1 Introduction

1.1 Negative quantifiers

- In many languages, there are words whose meaning is inherently negative (English “nobody,” Spanish “nadie”). These negative words, which I refer to as negative quantifiers, contribute sentential negation in the same way that that a negative particle does (Klima, 1964).

(1) “Nobody has called me” = “I have not been called by anybody.” (¬ > VERB)

- However, these negative quantifiers do not display uniform cross-linguistic behavior.
- Negative quantifiers in Standard American English can occur without the negative particle.

(2) No co-occurrence (English)

“Nobody has called me.”

- In many languages, negative quantifiers must co-occur with a negative particle.

(3) Co-occurrence (Spanish)

a. No vi a nadie hoy.
   NEG saw.I D.OBJ nobody today
   “I didn’t see anybody today”

b. *Vi a nadie hoy.
   saw.I D.OBJ nobody today
   Intended: “I didn’t see anybody today.”

- San Martín Peras Mixtec (SMPM) has two sets of negative quantifiers: one that looks like those found in English (4), and one that looks like those found in Spanish (5).

*Many thanks to my language consultant Natalia Gracida-Cruz for her endless patience and tireless work, to committee members Maziar Toosarvandani, Ivy Sichel, and Ryan Bennett for their guidance and encouragement, and to my friends and classmates for their valuable feedback. Any mistakes or misspellings are my own.
(4) **No co-occurrence**
ko:23-na² ka³ni² Pebro
NEG-them hit.CONT Pedro
“Pedro isn’t hitting anybody” or “Nobody is hitting Pedro”

(5) **Co-occurrence**
a. ni³-¹-na² ko²-ka³ni² Pebro
not-one-3PL.NEUT NEG-hit.CONT Pedro
“Pedro isn’t hitting anybody” or “Nobody is hitting Pedro”
b. *ni³-¹-na² ka³ni² Pebro
not-one-3PL.NEUT hit.CONT Pedro
Intended: “Pedro isn’t hitting anybody” or “Nobody is hitting Pedro”

- However, once we analyze negative quantifiers in SMPM, we will see that SMPM in fact behaves like Spanish, and not like English
  - Though there are multiple negative elements, there is only one semantic negation.
  - Negative quantifiers must co-occur with sentential negation.
  - Somewhat surprisingly, the negative quantifiers in (4) are morphologically composed of sentential negation and a non-negative indefinite.

1.2 **Roadmap**
- In §2, I will outline SMPM’s negative quantifiers and propose that the difference between them is whether or not they compositionally contain the negative marker.
- In §3, I will introduce an analysis of one type of negative quantifier in SMPM within Zeijlstra’s (2008) theory of negative concord.
- In §4, I will give empirical evidence that the other type of negative quantifier contains the negative marker.
- In §5, I will return to Zeijlstra’s (2008) framework and examine the consequences SMPM has for it.
- In §6, I conclude.

2 **Background**

2.1 **San Martín Peras Mixtec**
- SMPM is an Oto-Manguean language spoken in and around the municipality of San Martín Peras, Oaxaca, Mexico, and by diasporic communities in California.
- Its basic word order is VSO, and it has three level tones and at least two contour tones.
- Unless otherwise noted, all of the SMPM data that I present today has been gathered through my own fieldwork with a native speaker in Watsonville, California.
2.2 Negative quantifiers

- There are two classes of negative quantifiers in SMPM: those headed by ko\(^{23}\)- and those headed by ni\(^{3}\)-. I refer to them as ko-NPs and ni-NPs respectively.

- Neither item is likely to be a Negative Polarity Item (NPI), as they each can be used in fragment answers (Zeijlstra, 2016). Instead, they can be characterized as NEG-words in the spirit of Laka (1990).

(6) a. Question: yo\(^{23}\) yu\(^{2}\)'u\(^{3}\) sha\(^{1}\)shi\(^{2}\) Pebro? who mouth eat.COMPL Pedro
   “Who did Pedro kiss?” (lit. “Whose mouth did Pedro eat?”)

   b. Answer: \(\sqrt{\text{ko}:^{23}-\text{na}}\)
   NEG-3.PL.NEUT
   “No one.”

(7) a. Question: yo\(^{23}\) ka\(^{1}\)ni\(^{2}\) Pebro? who hit.COMPL Pedro
   “Who hit Pedro?”

   b. Answer: \(\sqrt{\text{ni}^{3}-\text{na}}\)
   not-one-3.PL.NEUT
   “No one.”

2.2.1 ni-NPs

- ni-NPs must co-occur with the negative marker.

(8) a. ko\(^{2}\)-ka\(^{3}\)ni\(^{2}\) Pebro \(\sqrt{\text{ni}^{3}-\text{na}}\)
   NEG-hit.CONT Pedro not-one-3.PL.NEUT
   “Pedro isn’t hitting anybody.”

   b. *ka\(^{3}\)ni\(^{2}\) Pebro \(\sqrt{\text{ni}^{3}-\text{na}}\)
   hit.CONT Pedro not-one-3.PL.NEUT
   Intended: “Pedro isn’t hitting anybody.”

- They can appear before or after the negative particle.

(9) a. \(\sqrt{\text{ni}^{3}-\text{na}}\) ko\(^{2}\)-ka\(^{3}\)ni\(^{2}\) Pebro
   not-one-3.PL.NEUT NEG-hit.CONT Pedro
   “Pedro isn’t hitting anybody” or “Nobody is hitting Pedro”

   b. ko\(^{2}\)-ka\(^{3}\)ni\(^{2}\) Pebro \(\sqrt{\text{ni}^{3}-\text{na}}\)
   NEG-hit.CONT Pedro not-one-3.PL.NEUT
   “Pedro isn’t hitting anybody”

---

1I have been informed that there are items analyzed as NPIs in Korean that can also be used in fragment answers.
2.2.2 *ko*-NPs

- *ko*-NPs cannot co-occur with the negative marker.

(10) *ko:23-na² (-ko²)-ka³ni² Pebro
    NEG-them NEG-hit.CONT Pedro
    “Pedro isn’t hitting anybody” or “Nobody is hitting Pedro.”

- Unlike *ni*-NPs, *ko*-NPs cannot appear in situ—they must be fronted:

(11) *ka³ni² Pebro *ko:23-na²
    hit.CONT Pedro NEG-SPL.NEUT
    Intended: “Pedro isn’t hitting anyone.”

- **Main questions:** why must *ni*-NPs co-occur with negation, while *ko*-NPs cannot? Why can *ni*-NPs occur in situ or fronted, but *ko*-NPs can only occur fronted?

2.3 Proposal

- The reason that *ni*-NPs must co-occur with the negative marker can be understood as an obligatory licensing relation like that found in many Negative Concord languages.

- The reason that *ko*-NPs cannot co-occur with the negative marker can be motivated by their morphologically containing the negative marker. I will give three main arguments for this analysis:
  - There are many form similarities between *ko*-NPs and the negative marker.
  - *ko*-NPs share the same distributional restrictions as other items that contain the negative marker.
  - *ko*-NPs serve the function of the negative marker in the sentences in which they occur, contributing sentential negation and licensing items dependent on negation.

(12) *ni*-NPs licensed by AGREE  
(13) *ko*-NPs formed by movement

- Before diving into the arguments for *ko*-NPs containing the negative marker, let’s account for *ni*-NPs distribution in a contemporary theory of Negative Concord.

3 Double Negation and Negative Concord

- The difference between negative quantifiers in languages like English and Spanish is usually accounted for by splitting languages into **Double Negation** (DN) and **Negative Concord** (NC) systems:

  - **Double Negation**
    - Languages like English are called DN languages because each negative element in a sentence contributes its own semantic negation:

(14) “Nobody didn’t call” = Everybody called
• Negative Concord

  – Languages like Spanish are called NC languages because multiple negative items still result in just one semantic negation:

(15) No vi a nadie hoy.
          NEG saw.I D.OBJ nobody today
    “I didn’t see anybody today” \( \neq \) “I saw someone today”

• One prominent theory of the difference between DN and NC languages is found in Zeijlstra (2008). Under this theory, formal negative features ([iNEG] and [uNEG]) distinguish DN and NC languages.

• In DN systems, each negative lexical item contributes its own semantic negation. Simplifying Zeijlstra (2008) somewhat, I model this by giving negative quantifiers in DN languages an [iNEG] feature.

  – The number of semantic negations in a sentence is equal to the number of [iNEG] features in the tree.

• In NC systems, negative quantifiers carry [uNEG] features that must be checked by a c-commanding item with an [iNEG] feature via an Agree relation.

(16) DN (no Agree)            (17) NC (Agree)

\[
\text{TP} \\
\text{DP [iNEG]} \\
\text{DP [iNEG]} \\
\text{nobody} \\
\text{T} \\
\text{T'} \\
\text{PAST} \\
\text{VP} \\
\text{V} \\
\text{DP [iNEG]} \\
\text{nothing} \\
\]

\[
\text{TP} \\
\text{DP} \\
\text{T'} \\
\text{PRO} \\
\text{T} \\
\text{NEG} [iNEG] \\
\text{VP} \\
\text{no} \\
\text{V} \\
\text{DP [uNEG]} \\
\text{comí} \\
\text{nada} \\
\]

3.1 \textit{ni}-NPs and negation

• In a system like Zeijlstra’s (2008, 2016), \textit{ni}-NPs bear [uNEG] and must be c-commanded by an [iNEG] item.

• But we have already seen that they can occur in a position preceding negation:

(18) a. \texttt{\underbrace{\textit{ni}^3-\textit{j}^3-\textit{na}^2}} \texttt{\textit{ko}^2-\textit{ka}^3\textit{ni}^2} \texttt{Pedro not-one-3PL.NEUT NEG-hit.CONT Pedro}
     “Pedro isn’t hitting anybody” or “Nobody is hitting Pedro”

b. \texttt{\textit{ko}^2-\textit{ka}^3\textit{ni}^2} \texttt{Pedro \underbrace{\textit{ni}^3-\textit{j}^3-\textit{na}^2}}
   \texttt{NEG-hit.CONT Pedro not-one-3PL.NEUT}
   “Pedro isn’t hitting anybody”
• This c-command constraint need not hold at all levels of representation. *ni*-NPs can have their [uNEG] feature valued as soon as a c-commanding [iNEG] item is merged.

• Under this theory, when *NEG* is merged, its [iNEG] feature can value the [uNEG] features that it c-commands. This is compatible with a view that Agree happens as soon as possible.  

• Then, a *ni*-NP can front via a separate process.

\[(19)\] Valuation of *ni*-NPs’ [uNEG] features\(^3\)

\[
\begin{array}{c}
\text{ZP} \\
\quad \text{Z'} \\
\quad \text{Z} \\
\text{NEG \ [iNEG]} \\
\quad \text{TP} \\
\quad \text{ko}^2 \\
\quad \text{vP} \\
\quad \text{T'} \\
\quad \text{T} \\
\text{XP} \\
\end{array}
\]

\[
\begin{array}{c}
\text{DP} \\
\quad \text{X'} \\
\quad \text{X} \\
\quad \text{YP} \\
\end{array}
\]

\[
\begin{array}{c}
\text{DP \ [uNEG]} \\
\quad \text{Y'} \\
\quad \text{Y} \\
\quad \text{t}_{vP} \\
\end{array}
\]

• If *ni*-NPs do not obligatorily front under negation, why do they move to a pre-verbal position?

• The movement seen in (19) can be accounted for by calling on Quantifier Fronting, a process independently motivated and described for SMPM in Ostrove (2018), which is a generally non-obligatory movement of quantified NPs to a pre-verbal position.

\[(20)\] a. nzi\(^1\)’bi\(^{12}\) ki\(^{3}i^{2}\) ŋa\(^3\) egg pick.up.PRES she 
   “She’s gathering (some indefinite quantity of) eggs”

b. koh\(^1\) m\(^{12}\) libro na’ka:\(^{1}ba\(^{1}\) four book fall.PAST 
   “Four books fell” (Ostrove, 2018)

• **Conclusion:** the negative particle in SMPM can be analyzed in Zeijlstra’s (2008) system as bearing an [iNEG] feature. *ni*-NPs are licensed in-situ, after which they optionally undergo Quantifier

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\(^2\)While this style of feature-valuing involves upwards Agree, general considerations of cyclicity make it reasonable to assume that uninterpretable features are valued as soon as possible—that is, as soon as an Agree relation is possible.

\(^3\)I posit that SMPM’s VSO word order is derived by evacuation of subject and object from vP followed by predicate raising, perhaps to Spec, TP.
Fronting (Ostrove, 2018).

4 **ko-NPs and negation**

- **Claim:** *ko*-NPs are compositionally made up of the negative marker and an indefinite.
- Again, I will give four arguments for this:
  - Form similarities.
  - Positional similarities, with a brief foray into adverbial negation.
  - Licensing similarities.
  - Parallel decompositional examples.
- In order to understand understand the arguments that *ko*-NPs contain the negative marker, it is necessary first to understand the properties of the negative marker in SMPM.

4.1 Form similarities

- **Tense in SMPM is marked tonally** on the first syllable of the verb: a high tone (/3/) for Continuative, a low tone (/1/) and lexically-selected allomorphy *ni-* for Completive. Potential mood preserves the lexical tone of the verb and sometimes includes a stem change.

\[(21)\] **TAM Marking**

<table>
<thead>
<tr>
<th>Verb</th>
<th>CONT</th>
<th>COMPL</th>
<th>POT</th>
</tr>
</thead>
<tbody>
<tr>
<td>“to paint”</td>
<td>ko(^2)-na(^3)ka(^2)yi(^1)</td>
<td>ko(^2)-ni(^{23})-na(^4)ka(^2)yi(^1)</td>
<td>na(^{23})ka(^3)yi(^2)</td>
</tr>
<tr>
<td>“to rot”</td>
<td>ko(^2)-zya(^3)yi(^1)</td>
<td>ko(^2)-ni(^{23})-zya(^2)yi(^{12})</td>
<td>zya(^{23})yi(^12)</td>
</tr>
<tr>
<td>“to laugh”</td>
<td>ko(^2)-shah(^3)ku(^2)</td>
<td>ko(^2)-ni(^{23})-shah(^1)ku(^{2})</td>
<td>kwah(^{23})ku(^{21})</td>
</tr>
</tbody>
</table>

- The negative marker changes depending on the TAM of the verb.
  - Continuative verbs are negated by the **prefix ko\(^2\)-**.
  - Completive verbs are negated by a tonally modified **Completive prefix -ni\(^{23}\)** as well as an **optional ko\(^2\)-**.
  - Potential verbs are negated solely by a **/23/ rising tone**.

\[(22)\] **Negative Marking**

<table>
<thead>
<tr>
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<td>“to paint”</td>
<td>ko(^2)-na(^3)ka(^2)yi(^1)</td>
<td>ko(^2)-ni(^{23})-na(^4)ka(^2)yi(^1)</td>
<td>na(^{23})ka(^3)yi(^2)</td>
</tr>
<tr>
<td>“to rot”</td>
<td>ko(^2)-zya(^3)yi(^1)</td>
<td>ko(^2)-ni(^{23})-zya(^2)yi(^{12})</td>
<td>zya(^{23})yi(^12)</td>
</tr>
<tr>
<td>“to laugh”</td>
<td>ko(^2)-shah(^3)ku(^2)</td>
<td>ko(^2)-ni(^{23})-shah(^1)ku(^{2})</td>
<td>kwah(^{23})ku(^{21})</td>
</tr>
</tbody>
</table>

- I adopt a view of the negative morpheme as a single NEG head, which is the combination of *ko-* and a floating, **/23/ rising tone**. This NEG head maps onto verbs via a somewhat opaque process depending on verbal tense.
• ko-NPs always contain both ko- and a /23/ rise, whether it is exponed on one syllable or two:

(23) a. \[\text{ko}^{23-\text{na}^2}\]
    \[\text{NEG-3PL.NEUT}\]
    “Nobody.”

b. \[\text{ko}^{2-\text{ña}^3\text{a}^2}\]
    \[\text{NEG-thing}\]
    “Nothing.”

c. \[\text{ko}^{23-\text{ña}^2\text{yi}^3\text{bi}^2}\]
    \[\text{NEG-3SG.NEUT.person}\]
    “Nobody.”

• The fact that ko-NPs all contain the exponents of the negative marker, with a similar segmental and tonal mapping relation, is our first clue that they are formed compositionally of negation and an indefinite.

  – Note that the ni-NP variant of ko\(^2\)-ña\(^3\)’ā\(^2\) (“nothing”) is ni\(^3\)-ña\(^2\)’ā\(^3\) (“nothing”), which does not have an initial /23/ rise.

4.2 Positional similarities

• The negative marker appears obligatorily pre-verbally—after fronted topics and focused elements but before the verb and its non-fronted arguments. It cannot appear elsewhere.

(24) a. \[\text{ko}^{2-\text{shi}^3\text{nu}^2}\] \text{Pebro bi}^2\text{zi}^2\text{l}
    \[\text{NEG-run.CONT Pedro today}\]
    “Pedro is not running today.”

b. \[\text{bi}^2\text{zi}^2\text{l} \text{ko}^{2-\text{shi}^3\text{nu}^2}\] \text{Pebro today NEG-run.CONT Pedro}
    “Pedro does not run today.”

c. \[\ast \text{ko}^{2-\text{bi}^2\text{zi}^2\text{l}} \text{shi}^3\text{nu}^2\] \text{Pebro}
    \[\text{NEG-today run.CONT Pedro}\]
    Intended: “Pedro does not run today.”

d. \[\ast \text{shi}^3\text{nu}^2 \text{ko}^{2-\text{Pedro bi}^2\text{zi}^2\text{l}}\]
    \[\text{run.CONT NEG-Pedro today}\]
    Intended: “Pedro is not running today.”

• An additional aspect of negation’s positional requirement can be seen in its interaction with a specific class of adverbs.

• This class of adverbs occurs pre-verbally. In most contexts, it is marked for them to occupy a post-verbal position:

(25) \[\sqrt{\text{ni}^1\text{i}^2}\] \text{shi}^3\text{nu}^2 \ (?\text{ni}^1\text{i}^2) \text{Pebro (ni}^1\text{i}^2\)
    \[\sqrt{\text{strong}} \text{run.CONT (strong) Pedro (strong)}\]
    “Pedro runs quickly”
• However, to negate (25), the negated verb can precede the adverb:

(26) a. ni¹'i² shi³'nu² Pedro
   strong run.CONT Pedro
   “Pedro runs quickly”

b. ko²-shi³'nu² ni¹'i² Pedro
   NEG-run.CONT strong Pedro
   “Pedro does not run quickly”

• When the adverb occurs post-verbally under negation, that position is no longer marked.

• This same V-ADV configuration is possible and unmarked with a ko-NP:

(27) [ko:²-na²-] ni³-shi³'nu² ni¹'i²
   NEG-3.PL.NEUT COMPL-run fast
   “Nobody runs fast”

• Additionally, when ni-NPs front, they move to the left of the negated verb:

(28) [ni³-'˜i³-na²-] ko²-ka³ni² Pedro
   not-one-3PL.NEUT NEG-hit.CONT Pedro
   “Pedro isn’t hitting anybody” or “Nobody is hitting Pedro”

• There are some cases in which both fronted ni- and ko-NPs can co-occur. In these cases, the ni-NP always has to precede the ko-NP, just as it has to precede the negated verb.

(29) [ni³-'˜i³-na²-] [ko²-ña³'a²-] ki³sha²
   not-one-3PL.NEUT NEG-thing do.CONT
   “No one is doing anything.”

• ko-NPs occur in the same fixed, pre-verbal position as negation.

(30) Interim summary of ko-NP characteristics

<table>
<thead>
<tr>
<th></th>
<th>NEG marker</th>
<th>ko-NP</th>
<th>ni-NP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contains ko- and /²³/</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Obligatorily pre-verbal</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
</tr>
</tbody>
</table>

4.3 Adverbial negation and ko-NPs

• There is another way to negate sentences with pre-verbal adverbs in which negation maps directly onto the adverb⁵.

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⁴This was the citation form spontaneously given to me by my consultant. I have not tested the sentence ko:²³-na² ni¹'i² ni³-shi³'nu².

⁵I analyze these adverbs as being contained within a fronted verbal projection based on distributional and binding data.
(31) a. \( \text{ni}^1\text{i}^2 \text{shi}^3\text{nu}^2 \text{Pebro} \)  
strong run.CONT Pedro  
“Pedro runs fast.”  
b. \( \text{ni}^{23}\text{i}^2 \text{shi}^3\text{nu}^2 \text{Pebro} \)  
NEG.strong run.CONT Pedro  
“Pedro does not run fast.”

- There are several pieces of evidence suggesting that the **negated adverb** in (31) contributes **sentential negation** rather than constituent negation to its host sentence.

- There are certain responses in SMPM that are polarity sensitive, much like those outlined in Klima (1964).

- Positive polarity sentences can be responded to by saying “me, too” but not “me, neither”

(32) **Statement**  
\( \text{ta}^3\text{sha}^3\text{a}^3 \text{Pebro} \)  
dance.CONT Pedro  
“Pedro is dancing.”

(33) **Response**  
a. \( \checkmark \text{sa}^3 \text{ti}^2\text{‘i}^2 \)  
so also-1SG  
“Me, too.”  
b. \#\text{ni}^3 \text{yu}^2\text{u}^2 \)  
not 1SG  
“Me, neither.”\(^6\)

- Negative sentences can be responded to by saying “me, neither” but not “me, too.”

(34) **Statement**  
\( \text{ko}^2\text{ni}^{23}\text{ta}^3\text{sha}^3\text{a}^3 \text{Pebro} \)  
NEG-COMPL-dance.CONT Pedro  
“Pedro is not dancing.”

(35) **Response**  
a. \#\text{sa}^3 \text{ti}^2\text{‘i}^2 \)  
so also-1SG  
“Me, too.”  
b. \( \checkmark \text{ni}^3 \text{yu}^2\text{u}^2 \)  
not 1SG  
“Me, neither.”

- Importantly, instances of constituent negation cannot be responded to with “Me, neither.”

(36) **Statement**  
\( \text{shi}^{12}\text{n-i}^2 \text{tah}^3\text{te}^2 \text{ntah}^{23}\text{ku}^2 \text{see.COMPL-1SG man} \)  
NEG.strong  
“I saw the not-strong man.”

(37) **Response**  
a. \( \checkmark \text{sa}^3 \text{ti}^2\text{‘i}^2 \)  
so also-1SG  
“Me, too.”  
b. \#\text{ni}^3 \text{yu}^2\text{u}^2 \)  
not 1SG  
“Me, neither.”

- Sentences containing a negated pre-verbal adverb can be responded to with “Me, neither,” but not “Me, too,” suggesting that **pre-verbal negated adverbs contribute sentential negation**.

\(^6\)Notice that the negative marker \( \text{ni}^{3}\)- here is identical to that found on \( \text{ni-NPS} \).
Additionally, negated adverbs license *ni*-NPs, which require the negative marker in order to be licensed:

(40) \[ \text{ni}^{23}\text{i}^2 \text{ ni}^3\text{-shi}^2\text{nu}^2 \text{ Pedro} \text{ COMPL-run Pedro} \]

"Nobody ran quickly"

Negated adverbs license the same polarity-sensitive responses as sentences containing the negative marker, and they license *ni*-NPs, which are licensed only by negation.

I conclude that the same negative marker that shows up on verbs also maps onto this class of adverbs, contributing sentential negation.

In SMPM, the negative marker cannot appear twice, which is why negated adverbs cannot co-occur with negated verbs:

(41) \[ \text{ni}^{23}\text{i}^2 \text{ (*ko}^2\text{-)-shi}^3\text{nu}^2 \text{ Pedro} \text{ COMPL-run Pedro} \]

"Pedro doesn’t run fast."

In much the same way, *ko*-NPs cannot co-occur with any other realization of the negative marker, whether it is exponed on an adverb or the verb itself. In addition, there cannot be more than one *ko*-NP in a sentence.

(42) a. \[ \text{*ko}^{23}\text{-na}^2 \text{ ko}^2\text{-ka}^3\text{ni}^2 \text{ Pedro} \text{ CONT Pedro} \]

“Pedro isn’t hitting anybody” or “Nobody is hitting Pedro”

b. \[ \text{*ko}^{23}\text{-na}^2 \text{ ni}^{23}\text{i}^2 \text{ ni}^3\text{-shi}^2\text{nu}^2 \text{ Pedro} \text{ COMPL-run} \]

Intended: “Nobody runs fast” or “Nobody doesn’t run fast”

c. \[ \text{*ko}^{23}\text{-na}^2 \text{ ko}^2\text{-ña}^3\text{a}^2 \text{ ki}^3\text{sha}^2 \text{ Pedro} \text{ CONT Pedro} \]

Intended: “Nobody is doing anything”

We have seen that *ko*-NPs occur in the same fixed, pre-verbal position as the negative marker, and that they cannot co-occur with any other realization of the negative marker.

### 4.4 Licensing similarities

We have seen that *ko*-NPs seem to be in the same position as negation. Here, I will show that they perform the same function as the negative particle, namely giving rise to sentential negation.
1. Licensing ni-NPs

- While ni-NPs must co-occur with the negative particle, they can also be licensed by a ko-NP.

\[(43)\] a. [ko:2-na:3]-a2 ki:3sha2 [ni:2-t:na:2]  
   NEG-thing do.CONT not-one-3.PL.NEUT  
   “Nobody is doing anything”

\[(43)\] b. [ni:3-t:na:2] [ko:2-na:3]-a2 ki:3sha2  
   no-one-3.PL.NEUT NEG-thing do.CONT  
   “Nobody is doing anything”

2. Polarity-sensitive intensifier

- A polarity-sensitive intensifier timi:-ba is only grammatical immediately following items bearing the negative marker. It is ungrammatical in positive polarity sentences.

   NEG-COMP-laugh at.all-PART Pebro at.all-PART  
   “Pedro isn’t laughing (at all).”

\[(44)\] b. nzye:23 (✓ ti:2-mi:2) shah3ku2 (*ti:2-mi:2) Pebro  
   NEG.strong (at.all) laugh.CONT Pedro  
   “Pedro isn’t laughing hard (at all).”

\[(44)\] c. *ni:1-shah3ku1 ti:2-mi:23-ba2 Pebro  
   COMPL-laugh at.all-PART Pedro  
   Intended: “Pedro laughed (at all)”

- This intensifier immediately follows ko-NPs.

\[(45)\] ko:2-na:3-a2 (ti:2-mi:23-ba2) ki:3sha2 Pebro  
   NEG-thing at.all-PART do.CONT Pedro  
   “Pedro doesn’t do anything (at all).”

3. Polarity-sensitive responses

- Sentences with ko-NPs can be responded to by saying “me, neither,” but not “me, too,” indicating that a sentence containing a ko-NP has sentential negation.

\[(46)\] Statement  \[(47)\] Response

   NEG-3.PL.NEUT COMPL-eat banana  
   “Nobody ate a banana”

\[(47)\] a. #sa3 ti:2-'i:2  
   so also-1SG  
   “Me, too.”

\[(47)\] b. ✓ ni:3 yu:2'u2  
   not 1SG  
   “Me, neither.”

- Conclusion: ko-NPs display many of the licensing characteristics of the negative particle.

  - They license ni-NPs.
  - They can be immediately followed by a polarity sensitive intensifier.
  - They can be responded to with continuations only compatible with negative polarity sentences.
4.5 Review of similarities

- *ko-*NPs behave similarly to the negative particle in many ways:
  - Part of their morphological make-up includes a spell-out of the negative morpheme, a combination of *ko-* and */23/.
  - They show up in the same positions that we see the negative particle, and they show similar distributional restrictions.
  - They contribute sentential negation in the same way that the negative particle does.

(48) Summary of characteristics

<table>
<thead>
<tr>
<th></th>
<th>NEG marker</th>
<th>*ko-*NP</th>
<th>*ni-*NP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contains <em>ko-</em> and */23/</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Obligatorily pre-verbal</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Licenses polarity responses</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Co-occurs with NEG marker</td>
<td>no</td>
<td>no</td>
<td>yes</td>
</tr>
</tbody>
</table>

- Given these characteristics, I argue that *ko-*NPs **compositionally contain the negative particle**.
- A compositional analysis suggests that there should be instances in which the indefinite portion of the *ko-*NP does not compose with the negative marker. In fact, we do see such cases.

4.6 Decompositional examples

- An additional piece of evidence that *ko-*NPs are formed compositionally comes from the fact that some indefinites can remain in situ with the same reading.
- Most *ko-*NPs see so far have been made of the negative marker and a weak pronoun, which are prosodically dependent. ***ko-*NPs can also incorporate a full DP, which can also appear in situ** with no immediately apparent change in meaning. In both cases, negation obligatorily scopes over the indefinite.

(49) a. [ko:23-ñana2-yi3bi2] ni3-shi2ni2 Pedro
    NEG-3SG.NEUT-person COMPL-see Pedro
    “Pedro didn’t see anyone”

    b. [ko2-ni23-shi2ni2] Pedro [ña2 yi3bi2]
    NEG-NEG.COMPL-see Pedro 3SG.NEUT-person
    “Pedro didn’t see anyone”
• This indefinite is **not an NPI**, as it is licit in non-downward entailing, veridical contexts:

(50) \( \text{ka}^{1}\text{ni}^{2} \text{ Pedro} \text{ na}^{2} \text{ yi}^{3}\text{bi}^{2} \)  
hit.COMPL Pedro 3SG.NEUT person  
“Pedro hit someone”

• Decompositional examples provide additional evidence that \( \text{ko-NP}s \) are formed compositionally with the negative marker and an indefinite.

## 5 Implementation and consequences

### 5.1 Syntactic derivation

- Because the negative particle leans on whatever item immediately follows it, I assume that the compositional process involves the negative particle leaning on an indefinite that has moved to a right-adjacent position.

  - The motivation for movement to this position is likely not valuation of [uNEG] features (contra Haegeman and Lohndal (2010) for West Flemish), since \( \text{ni-NP}s \) can have their [uNEG] features valued via Agree without movement.

(51) Example derivation of \( \text{ko-NP} \) in \( \text{ko}^{\text{−23-na}^{2}} \text{ka}^{3}\text{ni}^{2} \text{ Pedro} \) (“Pedro isn’t hitting anyone”).
5.2 Theoretical consequences

- The difference between DN and NC systems has generally been assumed to be a language-wide parameter, but this is not a logical necessity.

- Since Zeijlstra’s (2008) NEG features are lexical features, they should be able to apply freely to lexical items.

- As a result, we might expect to see a language that has both [iNEG] and [uNEG] negative quantifiers.

(52) NEG-feature typology

<table>
<thead>
<tr>
<th></th>
<th>Double Negation</th>
<th>Negative Concord</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative particle</td>
<td>[iNEG]</td>
<td>[iNEG]</td>
</tr>
<tr>
<td>Negative quantifiers</td>
<td>[iNEG]</td>
<td>[i/uNEG]</td>
</tr>
</tbody>
</table>

- On the surface, SMPM looks to be such a language: ni-NPs bear [uNEG], and ko-NPs bear [iNEG].

- However, my analysis argues that SMPM is not such a language: ko-NPs only have an [iNEG] feature through compositionality with sentence negation.

(53) ni-NPs licensed by AGREE  
(54) ko-NPs formed by movement

\[
\begin{align*}
\text{NEG} & \quad \text{ni-NP} \\
\quad & \quad \text{NEG} \quad \text{NP}
\end{align*}
\]

- SMPM, then, is not a language with both [iNEG] and [uNEG] negative quantifiers at all levels of representation.

- The question remains open: are there languages with both [iNEG] and [uNEG] negative indefinites? If there are, this is consistent with a view that Zeijlstra’s (2008) [uNEG] and [iNEG] features can freely combine with a language’s lexical items.

- If there are not, then Zeijlstra’s system requires additional stipulations to capture the typology.

- If the restriction on [iNEG] negative quantifiers really holds cross-linguistically, this falls in line the claim of Penka (2011) that all negative quantifiers are semantically non-negative.

- Additionally, Negative Indefinites (NIs) in Scandinavian and Germanic have been argued to be a combination of covert NEG and an overt, non-negative indefinite (Penka, 2011).

- In SMPM, we see this division overtly, as ko-NPs are made up of the overt locus of sentential negation and a non-negative indefinite, formed by movement.

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7 West Flemish may present such a case, according to the analysis of Haegeman and Lohndal (2010).
6 Conclusion

- I have argued that the negative marker is a single NEG head made up of ko- and a floating /23/ tone, which maps via a somewhat opaque process onto elements immediately to its right.

- Additionally, I have argued that there are two types of negative quantifiers in SMPM, one that contains the negative particle and one that does not.

- I have used this data to raise a question of the source of variation between DN and NC concord languages, calling into question the assumption that negative quantifiers in NC languages may only bear [uNEG].

- Current research questions:
  - What is the trigger for and the nature of movement of an indefinite to a position local to negation?
  - What is the morphological process by which indefinites combine with the negative particle, and how does it relate to negation in the verbal paradigm?
  - What is the nature of the ni3-morpheme in ni-NPs, and is it related to what I have analyzed as the tonally-modified negative Completive marker ni23-?
  - Are there significant differences between ko-NP sentences and sentences where ko- and the indefinite are separate?

References


