Existentials and Negation in Chol (Mayan)[*]

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Two different words are used to mark negation in the Tila dialect of Chol (Mayan): *mač* and *ma`añ*. In this paper I argue that the distribution of these two negation markers is governed by whether an individual- or a stage- level predicate is being negated.

1 INTRODUCTION

In the Tila dialect of Chol, a Mayan language spoken in the Mexican state of Chiapas, two different words are used to mark negation: *mač* and *ma`añ*. This is illustrated by the affirmative sentences and their negative counterparts in (1) and (2).[1]

(1)   a. *k-om   mahlel tyi   k-otyoty*
         1E-want go   PREP   1E-house
         'I want to go to my house.'

       b. **mač** *k-om   mahlel tyi k-otyoty*   (**ma`añ*)
         NEG   1E-want go   PREP 1E-house
         'I don't want to go to my house.'

(2)   a. *mi   k-mahlel tyi   eskwela*
         IMPF 1E-go   PREP   school
         'I'm going to school.'

       b. **ma`añ** *mi k-mahlel   tyi   eskwela*   (*mač)
         NEG   IMPF 1E-go   PREP school
         'I'm not going to school.'

In this paper I analyze the distribution of these two negation markers in Chol and argue that the appearance of *mač* or *ma`añ* is governed by whether an individual- or a stage-level predicate is being negated. In §2 I review the distinction, originally formulated by Greg Carlson (1977), between individual- and stage-level predicates. In §3 I discuss existentials in both Chol and English and demonstrate, following previous work, that existential constructions require a stage-level predicate. Next, in §4 I examine *mač* and *ma`añ* in nominal, adjectival, and verbal contexts. Here I formulate the hypothesis that *mač* negates individual-level predicates, while *ma`añ* is used to negate stage-level

[1] The majority of the data presented here was collected during the winter of 2006 in Chiapas, Mexico under the auspices of MIT's Ken Hale Fund for Field Research. *ä* represents a high mid unrounded vowel, ` represents glottal stop and apostrophes (C') indicate ejective consonants. Abbreviations in glosses are as follows: 1 = speaker; 2 = addressee; 3 = non-local person; A = absolutive; DET = determiner; E = ergative; EXT = existential; IMPF = imperfective; IV = intransitive verb suffix; NC = numeral classifier; PERF = perfective; PL = plural; PREP = preposition; PROG = progressive; TV = transitive verb suffix

predicates. This correlates, I claim, with the fact that the negative *ma`añ* contains the existential morpheme. In §5 I conclude with implications and areas for future work.

2   INDIVIDUAL- AND STAGE-LEVEL PREDICATES

Greg Carlson (1977), in his work on bare plurals in English, argues for a distinction between individual- and stage-level predicates. Carlson proposes that the objects we talk about have a certain "internal structure" and argues that we must draw a distinction between *kinds*, *objects*, and *stages*, where the former two are subsumed under the category of *individuals*. The term *kind* is used to refer to abstract entities, in the case of cats, the species of cats. This *kind* is made up of particular *objects*, in this case, particular members of the species. *Stages* are particular spatio-temporal 'slices' of cats. Individual-level predicates, then, denote properties of *individuals* (*kinds* and *objects*), while stage-level predicates denote properties of particular *stages* of an individual. These distinctions are illustrated in the diagram in (3).

(3)
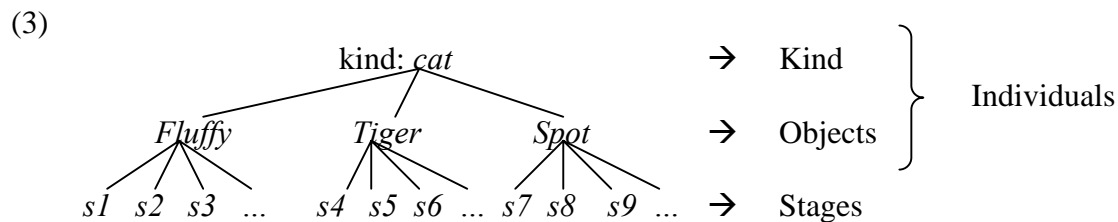
Stage-level predicates express properties that are typically transitory, such as meowing outside a door. Individual-level predicates, on the other hand, express properties that are generally viewed as more permanent or essential, such as having a tail (Kratzer 1995).

This distinction has grammatical effects in a variety of languages. For example, Spanish has two forms of the verb 'to be': *ser*, which combines with individual-level predicates, and *estár* which combines with stage-level predicates. This is illustrated in the sentences in (4): in (4a) (which uses the 3rd person singular form of *ser*), the greenness describes an essential property of the apple, for example, it's a Granny Smith. In (4b), on the other hand, a form of *estár* is used to indicate that the greenness holds only over a *stage* of the apple, for example it's a red apple and is not ripe yet.

(4)   a.   *La   manzana   **es** verde.*   (= individual-level)
             'The   apple   is   green.'
       b.   *La   manzana   **está** verde.*   (= stage-level)
             'The   apple   is   green.'

As we will see below, a grammatical distinction between these two types of predicates is found in Chol negated contexts. For example, the negated Chol equivalent of the sentence in (4a) employs the negation marker *mač*, while in a sentence like (4b) we find *ma`añ*.

3   EXISTENTIALS

Another area where the distinction between individual- and stage-level predicates has been shown to have a grammatical effect is in existential constructions. Gary Milsark (1977) first noted that English 'there-insertion' is only possible with stage-level predicates. This is illustrated in the English sentences in (5) and (6). The sentence in (5a) describes a particular stage of the subject's referents, namely, that they are

available. As shown in (5b), inserting 'there' to form an existential is fine. The sentences in (6), on the other hand, make reference to an individual-level property of linguists and there-insertion is shown to be impossible.

(5)   a.   Linguists are available.   (= stage-level)
         b.   There are linguists available.
(6)   a.   Linguists are intelligent.   (= individual-level)
         b.   *There are linguists intelligent.

Another property of existentials noted by Milsark (1977) is that they are subject to the 'Definiteness Restriction' which bans definite NPs from appearing as themes in existential constructions, as shown by the ungrammaticality of the sentence in (7).

(7)   *There are the linguists available.

In Chol the morpheme `*añ* is used in existential constructions as illustrated by the sentence in (8a). That the sentence in (8a) is a true existential is illustrated by the ungrammaticality of the sentence in (8b), in which the Definiteness Restriction is violated.

(8)   a.   `***añ***   *čäy*   *tyi*   *ha`*
            EXT   fish   PREP   water
            'There are fish in the water.'
      b. * `***añ***   *hiñi*   *čäy*   *tyi*   *ha`*
            EXT   DET   fish   PREP   water
            'There are the fish in the water.'

Existential constructions in Chol must be negated with *ma`añ*, which will be discussed in the section that follows.

4   DISTRIBUTION OF *MAČ* AND *MA`AÑ*

In this section I examine the distribution of Chol's two negation markers in nominal, adjectival, and verbal contexts and argue that their distribution is sensitive to the distinction between individual- and stage-level predicates.

4.1   Previous work

Previous work on Chol has not succeeded in capturing the rules that govern the appearance of *mač* versus *ma`añ* in negated constructions. Viola Warkentin and Ruby Scott (1980), in their description of Chol grammar, simply list both forms under the label 'adverbs of negation.' It will become clear as we examine the data, however, that in the majority of cases the two are in complementary distribution: it is not simply a matter of free choice which form a speaker uses. Where a choice is available, there are semantic consequences for using one form over the other.

      Juan Jesús Vázquez Alvarez (2002) presents the most thorough study of Chol negation to date. While he does not succeed in capturing the rules that govern the appearance of *mač* and *ma`añ*, he notes in his thesis on Tila Chol verbal morphology that *ma`añ* is formed from the negative morpheme *mač* and the existential morpheme `*añ*. Although it is not possible to use *mač* `*añ* in place of *ma`añ*, evidence that *ma`añ*

does (or did historically) contain the existential morpheme is found in its use in negated existentials, shown in (9).

(9)   a.   **ma`añ**   *čäy*  *tyi*  *ha`*
            NEG.EXT fish PREP water
            'There aren't fish in the water.'
    b. * **mač `añ**  *čäy*  *tyi*  *ha`*
            NEG EXT fish PREP water
            'There aren't fish in the water.'
    c. * **mač** *čäy* *tyi* *ha`*
            NEG fish PREP water
            'There aren't fish in the water.'

4.2 Predicate nominals

Chol nouns form predicates by taking an absolutive enclitic that agrees in person with the theme of the predicate. Third person absolutive is marked with a null morpheme, as in (10b).

(10)   a. *maystrah-oñ*
            teacher-1A
            'I'm a teacher.'
    b. *loktor* *ili* *wiñik*
            doctor this man
            'This man is a doctor.'

These are *stative* predicates in that they denote a property or state of the subject's referent. These and other stative predicates in Chol are unable to mark aspect. These contrast with *dynamic* or *eventive* predicates, which obligatorily mark for aspect in Chol. This distinction will be relevant to the discussion of verbs below.

    Predicate nominal constructions in Chol must negate with *mač*, as shown in the sentences in (11). In both cases, *ma`añ* is judged to be ungrammatical.

(11)   a. **mač** *čäy*   *hiñi*   (**ma'añ*)
            NEG   fish   DET
            'That's not (a) fish.'
    b. **mač** *maystrah-et^y*
            NEG   teacher-2A
            'You aren't a teacher.'

When the existential construction in (9a) is compared with the predicate nominal construction in (11a) we find a near-minimal pair. By negating a predicate nominal as in (9a) we negate an individual-level or stable property of the noun's referent—in this case, that it is not a fish. In (11a), on the other hand, when we negate existence, we state that no particular instantiation of the theme *čäy* exists in the given context—namely, in the water. Based on these observations, I formulate the generalization stated in (12).

(12)   **Generalization**
        • *mač* is used to negate individual-level predicates;
        • *ma`añ* is used to negate stage-level predicates.

4.3 Adjectives

Chol adjectives form predicates in the same way that Chol nouns do, by taking an absolutive enclitic which agrees in person with the predicate's theme. Again, like predicate nominals, adjectival predicates are stative and are unable to mark for aspect.

(13) a. *säk   hiñi ha`*
          clean   DET water
          'The water is clean'
      b. *bučul-oñ*
          seated-1A
          'I'm seated.'

While all predicate nominals were seen to be negated with *mač*, predicative adjectives are found negated with both *mač* and *ma`añ* as shown in (14) and (15).

(14) a. ***mač***   *bi`t̪ʸik-et̪ʸ*
          NEG   ugly-2A
          'You're not ugly.'
      b. ***mač***   *p'ip-oñ*
          NEG   intelligent-1A
          'I'm not intelligent.'
      c. ***mač***   *ličikyañ-oñ*
          NEG   stupid-1A
          'I'm not stupid.'

(15) a. ***ma`añ***   *mič'-oñ*
          NEG.EXT   angry-1A
          'I'm not angry.'
      b. ***ma`añ***   *luhbeñ-oñ*
          NEG.EXT   tired-1A
          'I'm not tired.'
      c. ***ma`añ***    *`ač'   hiñi pisil*
          NEG.EXT   wet   DET clothes
          'The clothes aren't wet.'

These examples lend support to the hypothesis that *mač* negates individual-level predicates while *ma`añ* negates stage-level predicates. The adjectives in (14) denote properties that are typically considered fairly permanent properties of an *individual*. The adjectives in (15), on the other hand, denote properties that typically hold only over *stages* of an individual.[2]

In many adjectival cases, using the opposite negation marker does not result in ungrammaticality, but rather, changes the meaning, as shown by the minimal pair in (16). Because sentences were often translated from Spanish, I was able to make use of the distinction between *ser* and *estár* (discussed above). The Chol equivalents of the Spanish sentences employing a conjugation of *ser* were translated with *mač* as in (16a), while Spanish sentences with a form of *estár* were translated with *ma`añ* as in (16b).

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[2] Four exceptions were found to this generalization: predicate adjective constructions involving *kolem* 'big'; *čañ* 'tall'; *čut̪ʸ* 'small'; and *`al* 'heavy.' While I do not have an explanation for these exceptions, it should be noted that they are exceptions of the same type: they all refer to physical properties of the theme.

(16) a. ***mač*** *č'ihyem-oñ*   (= individual-level)
          NEG   sad-1A
          'I'm not sad.' (Spanish: '*No <u>soy</u> triste.*')

      b. ***ma`añ*** *č'ihyem-oñ*   (= stage-level)
          NEG.EXT sad-1A
          'I'm not sad.' (Spanish: '*No <u>estoy</u> triste.*')

Furthermore, I was told that as a Caucasian I could never truthfully utter the sentence in (17a), though if I became very tan, it would be perfectly acceptable for me to say the sentence in (17b).

(17) a. ***mač*** *säsäk-oñ*   (= individual-level)
          NEG   white-1A
          'I'm not white.'

      b. ***ma`añ*** *säsäk-oñ*   (= stage-level)
          NEG.EXT white-1A
          'I'm not white.'

In this section we have seen that adjectives which denote stage-level properties negate with *ma`añ*, while adjectives which denote individual-level properties negate with *mač*.

Note that there is no affirmative counterpart to the *ma`añ* constructions involving just the existential *`añ* (in contrast to the existential constructions seen above), as shown by the ungrammaticality of the sentence in (18b). That is, it is not the case that *mač* simply combines with a predicate beginning with *`añ* and the two contract. Rather, the negator *ma`añ* requires a stage-level predicate.

(18) a. *č'ihyem-oñ*
          sad-1A
          'I'm sad.'

      b. * ***`añ*** *č'ihyem-oñ*
          EXT   sad-1A
          'I'm not sad.'

4.4 Verbs

Some examples of negated verbal constructions are shown in (19) and (20) below. Note that the sentences in (19) contain dynamic or eventive predicates and appear obligatorily with an aspect marker, while the stative sentences in (20) may not mark for aspect.

(19) a. ***ma`añ***  *t'ʸi*  *i-k'ušu*  *i-wah*    *hiñi*  *`alob*   (*mač)
          NEG.EXT PERF 3E-eat   3E-tortilla DET   boy
          'The boy didn't eat his food.'

      b. ***ma`añ***  *čoñkol*  *i-wäyel*  *hiñi*  *ñeñe`*
          NEG.EXT PROG   3E-sleep DET   baby
          'The baby isn't sleeping.'

(20) a. ***mač*** *h-käñ*   *ili*   *š`išik*                        (\**ma`añ*)
          NEG   1E-know this   woman
          'I don't know this woman.'

      b. ***mač*** *k-om*   *mahlel* *t'ʸi*   *eskwela*
          NEG   1E-want go   PREP school
          'I don't want to go to school.'

I argue that this split is evidence that negated indicative verbs follow the initial generalization above: *ma`añ* in the sentences in (19) negates the existence of a particular temporary event, while *mač* in (20) negates a state which holds over multiple stages of an individual.

      Two more examples of this type are shown in the eventive (21) and the stative (22). In (21) we find the imperfective aspect, which has a habitual interpretation in Chol. Both sentences make what appear to be individual-level claims about women and hens respectively, yet the first must negate with *ma`añ* and the second with *mač*.

(21)   **ma`añ**   *mi*   *i-hap-ob*     *lembal*   *hiñi*   *š`išik-ob*   (*mač)
       NEG.EXT IMPF 3E-drink-3PL   alcohol   DET   woman-PL
       'Women don't drink alcohol.'

(22)   **mač**   *y-uhil-ob*   *k'ay*   *hiñ-ob* *ña`-mut$^y$*         (\**ma`añ*)
       NEG   3E-know.how-3PL song DET-PL mother-chicken
       'Hens don't know how to crow.'

While the sentence in (21) does make a generic claim, I argue that it is nonetheless a *stage-level* predicate that is being negated. Compare the sentence in (23). Here we find a perfective verbal predicate combining with the existential morpheme `*añ*. Recall that we saw above that existentials may only combine with stage-level predicates. An appropriate gloss for (23) would be: 'There exist (some completed) events of my alcohol drinking.'

(23)   *`añ*   *t^{y}i*   *k-hapä*   *lembal*
       EXT   PERF 1E-drink   alcohol
       'I've drunk alcohol.'

Following this logic, a better interpretation of the sentence in (21) would be: 'There *do not* exist any events of women drinking alcohol.' That is, we are negating the existence of *all* stage-level occurrences of women drinking, rather than an individual-level property of women.

      As further support for this distinction within the verbal paradigm, examine the near-minimal pair in (24).[3] One informant told me that the *mač* form in (24a) would be used as a response if someone asks, for example: 'Do you know where Rocío's house is?'. The *mač* (individual-level) answer indicates that the not-knowing is a property of the speaker: she generally does not and has not known where Rocío's house is. The sentence in (24b), on the other hand, would be used, for example, if the speaker does not understand what someone has just said and would like it to be repeated. In this example the not-knowing/understanding holds only over a *stage* of the speaker: it is not the case that the speaker *never* understands her interlocutor.

(24)   a. **mač**   *k-ña`t$^y$ah*            (*baki*   *`añ* *i-yot^{y}ot^y*   *Rocío*)
            NEG   1E-know   where EXT 3E-house   Rocío
            'I don't know (where Rocío's house is).'
      b. **ma`añ**  *mi*   *k-ña`t^{y}añ*   (*a-t^y'añ*)
            NEG   IMPF 1E-know   2E-word/speech
            'I don't know (your words).' (= 'I didn't understand you.')

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[3] Note that the verb forms in these two sentences are slightly different. The *-ñ* ending is what we expect to find in this type of transitive imperfective. It is not clear to me what the *-h* ending is. It is possible that this is a possessed nominal form, though more work remains to be done to determine the status of this stem.

5 CONCLUSION

To conclude, we have seen in the sections above that the distribution of Chol's two negation markers, *mač* and *ma`añ*, is not random, but falls out from the semantic distinction between individual- and stage-level predicates across nominal, adjectival, and verbal paradigms. Namely, individual-level predicates negate with *mač*, while stage-level predicates negate with *ma`añ*.

While the details of this claim remain to be worked out, I suggest that the use of *ma`añ* in stage-level predicates may be connected to the fact that *ma`añ* contains the existential morpheme *`añ*, and that existentials require stage-level predicates. The fact that this under-studied Mayan language (unrelated to languages for which current semantic theories were initially developed) pays grammatical attention to these factors lends strong support to the universality of the stage-/individual-level distinction, as well as to the requirement that existentials combine with stage-level predicates.

A good deal of work remains to be done on this topic. While existentials and certain perfective constructions have affirmative forms with the existential *`añ* and are negated with *ma`añ*, adjectives and non-perfectives which negate with *ma`añ* have no affirmative *`añ* counterpart. That is, this process is not transparently compositional. A survey of other Mayan languages as well as historical work could reveal whether this process is or was present in other members of the family.

Additionally, other types of verbal constructions remain to be examined. For example, imperatives and subjunctives in Chol must be negated with *mač*. Though this does not obviously follow from the current analysis, it also does not clearly contradict it. My hope is that future work toward a better understanding of the semantics of imperatives and subjunctives will reveal that they behave predictably with respect to the claims made in this paper.

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