, a literal translation of auxiliaries into English is awkward and redundant. These phrases are therefore best rendered into English by a simple progressive phrase of the type 'to be... ing' without reference to position.

ʔənak taʔwa· 'I sit, I am sitting.' i.e. 'I am sitting.'

cac wi· tu·yaq 'It is scattered, it is lying. i.e. It is scattered.'

mat wəto· təny^əway 'They fight, they are being. i.e. They are fighting'

ny^əwa·yp təny^əwayx 'They live, they will be there.' i.e. 'They will be living there.'

ʔa·yp taʔyu·w 'I talk, I am standing' i.e. 'I am talking.'

ʔamp taʔa· 'I walk, I am going.' i.e. 'I am walking.'

wa·x tu·yu·w 'He will go, he is standing.' i.e. 'He'll be going.'

ʔakəwi· taʔyiw 'I follow (it), I am coming', i.e. 'I come following (it).'

ny^əpəṣuw taʔwa· 'I wait for you, I am sitting.' i.e. 'I am waiting for you.'

820 The Noun Phrase

A noun phrase is a construction consisting only of nominal elements whose internal syntactic structure is not marked by syntactic affixes. In this section, examples of noun phrases will be listed without syntactic affixes, i.e. in the form in which the nominal phrase appears in a sentence when it is the direct object of the predicate.

In texts, noun phrases of up to three words are quite common, longer ones are fairly rare. On the other hand, the patterns of noun-phrase formation described below are such that, theoretically, there is no limit to the length of noun

phrases that might be formed. It seems obvious that any generalization obtained from linguistic analysis contains this apparent contradiction, but this leaves unanswered the question of the extent to which speakers feel free to use the productive resources of their language. While this undoubtedly varies enormously from speaker to speaker, it also seems likely that different languages differ considerably in this area. An examination of various languages from this point of view to determine how much this is conditioned by the structure of the language and how much by cultural factors might prove very valuable. To my knowledge, only one study concerned with this particular problem is available in the literature.*

821 Nominal classes

In order to simplify the description of noun phrases, the following terms will be used to label various classes of nouns.

1. A pronoun is any of the first and second person personal pronouns (541) or one of the interrogative pronouns ma·p 'who' and ʔu·c 'what'.

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*Stanley P. Newman, Linguistic Aspects of Yokuts Style. in Yokuts and Western Mono Myths. Ann H. Gayton and Stanley P. Newman, UCP-AR 5:1:4-7 (1940). Reprinted in The California Indians: a Source Book. Compiled and edited by R. F. Heizer and M. A. Whipple, Berkeley (1951, 1962), and in Language in Culture and Society, edited by D. Hymes, New York (1964) pp 373-377.

2. A demonstrative is any of the demonstrative pronouns described in 542.

3. A kw noun is a shorter way of referring to nouns derived from verbs by prefixation of the nominal prefix {k^W} (527.23).

4. Adjective. This class was not defined in the morphology since its members do not have any common formal characteristic. It is required syntactically to describe noun phrases of a particular type (825). Adjectives are those nouns derived from verbs with no overt modifications which denote quantities (including numerals and n^ya·mat 'all') and qualities (including colors).

5. A possessive is any noun (as described in 530) which indicates also the possessor, either overtly (by personal possessive prefixes), or not (i.e. body parts for third person possessor).

6. The term noun may then be used to designate any other noun described in 500, and not already included in one of the above classes.

7. Nominal is a cover term for any form belonging to classes 1-6 above and is used for general statements where the above classification is irrelevant.

822 One-word noun phrases

Any nominal may function syntactically as a noun phrase. All forms discussed in 500 therefore, can be used as a noun phrase. Since many examples of nouns are given in that chapter, this type of noun phrase need not be further illustrated.

823 Appositional noun phrases

Phrases of this kind consist of two nouns in apposition, one of which identifies a person or animal, the other denoting some physical characteristic of that person or animal (i.e. sex, stage of development, group membership). The order of the constituents appears to be free, but the most commonly recorded order is that where the more general noun precedes the more specific. Thus

sin^{y} ʔəl^{y}ma·m 'woman child' ~ ʔəl^{y}ma·m sin^{y}

ʔəxaṭ sin^{y} 'dog woman, i.e. female dog'

ʔək^{w}ak xək^{w}an^{y} 'deer offspring, i.e. fawn'

ʔi·k^{w}ic miɬ^{y}cis 'man white person' i.e. 'white man'

The phrase ʔa·ṣa· ʔən^{y}əxaṭ 'bird my domesticated animal, i.e. my pet bird' probably belongs in this category, with a possessive in second position. It should be noted that words denoting animals (except ʔəxaṭ 'domesticated animal') do not take possessive prefixes.

824 Enumerative noun phrases

Any string of nominals, exclusive of pronouns and demonstratives, each separated from the other by /,/ may form an enumerative noun phrase, optionally followed by a demonstrative or n^{y}a·mat 'all' in which case the last word represents a summary of all preceding nominals.

ʔən^{y}a·k, kəwa·k 'East, west'

pa·tal^{y}, pa·ta·t 'his mother (and) his father'

kʷəcpac, kuyuc, pəya· 'that which comes out, that which happens, this'

əxu·, xəmaɬ, əyi·w, nʸa·mat 'nose, ear, eyes, all of these'

xaṭəpa·, ʔəwi·, xəna·kuṛ, ʔuʔu·, pa·ṛxa·w, pəyap 'coyote, rattlesnake, gopher snake, owl, fox, these'

825 Adjectival noun phrases

Any demonstrative, kw noun, noun, or appositional noun phrase may form the head of an adjectival noun phrase when followed by an adjective. The order head + attribute is fixed.

pəya· ʔəxin 'this one'

kupiɬʸ nʸa·mat 'day-all, i.e. every day'

ʔəlʸmaṣ xəmuk 'young-people three, i.e. three children'

xəkʷanʸ sinʸ ʔəxin 'offspring woman one, i.e. one girl'

ʔi·pay ʔəxmay 'people(Indians) many', i.e. 'many Indians'

It is interesting to note that when, as is very common, Spanish loans are used for expressions containing numerals, the order of constituents is reversed, i.e. the Spanish construction is borrowed along with the lexical items.

sye·nt ʔa·nʸ 'one hundred years'

826 kw noun phrases

Any demonstrative, kw noun, noun, appositional noun phrase, or adjectival noun phrase may form the head of a noun phrase of this type when followed by a kw noun. This in turn may be head of another phrase of this type if itself followed by another kw noun. The order head + attribute is fixed.

pəya· kumlay 'this-one, the-dead-one, i.e. this dead person'

k^{W}ay?ku· k^{W}əlmisp 'the-big-one, the-bearded-one, i.e. the large bearded person'

?i·pay k^{W}ətxəmi· 'people, the-grown-ones, i.e. the old folks'

sin^{y} ?əl^{y}ma·m k^{W}a?ṣaṣ 'woman, child, the-pretty-one, i.e. the pretty girl'

kun^{y}ku·y k^{W}a?xink 'the-one-who-is-an-old-woman, the-one-who is-alone, i.e. the old maid'

?i·k^{W}ic ?əxin k^{W}ay?ku· 'man one the-big-one, i.e. one big man'

?i·k^{W}ic k^{W}ay?ku· kułic 'man the-big-one the-bad-one, i.e. the big bad man'

827 Demonstrative noun phrases

Any kw noun, noun, appositional noun phrase, adjectival noun phrase, or kw noun phrase may form the head of a demonstrative noun phrase of which a demonstrative is the attribute. The order is again head + attribute.

kuṛak pəya· 'the one-who-is-an-old man, this-one, i.e. this old man'

?i·k^{W}ic pəya· 'man this-one, i.e. this man'

?i·pay n^{y}a·mat pəyap 'Indians all these, i.e. all the Indians'

sin^{y} ?əl^{y}ma·m pəya· 'woman child this-one, i.e. this girl'

?i·k^{W}ic k^{W}ay?ku· pu· 'man the-big-one, that-one, i.e. that big man'

828 Possessive noun phrases

Any noun phrase described above may be the attribute of a possessive noun phrase of which a possessive is the head. The order in this case is attribute + head.

ma· məkun^{y}əway 'you your-relative, i.e. your relative'

pu· n^{y}əwa· 'that-one his-house, i.e. his house'

pu· xəɬ^{y}ta· 'that-one his-head', i.e. 'his head'

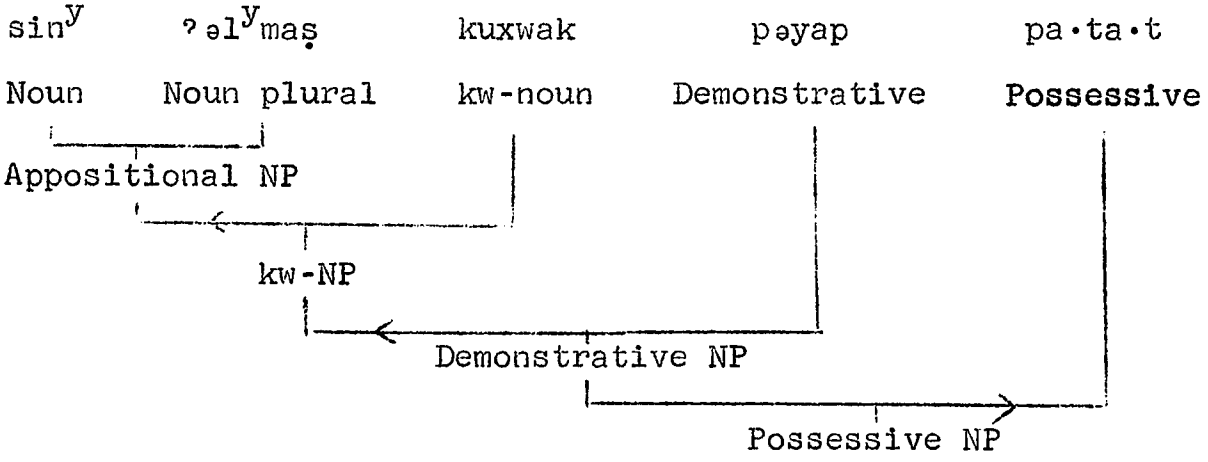
kal^{y}mu· əsaɬ^{y} 'mortar its-arm, i.e. pestle'

ʔi·pay a· 'Indians their-mouth (or language), i.e. the Indian language'

ʔi·k^{w}ic pu· paxu·ma·y 'man that-one his-son, i.e. that man's son'

829 Summary

As a summary of the constituency of noun phrases, one of the longest possessive phrases recorded is given below showing all the constituents. An arrow points to the head of the construction. NP = noun phrase.



'woman children the two of them these their father'

i.e. 'The father of these two girls'

From this point on, the term noun phrase will be used to refer to any one of the constructions just described.

830 Adverbials

The term adverbial will be used in this chapter to designate all forms described in 740. They are better considered to be a separate class of nominal satellites (though they do not differ from them formally) since they have become semantically specialized. Although most of them are morphologically complex, it seems simpler to consider them syntactically as single units with adverbial function, and the only additional information needed for their complete syntactic identification is an indication of the syntactic structure in which they act as constituents. All adverbials have been listed in 740 and need not be further illustrated. Their use in sentences will be exemplified below.

840 The declarative sentence

Declarative sentences are characterized by the obligatory presence of a predicate (as in 810) with no syntactic affixes. Declarative sentences are of various types: simple, complex, or compound.

841 Simple declarative sentences

A simple declarative sentence may consist of only a predicate.

ʔa·mx. 'I'll go away.' (one-word predicate)

ucəwayp tan^{y}əway. 'They were talking.' (auxiliary verb phrases)

mat ʔəpəcəx^{W}i·m. 'We're lost.' (reflexive verb phrase)

It may also consist of a predicate modified by any number of noun-phrase and/or adverbial satellites. The syntactic relation of a noun-phrase satellite to the predicate is indicated by the appropriate nominal syntactic affixes described in 700 (including zero as in 718). When the noun phrase consists of several words, only the last word of the phrase is marked with the appropriate syntactic affix. There appears to be no structural limit to the number of noun-phrase or adverbial satellites which may modify a predicate, though sentences with more than two of each type are vary rare. Normal word order is Subject + Object + Predicate, where Object may be a noun phrase which is the direct object (with zero syntactic affix), or with any of the other syntactic affixes which indicate other types of objects. If more than one object phrase is present, the order does not seem to be well defined. Adverbials are very free with respect to word order, but normally they occur in first position in the sentence. Not infrequently, a subject or object phrase may appear after the predicate.

The following examples illustrate some of the possibilities. Others have already been given in 700. A "=" separates the syntactic affix from the nominal. Full details concerning the meaning of nominal syntactic affixes have been given in 700.

xəya·y, ʔi·k^{w}ic ʔəxin=c təwa·. 'Long-ago, man one-subj. he was-sitting, i.e. Long ago, there was a man.'

Adv. Noun Adj | | NP Subj. Pred. Nom.Sat.

səma·n xəmuk tən^{y}əway. 'weeks three they-were-there, i.e. They stayed there three weeks.'

Noun Adj | Np of time (zero affix) Pred.

kun^{y}ku·y=vəc ʔəmat=i wənak tewa·. 'the-one-who-is-an-old woman=subject ground=on she-sat she-was-sitting. i.e. The old woman was sitting on the ground.'

NP Subj. NP Obj. V Aux Nom. Sat. Nom. Sat. Pred.

ʔəxat tułp təwam. 'Horse-object he-was-on-top he-was-around. i.e. He was riding a horse.'

əmil^{y}=m wənuw· 'his-foot=by he-ran.' i.e. 'He ran on foot.'

mətən^{y}a·ł^{y}, ma·ykał^{y}, ʔəna·mx təkəmak=m. 'Tomorrow, at-daybreak, we-will-go Mesa-Grande-toward, i.e. to Mesa Grande.'

Adv. Adv.

ʔənəkəwaykx ʔən^{y}a·m. 'We-will-come-back early.'

Adv.

ʔəwa·=k ʔa·m. 'the-house=from I-went-away, i.e. I left from the house.'

ʔəwa·=ł^{y} ʔəcam. 'the-house=inside I-left-it.' i.e. 'I left it inside the house.'

puy ʔəkʷak=vu əwu·w. 'There deer=specific he-saw-it.',
Adv. 'There he saw a deer.'

ʔəwa· kʷayʔku·=vu ʔəku·kap. 'House the-big-one=specific
NP I-went-around-it.' i.e. 'I went
Nom.Sat. around the big house.'

842 Complex declarative sentences

Complex declarative sentences consist of a simple declarative sentence as head, modified by nominal satellites consisting of nominalized sentences. Any simple declarative sentence as described above may be nominalized to serve as attribute to another simple declarative sentence as head, with the restriction that its predicate may not be an auxiliary verb phrase, though it may contain an auxiliary verb functioning as predicate. To illustrate, ʔi·kʷic təwa·. 'The man was there.' may be nominalized, and so can ʔi·kʷic wənak. 'The man sat'. ʔi·kʷic wənak təwa·. 'The man was sitting there.', however, cannot be nominalized.

Two distinct nominalization processes are possible.

842.1 kw nominalization

This type of nominalization can only apply to a simple declarative sentence with third person subject whose predicate is in nonfuture form. The nominalization process is as follows: replace the third person subject prefix (if any) of the predicate by the nominalizing prefix {kʷ}. The result corresponds essentially to an English relative clause.

Auxiliaries, even when used as predicates, cannot undergo kw nominaization. Thus

ʔi·kʷic pu·=c nʸuk pa·. 'Man that-one=subject already he-got-here.' or 'That man is already here.'

+ kw nominalization:

ʔi·kʷic pu·=c nʸuk kupa. 'Man that-one=subject already he-who-got-here...' i.e. 'That man who's already here...'

ʔəmat=i cəpak. 'Earth=on it-comes-out.' i.e. 'It happens on earth.'

+ kw nominalization

ʔəmat=i kʷəcpak...'Earth=on that-which-comes-out.' i.e. 'What happens on earth.'

ʔəwilʸ wəcuw. 'Rock he-made.' i.e. 'He made a rock'

+ kw nominalization

ʔəwilʸ kʷəcuw...'Rock he-who-made-it.' i.e., 'Rock-maker'.

The examples show clearly that it is the whole sentence that is nominalized since the syntactic relationships between the constituents of the unnominalized sentence are still maintained in the nominalized sentence. Thus in the first example, the phrase ʔi·kʷic pu·=c is still overtly marked as subject of the predicate pa· (now nominalized as kupa·) while the whole nominalized sentence need not be the subject of the head predicate. Thus

ʔi·kʷic pu·=c nʸuk kupa· ʔəwu·w. 'I saw the man who's already here', where it is direct object, or

ʔi·kʷic pu·=c nʸuk kupa·=c wənak təwa·. 'The man who's already here is sitting there', where it is the subject and is so marked.

842.2 Nominalization by nominal syntactic affix

A simple declarative sentence (with restriction as stated in 842) may be nominalized to function as nominal satellite to another simple declarative sentence by addition of the appropriate nominal syntactic affix to its predicate. For syntactic purposes, it is simpler to recognize in this case also a suffix zero for cases where the syntactic relationship is unmarked, corresponding to the zero suffix direct object (see 841). The syntactic relationships involved are essentially as already described in 700, but a few additional remarks need to be made to clarify the exact relationships in examples of greater complexity than those presented in 700. This process of nominalization is recursive and a sentence may therefore show several layers of constituency showing each subsequent nominalization, the syntactic affix denoting the relationship of the sentence to which it is affixed to the sentence with which it is in immediate constituency. The latter, in turn, may also be nominalized in the same manner, etc. It is therefore clear that, in order to understand fully the use of syntactic affixes, it is necessary to understand the complete constituent structure of the sentence which word

order alone does not reveal. The examples below will illustrate the situation.

Example 1.

tənam=əm pəlʸəma·=m acəpac. 'When they were there, as it got cooked, they took it off.'

This sentence is derived from three simple declarative sentences:

1) tənam. 'They were there.'

2) pəɬʸəma·. 'It is cooked.'

3) acepac. 'They took it off.'

A first nominalization of 1) with 2) as head gives

4) tənam=əm pəɬʸəma·. 'When they were there, it got cooked.'
where the suffix =m + mp 1 indicates that the subject of the head sentence is different from that of the nominalized sentence.

A second nominalization of 2) with 3) as head gives

5) pəɬʸəma·=m acəpac. 'As it got cooked, they took it off.'
again with =m indicating that the subject of the head sentence is different from that of the nominalized sentence.

Finally, a nominalization of 4) with 3) as head gives us the sentence we started out with above, and all relations are clear.

Example 2.

nʸatəwa·=c, ʔi·kʷic ʔəxin tu·yu·w=m əwu·w. 'When he was there, he saw a man standing there.'

This sentence is derived from the following simple declarative sentences:

1) təwa·. 'He was there.'

2) ʔi·k^{w}ic ʔəxin əwu·w. 'He saw a man'

3) tu·yu·w. 'He is standing.'

A first nominalization of 1) with 2) as head selecting the alternative where they both have the same subject gives

4) təwa·=c, ʔi·k^{w}ic ʔəxin əwu·w. 'As he was there, he saw a man.' or, with the additional syntactic prefix {n^{y}a} 'when'

5) n^{y}a=təwa·=c, ʔi·k^{w}ic ʔəxin əwu·w. 'When he was there, he saw a man.'

Nominalizing 3) with 2) as head can be done in a variety of ways depending on the subjects of the two verbs. The various possibilities will be listed to exemplify the versatility of this process.

6) tu·yu·w=c, ʔi·k^{w}ic ʔəxin əwu·w. 'As he stood there, he (the same one who stood) saw a man.'

7) tu·yu·w=m, ʔi·k^{w}ic ʔəxin əwu·w. 'As he stood there, he (some other person) saw a man.'

8) ʔi·k^{w}ic ʔəxin tu·yu·w=m əwu=w. 'Man one standing-there he-saw-him.' i.e. 'He saw the man standing there.'

Finally, nominalizing 1) (with also addition of {n^{y}a} 'when') with 8) as head, we get our original sentence and all relations are clear.

It is interesting to note that the simple declarative sentences from which this complex sentence is derived are ambiguous with respect to subject. If they occurred one after the other in text, only the knowledge of the situation would allow identification of subjects. In the complex sentence, however, this ambiguity is completely clarified.

842.21 Zero suffix nominalization

Some clarification is also required for the cases of nominalization by zero syntactic affix. In addition to the cases already described in 718 (expressions of time), nominalization of this type may express a very close syntactic relationship to the head sentence, which might be called direct subordination, thus maintaining the parallel with the direct object construction. In such cases, the last sentence in a series thus related is the head, as is confirmed by the fact that only the last may contain an auxiliary phrase. In order to illustrate the semantic aspect of direct subordination, a few examples will be given with both literal and nonliteral English translations. The symbol ∅ (zero) will be used following the nominalized form to clarify the syntactic structure of the sentences.

məcxəyay=∅ wəṇamx. 'They-being-afraid it-will-collapse.'

i.e. 'They were afraid that it would collapse.'

(Note in this and other examples, that the English translation usually has to reverse the relationship as the Diegueño head corresponds to the part of the English sentence which is subordinate.)

xəmi·=Ø pam təwa·. 'He-growing-up he-got-there he-is-sitting.' i.e. 'He's all grown up.'

ʔu·maɬ=Ø ʔənəwaṭ. 'I-writing I-finish-it.' i.e. 'I finished writing.'

ʔəsa·w=Ø ʔəmiṛ· 'I-eating I-like-it.' i.e. 'I like to eat.'

ʔəna·mx=Ø ʔəpəxəmacx. 'We-going-away-future we-will-sleep.' i.e. 'Let's go to bed.'

ʔən^{y}a·=c ma·kən ʔətuɬp=Ø ʔəpək^{w}iɬ=Ø ʔəpam. 'I-subject the-car I-riding-it, I-crossing-it, I got there.' i.e. 'I rode the car across it (the bridge).'

843 Compound declarative sentences

Several declarative sentences of any of the types described above may be united into a compound declarative sentence, each separated from the next by /;/. Each sentence maintains its autonomy, i.e. is not in any way subordinated to one of the others. Semantically, this construction denotes a succession of events. Thus

məṛway u·təyi·wk; məṛway pu·ɬ^{y} wəca·m; xək^{w}i·n puy a·taq;

n^{y}a·pum nəyi·wk. 'Some they-took-along; some there they-left; acorn-hopper there they-poured-them-into; then they-came-away.'

'They took some of the acorns with them. They poured the rest into a hopper and left them behind. Then they came away.'

850 Other Sentence Types

Declarative sentences form the core of Diegueño syntax. Other types of sentences, as will be seen below, can best be described as derived from declarative sentences by a variety of very simple processes.

851 Imperative sentences

A simple declarative sentence is an imperative sentence if its predicate is inflected with the personal imperative morphemes. All simple imperative sentences have the intonation contour /!/ instead of /./. Simple imperative sentences, like simple declarative sentences, can be nominalized to serve as satellites to another head sentence. The /!/ contour is obligatory only if the head predicate is an imperative form.

With imperative head:

mən^{y}əwa·=m ka·m=Ø mən^{y}əxaṭ kəwu·w! 'your-house=to go (direct subordination) your-domestic-animal look-at!' i.e. 'Go home to look after your cattle!'

kəna·=k ʔil^{y} kəya·m! 'You-all-go=(syntactic affix) wood you-get!' i.e. 'Go and get some wood!'

Without imperative head:

ʔu·cuc kin^{y}=əm wəsa·wx. 'Something give-him=(syntactic affix) he-will-eat-it.' i.e., 'Give him something to eat!'

852 Negative sentences

In Diegueño, the negative is a verb -ma·w 'to not', or, more specifically, a type of auxiliary. The process of

negation may be described as follows. Any simple declarative or simple imperative sentence may form a simple negative sentence by replacing its predicate by a negative auxiliary phrase, consisting of the original inflected predicate obligatorily in the future form followed by the appropriately inflected form of the negative auxiliary. If the original predicate is an auxiliary phrase, the process is the same except that the auxiliary in this case is replaced by the negative auxiliary. The auxiliary -ma·w has the same form in plural and nonplural contexts, but is inflected for first, second, third, and imperative subject, although in careless speech it may occasionally be uninflected and has the form /əma·w/. A simple negative sentence, like a simple declarative sentence (but unlike a sentence containing an auxiliary verb phrase), may be nominalized to serve as satellite to another head sentence.

wax=ɨ^{y} warx uma·w. 'He-will-go=(syntactic affix) he-will-want he-not.' i.e. 'He doesn't want to go.'

ka·mx kəma·w! 'go-away-future you-not!' 'Don't go away!'

wəyiwx uma·w=vək, n^{y}imvay məkəna·mx. 'He-will-come he-not=if, anyway you-will-call-him.' i.e. 'If he doesn't come, go on calling him anyway.'

mətənerx məma·w. ~ mətənerx əma·w. 'You-will-have (you)-not.' i.e. 'You don't have it.'

ʔu·ya·wx ʔəma·w. 'I-will-know-it I-not.' i.e. 'I don't know.'

853 Double negative sentences

A double negative sentence may be formed from a negative sentence by adding the word $n^{y}i\cdot$ 'not at all, not ever, not even' before the word in the sentence specifically selected for negation. The semantic aspect is one of emphatic negation. The word $n^{y}i\cdot$ never occurs in a sentence which does not also contain the negative auxiliary -ma·w.

$n^{y}i\cdot$ tətuɬp=Ø nəpək^{w}iɬ^{y}=Ø əwa·r̥px uma·w. 'Not-at-all they-ride-it (direct subordination) they-cross-it(direct subordination) they-will-want they-not.' i.e. 'They didn't at all want to ride across.'

$n^{y}i\cdot$ pu·wkx uma·w. 'Not-at-all he-will-come-back he-not.' i.e. 'He never came back.'

əma·w=vək, $n^{y}i\cdot$ ʔa·x ʔəma·wx. 'Not=if, not-at-all I-will-go I-will-not.' 'If not, I won't go.'

$n^{y}i\cdot$ əmil^{y}=m wənuwx uma·w. 'Not-at-all his-feet=by he-will-run he-not.' 'He does not run on foot anymore.'

$n^{y}i\cdot$ n^{y}a·k^{w}ar̥ ʔəwu·wx ʔəma·w. 'Not-at-all anyone I-will-see I-not.' i.e. 'I didn't see anyone at all.'

854 Dubitative sentences

A dubitative sentence may be formed from a simple declarative or negative sentence (but not from an imperative sentence) by suffixation of {kəx} 'must be' to the last word of the predicate. Alternately, a dubitative sentence may be formed by suffixation of {kəx} to the last word of a noun

phrase, in which case it has itself predicate function. A dubitative sentence was never recorded nominalized.

wa·m=kəx. 'Maybe he's gone.'

wa·mx=kəx. 'Maybe he'll be going.'

ʔa·n^{y} cəpamx uma·w=kəx. 'Year it-will-go-out it-not=must-be.' i.e. 'It hasn't been quite a year yet.'

ʔi·k^{w}ic pu·c puy əwa·=kəx ʔəmtaṛ=vi. 'Man that-subject there he-is=must-be open-space=in.' i.e. 'That man must be there in the wilderness.'

pu· yip=kəx sin^{y} ʔəl^{y}ma·m=vəc. 'That she-heard=she-must-have woman child=the-subject.' i.e. 'That must have been what the girl heard.'

ʔəwa·=kəx. 'House=must-be.' i.e. 'It must be a house.'

ʔu·cuc waṛ=kəx. 'Something he-wants=he-must.' i.e. 'He must want something.'

855 Mild emphatic sentences

Any sentence as above, except imperative, may be made into a mild emphatic sentence by suffixation of {s} to the last word of the head predicate. In the case of an imperative sentence, the same meaning is obtained by suffixation of {na} to the predicate. This, however, was never recorded with a negative imperative sentence.

ʔi·k^{w}ic ʔəxin=c n^{y}əwa·yp təwa·=s. 'Man one=subject he-lives he-is-(sitting)=emphatic.' i.e. 'There was a man living there.'

m·a=c ma·=k məkəna·mx=s. 'You=subject you-go=syntactic affix you-will-call-him=emphatic.' i.e. 'You'll go and call him.'

n^{y}i· pu·wkx uma·w=s. 'not-at-all he-will-come-back he-not= emphatic.' i.e. 'He didn't ever come back.'

ʔəkur=s. 'It is far-(emphatic).'

ʔu·ya·w=s. 'I know it-(emphatic).'

kəwu·w=na! 'Do-look at it!'

ʔəwa·=kəx=s. 'It must be a house (emphatic).'

856 The emphatic predicates {yis} and {ayins}

Another type of emphatic sentence with stronger emphatic meaning than those in 855 is formed with the predicates {yis} or {ayins}, both apparently meaning 'to be indeed' and an obligatory nominal satellite consisting either of a subject noun phrase (with ||c|| allomorph of {(və)c}) or a nominalized declarative sentence with the same subject as that of the predicate and therefore also marked with ||c||). Only in extremely careful speech, or rather only in the abnormal situation of repeated elicitation, are these predicates ever pronounced in their full forms as separate words with independent stress. Normally, they are incorporated into the preceding word with loss of stress and, in most cases, other phonological reduction. These forms are therefore written with the /+/ juncture between the two (morphological) words. It is possible that these two predicates may be further analyzable morphologically, since they both contain -s (cf. {s} 'mild

emphatic') as well as yi- 'to be(?)'. The -n- in {ayins} may then be related to the emphatic imperative {na}. No formally distinct plural stems were recorded for these verbs. {ayins} is of very rare occurrence. The examples below will illustrate the types of reduction these forms take.

ʔəma·y ʔəxa·=vəc wəcuw=c+is (= wəcuw=c yis). 'God made it indeed.'

ʔi·k^{w}ic=vəc wi·=c+is (= wi·=c yis). 'Man=the-subject he-said= syntactic affix he-did.' i.e. 'The man did say.'

pəya· kəna·p=c+is.(= kəna·p=c yis) 'This he told indeed.'

ʔən^{y}a·=c ʔa·x=c+is.(= ʔa·x=c ʔəyis) 'I must go.'

ʔən^{y}a· ʔətal^{y}=c+is.(= ʔətal^{y}=c yis). 'Of-me my-mother= subject she-is.' i.e. 'She is my mother.'

pəya+pa=cis. (= pəya· pa·=c yis.) 'This it-got-there it-is.' i.e. 'That's all.'

ʔən^{y}a· pəcay·=c+ayins.(= pəca·y=c ʔayins) 'I his-daughter= subject I-am-indeed.' i.e. 'I am indeed his daughter.'

n^{y}ipi ʔənəkəxap=c+ayins (= ʔənəkəxapc ʔayins) 'There we-went-in=syntactic-affix we-were.' i.e. 'There is where we did go in.'

xu·ma·y=c+ayins n^{y}ip. (= xu·may·=c ayins) 'He was indeed his son, that one.'

857 Interrogative sentences

There are three processes for forming interrogative sentences.

857.1 Suffixation of {a}.

A declarative sentence may form an interrogative sentence by suffixation of {a} 'interrogative syntactic suffix' to the last word of the predicate. The underlying sentence may also be a negative sentence.

ma·=c ma·yp=a. 'You=subject you-talk=interr.' i.e. 'Do you talk?'

ʔəxan=a. 'It-is-good=interr.' i.e. 'Is it alright?'

məṭəner maṭ əma·w=a. 'you-have-it or not=interr.' i.e. 'Do you have it or not?'

mi·ca·=a. 'Do you remember?'

məny cəwayp təməny əway=a. 'You-all-live you-all-are-there=interr.' i.e. 'Did you people live there?'

ma·=c məwu·wx əma·w=a. 'You=subject you-will-see-him not=interr.' i.e. 'Didn't you see him?'

ma·=c ma·x=s, məyip=a. 'You=subject you-will-go=emphatic, you-hear it=interr.' i.e. 'You are to go, do you hear?'

857.2 The interrogative predicate {yu}

The interrogative predicate {yu} is used in exactly the same manner as the emphatic predicate {yis}. One phonological peculiarity of this predicate should be mentioned, i.e. that it ends in a short vowel. As a matter of fact, in very slow repetitions of the sentences in which it appears, and when it is given word stress, it was often recorded yu· and is therefore

perhaps the same form as a verb yu· 'to be' recorded elsewhere. With reduced length and stress, however, it always seems to have interrogative meaning.

sin^{y}=c+u. (= sin^{y}=c yu) 'Is it a woman?'

məxano·=c+məyu (= məxano·=c məyu·). 'you-are-sick= syntactic-affix are-you.' i.e. 'Are you sick?'

ma?xanx əma·w=c+məyu. (= əma·w=c məyu·) 'you-will-be-good not-syntactic affix are-you.' i.e. 'Aren't you well?'

?ən^{y}a·=c+u. 'Is it me?; It's me!'

ma·rapx=c+u. 'he-will-hit-you-syntactic affix is-he.' i.e. 'Is he going to whip you?'

857.3 Interrogative words

Other interrogative sentences are those which contain an interrogative pronoun or adverb as one of the satellites. These question words were recorded in sentences of all types, except imperative sentences.

mu?yum ma·x məma·w. 'Why you-will-go you-not.' i.e. 'Why didn't you go?'

mu?yum xaṭəpa· mu·cuṭx əma·w. 'Why Coyote you-will-send-him not.' i.e. 'Why don't you send Coyote?'

mu?yu·k wəyiwx. 'How will he be coming?'

mu?yu·c məlay=a. 'How he-died=interr.' i.e. 'How did he die?'

ma·y n^{y}əway=a. (or) ma·y n^{y}əway=c+u. 'Where are they?'

?i·c mi·=a. 'What do you say?'

?u·c maṛ=a. 'What do you want?'

ma·yvu maṛ=a. 'Which one do you want?'

mu·yum mar=a. 'How many do you want?'

mu·yuməm min^{y}=a. 'How many did you give him?'

ʔa·n^{y} mu·yum taʔwa·=c+u. 'How many years was I there?'

muʔyum pəməwi·=c+məyu. 'Why did you do that?'

It might be noted here also that the interrogative pronoun ʔu·c 'What thing or object?' also functions as the standard hesitation form, or filler when a speaker either can't remember the particular word needed in some context or can't decide on the exact form and allows himself more time to think about it.

ʔu·c... ʔa·skay xətu·. 'What.... a pot he took.' i.e.
'He took a... a.. pot.'

ʔu·c... xaɬ^{y}məsa· rəwi·. 'What... shadow it-is-alike.'
i.e. 'It was like, well... a shadow.'

860 Minor sentences

Minor sentences are not very common and consist of sentences which do not contain a predicate as defined above (810).

A minor sentence may be simply an interjection.

xawka. 'Hello!'

xa·. 'Yes.'

Alternately, it may consist of one or more nominal satellites without predicate; in this case, they may be considered to be abbreviations of an underlying major sentence. Some may be considered to be idiomatic expressions:

ʔi·cacvu. 'I think so.'

wəsa·wɬ^{y}a. 'Would he (want) to eat?' (see 722.2)

Others are simply incomplete major sentences which can be fully understood only within a larger context. They were recorded only in conversations, as answers to questions.

nʸa·pum təkəmakvi. 'Then in Mesa Grande (i.e. we lived).'

pəya·m ʔənʸa·kvəm. 'This way, to the east (i.e. he went).'

One example was recorded of a nominal with the suffix {s} 'mild emphatic', suggesting that, under some circumstances, a nominal may act as a predicate.

kʷaʔxans. 'It's the truth.' (cf. ʔəxan 'to be good', kʷaʔxan 'the good one')

900 SAMPLE TEXT

The following short text is presented with a complete analysis in order to exemplify a number of the grammatical processes described in this grammar. In order to include all relevant information while maintaining a manageable presentation, the following format has been adopted.

With the text itself is given interlinearly all the relevant syntactic information as well as a word-for-word literal translation. The text is written phonemically, but syntactic affixes are separated from the rest of the word by a hyphen "-". A solid line under a string of symbols identifies them as belonging to a single construction which is then identified by its own symbol below the line. For example, a diagram of the form $\frac{X\ Y\ Z}{W}$ means that X, Y, and Z are the constituents of a construction W and the major constituents of a sentence are simply those with no further lines under them. Thus if a sentence is diagrammed syntactically as A $\frac{X\ Y\ Z}{W}$ $\frac{X\ Z}{V}$, its major constituents are A, W and V. The symbols themselves are a key to the syntactic class or construction referred to. They were chosen to be as suggestive as possible of the terms used in the grammar. A full explanatory list follows and gives also a cross reference to the section of the grammar where the term or concept is defined and discussed.

A = adverb 740 V = verb 810

Adj = adjective 821 Aux = auxiliary 810, 813

N = noun 821

C = conjunction (this category was not discussed in the grammar. It includes only Spanish loans.)

Dem = demonstrative 821

obj = direct object 718, 841

sub = subject 711, 841

pl = plural verb stem 460

NP = noun phrase 820

NPapp = appositional noun phrase 823

kwNP = kw noun phrase 826

NPadj = adjectival noun phrase 825

SP = syntactic prefix 717

SA = nominal syntactic affix 710

Dub = dubitative syntactic affix 721, 854

Emph = emphatic syntactic affix 722.3, 855

sub=pred = the subject of the verb in question is the same as that of the head predicate with which it is in immediate constituency 711, 842

sub≠pred = the subject of the verb in question is different from that of the head predicate with which it is in immediate constituency 712, 842.

ASat = Adverbial satellite 830

NSat = Noun phrase satellite 841

SSat = Nominalized sentence satellite 842.2

NSat (time) = Noun phrase satellite of time 718, 841

SSat (time) = Nominalized sentence satellite of time 842.2, 718

Pred = predicate 810

Direct subord. Sat = Direct subordination satellite 842.21

Minor sentence 860.

A free English translation follows the syntactic analysis. Finally, a glossary lists in alphabetical order all stems and morphemes found in the text with their English gloss, morphological class membership, reference to the section of the grammar where it is discussed, and any other information needed for complete identification.

910 Transcription, syntactic analysis, and literal translation

xəya·y, ʔi·paɬ n^{y}a-nəso·m,

ASat NP SA Pred

SSat(time)

Long-ago, summer (sub) when-it-is-all gone,

ʔi·pay-vəc matətay-m na··c

NP SA NP SA Pred SA

NSat NSat

SSat

people-the(sub) mountain-toward they-went(sub=pred) (pl)

kupxa.ɬ wəmu·ɬ.

NSat Pred

white-oak-acorn(obj) they-gather-acorns (pl).

pu·ɬ^{y} səma·n xəmuk ʔu· muʔyum tən^{y}əway-c

N Adj C A

ASat NSat(time) Pred SA

SSat

Right-there week three or how-much they-stay-there (pl)

(sub=pred)

wəmu·ɬ. marway u·təyi·wk;

Pred NSat Pred

they-gather-acorns (pl). Some (obj) they-bring-away-several;

marway pu·ɬ^{y} wəca·m;

NSat ASat Pred

Some(obj) right-there they-leave-them-behind (pl);

xək^{w}i·n puy a·taq;

NSat ASat Pred

acorn-hopper(obj) there they-pour-solid-into

n^{y}a·pum nəyi·wk.

ASat Pred

then they-came-away (pl).

ʔəwa·-vi n^{y}a-nəkəmic-əc

NP SA SA Pred SA

NSat

SSat

House-at when-they-came-back (sub=pred) (pl)

kupxa·ɬ-vu wəman^{y}-m sa·y-m

NP SA

NSat Pred SA

SSat Pred SA

SSat

white-oak-acorn-specific they-spread-it-out-to-dry (sub≠pred) it-is-dry (sub≠pred)

n^{y}a·pum tu·pa·.

ASat Pred

then they-crack-acorns.

tu·pa·-m sa·y-m n^{y}a·pum wətuṭ.

Pred SA ASat Pred

SSat Pred SA

SSat

they-crack-acorns (sub≠pred) it-is-dry(sub≠pred) then they-pound-it.

kupxa·ɬ-vu wətuṭ; ʔu·c ətuṭ-vu

NP SA Dem Adj

NSat NP adj SA

Pred NSat

white-oak-acorn-specific they-pound-it; that-which pounded-specific

wəsay k^{w}aʔəxk^{w}aq-vu tətəpac-vu.

NP SA

Pred NSat Pred SA

SSat

they-leach-it that-which-is-bitter-specific they-take-out-it-specific.

ʔəny̆pu·n wəcuw; ny̆a·pum tra·p wəcac;

NSat Pred ASat NSat Pred

leaching-basket they-made-it then cloth they-spread-

(obj) (obj) it-out

ny̆a·pum puy a·taq wətuṭ-vu;

ASat ASat Pred Pred SA

then there they-pour-solid-into SSat

they-pound-it-specific

əwi·-c yu·xan-s.

Pred SA SSat Pred Emp.

they-did-it they-made-it-good-emphatic.

(sub=pred)

ny̆a·pum ʔəxa· a·tu·; ʔəxa· wəpin-m a·tu·

ASat NSat Pred. NSat Pred SA Pred

SSat

Direct subordination Sat

Then water(obj) they-pour-liquid; water(obj) it-is-warm

they-pour-(sub≠pred) liquid

yu·xuy-s

Pred Emph.

they-(did-it)-first-indeed.

nʸa·pum a·tu··c nʸa·pum wəsay; wəsay tənam

ASat Pred SA ASat Pred V Aux

SSat Pred

Direct subord.Sat

Then they-pour-liquid then they-leach-it; they-leach-it

(sub=pred) they-are-around- (pl)

ʔəxkʷaq-vəc nəso·m. wəyu·w-c nʸa·pum ṣəwi·;

NP SA Pred Pred SA ASat Pred

NSat SSat

bitter-the-subj it-is-all-gone. They-get-hold-of-it then

(sub=pred)

they-make-acorn-mush

ʔəxa· kuṛa·w-m tap ʔa·skay; a·tu·.

kw-NP SA Pred NSat Pred

NSat

water the-hot-one-with they-put-down- olla(obj) they-pour-

round-object liquid-into-

it.

ʔəxa··vəc nʸa-cəpəɬu·yk-m,

NP SA SA Pred SA

NSat

SSat

water-the-subj when-it-boils-sub≠pred

nʸa·pum pu· ətuṭ-vu wəyu·w-c ʔəxa· ʔəstik-m a·tu·-c,

Dem Adj

NP SA Pred SA Pred SA

ASat NSat SSat

NSat Pred SA

SSat

SSat

then that pounded-specific water(obj) it-is-little
(sub≠pred)

they-got-hold-of-it
(sub≠pred)

they-pour-liquid
(sub=pred)

nʸa·pum ʔəxa· kucəpɬu·yk-wəɬʸ a·tu·; sa·wal təna m.

kw-NP SA V Aux

ASat NSat Pred Pred

then water the-boiling-one- they-pour- they-stir they-are-
into liquid around.

nʸa-pəɬʸəma·-m nʸa·pum acəpac.

SA Pred SA ASat Pred

SSat

when-it-is-done- then they-take-it-off.
sub≠pred

ʔu·cuc-i a·tu·; ʔi·cacvu

NP SA Pred Minor sentence

NSat

something-in they-pour-liquid; I-think-so

ʔa·skay ʔu·cuc-ɬ^{y} a·tu··kəx,

N N

NPapp SA

NSat

Pred Dub

olla something-into they-pour-liquid-must-have

ʔəl^{y}əmis-m wəcuw,

Pred SA Pred

SSat

they-are-little(pl)sub≠pred they-made-them

i.e. ollas

n^{y}a·pum pu· wəmac.

ASat NSat Pred

then that(obj) they-eat-it-soft(pl).

920 Free translation

"A long time ago, whenever the summer was over, the Indians used to go to the mountains to gather white oak acorns. They would stay there for three weeks or so and gather acorns. Some they took with them, but some they left behind having poured them into acorn hoppers. Then they came away from there. When they got home, they would spread the white oak acorns out to dry and, when they were dry, they would crack them. After they had spread them out and cracked them, they would pound them. They pounded the white oak acorns and then they would leach the flour to take the bitterness out. For this purpose they made leaching baskets over which they spread a cloth and in this they poured the flour. They did this very

carefully. Then they poured some water in, starting with some lukewarm water. They poured water and leached the flour. They kept on leaching it until the bitterness was all gone. Then they took this and cooked it into mush. They put an olla on the fire and poured hot water into it. When the water boiled, they took the pounded flour mixed with a little water and poured it into the boiling water. Then they would stir it up. When it was cooked, they took it off the fire and poured it into something else--I think they must have poured it into something like a pot, that is into some of the little pots that they made. Finally, they ate it."

930 Glossary

acəpac 'to take off, away from', verb type 424, pl. Class VIaii

a· 'to go' verb type 421, pl. Class IIIa

a·taq 'to pour solids' verb type 423, pl. Class VIciii

cəpəɬu·yk 'to boil' verb type 424, pl. Class zero

-kəx 'must be' dubitative syntactic affix 720

kupxa·ɬ 'white oak, white oak acorn' noun 527.23

$k^{W}a?$ əxk^{W}aq 'the bitterness' noun 526.23 = {k^{W}-? əxk^{W}aq} + mp 1,11d

k^{W}- 'the...one' nominalizing prefix 527.23

marway 'some' noun 523.2

matətay 'mountain' noun compound 521.2 = mat 'ground, earth' + *?ətay 'big'

mu?yum 'how much, why' adverb 742

na· plural stem of a· 'to go' q.v.

nəkəmic plural stem of pu·wk 'to come back' q.v.

nəso·m 'to be all over, all gone, complete' verb type 430, plural Class zero (perhaps Vd, informants disagree on this).

nəyi·wk plural stem of -yi·wk 'to come away' q.v.

n^{y}a- 'when' syntactic prefix 717

n^{y}a·pum 'then' adverb 741

pəɬ^{y}əma· 'to be done, cooked' verb type 424, Class VIbii

pu· 'that' demonstrative 543

pu·ɬ^{y} 'right there' adverb 741

pu·wk 'to come back, return' verb type 425a, pl. Class I

puy 'there' adverb 741

-s 'indeed' mild emphatic syntactic affix 722.3

sa·y 'to be dry' verb type 421, pl Class VIav

səma·n 'week' noun Spanish loan 180

ṣəwi· 1. 'to make acorn mush' verb type 423, pl. stem Class zero

2. 'acorn mush' noun 526.21

ṣa·wal 'to stir' verb type 423, pl. stem Class VIciii

t-am 'to be around' auxiliary verb 432.1, pl. stem Class III.

t-nam plural stem of t-am q.v.

tap 'to put down round things' verb type 423 (= ⟨t-ap⟩, pl. stem Class VIciii

tən^{y}əway 'several to be there' suppletive plural stem of several auxiliaries 432.1

təṭəpac 'to take out, off (round object)' verb type 424, pl. stem Class VIaii

tra·p 'cloth' noun Spanish loan 180

tu·pa· 'to crack acorns' verb type 423, pl. stem Class VIbii

u·təyi·wk 'to bring away several' verb type 424, 425b, pl. stem Class Vbi

-(və)c 1. 'subject' after nominals

2. 'subject of preceding verb is same as that of head predicate' after verbs.

Nominal syntactic affix 711

-(və)ɨ^{y} 1. 'into, inside' after nominals

2. '(want) to' after verbs

Nominal syntactic affix 714

-(və)m 1. 'towards, by means of, with' after nominals

2. 'subject of preceding verb is different from that of head predicate'

Nominal syntactic affix 712

-(v)i 1. 'in, at, on' after nominals

2. 'at the place where' after verbs. Nominal syntactic affix 715

-vu 'specific, specifically' nominal syntactic affix 716

w- 'he...(him)' personal verbal prefix 431

xək^{w}i·n 'acorn hopper' noun 523.2m

xəmuk 'to be three' verb 423, pl. stem Class VIaii

'three' adjective 821

xəya·y 'long ago' adverb 743

yu·xan 'to make (it) good, to do (something) well' verb type 423 pl. stem class VIciii

yu·xuy 'to be first, ahead' verb type 423, pl. stem Class zero

-cac 'to spread out, to make bed' verb type 422, pl. stem Class VIaii

-cam 'to leave, abandon' verb type 422, pl. stem Class VIaii

-cuw 'to make' verb type 422, pl. stem Class VIaiv

-ma· 'to eat soft things' verb type 422, pl. stem Class VIav

-man^{y} 'to spread out to dry, to spread outside' verb type 422, pl. stem Class VIav

-muł 'to gather acorns' verb type 422, pl. stem Class VIaii

-mu·ł plural stem of -muł q.v.

-pin 'to warm oneself, to be lukewarm' verb type 422, pl. stem Class VIaii

-ṛa·w 'to be hot' verb type 422, pl. stem Class zero.

-say 'to leach' verb type 422, pl. stem Class VIaiii

-tuṭ 'to pound' verb type 422, pl. stem Class VIaii

-wi· 'to make, to do' verb type 422, pl. stem Class IVa

-yi·wk 'to come away' verb type 425a, pl. stem Class III

-yu·w 'to get hold of' verb type 422, pl. stem Class VIaiii

ʔa·skay 'olla, cooking pot' noun 523.1

ʔi·ca· 'to remember' verb type 423, pl. stem Class Va

ʔi·cacvu 'I think so!' idiomatic expression (cf. ʔi·ca·) 860

ʔi·pał 'summer' noun 527.22

ʔi·pay 'person, Indian' noun 523.2

ʔu· 'or' conjunction Spanish loan

ʔu·c 'what, that which' 542

ʔu·cuc 'something' noun, reduplication of ʔu·c q.v. 610

ʔəl^{y}əmis plural stem of ʔəstik q.v.

ʔən^{y}pu·n 'leaching basket' noun 522.13

ʔəstik 'to be little' verb type 423, pl. stem Class I

ʔəwa· 'house' noun 523.2a

ʔəxa· 'water' noun 523.2a

ʔəxk^{w}aq 'to be bitter' verb type 423, pl. stem Class zero