Negation and Mood in Mixtec: Evidence from Chalcatongo

MONICA MACAULAY

Purdue University

Abstract. Many dialects of Mixtec are described as having two negative prefixes; in Chalcatongo Mixtec these prefixes are *ma-* and *tu-*. Most descriptions claim that one is used with potential aspect, and the other with other aspects. These dialects also have a third prefix, *na-*, usually called a hortatory. This paper shows that, at least in Chalcatongo Mixtec, *ma-* and *na-* are actually deontic mood-marking prefixes (distinguished by polarity), while *tu-* is a general negator with different morphosyntactic characteristics. I survey other dialects, finding a wide range of data, and conclude that in some cases a fresh look at these elements is called for.

1. Introduction. Many dialects of Mixtec are described as having two prefixes marking negation.[1] The precise forms of the prefixes vary across dialects; in the dialect examined in this paper the negative prefixes are *ma-* and *tu-*. Common to most descriptions is the claim that one is the marker of negation for potential aspect, and the other is the marker of negation for other aspects (i.e., continuative, completive, or realized).[2] All these dialects also have a third prefix, *na-*, which is usually called a hortatory prefix (or some similar term). In this paper, I propose an alternative analysis of these elements in Chalcatongo Mixtec (CM). By carefully examining the morphosyntactic characteristics of *ma-* and *tu-*, I show that these two elements exhibit very different behavior from one another, while a similar examination of *na-* and *ma-* shows entirely parallel behavior. I argue that, at least in this dialect, *tu-* is a general marker of negation with clitic status, while *na-* and *ma-* are the positive and negative versions of a deontic mood marker, with affixal status. Figure 1 schematizes the two analyses.[3] I start by giving some background information on word order in CM, which will become necessary in later sections. Section 2 presents data on the behavior of *na-* in CM, and contrasts it with the descriptions of this element in nine other dialects. The semantics of *na-* is also discussed, in terms of the framework for mood presented in Chung and Timberlake (1985). Section 3 describes negation in CM, contrasting the distribution of *tu-* and *ma-*, and concluding that the former is a clitic rather than a prefix. *Ma-* is shown to pattern with *na-* rather than *tu-*, leading to the conclusion that *na-* and *ma-* are the forms that should be paired. Section 4 provides a brief description of negation in the other dialects for which data are available. Finally, in the conclusion I argue that my reanalysis of the CM system, together with this look at data from other dialects, suggests that a reanalysis of negation and mood in at least some of the other dialects may also be called for.

| CHALCATONGO MIXTEC | | STANDARD DESCRIPTIONS |

Figure 1. Analyses of *na-*, *ma-*, and *tu-*.

2. Some notes on word order.

Basic word order in Mixtec is VSO, as illustrated in examples (1) and (2):

(1) *nì-naa íni čáá ndoʔò*
     CP-lose inside man basket
     'The man forgot his basket.'

(2) *ìkú nì-xą́ą́ María ndoʔò*
     yesterday CP-buy Maria basket
     'Yesterday Maria bought a basket.'

In addition to VSO word order, Mixtec speakers also use a topicalization construction in which a single constituent may be located in an initial, clause-external position. Any constituent may be topicalized, as shown in examples (3) through (8). (The topicalized element appears in boldface in those examples.) Subject and oblique topicalization are extremely common; object topicalization is quite rare. Note also that there is no passive in Mixtec.

(3) SUBJECT TOPICALIZATION:

     Juan *ni-xą́ʔmų šinì ndaʔa*
     Juan CP-burn head arm
     'Juan burned his finger.'

(4) **spexó** *táʔu*
     mirror break (VI)
     '**The mirror** breaks, is broken.'

(5) OBLIQUE TOPICALIZATION:

     čìì žuù wą *žáá į́į́ kòò*
     belly rock that live one snake
     '**Under that rock** lives a snake.'

(6) **nù** **žúkú** **wą** žáá įį bá ʔù
  face mountain that live one coyote

  'In those mountains lives a coyote.'

(7) OBJECT TOPICALIZATION:

  tutù **wą** nì-xa ʔža Pedrú
  paper that CP-cut Pedro

  'Pedro cut **that** (piece of) **paper.**'

(8) **statilá** nì-sa ʔa Miguel
  bread CP-make Miguel

  'Miguel made the **bread.**'

The topicalized NP does not necessarily have to be an argument of the verb, as illustrated in example (9):

(9) **i ʔa** **žoò-žó** u ʔu nduči-tó
  god moon-1PL hurt (VI) eye-3RESP

  'As for **our God of the moon,** her eye hurts.'

Adverbials may also appear in topic position, as in (10) and (11):

(10) **nù** **žoò** **nù** **žoò** kįʔį=rí nužá ʔu
   face month face month go=1 market

   'Every month I will go to the market.'

(11) **ikú**   ni-na-xáa=ña
   yesterday CP-REP-arrive+home=3F

   'Yesterday she returned home.'

In some cases, however, prepredicate adverbials are not located in topic position, but are located instead in a prepredicate position within the clause. Examples like (12), in which there is both a topicalized constituent and a preverbal adverb, illustrate this point:

(12) **ñàni-rí** šąą̀ kąʔą
   brother-1 much talk

   'My brother talks a lot/too much.'

These data suggest that we can illustrate the structure of the main clause in Mixtec (preliminarily) as in (13):

(13) $_{S'}$[topic $_S$[(adverb) V (NP) (NP)]]

As we will see in the following sections, word order in subordinate clauses is identical to that in main clauses; that is, subordinate clauses may be VSO,

or they may have an initial topicalized constituent.

3. The prefix *na*-.   Examples (14) through (16) illustrate main-clause uses of *na*- in Chalcatongo Mixtec:

(14)   *na-ndú-ndoo=rí*
        MOOD-INCH-clean=1
        'I must be/get clean.' ('Que yo esté limpio.')

(15)   *na-čuñá=ró*
        MOOD-destroy=2
        'Destroy it!' ('¡Destrúyelo!')

(16)   *na-s-ndóo*
        MOOD-CAUS-stay
        'He must/should leave (it).' ('¡Que deja [algo]!')

These examples illustrate the deontic mood function of *na*- in main clauses. Following Chung and Timberlake, I take deontic mood to "characterize an event as non-actual by virtue of the fact that it is imposed on a given situation" (1985:246). Examples (14), (15), and (16) illustrate three of the related senses that deontic mood may convey, depending on person of subject: (1) voluntative or desiderative ("the speaker expresses intention or deliberation to realize the event" [1985:247]); (2) imperative; and (3) optative ("the speaker desires some event of some participant" [1985:247]). What these three senses have in common is that they are all expressions of the will of the speaker.

Na- also occurs in subordinate clauses in CM, with similar semantics. It may appear in complements to verbs of causation, as in (17); to verbs expressing the desire of the subject, as in (18); to verbs of permission, as in (19); and in complements to imperatives—both when the two clauses have the same subject, as in (20), and when they have different subjects, as in (21).

(17)   *sá?a   xa-na-kïi*
        make   COMP-MOOD-come
        'Make him come.'

(18)   *kuní=ri   xa-Juan   na-kíno?o   bé?e*
        want=1   COMP-Juan   MOOD-go   house
        'I want Juan to go home.'

(19)   *sndoo   na-kị́?ị̀   xị́-ri*
        allow   MOOD-go   with-1
        'Let him go with me.'

(20) $k^w \acute{a}\hspace{1pt}\hspace{1pt}?a$ na-$k\grave{a}k\grave{a}$ $n\grave{u}u$
        go   MOOD-ask+for   face
        'Go ask for (it).'

(21) $k\acute{e}\d{i}$ $se\hspace{1pt}?e$-$r\acute{o}$ na-$k\acute{u}s\acute{u}$
        put   child-2   MOOD-sleep
        'Put your child down to sleep.'

Finally, *na-* also appears in conditional clauses, as in (22) and (23):

(22) $n\acute{u}$=$w\d{a}\d{a}$ na-$s\acute{a}\hspace{1pt}?a$ ku-$s\ddot{i}\ddot{i}$ $\check{s}\d{a}\d{a}$ $in\acute{i}$-ri
        COND=that   MOOD-do   COP-happy   much   inside-1
        'If he did that, I would be very happy.'

(23) $b\grave{a}\hspace{1pt}?\grave{a}$=$k\grave{a}$ nu=na-$k\d{i}\hspace{1pt}?\d{i}$=ro $\check{s}\d{i}a$
        good=ADD   COND=MOOD-go=2   tomorrow
        'It would be better if you went tomorrow.'

These uses of *na-* in subordinate clauses all have in common that the occurrence of some event, while not certain, is desired. They differ from the main-clause uses of *na-* in that the will expressed is not necessarily that of the speaker, but is instead usually that of the subject of the main clause, which may or may not be the speaker. This is what Chung and Timberlake call the use of deontic mood in "secondary events" (1985:249). Note that (23) could be interpreted as an exception to the claim that the subject of the main clause is the one whose will is expressed; in this case the sentence presumably reflects the will or desire of the speaker, whose identity is not expressed overtly in the sentence at all.

At this point we turn to the use of *na-* in other Mixtec dialects, using as data the grammars and dictionaries available for nine Mixtec dialects, situated across a wide geographic area. Unlike the situation we will find for negative marking, a form *na-* (differing across the dialects only in tone) is found in a number of very divergent dialects, and appears in all of them to be used with semantics comparable to the situation found in CM. Many of the descriptions only mention main-clause uses of *na-*, but a few discuss its use in subordinate clauses as well. The majority call it a hortatory, but it is also referred to as a "particle of constraint" (Daly 1973:17), a "prefix of permission" (Pensinger 1974:141), a "subjunctive" (Alexander 1980:35), and a particle that forms a "permissive imperative" (Stark Campbell, Peterson, and Cruz 1980:164). Table 1 summarizes the data available on the use of this element across nine dialects of Mixtec.

The descriptions of *na-* can be divided into five classes, according to the uses to which *na-* is put. First, there are three dialects in which only optative uses of *na-* are given (i.e., cases that express the speaker's desire for a third person to do something). Examples (24) through (26) illustrate these uses.[4]

Table 1. *na-* across Mixtec Dialects

DIALECT	FORM	TERM	MAIN CLAUSE	SUBORD. CLAUSE	SOURCE
Atatláhuca	*na*	subjunctive	Y	N	Alexander 1980
Ayutla	*nà*	hortatory	Y	N	Hills 1990
	na	obligation	Y	N	
Coatzospan	*nà*	hortatory	Y	N	Small 1990
Jamiltepec	*na-*	prefix of permission	Y	N	Pensinger 1974
Jamiltepec	*na*	hortatory	Y	Y	Johnson 1988
Jicaltepec	*nà*	hortatory	Y	N	Bradley 1970
Ocotepec	*ná*	hortatory	Y	Y	Alexander 1988
Peñoles	*nà-*	particle of constraint	Y	N	Daly 1973
San Juan Colorado	*na*	permissive imperative	Y	N	Stark Campbell et al. 1986
Silacayoapan	*ná*	hortatory	Y	Y	Shields 1988

NOTE: Y in the main or subordinate clause column means that data for that type of clause is given in the relevant source; N means that it is not. I have standardized the tone markings to conform to my own use.[5]

Peñoles Mixtec—the "particle of constraint," which "in addition to being potential conveys the idea of an action being in some way necessary" (Daly 1973:17):

(24)   *na-kùtu-dé*
       'He must plow.'

Jamiltepec Mixtec—"the prefix of permission" (Pensinger 1974:141):

(25)   *na-cuhu ña*
       'Let her go.' (lit., *na*-go she) ('Deje que se vaya ella.')

Jicaltepec Mixtec—the "hortatory," translated as 'let's' in the list of "preverbs" (Bradley 1970:41); however, note the translation of the example:

(26)   *na kĭči rá witi̧*
       'Have him come right now.'

Second, one description only mentions uses of *na-* with first person (i.e., a voluntative use).

San Juan Colorado Mixtec—"the permissive imperative" (Stark Campbell, Peterson, and Cruz 1986:164):[6]

(27)   na   cuhun   maa   yu
       na   go   self   1
       'Let me go.' ('Deje que yo vaya.')

Third, one source describes *na-* as being used for second and third persons.

Jamiltepec Mixtec—the "hortatory," used in polite commands and certain third person utterances (Johnson 1988:43, 52):

(28a)   nā   kātā   yōhō
        HORT   POT:sing   you:SG
        'Sing!'

(28b)   nā   kūndichin
        HORT   POT:dawn
        'Let (it [day]) dawn!'

Fourth, two dialects are described as using *na-* for first and third persons.

Atatláhuca Mixtec—the "subjunctive," used to form "polite imperatives" and constructions with first person subjects, about which the author says: "it gives the idea that the subject reflects and thinks carefully before executing an action" (Alexander 1980:35; my translation):

(29a)   na quívi de vehe
        'He should come inside the house.' ('Que entre él en la casa.')

(29b)   na quihín na
        'Well, I guess I'll be going.' ('Pues me voy.')

Coatzospan Mixtec—the "hortatory," used in commands that "exclude the subject" (Small 1990:302–3):

(30a)   na   kwēhé   u   tún   dyuhún
        HORT   POT:give   I   her   money
        'Let me give her money!'

(30b)   na   vĭí   tun   é   ndio   tún
        HORT   POT:do   she   COMP   CONT:want   she
        'Let her do what she wants.'

Finally, three dialects are described as using *na-* for utterances with a subject of any person: Ayutla (Hills 1990), Ocotepec (Alexander 1988), and Silacayoapan (Shields 1988). All three term it the hortatory. Ayutla will be discussed further below; for the purpose of brevity I give examples here only from Ocotepec.

Ocotepec Mixtec—"hortatory" (Alexander 1988:188–89):

(31a) ná   káx-o   staa
       HORT   POT:eat-we:IN tortilla
       'Let's eat!'

(31b) ná   kúsun   ní
       HORT   POT:sleep you:RESP
       'Sleep!'

(31c) ná   sátíñú   xīn
       HORT   POT:work   he:FAM
       'Let him work!'

Ayutla Mixtec is especially interesting because it has two related prefixes of the form *na-;* one (with low tone) is termed the hortatory, and the other (with mid tone) is termed the obligation marker. The hortatory "always implies personal interest on the part of the speaker, and frequently a strong wish"; the obligation marker "is used to state a requirement" (Hills 1990:73–74). Examples follow.

Ayutla Mixtec—"hortatory" (Hills 1990:73):

(32a) na   satah   eh   tātanh
       HORT   POT:buy   we:IN   medicine
       'Let us all buy medicine!' *or* 'We all wish to buy medicine.'

(32b) na   saa   unh   ña   vaha
       HORT   POT:do   you:SG   it:INAN   good
       'May you do [me] a favor!'

(32c) na   kushi   ra   shīīnh   yūhu
       HORT   POT:eat   he   with   me:EMPH
       'Let him eat with me!'

Ayutla Mixtec—"obligation marker" (Hills 1990:74):

(33a) nā   koho   ra   tātanh
       OBL   POT:drink   he   medicine
       'He must drink the medicine.'

(33b) nā   kūhun   unh   yahvi
       OBL   POT:go   you:SG   market
       'You must go to market.'

In conclusion, nine other dialects of Mixtec from a wide geographical area all use an element (or, in the case of Ayutla Mixtec, two elements) of the form

na-, with varying tones, to mark notions that are consistent with Chung and Timberlake's definition of deontic mood. It is not clear from all the sources whether the variation in person of subject that is allowed in main clauses marked with *na-* and the variation in the appearance of *na-* in subordinate clauses is due to reporting or to actual variation in use of the form. In some cases I suspect that it is the former; in others I am sure it is the latter.[7]

This issue, however, cannot be resolved here, and so we turn instead to the CM forms *tu-* and *ma-*.

4. Negation in Chalcatongo Mixtec. In all the dialects of Mixtec that have a negative prefix *ma-* (and not all have such a prefix), there is also a second negative marker, the form of which is variable across this subset of dialects. In CM, for example, there is one form *ma-*, which attaches only to potential verb stems, and another form *tu-*, which appears at first glance to attach only to realized verb stems. Thus, we find data such as that in (34) (in which *tu-* attaches to the realized stem *xižaa)* and (35) (in which *ma-* attaches to the potential stem *kį?į):*

(34)   *tu-ni-xižaa=ró*
       NEG-CP-be+located(R)=2
       'You weren't there.'

(35)   *ma-kį?į=rí*
       ma-go(P)=1
       'I will not go.'

Atatláhuca Mixtec, as described by Alexander (1980:27), displays precisely the same behavior in its marking of negation. Alexander says that *ma-* is used only with the "future tense" (i.e., with potential aspect), and that *tu-* is used usually with the "present tense" (i.e., with realized aspect), as well as, very occasionally, with the future. Dyk and Stoudt's dictionary of San Miguel el Grande Mixtec (1973:98) describes what is apparently the same situation; they list *túu, tú,* and *ma-* simply as negatives (with no further explanation), but give as an example a sentence in which *ma-* is attached to a potential stem.

San Miguel el Grande Mixtec:

(36)   *ma cúu*
       'One cannot or should not.' ('No se puede.')

Since the data for negative formation differ so much across dialects (much more so than for *na-),* I will reserve the issue of comparison for the next section. Instead, I will focus here on the behavior of the two negatives in CM. Let us start by looking at *tu-*. One of the primary distinctions that can be

made between affixes and clitics is that clitics "can exhibit a low degree of selection with respect to their hosts, while affixes exhibit a high degree of selection with respect to their stems" (Zwicky and Pullum 1983:503–4). Indeed, *tu-* does exhibit the promiscuity of attachment that this statement predicts for clitics. In addition to the numerous examples in which *tu-* attaches to realized verb stems, as in (34), we find it attaching to adjectives, as in (37), and to prepredicate adverbs, as in (38). We even find it occasionally attaching to potential verb stems, as in (39). While this last case is not common, it does occur and is perfectly grammatical.[8]

(37)   *tu-ñíʔní*
       NEG-hot
       'It's not hot.'

(38)   *sókó   tú-šạ̀   kúnú*
       well   NEG-much   deep
       'The well isn't very deep.'

(39)   *tú-kačáʔa=ró*
       NEG-dance(P)=2
       'Don't dance!'

Sentences like (37) through (39) show that *tu-* attaches to whatever kind of constituent might be in clause-initial position; that is, to the very left of the predicate phrase (usually this is a verb phrase, but I use the term *predicate phrase* here to allow for examples like (37), in which the predicator is actually an adjective). *Tu-* is therefore a clitic, or a "phrasal affix" in the terms of Klavans (1980). Example (40) shows once again the structure of the CM main clause (with a verbal predicate), and in addition indicates the position of the negative-marking phrasal affix *tu=*.

(40) $_{S'}$[topic $_S$[NEG=$_{V'}$[(adverb) V] (NP) (NP)]]

Another characteristic of one type of clitic, specifically the "special clitic" (Zwicky 1977), is that it alternates with a related full form. CM has, in addition to the bound negative marker *tu-*, a free word *túu*, which can be used alone to mean 'no', or can be used prenominally, as shown in (41):[9]

(41)   *túu   banko   ñụ̀ùndéya*
   NEG   bank   Chalcatongo
       'There is no bank in Chalcatongo.'

The relationship between *tu=* and *túu* fits Zwicky's definition of special clitic quite nicely: "cases where an unaccented bound form acts as a variant of a stressed free form with the same cognitive meaning and with similar phonological makeup" (1977:3).

Having concluded, then, that tu= is a clitic, we turn to ma-. Ma- does not display any of the behaviors associated with clitic status. First, it does not exhibit any sort of promiscuity of attachment: it does not attach to realized stems, to preverbal adverbs, or to adjectives, but rather, attaches only to potential verb stems. Second, there is no free word of the form *maa. Under a prefixal analysis, of course, this behavior is precisely what is expected. The fact that ma- cannot attach to adverbs or adjectives reflects the fact that pre-fixation is limited to verbs and statives in this language. The fact that ma- attaches only to the potential stem of the verb is simply a kind of selectional restriction—a realization of Zwicky and Pullum's "high degree of selection with respect to [the] stems [to which they attach]" (1983:503–4).

Assuming, then, that ma- is a prefix rather than a proclitic, the usual de-scription of negation in these Mixtec dialects runs into some problems. That is, if ma- is the potential counterpart of tu=, we are faced with the unlikely situ-ation in which a clitic and an affix are in alternation with one another. That is, this hypothesis embodies the claim that negation in realized contexts is accom-plished with a clitic, while negation in potential contexts is accomplished with a prefix. While I know of no cases in which such a situation occurs, I would not want to claim that it is inherently impossible. Nonetheless, an alternative analysis would be preferable, and in fact, one is readily available. When we look carefully at ma-, we find that the structural conditions for its use are precisely the same as they are for na-, the deontic mood marker, and that the two never co-occur. Furthermore, the meaning of ma- can be interpreted as precisely the opposite of that of na-; that is, by using ma-, the speaker in-dicates his or her expectation or desire that some event should *not* occur. So example (35), ma-$k\acute{\imath}^{\prime}\underset{.}{\imath}$=$r\acute{\imath}$ 'I will not go', is a negative voluntative—that is, it expresses the speaker's intention *not* to realize the event in question. It is still deontic mood because it still characterizes the event as nonactual. In fact, it could be argued that such an utterance is more strongly nonactual than a posi-tive voluntative: not only is it nonactual in the present, but the speaker indicates a desire that it remain nonactual in the future. Examples (42) through (44) further illustrate the negative deontic force of ma-:

(42) $s\acute{a}^{\prime}a$ xa=ma-$k\ddot{u}i$
       make   COMP=NEG/MOOD-come(P)
       'Make him not come/Don't let him come.'

(43) $kaka$ $k^{w}\acute{e}\acute{e}$=$n\acute{\imath}$ xa=$m\acute{a}$-$k^{w}\acute{\imath}t\acute{a}$=$n\acute{\imath}$
       walk   slow=2resp   COMP=NEG/MOOD-tire(P)=2RESP
       'Walk slowly so that you don't get tired.'

(44) ma-$k\acute{u}\acute{u}$=ro
       NEG/MOOD-die(P)=2
       'Don't die!'
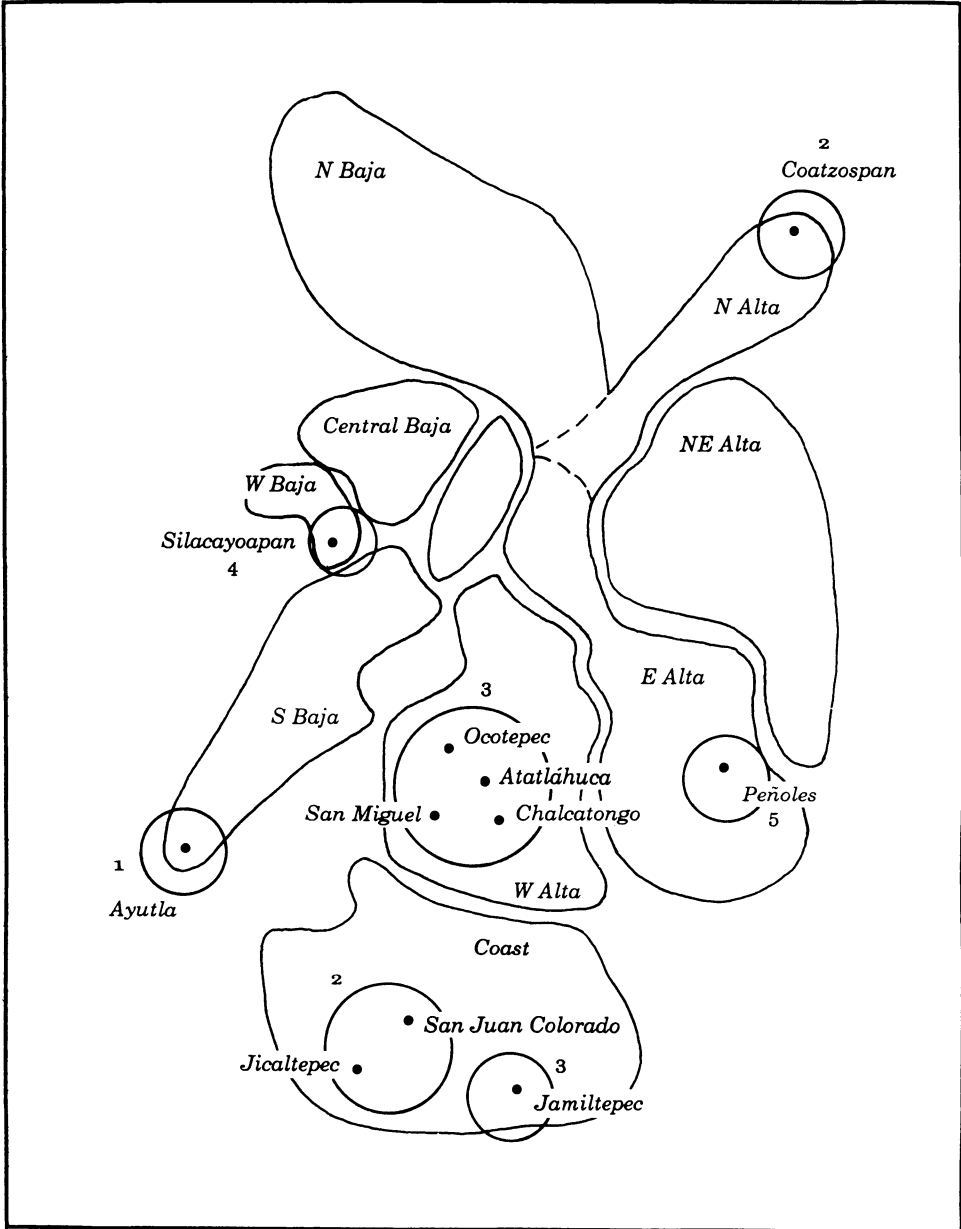
Map 1. Distribution of negatives. Adapted from Bradley and Hollenbach (1988), which was in turn adapted from Josserand (1983).

Thus we see that the traditional analysis pairs the wrong two forms. Rather than treating *ma-* and *tu=* as negative markers distinguished by the aspect of the verb stem to which they attach, it makes more sense to analyze *ma-* and *na-* as the negative and positive forms of the deontic mood marker, respectively. *Ma-* only attaches to potential stems because expression of will is by definition not realized aspect. *Tu=* and *ma-* fail to co-occur not because they are morphological alternants, but rather because the semantic contribution of *ma-* makes addition of *tu=* unnecessary. Pairing the two prefixes *(ma-* and *na-)* additionally relieves us of the burden of justifying the alternation between a clitic and an affix, as was the case under the earlier analysis.

5. Negation in other dialects. In this section I present a brief description of negation in the other dialects of Mixtec for which I have information. No firm conclusions can be drawn about the status of the various elements, however, due to a general lack of data.

The patterns of negation found fall into four classes: (1) specified tone change in the verb stem; (2) use of a form *ña* (for all aspects); (3) use of *ma-* for potential aspect, and some other form for realized or other aspects; and (4) use of *a* for potential aspect, and *ko* for continuative and completive aspects. Table 2 lists the dialects and their negative forms. Where two forms are separated by a slash, the one on the left is the one that collocates with potential aspect, and the one on the right is the one used for all other aspects. Map 1 (on the previous page) then shows the geographical distribution of the various forms of negation.

Table 2. Negation across Mixtec Dialects

DIALECT	FORM(S)	SOURCE
Atatláhuca	*ma-/tu-*	Alexander 1980
Ayutla	tone change	Hills 1990
Coatzospan	ñá	Small 1990
Jamiltepec	*ma/ñà*	Johnson 1988
Jicaltepec	ñà	Bradley 1970
Ocotepec	*mà/nduú, ñaá*	Alexander 1988
Peñoles	ñà-díú, ñà-túú, túú, ñà	Daly 1973
San Juan Colorado	ña	Stark Campbell et al. 1986
San Miguel el Grande	*ma-/tu-*	Dyk and Stoudt 1965
Silacayoapan	*a/ko*	Shields 1988

NOTE: I have standardized the tone marking in this table to conform to my own. I have only given one source for Jamiltepec Mixtec, since the two available sources (Pensinger 1974 and Johnson 1988) provide the same data.

We see from table 2 that Ayutla Mixtec is the only dialect that marks negation by a tone change in the verb; Coatzospan, Jicaltepec, and San Juan Colorado Mixtec use *ña* in all cases; Atatláhuca, Jamiltepec, Ocotepec, and San

Miguel el Grande Mixtec use *ma-* in the potential and some other form in all other aspects; and Silacayoapan Mixtec is alone in using *a* for potential and *ko* for other aspects. Finally, the situation in Peñoles Mixtec is unclear. I find four forms listed in Daly (1973), but it is not clear under what conditions each one may or may not appear. This uncertainty is especially unfortunate, because Peñoles is the only dialect that shows both *ñà* and *túú*.

Finally, the data for one other dialect require explanation. Ocotepec Mixtec has three forms: it uses *ma-* for potential and either *nduú* or *ñaá* for completive and continuative aspects. Alexander (1988:199) says that the latter are in free variation, although *ñaá* is less common with continuative aspect.[10]

These data are certainly intriguing, but unfortunately, the descriptions available are neither thorough nor numerous enough to allow for any firm conclusions. In order to pursue reconstruction of negative marking in the Mixtec languages, we will need clearer descriptions of a larger number of the existing systems.

6. Conclusion. We have seen that the prefix *na-*, which is most often termed a hortatory, in fact has a wider range of uses in Chalcatongo Mixtec than just that single category. Examination of *na-* in main and subordinate clauses indicates that it is best described as a deontic mood marker. This category is used to express the imposition of either the speaker's or the subject's will in some situation. It is a broader category that includes all the various functions that have been ascribed to *na-* in descriptions of other Mixtec dialects, such as hortatory, optative, subjunctive, and so forth. The range of descriptions of *na-* across a number of very divergent dialects is surprisingly coherent, leading one to suspect that in at least some of them a similar analysis would be appropriate.

We have also seen that the distinction usually made between the negative marker *ma-* and its alternant (be that *tu-* or some other form)—that is, that the former co-occurs with the potential stem, and that the latter co-occurs with the realized stem—does not hold for Chalcatongo Mixtec. While *ma-* does only occur with potential stems, *tu=*, as we saw, is also occasionally found attached to potential stems. Furthermore, we found that *tu=* exhibits the promiscuous behavior typical of a clitic, while *ma-* does not show any such tendencies. The element *ma-* instead exhibits behavior typical of a prefix, and is structurally and semantically parallel to the deontic mood prefix *na-*, leading to the conclusion that *ma-* is in fact the negative counterpart to the affirmative deontic mood marker.

Finally, the conclusions of this paper indicate that a fresh look at *na-*, *ma-*, *tu-*, and the other negatives in the dialects briefly surveyed here is called for. It is impossible to judge the precise status of each form and the relationships the forms hold to one another from the data that are available for many of these dialects. In some cases it is clear that there are no parallels to the CM

situation (e.g., in Ayutla Mixtec, where negation is marked for all aspects by a tonal change in the verb). However, in other cases one simply cannot tell, since the data are so scanty.[11] If these data were available, we could then determine whether the situation that obtains in CM is shared by other dialects, and perhaps decide whether or not it represents an innovation. Such conclusions, however, will have to await further research on this diverse group of languages.

Notes

1. Mixtec is an Otomanguean language spoken by over 300,000 people in south-central Mexico (cf. Garza Cuarón and Lastra 1991 for statistics on native speaker populations). Dialect differentiation in Mixtec is extreme, to the point that it should really be considered a group of related but distinct languages. (This more appropriate terminology, however, has not been adopted due to political factors, as well as to the problem of dialect continua.) The dialect that is the subject of this paper is that spoken in the village of Chalcatongo, in the Tlaxiaco district of Oaxaca.

2. Most verbs in Mixtec have two stems, one for potential and the other for realized aspect. These stems may be differentiated by tone, initial consonant, or initial syllable. Where the distinction is relevant, in this paper I mark potential stems with (P) and realized stems with (R). Also, for the purposes of this paper, I will assume that the potential and realized stems are underlyingly distinct (i.e., not derived from any common form). For an alternative analysis, see Hinton (1991).

3. Abbreviations in the examples are: 1, 2, 3,—1st, 2nd, 3rd person; ADD—additive; CAUS—causative; COMP—complementizer; COND—conditional; CONT—continuative; COP—copula; CP—completive; EMPH—emphatic; F—feminine; FAM—familiar; HORT—hortative; INCL—inclusive; INAN—inanimate; INCH—inchoative; NEG—negative; OBL—obligation; POT or (P)—potential stem; (R)—realized stem; REP—repetitive; RESP—respect; SG—singular; VI—intransitive verb. The Mixtec languages are tone languages; CM has three tones: high (marked with acute accent), mid (unmarked), and low (marked with grave accent). Finally, a dash marks an affix boundary, and an equals sign marks a clitic boundary.

4. These examples are given using the individual authors' transcriptions, including their marking of tone. None of the authors give morpheme-by-morpheme glosses.

5. The only case in which this standardization was not possible was Pensinger, who only marks tone "in those cases where to not do so would create confusion among different words" (1974:138; my translation). I have left the entry unmarked in that case.

6. I have provided the gloss for this example to show that, despite its translations into English and Spanish, it has a first person subject. A more literal translation might be 'I myself might/must go'.

7. Barbara Hollenbach (p.c.) reports that this is something which was explicitly checked in the volumes of *Studies in the Syntax of the Mixtecan Languages*, which she and C. Henry Bradley are editing. That is, if subordinate clause uses are not reported for the dialects described therein, they do not occur; and if use of *na-* with a particular

person subject is not reported, it likewise does not occur.

8. However, I could never get my consultants to pin down the difference in meaning between a potential stem negated with *tu=* and one negated with *ma-*. My guess is that it may correspond to something like the difference in English between "You WILL not dance!" and "Don't dance." I intend to investigate this difference further.

9. It is possible that the full form *túu* is better analyzed as a negative existential. Barbara Hollenbach (p.c.) informs me that the Peñoles forms *ña-diu* and *ña-tuu* (see section 4) are the negative marker *ña* plus a verb of existence. That is a possibility I will leave unexplored for now.

10. Although the Ocotepec form *nduú* bears a superficial resemblance to *túu* in CM (and other dialects), Josserand (1983) does not show a correspondence between Ocotepec *nd* and CM *t*.

11. Barbara Hollenbach (p.c.) has indicated to me that the distributional characteristics of *ma-* and *tu=* found in the Chalcatongo dialect appear to hold as well in at least some of the other dialects with which she is familiar. That is, the form used with the potential attaches directly to the potential stem, while the form used with the realized (or other nonpotential aspects) does allow intervening elements.

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