

Notes on tense, mood, and negation in Mixtec languages

Barbara E. Hollenbach

August 2015

INTRODUCTION

This study describes the preverbal particles that mark tense, mood, and negation in Mixtec languages. Some of these particles carry floating tones that affect the tone of the following particle or root.

The data used for this study have been compiled from various sources into a database (Database showing tense, mood, and negation in Mixtec), which is in a separate file (TNMDNDB.doc). The data are largely from published sources, but in many cases they have been supplied or augmented via personal communication with SIL colleagues. In this database, towns are grouped into the dialect areas proposed by Josserand (1983:470).

The oldest description of Mixtec that we have is fray Antonio de los Reyes' grammar of Teposcolula Mixtec, published in 1593, early in the colonial period. This variant is certainly not Proto Mixtec (De los Reyes recognized the existence of a number of different variants at the time he wrote), but it nevertheless provides a useful starting point. De los Reyes (R) used a Latin model, however, and it is necessary to see beyond this model and look at the elements in his description that are truly Mixtec.

There is a major isogloss running through the Mixtec region from northwest to southeast; towns to the northeast of this isogloss have a voiced dental fricative, written with the letter **d**, in words like **yodo** 'metate', and towns to the southwest of this isogloss have an apical sibilant instead, and so the word for 'metate' is **yoso**.

TENSE

One important category found in the Mixtec verb is tense, and there are three indicative tenses, future, present, and past. Many people prefer to consider these forms aspects, and call them potential, continuative (or imperfective), and completive (or perfective); others separate off the future as irrealis mood. In Colonial Mixtec, for most verbs, future tense consists in the verb stem alone, with no affixation, present tense is marked by a prefix **yo-**, and past tense is marked by a prefix **ni-**. The following forms from R's sample conjugation are written first as he has them, and then again in the alphabet of the Mixtec Academy; the verb stem is **dzatevui** (**datevi**) 'to sin', and the final element is the first person singular enclitic pronoun **-ndi**.

FUT	dzatevuindi	datevindi	I will sin
PRES	yodzatevuindi	yodatevindi	I sin
PAST	nidzatevuindi	nidatevindi	I sinned

Tone is not marked in R or in other colonial sources, though it played an important role in the language.

This basic tense system is attested in all of the colonial sources, which include the Hernandez catechism in Tlaxiaco-Achiutla Mixtec (1567) and the Gonzales catechism from Nochixtlan (1755), and also in various 19th century catechisms from the Lowland Mixtec area. It can still be seen in most modern Mixtec variants, though there have been significant phonological changes.

The Magdalena Peñasco (MP) stem that is cognate with **datevi** is **xtívi** (high mid), and the equivalent tense forms are:

FUT	xtívì rì	I will sin
PRES	xtívì rì	I sin
PAST	nì xtívì rì	I sinned

In this verb, there is no difference between future and present. In the following set based on the verb **kakù** (low mid) ‘to escape’, the tense system is seen more clearly:

FUT	kakù rì	I will escape	stem alone
PRES	kákù rì	I escape	floating high tone + stem
PAST	nì kakù rì	I escaped	nì particle + stem

PRESENT TENSE

Even though the present-tense prefix **yo-** is found in colonial and most 19th century sources, it does not occur in any modern tense system. What appears to have happened is that, between 1892 (the most recent catechism with **yo-**) and 1948 (the first modern description without **yo-**), the **yo-** prefix suffered the loss of the consonant and vowel, leaving only its tone, which floated to the stem. A catechism written by a Mixtec speaker and published in 1899 does not have this prefix, and the author protests what he considers to be the overuse of **yo**, a short form of the deictic **yo'o** ‘here, this’. This strongly suggests that the prefix had gone out of use, but that recent catechisms continued to use it, wrongly in the author’s opinion.

Present tense is marked by tone now in nearly all Mixtec variants for which I have data. The earliest description of a modern Mixtec tone system is for San Miguel El Grande, given in Pike (1948:77-94), which notes a change to high tone to mark present tense (p. 82). This change is now considered by most linguists to be a floating high tone, and it marks present tense in Lowland Mixtec, Western Highland Mixtec, and Eastern Coastal Mixtec.

One intriguing feature of this tone change is that in Eastern Highland Mixtec and Western Coastal Mixtec (two noncontiguous areas), the marker of present tense is a floating low tone. These tone changes are clearly cognate with each other, and both are clearly reflexes of the **yo-** prefix, but I currently have no explanation to offer as to how the tone flipped upside down, nor which of the two is the original.

From here on, when I refer to tone, I will talk only about systems in which high tone marks present, because that is the system used in MP, the variant I am most familiar with. The reader will have to make his own adjustments for the other systems.

[[fn: Studies of tone systems in towns at the border between the Western and Eastern Highland areas, such as Southeastern Nochixtlán, which is described in McKendry (2013), may well provide clues to these tone changes. The Coast was settled by complex migration patterns from the Highland and Lowland areas, according to Bradley and Josserand (1978), and it seems likely that the settlers brought the tone with them from the source area. There is room for considerable future research in this area.]]

The **yo-** prefix found in Colonial Mixtec is a grammaticalization of **iyó**, which is the present-tense form of the position verb **koo/iyó** ‘to sit, to exist’. In MP, **íyó** is high high, and so the **yo-** prefix was likely also high tone, and such a high tone is consistent with the floating high now found in MP present-tense forms.

The geographical outlier San Juan Coatzacoapan (a former garrison) is an exception to the above because it marks present tense with a **ka-** prefix. This is almost certainly an innovation, perhaps a borrowing.

PAST TENSE

The past-tense marker **ni-** was written as a prefix in R (57-58), and this marker survives in many towns, either as a prefix or as a proclitic, and it has a low tone.

In many towns, the **ni-** prefix has been reduced. In some towns it has lost the vowel, leaving an **n-** prefix, usually with associated low tone. In other towns, the prefix has been lost entirely, or lost entirely before certain consonants, and has become a floating low tone.

In MP, the **n̄i** proclitic is especially likely to be lost before repetitive verbs, which have at least three syllables and begin with **ndà-** (mid tone). The **ndà-** takes the low tone of the lost **n̄i**.

FUT	ndàkàkà r̄i	I will walk again
PRES	ndákàkà r̄i	I walk again
PAST	n̄i ndàkàkà r̄i	I walked again
	ndàkàkà r̄i	“

N̄i also tends to be reduced in MP before the plural proclitic **ka**, creating **nka**, phonetically [nga].

In Silacayoapan in the Mixteca Baja, the past prefix is **na-**. I have at present no theory to explain the vowel in this form.

FUTURE TENSE

Even though future tense was marked in Colonial Mixtec by a zero, i. e., the lack of an affix, it is not always a zero in modern variants. Some towns in the Western Coastal area mark future tense with overt prefixes or particles. In Zacatepec, future in main clauses is regularly marked by **ni**, which may be an additional use of the counterfactual particle discussed below. In Jicaltepec, the future is fairly regularly marked by a **va** particle, and in neighboring Ixtayutla, future is regularly marked by **kua**. Both of these forms appear to be grammaticalizations of **kua'an**, the incompletive tense of the verb ‘to go’. This is not unlike the Spanish periphrastic future **ir a** + infinitive. All of these forms seem to be innovations.

In addition to the use of the bare stem for future, R also described two ways that future tense was overtly marked in Colonial Mixtec, each with a special group of verbs.

For a large group of common two-syllable verbs, there are two stems, one used for future, and the other for present and past (52-54). These two forms usually differ in the first syllable. The future form has an initial velar stop **c-** (**k-**), and the present-past form usually has an initial alveopalatal sibilant **s-** (**x-**). Two of R’s examples are:

yositondi, future coto	yoxitondi, koto	to look
yosinondi, future cono	yoxinondi, kono	to run

These two-stem verbs occur in all modern Mixtec variants for which I have data. In some towns the present-past form begins with **x** (alveopalatal sibilant); in others it begins with **j** (velar fricative) or **ch** (alveopalatal affricate). The forms of MP ‘to run’ are:

FUT	kùnù r̄i	I will run
PRES	jìnù r̄i	I run
PAST	n̄i jìnù r̄i	I ran

Pike (1944:123) suggested that the present stem for two-stem verbs contained a palatalizing morpheme, but he did not attempt to analyze it in detail. Bickford and Marlett (1988) made a serious attempt to break down these stems into component morphemes, but there is a considerable degree of irregularity. Most modern dictionaries and grammars include both stems as principal parts of the verb. Clearly, these two-stem verbs are a very old feature of Mixtec.

The second way that future tense was overtly marked in Colonial Mixtec is found with a set of intransitive state verbs expressing mainly position. These verb stems started with **n-** or **nd-**, and the future was marked with a prefix **co-** (**ko-**). R mentioned these in passing (27); he gives the example:

FUT	condaa	konda	will be written
PRES	yonda	yonda	is written
PAST	nisacoonda	nixakonda	was written

The past tense form given by R contains an inchoative marker **sa-** (**xa-**) before the future prefix **co-** (**ko-**).

Modern variants of Mixtec contain similar verbs; the MP forms for ‘to be written, to be stuck to’ are:

FUT	kòndèè	will be stuck to
PRES	ndéè	is stuck to
PAST	nì jakòndèè	got stuck to

As in Colonial Mixtec, this verb occurs in past tense more frequently in its inchoative form, with the prefix **ja-**, which indicates movement into that position.

Most modern variants of Mixtec contain forms parallel to these, but the future prefix **ko-** is sometimes **ku-**.

Given that the usual way to mark future is with no prefix, it is noteworthy that this class of verbs should be an exception. I consider it likely that the **n-** and **nd-** forms were at some earlier point adjectives, rather than verbs, and that they often served as predicate adjectives with no copula, and were understood to mean present tense. To express future, a copula needed to be added, and **koo**, the future of the position verb **koo/iyó** ‘to sit, to exist’ was used. Then **koo** reduced to **ko-**, the word was reclassified as a verb, and it took the present tense marker as well. If this derivation is correct, the **ko-** form is older than the **ku-** form.

HABITUAL

A category that occurred in Colonial Mixtec, at least occasionally, but which is not included in R’s conjugation (perhaps because the Latin model he followed did not have such a category), is habitual. A habitual marker indicates frequent, customary, or sustained action. Colonial Mixtec had a future habitual marker **co** (**ko**), which occurred before the stem, which R identifies as the future of the verb **coo/yyo** (**koo/iyó**) ‘to sit, to exist’ (36). He gives several examples, all of which are imperatives, like the following based on the verb **quesi** (**kexi**) ‘to come’:

dehetnaha quevuico quesindo (nde'etna'a kevi ko kexi ndo)
 every day you will come, come every day

Habitual markers are found in some contemporary Mixtec variants. MP has two, **kò** for future tense, and **yò** for past tense.

FUT	kàtà rì	I will sing
FUT HAB	kò kàtà rì	I will habitually sing
PAST	nì jìtà rì	I sang
PAST HAB	nì yò jìtà rì	I habitually sang

Note the spread of low tone from the past tense marker **nì** to the habitual. The spread of low to unstressed syllables with a mid tone is a regular process.

In some towns the habitual markers are **ku** and **yu**. In that these habitual markers are clearly all reduced forms of the verb **koo/iyo** ‘to sit, to exist’, the forms with **o** are closer to the original than the forms with **u**.

The habitual marker **yò** does not occur with present tense in MP. The simple present covers the meaning habitual. There is, however, a special periphrastic form for present progressive, which employs the verb **yìkùù** ‘to be in process’. This construction consists of two short clauses.

PRES (HAB)	jítà í	he sings
PRES PROG	yìkùù ì jítà í	he is singing

This use of **yìkùù** is not found in the surrounding towns, which suggests that it is an innovation in MP. Also, it is not part of the verb particle system, and it will not be treated further here.

The habitual category is found only in part of the Western Highlands, namely, the Achiutla valley and the area immediately to the east of it. Diuxi has an especially rich habitual system. The category habitual is missing from all of the Lowland and Coastal Mixtec areas, and also from the eastern, southern, and extreme Western Highland area. This category was likely an innovation in the prestige Western Highland area.

PLURAL MARKING

In Colonial Mixtec, verbs were not inflected for the number of the subject (R 25; see also the conjugation on pp. 57-62). The subject was marked by nouns or enclitic pronouns following the verb, but in the Highland Mixtec area, number was not marked in nouns or pronouns either.

There is one kind of number marking that occurred in present tense only, in which a **y-** (**i-**) prefix took the place of the **yo-** present-tense prefix (R 26).

yosicandi	yoxikandi	ando
ysicata	ixikata	andar muchos, ellos andan

This prefix may be restricted to third person, even though R did not explicitly say so, because the examples he gives are all in third person. Also, this **y-** (**i-**) prefix was not included in the sample conjugation, which suggests that it was optional, or maybe a dialect variant. I have not found any modern variant that has this **y-** (**i-**) plural prefix.

Modern Mixtec variants in the Western Highland area, however, mark plural subject in the verb by a particle that comes between the tense marker and the habitual. In some towns there is a plural marker only for present and past tenses, and it has the form **ka**, with mid or low tone.

When this plural marker is present, the high tone that marks present tense falls on the **ka**, changing it to **ká**, instead of falling on the stem. MP has:

	<i>Singular</i>		<i>Plural</i>	
PRES	jítà ì	he sings	ká jítà ì	they sing
PAST	nì jítà ì	he sang	nì kà jítà ì	they sang

[[fn: I consider the marker **kà** to be low tone, but this cannot be determined with precision because it always follows a tense element that affects its tone; it could also be mid. If it follows either the floating high tone that marks present, or the past unrealized **ní** (a), it will be raised to high by the floating tone, and if it follows the past tense **nì**, it will be changed to low by a low-tone spread rule.]]

The **ka-** plural is found here and there outside the Western Highland area. In Santa Lucía Monteverde, at the very western edge of the Highlands, the **ka** plural serves for all tenses. In Mitlatongo in the Eastern Highlands, the **ka** plural occurs for present and past. In Zacatepec, in the Western Coastal area, it is used optionally in present for groups doing things together. In Jicaltepec, also in the Western Coast, it occurs in present, but seems to be obsolescent. In Jamiltepec, in the Eastern Coastal area, the **ka** plural also occurs, and it serves for all tenses.

The source of this form remains indeterminate, but Pérez Jiménez suggests **taka** ‘each’ (1988:146). Another possible source is the adverbial **kàá** ‘together’, found in MP. Note that this form accords with the special use of **ka** in Zacatepec mentioned in the above paragraph.

In the northern part of the Western Highlands there is also a plural marker for future tense. This marker has many variant forms, listed roughly from north to south:

kun	San Antonino Monteverde
vi	Yosoñama
jì	San Cristóbal Amoltepec
jìn	MP
ku	Tlacotepec
ju	San Mateo Peñasco
ki	Sinicahua, Teita
jìn	Molinos

The southern limit of this future plural seems to be Molinos. The following towns to the south have the **ka** plural for present and past, but lack a future plural: Atlatlahuca, San Miguel El Grande, Chalcatongo, and Yosondúa.

Here is a singular-plural conjugation of the verb ‘to sing’ from MP, which has **jìn** (low tone) for future plural

	<i>Singular</i>		<i>Plural</i>	
FUT	kàtà ì	he will sing	jìn kàtà ì	they will sing
PRES	jítà ì	he sings	ká jítà ì	they sing
PAST	nì jítà ì	he sang	nì kà jítà ì	they sang

The source of these diverse plural forms is far from clear, but the initial consonant is most likely to have been **k**, with **j** resulting from a lenition. (I have no explanation to offer for the form with **v**.) The nasalization in some forms suggests that the original form was nasalized, and the diversity of vowels suggests that the original was **ĩ** (barred **i**), which became **u** in some towns and **i** in others (see Josserand 1983:305, 308).

Most of these forms bear some resemblance to the future tense of the verb ‘to go’. This verb had a back vowel in the Colonial sources (sometimes written **qhu**), but in modern Mixtec it varies between a front and a back vowel. Tezoatlán in the Lowland area has **ko'on**, Peñoles in the Eastern Highlands has **ki'in**, and towns in the Tlaxiaco area have **ki'in**. The use of ‘to go’ for future plural is admittedly semantically odd. I get the impression that this form is a more recent coinage than **ka**, perhaps brought in to fill a perceived gap in the paradigm.

Both **ka** and the various future plural forms were most likely innovations that started in the city-states of the Western Highland area.

With motion verbs, plural is expressed by a marker that follows the verb, which has the form **koyo** (San Miguel El Grande), **kuei** (Yosoñama), or **kòò** (MP). This particle is historically related

to a verb **kòyò** meaning ‘to pour out (many small items)’ (Pike 1948:86). It seems to be an innovation in the Western Highland area, and I do not treat it further in this study.

PERFECTIVE / ALREADY

One other preverbal element in Colonial Mixtec is the temporal adverb **sa-** (**xa-**) ‘already’, which precedes all the others. This is used in R’s conjugation for pluperfect (58)

nidzatevuindi	nidatevindi	I sinned
sanidzatevuindi	xanidatevindi	I had sinned

This adverb also occurred in future tense, but the future form added the postclitic **-ca** (**-ka**) ‘more’ (58).

dzatevuindi	datevindi	I will sin
sadzatevuicandi	xadatevikandi	I will have sinned

No present-tense forms with **sa-** (**xa-**) are given in R.

Contemporary variants usually have this adverb meaning ‘already’ in the form **xa**, **ja**, or **cha**, depending on the town. The MP form is **jà** (mid tone). This adverb commonly occurs in modern Mixtec before present and past tenses. Its use before future seems to be an extension, and in MP it means ‘about to’, rather than ‘will have’ (future perfect).

PERFECT	jà jíà ì	he has sung
PLUPERFECT	jà ñì jìà ì	he had sung
ABOUT TO	jà kàtà ì	he is about to sing

SUMMARY OF INDICATIVE MODE

To summarize the MP system in the indicative mood, there are four orders of elements; from left to right they are: already, tense, plural, and habitual. All except plural were a direct inheritance from Colonial Mixtec. Only rarely does a variant have additional preverbal elements (Tezoatlán has a durative), though many have fewer.

QUESTIONS / INTERROGATIVE MODE

There is no indicator of a yes-no question registered for Colonial Mixtec. In the question-and-answer format of the catechisms (Hernandez 1567, 1568, and Gonzales 1755), questions show no difference from the corresponding declarations.

In contemporary Mixtec, Macaulay says there is no question marker in Chalcatongo (1996:126). A few towns have a marker at the end of the sentence. In MP and nearby towns, it is a sentence-final glottal stop; in Diuxi it is a particle **a**. In Coatzospan the yes-no question marker is a second-position enclitic **ndu**.

The most common marker of a yes-no question is, however, a sentence-initial particle of the form **a**, usually with high tone. This is found in Ocotepéc and other towns. In Ayutla this particle is nasal. The particle often has the same form as the conjunction that means ‘or’, and it is probably an extended use of that conjunction.

All of these question markers appear to be innovations, unless Colonial Mixtec had a way to mark questions that the sources did not mark. For example, if it had been a glottal stop, it would probably not have been marked, since glottal stop was marked in words only sporadically in the

Colonial materials. Likewise, if questions had been marked by a tone change, this would not have appeared in the orthography.

Indirect yes-no questions are often introduced in modern variants by the conjunction that means 'if'. R does not mention such questions.

WH questions are marked by various interrogative pronouns, adverbs, and phrases at the beginning of the sentence, both in Colonial Mixtec and modern Mixtec. In MP, the glottal stop that marks yes-no questions is optionally used on WH questions.

DECL	jítà ì	he sings
Y-N QUEST	jítà ì'	does he sing?
WH QUEST	nà yàà jítà ì	what song does he sing?
	nà yàà jítà ì'	"

In that none of these question types is marked in the verb, I give them no further attention here.

COMMANDS / IMPERATIVE MODE

For Colonial Mixtec, R shows a full set of imperative forms on pp. 58-59.

nadzatevuindi	nadatevindi	may I sin
dzatevui	datevi	sin
nadzatevuita	nadavevita	let him sin
nadzatevuindoo	nadatevindoo	let's sin
chidzatevui	chidatevi	sin (plural)
nadzatevuita	nadatevita	let them sin

There are two preverbal markers found in this set that do not occur in indicative forms. The first is **na-**, which occurs in first and third person, but not in second person. The second is **chi-**, which occurs only in second-person plural. These markers precede the future tense form of the verb. For second-person singular, the future tense form is used without a prefix. In first and third person, subjects are expressed in imperatives, but in second person there are no subject pronouns.

In modern Mixtec, the only town for which I have found a reflex of **chi-** for imperative plural is Peñoles, which has **chii**. This is almost certainly a retention found only in a town at the very edge of the Eastern Highlands.

The **na** particle, however, has a reflex in nearly every modern variant. It is usually called the subjunctive particle, or sometimes the hortatory particle. In some towns, **na** occurs in first and third person, just as in R. In other towns, **na** occurs also in second person, but usually only with formal pronouns or to indicate an extra degree of politeness. It usually has a high tone, or a mid tone with a floating high.

In MP, **na** is infrequent. What occurs instead in the imperative verb paradigm is a floating high tone in first and third-person forms, just before the number position, which is where **na** would be expected to occur. I consider this floating tone a reflex of **na**. As with the present-tense prefix **yo-**, **na** lost the consonant and vowel, leaving only a floating high tone.

	<i>Imperative</i>		<i>Indicative</i>	
1 fam. sg.	kátà rì	may I sing	kàtà rì	I will sing
1 resp. sg.	kátà sá	may I sing	kàtà sá	I will sing
3 sg. m.	kátà dē	let him sing	kàtà dē	he will sing

In second-person forms, there is no floating high tone, and the subject pronoun is omitted in second singular familiar.

	<i>Imperative</i>		<i>Indicative</i>	
2 fam. sg.	kàtà	sing	kàtà ró	you will sing
2 resp. sg	kàtà ní	sing	kàtà ní	you will sing

In imperative plurals in first and third person, this floating tone combines with the future plural **jín** (low tone) to create **jín** (high tone). This tone change does not occur in second person, just as **na** does not occur in second person imperatives in Colonial Mixtec.

	<i>Imperative</i>		<i>Indicative</i>	
1 fam. pl.	jín kàtà rì	sing!	jín kàtà rì	we will sing
1 resp. pl.	jín kàtà sá	let us sing	jín kàtà sá	we will sing
1 incl. pl.	jín kàtà ó	let's sing	jín kàtà ó	we will sing
2 fam. pl.	jín kàtà ró	sing!	jín kàtà ró	you will sing
2 resp. pl.	jín kàtà ní	sing!	jín kàtà ní	you will sing
3 m. pl.	jín kàtà de	let them sing	jín kàtà de	they will sing

In MP, the full form **na** occurs in some frozen forms, like: **jàa na** (a) 'in order that', **nasá** (ba) 'lest' (which introduces a polite warning), **na ndakani sa in kuentu ja...** 'let me tell a story about ...'. The use of **na** always reflects a wish on the part of the speaker, expressed with courtesy.

In Colonial Mixtec, second-person imperatives are marked not only by the absence of **na**, but also by the absence of an expressed subject pronoun in both singular and plural. In modern Mixtec, the lack of a pronoun is common for second person familiar, but respect pronouns are expressed. In towns that do not have respect pronouns, it usually shows more respect to express the pronoun than not to do so.

NEGATION

Negative verb forms were not included in R's basic conjugation, but in the grammar he mentions three negative adverbs.

INDICATIVE NEGATIVE: PRESENT AND PAST

In Colonial Mixtec (R 68), the negative particle for present and past tense in indicative mode is **ña**, which occurs in the modal position preceding the tense marker (the same position as the subjunctive **na**).

This particle also occurs in many variants of modern Mixtec; in MP it has the complex tone pattern mid-low with floating low-high (in spite of having only one mora of vowel length).

Some variants use unrelated terms for negative in present and past. A common form in Lowland Mixtec is **ko**, which is apparently a reduction of a verb **koo** 'to not exist'. Perhaps this negative verb developed from **koo/iyó** 'to sit, to exist' by a tone change that marked negative. R gives a tantalizing example **yoo to niquesi** 'the nobleman did not come', in which the negation seems to be marked by a verb **yoo** (p. 15). This **yoo** could well be a variant of **iyó**.

A compound negative form that is very common in MP is **ñatúú**. This form is a reflex of Colonial Mixtec **ña tuvui** (**ña tuvi**) 'to not exist', given in the Alvarado Vocabulary (1593; also Jansen and Pérez Jiménez 2009), apparently based on the verb **yotuvui** (**yotuvi**) 'to appear'. The form **tuvui** underwent a sound change to **tuu** in many towns in the Highlands. The form **ña tuvui** apparently lost its verbal force and weakened to an adverb in MP.

In some variants of Highland Mixtec, a common negative for present and past is **túú**, without **ña**. This seems to be related to an additional negative that R gives for Yanhuitlán, which is **tu** (p. 12). It is not clear to me whether this **tu** is related to **ña tuvui**.

In some Lowland and Coastal Mixtec variants, negative is sometimes marked solely by a tone change; these include Zacatepec, Xochapa, and Alacatlalzala. Presumably the negative particle lost its segments and left a floating tone, much as happened with the **yo-** and **ni-** tense markers, and the **na** subjunctive particle.

INDICATIVE NEGATIVE: FUTURE

For future tense in indicative mode, R gives the negative adverb **hua (va)**, which occurs in the same modal position as **ña** preceding the tense marker (68).

In most contemporary variants, there is a special future negative, but it is more often **ma** than **va**, which suggests that the Colonial Mixtec form was **van**, rather than **va** (nasalization was not marked in the colonial sources). There are, however, contemporary variants that have **v̄a**, and in Tezoatlán (Lowland Mixtec), **v̄a** or **m̄a** reduced to **o**.

These negative forms often have complex tone patterns that include floating tones. In MP the tone of the future negative is low plus a floating low-high. Note the tone changes in the following forms:

FUT AFF SG	kàtà ì	he will sing
FUT NEG SG	m̄a k̄atá ì	he will not sing
FUT AFF PL	jìn kàtà ì	they will sing
FUT NEG PL	m̄a jín kàtà ì	they will not sing

Jicaltepec, a town in the Western Coast, lacks a future negative and uses only **ña** as the negative particle for all tenses.

There are also various compound negatives based on **ma**. Alvarado (1593) gives **hua dzevui (va devi)**, which can negate a noun. Hernández (1567) gives a form **suvi** for the Tlaxiaco-Achiutla variant of Colonial Mixtec, which means ‘the very one’, and is probably related to **dzevui (devi)**. This particle came into MP in the form **sùù** (a), and it is the second element of the MP emphatic negative **masu**.

IMPERATIVE NEGATIVE

For Colonial Mixtec, R also gives an imperative negative **huasa (vaxa)** (68). Even though R calls this a present imperative, it occurs with future tense forms. He says it is used with second and third persons, in singular and plural. This imperative form is clearly a compound of the future indicative imperative **hua (va)** plus something else; the source of this **-sa (-xa)** remains undetermined, but it could well be the complementizer **sa (xa)**.

Magdalena Peñasco has the form **má** (high tone) for negative imperative, which is different from **m̄a** (ba) (low tone with floating low-high) in future negative indicative, but occurs in the same position class.

má kàtà í	let him not sing
m̄a k̄atá ì	he will not sing

In many neighboring towns, no special imperative negative form has been recorded. For example, San Miguel El Grande seems to have only **m̄a** for both indicative and imperative; Dyk

gives ‘must not’, ‘will not’, and ‘do not’ as meanings for **mà** (1959:234). Pike gives **màa** (a) for future negative (1948:92).

MP also has a number of compounds that serve as imperative negatives. One of the commonest ones is **mákò**, which consists of the imperative negative **má** plus the future habitual **kò**.

PAST UNREALIZED / COUNTERFACTUAL

In addition to the past tense proclitic **nì** (low tone), many modern variants have a past unrealized particle (counterfactual), which has the same segments as **nì** ‘past tense’, but has high or mid tone with a floating high tone that causes changes in the following word.

This unrealized particle with high tone follows the negative particle **ñā**, or one of its compounds like **ñātuu**, in the tense position, the same position in which the past tense particle **nì** occurs. In MP this particle also occurs in certain places where the meaning is unrealized, but there is no immediately preceding negative particle.

This counterfactual particle is not mentioned as such in the R grammar, but there is an example given that probably has it.

ñani saindatuta ñā nixaindatuta he did not obey

(The text has **nani** as the first word, but the first **n** is almost certainly a misprint for **ñ**.) In that tone is not marked in the Colonial sources, it is highly likely that the **nì** in this example is the counterfactual, not the past.

This particle has been described for both Highland and Lowland Mixtec. For Highland Mixtec, see Merrifield and Stoudt (1967:62-63) for San Pedro Molinos, Dyk (1959:238) for San Miguel el Grande, and Erickson de Hollenbach (2013:127-28) for Magdalena Peñasco. For Lowland Mixtec, see Casiano Franco (1982:257-58) for Coatzacoquitengo, and Ferguson de Williams (2006:87) for Yutatío. Given its geographical spread, the counterfactual particle appears to be very old.

The counterfactual particle may serve as a more general irrealis marker in some towns, rather than marking only past negative. See above, where there is a **nì** that serves to mark future in Zacatepec, which may be another use of this particle.

It is possible that some investigators missed the counterfactual particle, and thought it was the past-tense particle with some sort of irregular tone sandhi. The two particles occur in the same position class, but never in identical environments.

INCHOATIVES

Inchoative prefixes are contracted forms of motion verbs that are prefixed to state verbs and indicate entrance into that state. They seem to be especially common in past tense. R (23) mentions special past-tense forms with **sa-** (**xa-**) and the future stem.

nisacuiñe nixacuiñe was placed standing

In modern Mixtec, a reflex of this prefix is often found, sometimes only in frozen forms, and sometimes as a regular part of conjugations for certain classes of verbs. Compare the MP form **nì jakuiñi** ‘stood up’, which contains the inchoative prefix **ja-**, which is cognate with the **xa-** in **nixacuiñe**.

DERIVATIONAL PREFIXES

Derivational prefixes are part of stem formation and are therefore an inner layer; they follow all of the preverbal position classes.

CAUSATIVE

In R (23 ff.), there is one causative form given, **dza-** (**da-**), which occurs with verbs. For verbs that have two stems, **dza-** combines with the future stem.

<i>noncausative</i>			<i>causative</i>		
yosicandi	yoxikandi	I walk	yodzacacandi	yodakakandi	I cause to walk
yosihindi	yoxi'indi	I drink	yodzacohondi	yodako'ondi	I give a drink

On p. 34, however, R talks about another prefix **dza-** (**da-**) that follows a repetitive prefix **da-** (**nda-**) and occurs with adjectives, with the meaning 'to restore a state'.

<i>noncausative</i>			<i>causative</i>		
saa	xaa	new	yondadzasaandi	yondadaxaandi	I renew
huaha	va'a	good	yondadzahuahandi	yondadava'andi	I fix

Even though these two causatives are homophonous, R treats them differently. The first is simply a derivational prefix, and he suggests no source for it. In contrast, he claims that the second is a reduction from the verb **quidza** (fut. **cadza**) (**kida/kada**) 'to do' (34). Reflexes of this verb are found in many Mixtec towns.

The causative prefix shows more complication on the **s** side of the **d/s** isogloss, at least in modern variants. In the Colonial Mixtec of Tlaxiaco and Achiutla (Hernández 1567), the causative prefix for verbs was **sa-** (as in **satevui** 'to sin'), and the causative prefix for adjectives was also **sa-** (as in **satneñu** 'to disturb').

In the modern Mixtec of MP, the causative prefix used with adjectives is **sa-**, as in Colonial Mixtec; this prefix often occurs after the repetitive prefix **nda-**.

<i>noncausative</i>		<i>causative</i>	
tneñu	full, busy	satneñu	to disturb
va'a	good	ndasava'a	to fix
jaa	new	ndasajaa	to renew

This prefix seems to be, as R claimed for the Colonial Mixtec on the other side of the isogloss, a reduction of the verb 'to do'. In MP, however, the verb R cites does not occur, but instead there is another verb that means 'to do', which has the form **sá'á** in MP and other nearby towns. This verb has a high tone pattern. Sometimes the full verb **sá'á** is used with an adjective instead of the reduced form **sa-**, which confirms this derivation from the verb.

The causative prefix used with verbs in MP shows more fusion. It often reduces to a consonant **s**, and the high tone of the **sa-** prefix becomes a floating tone that is pronounced on the following verb root. In MP, this causative prefix is **x-** before apical consonants.

<i>noncausative</i>		<i>causative</i>	
kàkà	to walk	skákà	to cause to walk
tnùñù	to try	xtnùñù	to pressure someone

This prefix may well derive from a verb meaning 'to do', but it is clearly an older formation than the **sa-** used with adjectives.

REPETITIVE

R described the repetitive prefix for verbs, **na-** (34), which occurred before the future stem.

Litografía de P. Alarcon. [consists of two catechisms, from different parts of the Lowland Mixtec area]

- Anonymous. 1899. *Catecismo de la Doctrina Cristiana en la lengua Mixteca, por un mixteco*. Puebla: Tipografía del Colegio Pío de Artes y Oficios.
- Bickford, J. Albert, and Stephen A. Marlett. 1988. The semantics and morphology of Mixtec mood and aspect, *Work Papers of the Summer Institute of Linguistics, University of North Dakota* 32:1–39.
- Bradley, David P. 1991. A preliminary syntactic sketch of Concepción Pápalo Cuicatec. Pp. 409–506 in Bradey, C. Henry, and Barbara E. Hollenbach, eds., *Studies in the Syntax of Mixtecan Languages, Volume 3*. Summer Institute of Linguistics and the University of Texas at Arlington Publications in Linguistics 105. Dallas: Summer Institute of Linguistics and the University of Texas at Arlington. [Versión facsimilar electrónica disponible en: <http://www-01.sil.org/acpub/repository/31843.pdf>]
- Bradley, C. Henry, and J. Kathryn Josserand. 1978. El Proto Mixteco y sus descendientes, unpublished manuscript.
- Casiano Franco, Vicente Paulino. 1982. *Análisis sintáctico del mixteco de Coatzacoquitengo, Gro.* Etnolingüística 11. México: SEP-INI.
- Dyk, Anne. 1959. *Mixteco texts*. Linguistic series, number 3. Norman, Oklahoma: Summer Institute of Linguistics of the University of Oklahoma. [En la variante de San Miguel El Grande.] [Versión facsimilar electrónica disponible en: <http://www.sil.org/resources/publications/entry/8767>]
- Erickson de Hollenbach, Elena. 2008. *Gramática popular del triqui de Copala*. SERIE gramáticas de lenguas indígenas de México, Núm. 11. México, D.F.: Instituto Lingüístico de Verano, A.C. [Versión electrónica disponible en: <http://www.sil.org/resources/publications/entry/35332>]
- Erickson de Hollenbach, Elena. 2013. *Gramática del mixteco de Magdalena Peñasco* (Serie de gramáticas de lenguas indígenas de México, núm. 13). México, D.F.: Instituto Lingüístico de Verano. [Versión electrónica disponible en: <http://www.sil.org/resources/publications/entry/55541>]
- Ferguson de Williams, Judith. 2006. *Gramática popular del mixteco del municipio de Tezoatlán, San Andrés Yutatío, Oaxaca*. Serie de gramáticas de lenguas indígenas de México, Número 9. México: Instituto Lingüístico de Verano, A.C. [2007. Versión electrónica disponible en: <http://www.sil.org/resources/archives/10694>]
- Gonzales, Antonio. 1755. *Cathecismo y explicacion de la doctrina christiana, compuesto por el P. Geronymo de Ripalda, de la Sagrada Compañia de Jesus, y traducido en lengua Mixteca*. Reimpreso en la Puebla, en la Imprenta de la Viuda de Miguel de Ortega. En el Portal de las flores.
- Hernández, Fray Benito. 1567. *Doctrina Christiana en Lengua Mixteca*. México: Casa de Pedro Ocharte. [En la variante de Tlaxiaco y Achiutla.]

- Jansen, Maarten E. R. G. N., y Gabina Aurora Pérez Jiménez. 2009. *Voces de dzaha dzavui (mixteco clásico): análisis y conversión del vocabulario de fray Francisco de Alvarado (1593)*. [En la variante de Teposcolula.] Oaxaca: Colegio Superior para la Educación Integral Intercultural de Oaxaca. [Versión electrónica disponible en: <https://openaccess.leidenuniv.nl/bitstream/handle/1887/14157/VOCESintro.pdf?sequence=5>
<https://openaccess.leidenuniv.nl/bitstream/handle/1887/14157/VOCESvocab.pdf?sequence=6>]
- Josserand, Judy Kathryn. 1983. *Mixtec dialect history*. Tesis doctoral, Tulane University. Distributed by ProQuest.
- Macaulay, Monica. 1996. *A grammar of Chalcatongo Mixtec* (University of California Publications in Linguistics, Volume 127). Berkeley and Los Angeles: University of California Press.
- McKendry, Inga. 2013. Tonal Association, Prominence and Prosodic Structure in Southeastern Nochixtlán Mixtec, doctoral dissertation, University of Edinburgh. [Versión electrónica disponible en: <http://www.sil.org/resources/publications/entry/54691>]
- Merrifield, William R., and Betty J. Stoudt. 1967. Molinos Mixtec clause structure, *Linguistics* 32:58–78.
- Pérez Jiménez, Gabina Aurora. 1988. Sain sau: introducción al mixteco de Chalcatongo. Pp. 132–155 en Maarten Jansen, Peter van der Loo y Roswitha Manning, editores, *Continuity and identity in native America: essays in honor of Benedikt Hartmann*. Leiden: E. J. Brill.
- Pike, Kenneth L. 1944. Analysis of a Mixteco text. *International Journal of American Linguistics* 10:113–38.
- Pike, Kenneth L. 1948. *Tone languages*. Ann Arbor: University of Michigan Press. [Pp. 77–94 presents a description of the tone system of San Miguel El Grande Mixtec.]
- Reyes, Padre Fray Antonio de los. 1593. *Arte en lengua mixteca*. México: Casa de Pedro Balli. Reimpresión 1890 por Comte H. de Charencey. Reproducción facsimilar de la edición de 1890 publicada en 1976 por Vanderbilt University, Nashville (Vanderbilt University Publications in Anthropology, Núm. 14). [En la variante de Teposcolula.]