

7G. Jiliapan Pame

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part of San Luis Potosi to the north of Hidalgo, approximately between 99° and 100° W. and from 20°45' to 22°30' N. The Pame area covers almost all the length of the Sierra Gorda, but not its width. It forms a band more than 150 km. long and less than 50 km. wide; it is not continuous, but consists of a series of small nuclei more or less isolated, with some new extensions. Pame nuclei, north to south, are: Ciudad del Maiz, Alaquines, La Palma and Gamotes, Santa Maria Acapulco, Tilaco, Pacula, Jiliapan.

Today, the situation of Pame is weak. It has been replaced by Spanish in most places, and in others it is being lost, except in Santa Maria Acapulco. Pame is known by only one speaker in Pacula, for instance; five or six persons in Jiliapan are able to speak it, but they use Spanish customarily.

Since the writings of Manuel Orozco y Berra (1864, p. 48) and Francisco Pimentel (1904, p. 412) Pame has been considered a single language, and so it was recorded by Jacques Soustelle (1937), but more recent researches (Manrique, 1958; Swadesh, 1959b, 1960a) postulate the existence of two distinct languages: North Pame and South Pame. The former comprises the dialects of Ciudad del Maiz, also spoken in some new settlements; Alaquines, especially in the Colonia Indigena (it has disappeared from the neigh-

0. INTRODUCTION. Pame is spoken in the the Sierra Gorda, a branch of the Sierra Madre Oriental running from the southern

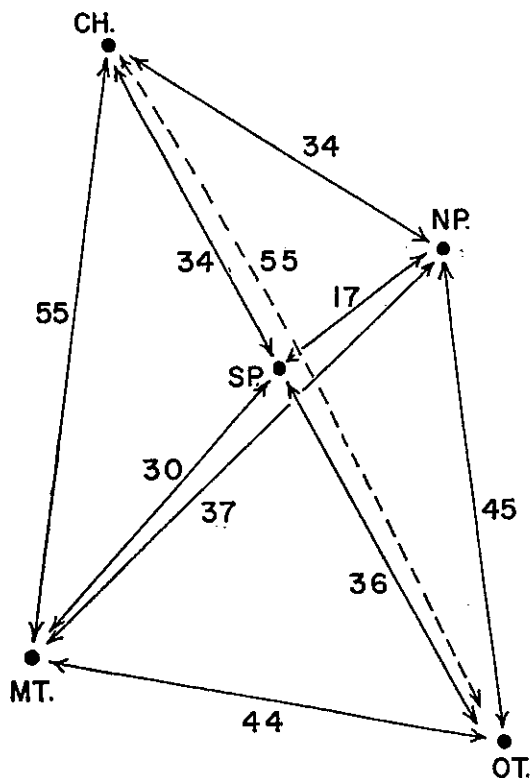


FIG. 1—INTERNAL RELATIONSHIPS OF OTOPAMEAN FAMILY. CH, Chichimec; NP, North Pame; SP, South Pame; MT, Matlatzinca (and Ocuiltec); OT, Otomí (and Mazahua).

borhood where Soustelle still found it); La Palma, in some hamlets around the Mestizo town of that name; Gamotes, and Santa María Acapulco, the last one very divergent.

South Pame is now a dead language. It is known to only a few people in Jiliapan and Pacula. The more divergent dialect of Tilaco is completely lost.

It is worth noting that Chichimec, a language spoken only in La Mision, near San

Luis de la Paz, shows a somewhat remote genetic relationship with Pame, in spite of what we supposed on the basis of certain historical data and some striking phonetic and lexical resemblances.

To give a brief idea of the genetic relationships of South Pame we can say that it is a member of the Otopamean family, together with Otomí, Mazahua, Ocuiltec, Matlatzinca, North Pame, and Chichimec. The internal relationships of this family as lexicostatistically established are shown in Table 1 and in figure 1, which is a graphic expression of the table; both are taken from Manrique, 1958, slightly modified according to the latest revised cognate count.

In contrast to former classifications, the table and diagram clearly show that there are two absolutely different Pame languages (which for easy reference and identification in other works we still call Pame, but label North and South in order to distinguish them); both languages are also completely different from Chichimec. Today Otopamean can be classified as follows:

Otopamean family

- I. Otomí-Mazahua group
 - a. Otomí (it may comprise only three main dialect subdivisions)
 - b. Mazahua
- II. South Pame, with three closely related dialects
- III. North Pame
 - a. Ciudad del Mazé and La Palma dialects, closely related
 - b. Santa María Acapulco dialect, more differentiated in some respects

TABLE 1—INTERNAL DIVERGENCES OF THE OTOPAMEAN FAMILY (in minimum centuries)

	Otomí-Mazahua	S. Pame	N. Pame	Matlatzinca-Ocuiltec	Chichimec
Otomí-Mazahua	...	36	45	44	55
South Pame	36	...	17	30	34
North Pame	45	17	...	37	34
Matlatzinca-Ocuiltec	44	30	37	...	55
Chichimec	55	34	34	55	...

IV. Matlatzinca-Ocuiltec group

a. Matlatzinca

b. Ocuiltec

V. Chichimec

Figure 2, taken from Swadesh (1960b), shows the relations of Otopamean with the most closely related families of the Macro-Mayan phylum, in which it is included, and with the Macro-Quechuan phylum, because Otopamean is the link between these two phyla. In this diagram the underlined figures represent the greatest internal divergences; other figures indicate divergences between families and phyla. Some figures have been modified following recent researches; all are subject to slight changes when a better knowledge of the phonology of the group will permit more accurate cognate counts.

Descriptive works on South Pame are listed below in chronological order:

(a) The *Arte*, by Fray Juan Guadalupe Soriano (1776). Lost manuscript of which only a later copy survives. The copy, perhaps incomplete, includes a *Prólogo Historial* of great ethnohistorical value; a Spanish-Pame - Otomí - Nahuatl - Chichimec vocabulary fairly complete for the first three languages, not so complete for Nahuatl, and very brief for Chichimec. It also includes a list of verbs of each of the two "conjugations," and a few unsystematic grammatical remarks. As Pimentel (1904) says, "it looks like a rough draft which has not received the final revision."

(b) The work of Fray Francisco Valle, manuscript of the 18th century, now in the Archivo Histórico de Madrid. It was published almost entire by the Count of Viñaza (Viñaza, 1892), and a small part of this publication was later re-edited by Rudolf Schuller (1925b). For his investigations, the late Dr. Antonio de la Maza obtained a complete copy of the Madrid manuscript, including a short vocabulary and texts used in Confession, not published by Viñaza. The most interesting fact of Valle's work is his astonishing analysis of the verb; it is a pity

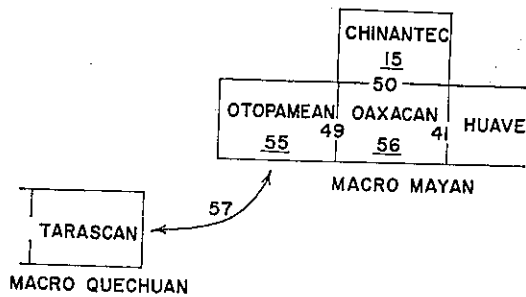


FIG. 2—RELATIONSHIPS OF OTOPAMEAN WITH THE MOST CLOSELY RELATED FAMILIES OF THE MACRO-MAYAN AND MACRO-QUECHUAN PHYLA. Underlined figures represent greatest internal divergences; other figures indicate divergences between families and phyla. (After Swadesh, 1960b.)

that Valle did not make the same kind of analysis of other parts of the grammar.

(c) The very short descriptions of Orozco y Berra (1864) and of Pimentel (1904) are not based on fieldwork, but on Soriano's *Arte*. The main purpose of these descriptions was to provide a basis for their comparative work and for the classifications of the languages of Mexico which they made.

(d) In his *La Famille Otomi-Pame...*, Jacques Soustelle (1937) published a sketch of North Pame based on fieldwork with the Alaquines dialect, and short notes on Jiliapan Pame. The notes on South Pame are based on fieldwork, on Soriano's manuscript, and on Schuller's edition of Valle.

(e) Robert J. Weitlaner and Carlo Antonio Castro gathered vocabularies and texts in La Misión, near Jacala, and in Pacula. None of their material has been published, except an article on plural formation (Castro, 1955).

(f) For the 58th annual meeting of the American Anthropological Association I prepared a few descriptive remarks on the works of Soriano and Valle, published by the Instituto Nacional de Antropología e Historia of Mexico (Manrique, 1960). This analysis is the basis for the present description, checked and supplemented with new materials gathered in Jiliapan from the informants

Abundia Santana Bartolejo and María An-dablo.¹

1.1. INVENTORY OF PHONEMES. The table below charts the phonemes of Jiliapan Pame.

Consonants:

voiceless stops	<i>p</i>	<i>t</i>	<i>ɸ</i>	<i>č</i>	<i>k</i>	<i>ʔ</i>
voiced stops	<i>b</i>	<i>d</i>	<i>z</i>	<i>ž</i>	<i>g</i>	
voiceless						
fricatives			<i>s</i>	<i>š</i>		<i>h</i>
nasals	<i>m</i>	<i>n</i>				
oral sonorants	<i>w</i>	<i>r</i>		<i>y</i>		

Vowels:

high orals	<i>u</i>	<i>i</i>	<i>i</i>
low orals	<i>o</i>	<i>e</i>	<i>a</i>
high nasals	<i>u̠</i>	<i>i̠</i>	<i>i̠</i>
low nasals	<i>o̠</i>	<i>e̠</i>	<i>a̠</i>

Besides these segmental phonemes, there are three tone-stress phonemes: high (ˊ), low (ˋ) and falling glide (ˆ). One of these and only one is found in each word. There are, of course, secondary tones on the unstressed syllables of a word; their production seems mechanical, but they have not been sufficiently analyzed. The tone-stresses are considered phonemes because they differentiate minimal pairs, but as far as I know they have no grammatical function. Some examples follow:

<i>kudá</i> 'devil'	<i>kudà</i> 'stone'
<i>tiki?</i> 'arrow'	<i>tiki?</i> 'rubber'

1.2. DESCRIPTION OF SEGMENTAL PHONEMES. The placing of each of the phonemes in the table shows its point of articulation. This section, therefore, deals only with some further characteristics, and with allophones. Brackets are used to indicate phonetic characteristics; forms not in brackets are written phonemically.

The stops *p*, *t*, *k*, are voiceless and usually unaspirated but they may be slightly as-

¹ Although it is a description of North Pame, not of South Pame, Gibson's "Pame (Otomí) Phonemics and Morphophonemics" (1956) is worth mention because it provides a good basis for comparing the two languages.

pirated, especially when not in clusters; when a strong aspiration is heard, it is to be interpreted as cluster of stop plus *h*:

<i>[p]</i> <i>píɸ?</i> 'mushroom'	<i>[pʰ]</i> <i>mpháɸ?</i> 'sandal'
<i>[t]</i> <i>tandyn</i> 'tail'	<i>[tʰ]</i> <i>šuthynt</i> 'five'
<i>[k]</i> <i>ketʔe</i> 'atole'	<i>[kʰ]</i> <i>khh</i> 'blood'

ɸ, *č* are voiceless affricates; sometimes, when not in cluster, they are slightly aspirated:

<i>[ɸ]</i> <i>masúɸ</i> 'knot'	<i>[č]</i> <i>gyučí</i> 'firewood'
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The glottal stop *ʔ* varies in strength: between two different vowels it is clearly and easily distinguishable, but between identical vowels it is weakened and sometimes disappears, especially in rapid speech. When it follows a voiceless stop or an affricate it is heard as a glottalization of them:

<i>[ʔ]</i> <i>krúʔa</i> 'skunk'
<i>[ʔ]</i> <i>niʔu</i> 'louse'; <i>píɸ?</i> 'mushroom'; <i>rčʔi</i> 'vein'; <i>hukʔ</i> 'you' (sing.)

Voiced stops *b*, *d*, *g* are slightly fricative, fluctuating to completely fricative between vowels; *b* and *d* lose all or almost all their fricative quality when they follow the corresponding homorganic nasals (in the materials at hand there is no example of *ng*):

<i>[β]</i> <i>sibiɸʔi</i> 'lime'	<i>[b]</i> <i>numbúʔu</i> 'wooden'
<i>[d̪]</i> <i>tide</i> 'forty'	hammer'
<i>[g]</i> <i>negú</i> 'pine'	<i>[d̪]</i> <i>ndedʔ</i> 'stair'

Sibilant fricatives *s*, *š* are respectively apico-alveolar and lamino-palatal; both are voiceless:

<i>[s]</i> <i>-suɸ?</i> 'tie'	<i>[š]</i> <i>šinyu</i> 'nose'
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Fricative *h* has positional allophones when occurring intervocalically between vowels of front, central, or back articulation. Front and back allophones also occur when preceding semiconsonants *y* and *w* in the clusters *hy* and *hw*. Between nasal vowels *h* is also nasalized. After a voiceless stop it is heard as aspiration of the stop.

<i>[h]</i> <i>ntihin</i> 'corn dough'
<i>[h]</i> <i>muju</i> 'pumpkin'
<i>[h]</i> <i>kahan</i> 'star'
<i>[hN]</i> <i>baha</i> 'far'
<i>[Cʰ]</i> <i>štha</i> 'rabbit'

Voiced fricatives *z*, *ž* have a very restricted occurrence; the first one appears only in

seven words of a 600-word vocabulary and the second one in no more than six. They are homorganic too, but contrast with, the voiceless fricatives *s*, *š*:

z *kiztn* 'hole' *s* *kisáyn* 'eagle'
ž *ži?* 'teeth' *š* *šiši?* 'breast'

Nasals *m*, *n* are bilabial and alveolar. *n* has a velar allophone [ŋ] before *k*; *m* and *n* are palatalized before *y*, but not before *i*:

[*m*] *miši* 'cat'
[*mʷ*] *msa-mye?* 'the other side of the sea'
[*n*] *nidi?i* 'straight'
[*nʷ*] *šinyú* 'nose'
[*ŋ*] *nk?u* 'snail'

The *r* has special allophones: it is a flap [ɾ] before a vowel, it is trilled [ʀ] more or less long before a consonant other than ? (the only example of *r?* is in final position), and it is lateral [l] in final position, followed or not by glottal stop. Besides this, it develops a brief supporting vocalic sound when in initial cluster of three or more consonants:

[ɾ] *-?ery* 'alive', *kru?a* 'skunk'
[ʀ] *byarma?a* 'coyote', *rsi* 'leaf'
[ʀ] *rc?i* 'vein', *rk?wε* 'mezquite tree'

[l] *-núur?* 'want', *mpáhar* 'horse'

The semivowel *w* always has a timbre like [u]; it is distinguished from the homophonous vowel because it never takes a tone-stress phoneme nor is it nasalized, and because of its relative shortness. The *y* frequently sounds like [i], and in that case it is distinguished from the corresponding vowel for reasons parallel to those distinguishing *w* and *u*. When in initial position or intervocalic the *y* is slightly fricative, nevertheless contrasting with the fricative *ž*. The *w* gives a slight labial quality to certain preceding consonants; *y* palatalizes any consonant immediately preceding it:

[u] *idiwe* 'capulín'
[*hʷ*] *škuhwá* 'palm'
[i] (with palatalization)
ihiyaw 'earth'
[y] *yurthi* 'root'

The norms of the vocalic phonemes are

sufficiently described in the table; here I need only to describe their outstanding allophones:

Besides the norm [i], the phoneme *i* has a lower and somewhat backed allophone [ɛ]:

[i] *tú* 'two' [ɛ] *sinč?e?* 'small'

When in cluster with *y* or in final position, *e* is pronounced somewhat open [e]; when these two conditions occur together the vowel is still more open [eː]:

[e] *meri* 'fast'
[e] *tikyent* 'six'
[e] *bi?e* 'few'
[eː] *nimbye* 'nest'

o has, similar to *e*, more open allophones [ɔ] in final position and in other situations not yet well defined:

[o] *komú* 'butterfly'
[ɔ] *m?mɔ* 'moon'

The central vowel *ɨ* has been postulated because of the impossibility of transcribing certain words using only *i*, *e*, *a*, *o*, *u* (and the corresponding nasals); it has three frequent allophones [ə], [ɨ], [ɘ], and other not so common variants [a], [ɔ]. Undoubtedly, there is sometimes a vocalic development within certain consonant clusters, with the characteristics of *ɨ*; sometimes a fronted allophone [ɛ] of *u* is found, and occasionally *i* is pronounced further back than [ɛ]; the result of this is that under certain circumstances the oppositions of these three phonemes are neutralized:

[ə] *-mikindáw* 'burn'
[ɘ] *bí?i* 'chili pepper'
[ɨ] *kisáyn* 'eagle'

Besides the more common vocalic allophones just described, all unstressed vowels tend to be more or less obscure, increasing the difficulties of phonemic interpretation.

The nasal vowels have more or less the same phonetic timbres as the oral ones, including the obscure pronunciation in unstressed syllables. They have not been interpreted as *oral vowel plus nasalization*, because nasalization would be a suprasegmental phoneme not easy to match with tone-stress, and if counted as a consonantic phoneme, a

much more difficult description and analysis of distribution would be required:

<i>i</i>	<i>fi</i>	'above'	<i>e</i>	<i>-tehe</i>	'laugh'
<i>a</i>	<i>mpa</i>	'sun'	<i>i</i>	<i>skin</i>	'skin'
<i>u</i>	<i>nku</i>	'tree'	<i>o</i>	<i>mpo</i>	'snake'

The system of vowels in terms of their contrasts is shown in the following scheme:

All vowels, whether oral or nasal, have certain traits in common which are not merely phonetic, but phonemic and are related to the syllable and word structure. The vowels, and only they, constitute the syllable peak; only vowels can support the suprasegmental phoneme of tone-stress, and when they are not stressed they bear secondary tones contrasting with that of the stressed syllable (in fact, in certain clusters also *m* or *n* have secondary tones which make of them peaks of phonetic, but not phonemic, syllables). All vowels are longer still when these two conditions coincide. These characteristics serve as differential criteria in distinguishing between *w-u*, *y-i*.

1.3. SYLLABLE. Jiliapan Pame has junctures (for "juncture" see Hockett, 1955, p. 52) that make the syllabic analysis easier, but not all junctures are equally clear; e.g. between two vowels junctures are almost inaudible, but between a vowel and a following voiceless stop they are strongly marked. Phonetically junctures are marked by the lengthening of the vowel in an open syllable, or by sustaining the final occlusion in a syllable closed by a voiceless stop, or by the lengthening of the syllable final nasal, and by lowering the word melody in the final syllable; the last characteristic gives a stronger mark for junctures between words than for junctures between syllables of the same word.

Syllables conform to the patterns (CCCC)V, (CCCC)VC and (CCC)VCC; in other words, they can be constituted by a single vowel or vowel preceded and/or followed by consonants. Consonants following the vowel may be one or two; those preceding it may be one to four (if only one consonant follows), or one to three (if two

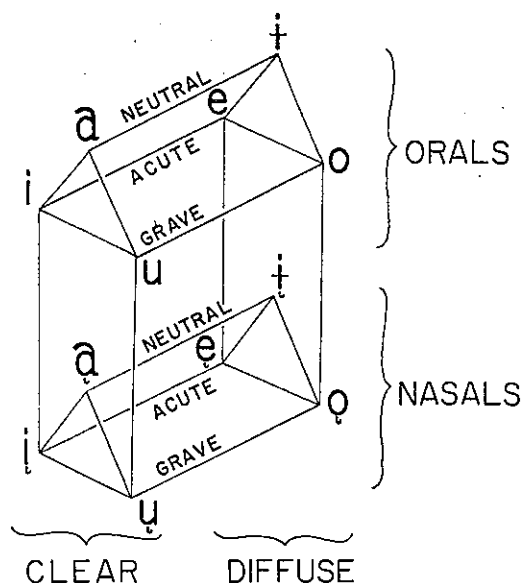


FIG. 3—JILIAPAN PAME VOWELS

consonants follow). There are no more than five consonants in a single syllable, and the largest consonant cluster has no more than four phonemes.

Open syllables occur in all positions within the word. (In the examples given below, syllable division is marked by a lowered point [.]):

V: *i.hyəw* 'earth', *na.u.hwe* 'nine',
šma.só.a 'skin'

CV: *mi.fú.hu* 'sat', *fi* 'above'

CCV: *č[?]i.nk[?]i* 'jar', *ke.nta.mpa[?]* 'sky'

CCCV: *mphú.st[?]i* 'table', *i.šnk[?].hin* 'bush'

CCCCV: *nkhwé.hen* 'mirror', *nsa.žmphú*
'muddy place'

Syllables closed by a consonant occur mainly in word final position:

VC: *-ndó.ak* 'walk'

CVC: *šku.mu[?]* 'hip', *ba.[?]a.čán* 'poor'

CCVC: *di.pyet* 'rich', *ti.nyin* 'lightning'

CCCVC: *bi.khio[?]* 'knife', *št[?]tw* 'nit'

CCCCVC: *št[?]we[?]* 'sheep', *nk[?]ya[?]* 'wet'

Such syllables occur in other positions only under certain limited conditions: (a) when the syllable final consonant is followed by an identical consonant which is part of a syllable : of . pattern : CV(CC): *kon.nó.a*

'guava'; (b) when the syllable final consonant is a voiceless stop followed by another voiceless stop which is part of a syllable of pattern *CV(CC)*: *tik.ti* 'seven'; and (c) when the syllable final consonant is a glottal stop followed by a syllable of pattern *mV(CC)*: *bu[?].ma.[?]a* 'amate tree'.

Syllables closed by two consonants occur only in word final position:

VCC: *-n[?].ur[?]* 'want'

CVCC: *pi[?]q[?]* 'mushroom', *ta.nayn* 'tail'

CCVCC: *šu.thunt* 'five', *mbu[?]t* 'grinding stone'

CCCVCC: *ntyawš* 'round', *mphaq[?]* 'sandal'

The distribution of consonants is so complex that it is preferable to give only a few general remarks:

(1) All of them occur as single consonants preceding a vowel.

(2) As single consonants in syllable final position only *t*, *ʃ*, *k*, *ʔ*, *s*, *š*, *m*, *n*, *r*, *w*, *y* occur.

(3) Two identical consonants never occur in a single syllable, excepting *ʔ*, *m*, *n*. Two glottal stops in the same syllable have at least a vowel between them. Two nasals in the same syllable occur in the clusters *nhn*, *mhm*, *m[?]m*, *n[?]n*.

(4) The only consonant which may occur in all positions within clusters is *n*.

(5) The consonants with a broader distribution are *n*, *t*, *k*, *ʔ*, *š*, *h*.

(6) *w*, *y* never occur as first member of an initial cluster.

(7) All consonants, excepting *č*, *b*, *z*, *w*, *y*, are found as first member of an initial cluster of two consonants.

(8) In final clusters only *t*, *ʃ*, *k*, *ʔ*, *š*, *r*, *w*, *y* occur.

(9) Voiced fricatives have the most limited distribution.

Vowels occur only singly, that is, one in each syllable, constituting its peak; they may be preceded and/or followed by consonants in the way already described. The frequency of occurrence of vowels is not equal for all; in the materials at hand vowels are found in all environments, except the syllables *(CCC)wu*, *(CCC)w_u*, *o*, *q*, *i*, *i*.

1.4. SENTENCE MELODY. The melody of the sentence rises gradually towards the end, and then it falls sharply; different melodies for different types of sentences are not to be found. As explained, each syllable has its own melody: when it is stressed it has high, low, or glide tone, and when unstressed it has secondary tones contrasting with that of the stressed syllable; in this way a peculiar melody for each word is formed. The ascending melody of the sentence refers then to a slight progressive rising of the tones of each syllable when compared with the same tones occurring at the beginning of the sentence; the same applies to the final falling of the melody. These intonational features delimit the sentences.

2. FORMATIVE PROCESSES AND MORPHOPHONEMICS. The formative processes of Jiliapan dialect are prefixation, suffixation, and juxtaposition. Suffixation is scarce, but juxtaposition and especially prefixation are abundant. In another section I shall deal in some detail with classes of affixes; for the present it may be observed that they serve mainly in conjugation. In what we call juxtaposition the elements do not cause or suffer regular morphophonemic changes; nevertheless, they are in certain ways fused, as shown by certain melodic and stress features.

A root never bears more than one prefix, never more than two suffixes. The structure of suffixes is very simple: they are formed by a single consonant. Most prefixes are of pattern *CV-*, but there are also prefixes formed by a single vowel or by a single consonant, and there is one of pattern *CCV-* (*mdu-*). Though some roots have the same limited patterns of affixes, most of them have more complex ones.

The combinatory processes are accompanied by many morphophonemic changes. To explain them it is convenient to recognize a set of morphophonemes related to the segmental phonemes, but at times otherwise represented. We use capital letters for these morphophonemes so indicating the part of an

affix which is lost under certain circumstances which will be described later.

Prefixes containing the morphophoneme *I* palatalize the root or stem to which they are jointed but the vowel does not appear as such. It is worth noting that probably in the 18th century, when Soriano and Valle wrote their *Artes*, this (and the other morphophonemes here transcribed with capitals) had a simple segmental form, but they must already have acquired their modern form when Soustelle gathered his materials in Jiliapan. That would be the explanation of Soustelle's difficulties which led him to postulate an almost unpredictable series of "functional variations."

Prefixes containing the morphophoneme *I* are: *I-*, *nI-*, *mI-*, *gI-*, *kI-*, *KI-*, *tI-*, markers of tense-aspect and person. The palatalization they produce has several particular forms:

(a) When the root initial is *t*, *k*, *m*, *n*, *nd* followed by a vowel, the palatal semiconsonant is infix between the consonant and the vowel:

$I+tao? > tyao?$ 'I am cutting'
 $I+ku\phi > kyu\phi$ 'I am following'
 $I+maq > mya$ 'I am sowing'

(b) When the root begins with ϕ or *s* followed by vowel, the initial consonant is palatalized respectively to \check{c} or \check{s} , and *y* is infix:

$nI+\phi u > n\check{c}yu$ 'you chided'
 $mI+su\phi? > m\check{s}yu\phi?$ 'if you had tied'
 $nI+s\acute{c}hot > n\check{s}yahot$ 'you dug'

(c) When there is a *w*, whether alone or in cluster, palatalization consists in changing *w* to *y*:

$kI+hwa > kihya$ 'you loosened',
 $nI+k?wa?+n > nk?ya?n$ 'you (pl.) wet'

(d) When the root begins with *p* followed by a vowel, the vowel is changed to *i*:

$I+p\acute{a}?at > pi?at$ 'I am helping'
 $I+puhin > pihin$ 'I am covering'

(e) When for the processes just described *i* and *y* are brought together, *y* is lost:

$nI+hwi\phi? > *nhyi\phi? > nhi\phi?$
 'you lifted up'
 $gI+\phi in > *gi\check{c}yin > gi\check{c}in$ 'you are piercing'
 $I+ndtis > *ndytis > ndtis$ 'I am fighting'

(f) When roots have forms different from those described they are not palatalized or are palatalized irregularly.

Prefixes *nU-*, *nI-*, *r-*, *nA-*, *mU-*, *mdu-*, also markers of tense aspect and person, change initial *p* followed by a vowel into *w*. When *nI-* is employed, this *w* suffers the palatalization produced by the morphophoneme *I*, as explained above. In the examples given below we find also two phenomena described in the section devoted to phonology: loss of intervocalic ϕ , and vowel reduction. These are not morphophonemic changes, but free phonetic variations, although it is probable that this kind of variation had been fixed in certain roots and became now a regular alternation not explainable by formative processes:

$nU+pa?at > nuwaat$ 'I helped'
 $nI+pa?at > niyat$ 'you helped'

As already pointed out, some prefixes and parts of others are written with capital letters to indicate the changes they produce, and to register its complete form which occurs only under certain circumstances. These circumstances are:

(a) Prefixes *I-*, *A-* are never found in segmental form. The changes *I-* produces are enough for postulating it. *A-* is kept to complete the prefix series, and also for purposes of comparison with other languages. The vowel morphophoneme of prefix *nA-* is kept for similar reasons.

(b) Prefix *KI-* occurs only with certain verbs, perhaps only to avoid confusing them with other verbs of simpler pattern:

$KI+ku\phi > kiky\phi$ 'you are following'

KI+hwa > *kihya* 'you are loosening'

(c) *nU-*, *nI-*, *mU-*, *mI-*, *gA-*, *gI-*, *kI* occur most frequently in the shortened forms *n-*, *n-*, *m-*, *m-*, *g-*, *g-*, *k-*. They appear in their complete form when the root begins with a bilabial, whether or not preceded by *h* (probably also when preceded by *ʔ*, but there are no examples of this in the materials at hand):

nU+sáhot > *nsáhot* 'I dug'
nI+tut > *ntyut* 'you broke'
mU+ɕu > *mɕu* 'if I had chided'
mI+kʔwaʔn > *mkʔyaʔn* 'if you had wet'
gA+kʔɕ > *gkʔɕ* 'I will follow'
nU+pihin > *nuwihin* 'I covered'
nI+ma > *nimya* 'you rolled'
mU+hwiɕʔ > *muhwiɕʔ* 'If I had lifted up'

(d) Commonly *mdu-* occurs in its complete form. The only case I have of the occurrence of the shortened form may be due to the haplogy of *mdu+nd*:

mdu+paʔat > *mdumbaat* 'if he had helped'
mdu+sáhot > *mdrusáhot* 'if he had dug'
mdu+ndtis > *mdtit* 'if he had fought'

Besides the conjugational prefixes there are three prefixes of number of the nouns. Two of them (*na-*, *re-*) do not produce changes; the third, *Y-* apparently, behaves exactly like *I-*; we use a different symbol as a convenient way to distinguish the two morphemes:

Y+(nu)dié > *dyié* 'capulines'
Y+mpahan > *yahan* 'horses'
Y+ntao > *dyao* 'eyes'
Y+(k)ne > *nye* 'mouths'

The suffixes so far found in this language are *-m*, *-n*, *-#* (zero), *-k*, *-t*, *-s*. The last three do not produce or suffer changes; the first three (plural markers in conjugation) display a series of changes almost as rich as that of prefixes:

(a) Verbs ending in a vowel take *-m*, *-n*

without change of the root or the suffix:

ntaʔo+m > *ntaʔom* 'to look for'
 (1st pers. pl.)
nI+ɕu+n > *nɕyun* 'to chide'
 (2nd pers. pl.)

(b) Usually *-m*, *-n* are lost when the verb ends with voiceless stop, especially in progressive tense-aspect:

I+paʔat+m > *piʔat* 'we are helping'
KI+taoʔ+n > *tyaoʔ* 'you (pl.) are cutting'

(c) When the verbal root ends with *n*, this is fused with *-m* or *-n*:

I+puhin+m > *pihim* 'we are covering'
t+pwɨn+n > *tpwɨn* 'you are punishing'

(d) When the root ends in *s*, *ɕ*, *ɕʔ*, the ending is palatalized to *ʃ*, and the suffixes are not modified:

nU+kʔɕ+m > *nukʔʃm* 'we followed'
nI+ndtis+n > *ndtiʃn* 'you (pl.) fought'
nU+hwiɕʔ+m > *nuhwiʃm* 'we lifted up'

(e) If the root has *ɕ* not in cluster, it becomes glottalized when *-#* is added; but after the *n* of the infinitive *ɕ* > *z*:

r+kʔɕ+# > *rkuɕʔ* 'they followed'
A+ɕu+# > *ɕʔu* 'they are chiding'
nA+ɕu+# > *nzu* 'to chide' (3rd pers. pl.)

(f) When *-#* is suffixed, final *s* becomes *d* or *t*:

t+ndtis+# > *tndtit* 'they are fighting'
nA+mdtis+# > *ndtid* 'they fought'

In still other situations the suffix *-#* does not affect the endings, but the initial consonants:

(a) Initial *s* becomes affricate:

$A + s\acute{a}hot + \# > \acute{c}ahot$ 'they are digging'

(b) When the verbal root begins with *t* or *m*, the suffix *-#* produces its aspiration:

$A + tut + \# > thut$ 'they are breaking'

$A + m\acute{a} + \# > mh\acute{a}$ 'they are sowing'

(c) The cluster *hw* is changed into *th* when *-#* is added:

$r + hwa + \# > rtha$ 'they loosened'

$nA + hwi\acute{c} + \# > nthi\acute{c}$ 'if they had lifted up'

(d) Initial *p* followed by vowel becomes *mb* when *-#* is suffixed, but *p* in cluster has no change:

$r + pa\acute{a}t + \# > rmba\acute{a}t$ 'they helped'

$A + pwi\acute{h}i + \# > pwi\acute{h}i$ 'they are entreating'

It must be explained that the morpho-phonemic changes just described are not absolutely regular, that certain verbs with apparently the same patterns show changes different from those here explained; e.g., the verb *tu^ou*, 'to sow', does not take the infix *y* we would expect, but changes the vowel, as do verbs beginning with *pV*: $nI + tu\acute{u} > nti\acute{u}$. Moreover, still other verbs have no changes or have particular changes so special that they can not be systematized. These variant treatments are selective, i.e., they are always the same for certain roots.

Many other words, mostly nouns, show another kind of non-systematizable variations. Although these sometimes seem to respond to the phonetic environment, or depend on the grammatical function, they in part involve free alternation unrelated to special conditions. These changes make the phonemic analysis very difficult, because they sometimes entail the neutralization of phonemic oppositions. This phenomenon was

already present in the 18th century, as is clearly noted by Valle. Some examples are given below:

m\acute{q}h\acute{q} / b\acute{q}h\acute{q} / mb\acute{q}h\acute{q} 'good'

byarma\acute{a} / mbyarma\acute{a} 'coyote'

bisa / bsa / msa / sa 'water'

k\acute{e}z\acute{e} / g\acute{e}z\acute{e} 'pig'

kumpu / kmpu / gmpu 'black'

kud\acute{u} / kd\acute{u} / gd\acute{u} 'stone'

ksi / si 'ice'

gyu / yiu 'firewood'

n\acute{c}i / \acute{c}i 'pot'

n\acute{c}i\acute{?} / \acute{c}i\acute{?} 'tooth'

\acute{c}ye / \acute{s}ye 2nd person possessive

\acute{c}i\acute{?} / \acute{s}i\acute{?} / \acute{z}i\acute{?} 'teeth'

\acute{s}kandoa / \acute{s}kindoa 'white'

Juxtaposition in Pame consists in the union of two words, forming a new unit with a new sense. This union does not always agree with normal syntax; occasionally there may be phonetic changes similar to those found in syntactic constructions, but they are not obligatory, i.e., they may or may not occur in the same expression uttered at different times. Nevertheless, juxtaposed compounds tend to fix one of the free variants and to reduce the pause between the juxtaposed words, along with frequent loss of the stress of one of them; for these reasons juxtaposed compounds are transcribed in a single word:

(a) noun + verb

kuduksi 'hail' < *kud\acute{u}* 'stone' and *ksi* 'ice'

maha\acute{s}k\acute{?}i\acute{s} 'cigarette' < *m\acute{a}ha* 'tobacco', and *\acute{s}k\acute{?}i\acute{s}* 'paper'

(b) noun + verb

\acute{s}k\acute{?}i\acute{s}n\acute{u}\acute{?}u 'read' < *\acute{s}k\acute{?}i\acute{s}* 'paper', and *n\acute{u}\acute{?}u* 'hear'

(c) noun + adjective

bikhyom\acute{a}d\acute{a} 'a kind of machete' < *bikhyo* 'knife', and *m\acute{a}d\acute{a}* 'big'

msam\acute{a}d\acute{a} 'river' < *msa* 'water', and *m\acute{a}d\acute{a}* 'big'

(d) adjective + adjective

n\acute{c}i\acute{?} \acute{e}\acute{?} \acute{s}i\acute{?}i 'narrow' < *n\acute{c}i\acute{?} \acute{e}\acute{?}* 'small', and *n\acute{i}\acute{s}i\acute{?}i* 'broad'

3. CLASSES OF ELEMENTS. Although the division of classes is primarily based on structural traits, I have preferred to call them "classes of elements" instead of "structural classes" because semantic and functional criteria are also taken into account. These criteria have the advantage of avoiding the need for a different classification based on syntactic categories, when we speak of constructions:

Classes of Elements

- I. Roots
 - A. Independent non-inflective
 - 1. Interrogatives
 - 2. Locatives
 - 3. Temporals
 - 4. Negative
 - B. Satellite non-inflective
 - a. Adverbials
 - 5. Pronouns
 - 6. Verb auxiliaries
 - b. Adnominals
 - 7. Adjectives
 - 8. Quantitatives
 - 9. Numerals
 - 10. Demonstratives
 - c. Endoclitics
 - 11. Conjunctions
 - C. Inflective
 - a. Pluralizable
 - 12. Nouns
 - 13. Possessives
 - b. Temporalizable
 - 14. Verbs
- II. Affixes
 - A. Prefixes
 - a. Of nouns
 - 15. Markers of number
 - b. Of verbs
 - 16. Markers of tense-aspect and person
 - 17. Nominalizers
 - B. Suffixes
 - a. Of nouns
 - 18. Markers of number
 - b. Of verbs
 - 19. Markers of plural
 - 20. Markers of object

Independent non-inflective roots may form sentences by themselves or serve as one of the segments of a paratactic construction (see §4.5). The four classes of these roots are interrogatives, locatives, temporals, and negative.

3.1. INTERROGATIVES (class 1). It is necessary to join in a single class all interrogatives

(including those which express location or time), because they are always initial in the clause.

<i>či</i>	'what?'	<i>nʔni</i>	'what?'
<i>čibi</i>	'where?'	<i>nɕa</i>	'who?'
<i>čiru</i>	'how?'	<i>nɕaʔnu</i>	'who?'
<i>čiti</i>	'when?'	<i>kiʔe</i>	'when?'
<i>šunkwa</i>	'how many?'		

3.2. LOCATIVES (class 2). We include here expressions of location other than interrogative locatives:

<i>kúwa</i>	'here'		
<i>kubú</i>	'there'		
<i>wiʔi/wiʔ/wi</i>	'there (away)'		
<i>šnu</i>	'near'	<i>kumpuʔ</i>	'below'
<i>baha</i>	'far'	<i>nibiʔ</i>	'under'
<i>či</i>	'above'	<i>kaʔa</i>	'upon'

3.3. TEMPORALS (class 3). This class includes expressions of time other than the verb auxiliaries and the interrogatives:

<i>mwe</i>	'already'
<i>štaʔ</i>	'yesterday'
<i>čegmpa</i>	'the day before yesterday'
<i>mpíʔa</i>	'tomorrow'
<i>če</i>	'today'
<i>turumpa</i>	'the day after tomorrow'
<i>bahansa</i>	'last night'
<i>wahanidyet</i>	'at noon'

3.4. NEGATIVE (class 4). This class consists of only one particle, used alone to express negation, or in a clause to negate it:

<i>mwi</i>	'no, not'
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Satellite non-inflective roots are so called because they always enter into syntactic constructions as verb satellites (adverbials) or as noun satellites (adnominals). They differ from inflective roots in not having inflexion:

3.5. PRONOUNS (class 5). Usually they are employed as the subject of a sentence when the corresponding noun is not used in the expression; less frequently they are used as verb objects. There are only three (differentiating person but not number):

<i>kak / ka</i>	'I, we'
<i>hukʔ / huk / hu</i>	'you' (singular or plural)
<i>kunu / kuru</i>	'he, she, it, they'

The forms ending in nasal (for first, second and third persons plural), and the form for third person singular feminine (**kunea*), mentioned by Soriano and Valle, do not occur now. It seems to me that **kunea* never existed, and that the plural forms, if they existed, have now disappeared; it is possible that these authors were attempting to provide equivalents for the Spanish pronouns.

3.6. VERB AUXILIARIES (class 6). These are only two invariable particles used to form the future tense-aspect of verbal inflexion:

<i>ma</i>	marker of simple future
<i>ma nuwa</i>	marker of immediate future

3.7. ADJECTIVES (class 7). These are noun modifiers, and for this they are always syntactically related to nouns, although they may be morphologically unrelated:

<i>mohq</i>	'good'	<i>nɕʔeʔ</i>	'small'
<i>niʃiʔi</i>	'broad'	<i>ʃtinkaw</i>	'new'
<i>kuʔua</i>	'red'	<i>maqɑ</i>	'big'

3.8. QUANTITATIVES (class 8). Quantitatives are NOUN or adjective modifiers, and as such they are always bound to the elements they modify. I have so far found no more than two quantitatives:

<i>bidi</i>	'much, many, very'
<i>biʔe</i>	'few, a few'

3.9. NUMERALS (class 9). In normal constructions they are always related to nouns, forming plurals of determinate number. They occur isolated only in the process of counting. Some numerals are:

<i>ʔna/nada</i>	'one'
<i>ti</i>	'two'
<i>hnɕuʔ</i>	'three'
<i>pye</i>	'four'
<i>ʃuthɕnt</i>	'five'
<i>tikyent</i>	'six'
<i>takti</i>	'seven'
<i>tignyɕu</i>	'eight'
<i>nayhwɛ</i>	'nine'
<i>sthɔ</i>	'ten'
<i>sthutnɑ</i>	'eleven'
<i>sthuti</i>	'twelve'

<i>sthuteʃthɕnt</i>	'fifteen'
<i>ʔnade</i>	'twenty'
<i>tide</i>	'forty'
<i>ʔnanteʔe</i>	'one hundred'

3.10. DEMONSTRATIVES (class 10). These always precede a noun. I have found only three:

<i>keni</i>	'this'
<i>kuni</i>	'that' (homophonous with the third person pronoun)
<i>ɕe</i>	'this, present' used only in temporal constructions like 'this year', 'this month' (homophonous with the temporal 'today')

3.11. CONJUNCTIONS (class 11). They have a very restricted use. Their function is to co-ordinate two expressions or two nouns in an expression; the first use is very infrequent, because paratactic constructions are preferred; co-ordination of nouns is more frequent. Conjunctions are considered endoclitics because, lacking semantic value, they are imbedded in endocentric constructions. There are only two conjunctions, and both have the same function:

<i>ti / te</i>	'and'	<i>ra</i>	'and'
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Inflective roots have the distinctive mark of inflexion. Pluralizable ones (nouns and possessives) have a much more limited inflexion than temporalizables (verbs).

3.12. NOUNS (class 12). Nouns have the obligatory category of number. Number is singular, plural, or dual, and is not always overtly marked. The affixes of nouns pertain to classes 13 and 18 (prefix and suffix markers of number); their syntax will be described in §4.2.

Besides single-root and juxtaposed nouns (as those at the end of §2), there are also nouns formed of a verbal base plus a nominalizing prefix of class 17:

<i>bisa</i>	'water'	<i>ihyaw</i>	'earth'
<i>ʃkidi</i>	'cicada'	<i>nɕuaɕ</i>	'bat'
<i>kumuy</i>	'squirrel'	<i>kudɔ</i>	'stone'
<i>minɕʔyaʔ</i>	'a wet thing' < m-nominalizer, <i>nkʔyaʔ</i> variant form of the verb <i>nkʔwaʔ</i>		

3.13. POSSESSIVES (class 13). Possessives are always placed immediately before a noun which is the thing possessed. In free translation possessives could be translated as 'my' (and 'our'), 'your' (sing. and pl.) and 'his/hers' (and 'their'), but they are better translated, in singular, as 'it is mine' (and 'it is ours') 'it is yours' (sing. and pl.), and 'it is his/it is hers' (and 'it is theirs'). When the things possessed are plural, whether marked or not, the possessive is pluralized by means of the prefix *Y-*, also used as noun pluralizer. Class 11 is formed only by the following elements:

- mpaq* 'it is mine, it is ours'
- čaq* 'it is yours' (sing. and pl.)
- maq* 'it is his, it is hers, it is theirs'
- yia(?)* 'they are mine, they are ours'
- čya?* 'they are yours' (sg. and pl.)
- mya* 'they are his, they are hers, they are theirs'

3.14. VERBS (class 14). Verbs have the richest inflexion of this language, with categories of tense-aspect and person (marked by prefixes of class 16), and number (marked by suffixes of class 19). Verbs are also bases for nouns formed by prefixing an element of class 17. They can take suffixes of class 20 (object markers), but these are not obligatory.

Verbal roots fall into two subclasses, according to their inherent voice; the voice determines which prefixes of class 16 should be employed. The two subclasses are: transitives—those roots which admit an object, and intransitives—those roots which exclude the object.

Several transitives can get the intransitive voice by taking the prefixes of intransitive. A secondary voice, that of reflexive, is formed by using a special set of prefixes with inherently transitive roots. Some verb roots are:

- ndoa* 'to walk' *-tu²u* 'to sow'
- paha* 'to hit' *-suč* 'to tie'
- če²et* 'to split' *-igin* 'to weep'
- aw* 'to eat' *-sáhot* 'to dig'
- tišín* 'to take a bath'

3.15. PREFIXES OF NUMBER OF NOUNS (class 15). I have referred, when speaking of class 12, to the number inflexion of nouns. Prefixes of class 15 are markers (along with suffixes of class 18) of this category. Class 15 is constituted by three elements:

- na-* marker of singular.
- Y-* marker of plural used most frequently.
- re-* marker of plural used with a few roots, it may be a recent loan from Otomi.

3.16. PREFIXES OF TENSE-ASPECT AND PERSON (class 16). I shall explain the inflective categories of verbs in §4.1; here I give an almost complete list of tense-aspect and person prefix markers, excluding those of future because they are nearly out of use. The list contains forms I gathered in the field, as well as forms reconstructed according to data provided by Valle; reconstructed forms are marked by an asterisk, as is customary, and it is not possible to guarantee that they actually exist in the language as it is remembered by the few present-day speakers. I have not included Valle's *third conjugation* prefixes because, according to data he himself provides, it seems to have been an optative set of stylistic prefixes used instead of the usual sets:

(a) prefixes of transitive voice verbs:

	progres- sive	perfec- tive	infin- itive	hypo- thetic	imperative
1st	<i>I-/ t-</i>	<i>nU-</i>	<i>nU-</i>	<i>mU-</i>	
2nd	<i>KI-/ t-</i>	<i>nI-</i>	<i>nA-</i>	<i>mI-</i>	<i>k-...-t/I-...-t/s-...-t</i>
3rd	<i>A-/ t-</i>	<i>r-</i>	<i>nA-</i>	<i>mdu-</i>	

(b) prefixes of intransitive voice verbs:

	progres- sive	perfec- tive	infin- itive	hypo- thetic	imperative
1st	<i>I-</i>	<i>*tA-</i>	<i>*tA-</i>	<i>*tA-</i>	
2nd	<i>gI-</i>	<i>*kI-</i>	<i>*kI-</i>	<i>*kI-</i>	<i>k-...-t/I-...-t/s-...-t</i>
3rd	<i>U-</i>	<i>*gU-</i>	<i>*nA-</i>	<i>*mI-</i>	

(c) prefixes of reflexive voice:

	progres- sive	perfec- tive	infin- itive	imperative
1st	<i>*tI-</i>	<i>*nI-</i>	<i>*mI-</i>	<i>*I-...-t</i>
2nd	<i>*tI-</i>	<i>*nI-</i>	<i>*mI-</i>	
3rd	<i>*tI-</i>	<i>*nI-</i>	<i>*mI-</i>	

The alternate sets of markers for the progressive of transitives and for the three forms of imperative, not differentiated for voice, are used selectively, i.e., one series inflects certain roots, and the other inflects other roots.

3.17. NOMINALIZERS (class 17). There are nouns formed by adding prefixes of class 17 to the transitive voice roots. These prefixes are: *k-* agentive, *s-* instrumental, *m(I)-* resultative:

k-sáhot 'digger, a person who digs'.

k-dao? 'cutter, a person who cuts'.

s-kibi 'the instrument that serves for unloading'

s-tao? 'the instrument that serves for cutting'

m-foa 'something split'

m-tao? 'something cut'

3.18. SUFFIX MARKERS OF PLURAL OF NOUNS (class 18). Besides prefixes of class 15 (markers of number) there is a suffix of plural used selectively with words of class 12 formed on a verb-root base: it is the suffix *-t*. Almost unused, and entirely optional is suffix *-s*, marker of dual:

kuhú 'sorcerer' *kuhút* 'sorcerers'

mfoa 'something split' *mfoat* 'some things that have been split'

3.19. SUFFIX MARKERS OF PLURAL OF VERBS (class 19). Number inflexion of verbs has three suffix markers of plural (singular being unmarked) *-m* is used with first person, *-n* is used with second person, and *#* (zero) is used with third person. In §2 I referred to the morphophonemic changes produced by these suffixes:

ndiwa+m > *ndiwam* 'we walk'

ndiwa+n > *ndiwan* 'you walk'

fu+# > *fu* 'they are chiding'

phín+m > *phím* 'we are covering'

éyu+n > *éyun* 'you (pl.) are chiding'

hwa+# > *tha* 'they are loosening'

3.20. MARKERS OF VERB OBJECT (class

20). The two elements of this class indicate the grammatical person which is the object of the verb to which they are suffixed: *-k* is used for first and second person; *-p* is used for third person, but seldom, and, perhaps, optionally:

rwáha-k 'he hit me',

nwáha-k 'I hit you',

rwáha-p 'he hit him'

4. CONSTRUCTION. In Jiliapan Pame there are syntactic and paratactic constructions. Syntactic constructions are those in which there is grammatical subordination or dependence among the component elements; paratactic constructions are those in which two or more independent expressions are set side by side without formal indication of their connection. Entities taking part in paratactic constructions may be one-element clauses or syntactic clauses, so we have three types of clauses: (a) one-element clauses, depending on the total situational context in which they are uttered, being mainly answers to questions; (b) syntactic clauses, the normal basic expressions (discussed in §4.4); and (c) paratactic clauses, the product of combining two or more clauses of types (a) and (b).

One-element sentences consist of a single word of the group of independent roots, i.e., an interrogative, locative, temporal, or negative.

It is not normal to make a sentence with a noun or verb alone, even in answer to a question. Instead these forms are combined with at least one other even if it involves repeating the verb of the question.

Syntactic clauses basically consist of a verb (with its bound person and tense-aspect marker) and an independent subject, and sometimes also an independent object. The subject and object may in turn be complex, as will be explained later.

Paratactic sentences unite simple elements and syntactic formations by placing them one behind the other, without establishing a subordination relationship, and seldom a co-ordination relationship.

In the following descriptions I shall not make special reference to simple expressions because, as they consist of a single word of classes 1, 2, 3, or 4, they present no difficulties.

4.1. VERB SYNTAX. The verb has inflection for tense-aspect, for person, and for number. Persons are first, second and third; numbers are singular and plural (and, occasionally, dual); tense-aspects are progressive, perfective, future, hypothetic and imperative, with the following values:

Progressive. This tense indicates continuing action, which is assumed to refer to present time if there is no contrary indication. However, used with an appropriate temporal, it refers to past time:

ka tyao? 'I am cutting, I cut'

šta? ka tyao? 'I was cutting yesterday, I cut yesterday'

Perfective. This tense indicates concluded action. In the absence of specific indication past tense is implied, but with the appropriate temporal it can also refer to the future:

ka ntut 'I broke [it]'

turumpa ka ntut 'I will have broken [it] the day after tomorrow'

Hypothetic. It can be translated by 'if I had...', 'if you had...', 'if he had...', in sentences like 'if you had seen'.

Future and Imperative. These have approximately the same values as the English future and imperative.

Tense-aspects (excepting future) and persons are marked by prefixes of class 16 which I have already listed. The prefix markers of future mentioned by Valle have disappeared, and now this tense is expressed by auxiliaries (class 6) placed before a verb bearing the infinitive prefix. Possible confusions between verbal forms are avoided by the regular employment of pronouns:

ka šyáhot 'I am digging, I dig'

huk šyáhot 'you are digging'

kunu sáhot 'he is digging'

ka nsáhot 'I dug'

huk nišyáhot 'you dug'

kunu rsáhot 'he dug'

ka msáhot 'if I had dug'

hu mšyáhot 'if you had dug'

kunu mdusáhot 'if he had dug'

ka ma nsáhot 'I am going to dig, I will dig'

hu ma nsáhot 'you are going to dig'

kunu ma nsáhot 'he is going to dig'

ksáhot 'dig!' (imperative)

The singular forms of verbs have no special markers. Forms in the plural have suffixes of class 19; although very infrequent, when the subject is dual, the forms may optionally have the suffix of dual (-s) instead of the corresponding suffix of plural. In other words, verbs in the singular bear only a prefix of class 16, and in plural bear one prefix and one suffix. When an object suffix (class 20) is employed with verbs in plural, it is placed between the root and the suffix of number:

t-ta?o 'I am seeking'

n-tya?o-n 'you (pl.) sought'

nu-waha-k 'I hit (past tense) you'

nu-waha-k-m 'we hit (past tense) you'

4.2. NOUN SYNTAX. The noun has inflexion for number as an obligatory but not always overt category. Usually singular is unmarked (the old prefix *n-*, marker of singular, has fused with the root and is no longer a living prefix), but when it is necessary to emphasize the singular character of a noun, this is done by placing the numeral *nada* 'one' before the noun, or by means of the bound proclitic *na-*. Dual is almost unused, but, when found, it is marked by the suffix *-s*. Plural may be expressed by special affixes (classes 15 and 18) or by using numerals (class 9), or quantitatives (class 8):

Singular	Marked Singular	Plural
	use of affixes:	
<i>šthe</i> 'nopal'	<i>na-šthe</i>	<i>re-šthe</i>
<i>n-ŋi?</i> 'tooth'	<i>na-nŋi?</i>	<i>ŋi? (Y+ŋi?)</i>
<i>n-t?u</i> 'louse'	<i>na-nt?u</i>	<i>tyu?</i>
<i>kuhú</i> 'sorcerer'	<i>nada kuhú</i>	<i>kuhul</i>

use of numerals:

<i>n-tao</i> 'eye'	<i>nada ntao</i>	<i>ti dyao</i>
<i>m-páhan</i> 'horse'	<i>nada mpáhan</i>	<i>hntu yáhan</i>

use of quantitatives

<i>n-ky</i> 'stick'	<i>nada nky</i>	<i>bidi gyu</i>
<i>kudù</i> 'stone'	<i>nada kudù</i>	<i>kuru kudù</i>

4.3. COMPLEX SUBJECTS AND OBJECTS.

In general, it may be said that subjects and objects have the same structure, but with certain limitations in use. Both are formed by a noun, a pronoun, or by several nouns:

ka çyú 'I chide'
çuwa sáhot 'John digs'
çuwa ra mle ma t-tehes 'John and Mary will marry'

Each noun can serve as a base for more elaborate constructions. When there is more than one noun, they are co-ordinated by conjunctions. The elaboration of noun bases consists in using their own modifiers: adjectives, numerals, quantitatives and demonstratives. In their turn, adjectives can be elaborated by the use of quantitatives.

Numerals, quantitatives, and demonstratives are placed before the noun; numerals and quantitatives are mutually exclusive. Demonstratives are placed before other modifiers when they appear together in a complex subject. The adjective (and its modifier, when it has one) usually follows the noun, especially in more complex constructions, but it may also be placed before the noun. The modifier of an adjective precedes it. Some examples follow:

kudù 'stone'
pye kudù 'four stones'
kudù škandóa 'white stone' (also:
škandóa kudù)
bidi kudù 'many stones'
bidi kudù škandóa 'many white stones'
kudù bidi škandóa 'very white stone'
pye kudù škandóa 'four white stones'
kunu kudù 'that stone'

Although basically the object may have

the same elaborations, objects of complex formation are not frequent.

4.4. SYNTACTIC CLAUSE. The syntactic clause has always two parts, each of which may consist of one or two entities (shown in the formula by $\sum_1^1 + \sum_2^1$).

The first part may contain an introductory (I), a verb auxiliary (X), or both. In constructions with only one entity in the first part the introductory is found more frequently than the auxiliary; in constructions with two entities the obligatory order is *introductory* first, *auxiliary* second (in the formula this is represented by [I.X]).

The second part may contain a verb (V), a complement (C), or both. In constructions with only one entity in the second part, the verb is found more frequently than the complement. In constructions with two entities there is no fixed order, but usually the verb precedes the complement (shown in the formula by [V, C]).

Then, the basic formula for syntactic clause in Jiliapan Pame is:

$$\sum_2^1 [I.X] + \sum_2^1 [V, C]$$

The introductory may be an interrogative (i) of class 1, or a simple or complex subject (s) of the forms already described. Clauses with an interrogative word as introductory are, of course, questions. The verb auxiliary is a member of class 6.

The verb is of class 14. The complement may have the same components as the subject, but as already indicated, it is usually simpler. In constructions with a complement and a verb (which must be transitive) the complement functions as object (o) of the verb. In constructions with complement only it is a predicate (p) modifier of the subject, or, in other words an equational expression is formed:

$I_s + V + C_o$ *ka gtao' mugu* 'I am cutting the meat'
 $I_i + V + C_o$ *çton dyhe't mpuhi* 'how do you weave the hat?'
 $X + V + C_o$ *ma nuwa nsuç gyu* 'I am going to cut firewood'

I₁ + X + V *kí?é ma kikyé* 'when will you come back?'

I₃ + C_p *mbyarma?a ti nk?a?o? bídí mothí* 'coyote and fox are very bad'

I₃ + C_o + V *ka n?i kyo?a* 'I make pots'

4.5. PARATACTIC CONSTRUCTIONS. In an effort to interpret accurately the syntactic structure of Pame, we note which components are complete in themselves and do not acquire additional meaning by inclusion in a larger complex, as against those which cannot be used alone or which take on some implicit additional notion in context. A construction entirely made up of the first kind of form is paratactic; other types are syntactic.

Since in a few details Pame parallels Spanish, we may illustrate with a Spanish example like *yo trabajo*, freely translated as 'I work' but more strictly as 'I, I-work'. That is, *trabajo* includes the subject (marked by the suffix *-o*) and is complete in itself. Hence, the addition of *yo*, also self-sufficient, is paratactic. In contrast, 'I work' in English is syntactic because one of the parts of the construction, 'work', is incomplete by itself. Incidentally it may be observed that, generally speaking, paratactic formations more readily admit variations in order than do syntactic ones; for example, *trabajo yo* is perfectly correct in Spanish. There are, of course, paratactic formations in English, as 'I work now' in which the segments 'I work' and 'now' are related only paratactically. Syntactic character may also be given by the use of relational particles, such as the prepositions in English.

Paratactic sentences in Jiliapan Pame result from combining in parataxis two or more expressions, at least one of which is a syntactic clause. The paratactic nature of these constructions is seen in the lack of specific relational elements and in the fact that each component is complete in itself. Members of classes 1, 2, 3, and 4 (interrogatives, locatives, temporals, and the nega-

tive), entering into a paratactic construction may be placed either before or after the syntactic clause, and have no fixed order among themselves:

šta thyu ntu?u 'I sowed corn yesterday' (literally: 'yesterday I-sowed corn')

ka thyu ntu?u šta 'I sowed corn yesterday (I I-sowed corn yesterday)'

Note that the independent subject may disappear in paratactic constructions; the rule is that, if some other element precedes the verb, it is normal to omit the independent subject. Perhaps as an extension of this principle, when an English sentence with several co-ordinate verbs is translated into Pame, the subject is kept in the first expression, but lost in the others:

šwa rwahak te ginti rnaha 'John hit me and went away running (John he-hit-me and he-left he-ran)'

If an English sentence with several co-ordinate subjects is translated, the Pame language favors the use of a paratactic sentence with the verb repeated in each clause, rather than use a co-ordinate subject:

wi kenèn mphaggyu šthe naw, stit?i? rešthe naw 'there in the town the ox and the donkey are eating the nopals (there (in)-town ox nopal he-is-eating, donkey nopals he-is-eating)'

In the following small text (given as an example of longer utterances) slant lines separate the major divisions. A single stroke marks the division between clauses, a pair of strokes mark the division between sentences:

ma nuwa unahao nuwehe / ma nuwa nk?uš nuwehe // šndabi nuwehe // ma ntuhin nk?uš // mwe? / unahao nk?wa?n // ma n?i nkú?a // ma nuwa unahao nk?wa?n // ma nme m?h?q unahao // ma n?i nkú?a.

Literal translation:

'[I] will go-now earth seek / will go-now

"guija" seek / finished seek / will grind
 "guija" /now // earth [I will] wet // will
 pot make // will go-now earth wet // will
 now earth good // will pot make'.

Free translation:

I am going to seek earth and "guija"

(a mineral pottery temper). I have brought
 the things I went to gather. I will grind the
 "guija," and in this moment I am going to
 wet the earth. The earth is ready now, and
 I will make my pot.

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