The Interpretation of Indefinites and Bare Singulars in Spanish Child Language

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1. Introduction

The ability of children to access the wide-scope reading of indefinites in negated sentences has been the focus of several recent experimental studies (Krämer, 2000; Su, 2001; Lidz and Musolino, 2002; Miller and Schmitt, 2003). While some of these studies show that children have difficulty accessing the wide-scope reading, others show children patterning with adults on their interpretation of indefinites. This paper examines indefinites in Spanish child language and presents an experiment on child interpretation of indefinite and bare singular noun phrases under negation as in (1) and (2), respectively.

(1) El niño no trajo una pelota. (neg > a, a > neg)
The boy neg brought a ball
“The boy didn’t bring a ball.”

(2) El niño no trajo pelota. (neg > a, *a > neg)
The boy neg brought ball
“The boy didn’t bring a ball.”

Sentence (1) with the indefinite singular object is ambiguous; it can mean that the boy didn’t bring any balls (neg > a) or that there was a certain ball (out of a set a balls) that the boy didn’t bring (a > neg). Sentence (2) with the bare singular object only has one interpretation; it can only mean that the boy didn’t bring any balls.

This paper is organized as follows: section 1 discusses the properties of Spanish indefinite and bare singulars. Section 2 reviews the acquisition literature on indefinites and numerals under negation. Section 3 presents an experiment on child interpretation of Spanish indefinite and bare singulars and section 4 discusses the findings in light of recent proposals on child acquisition of wide-scope indefinites.

We can better understand the properties of Spanish indefinite singulars and bare singulars by first examining the properties of bare plurals in English. Carlson (1977) noted that bare plurals are not the plural counterpart of indefinite singulars. Instead, bare plurals and indefinite singulars pattern differently when in the scope of another operator. This is shown in (3) and (4) below.

(3) a. Arnold is looking for a student. (narrow/wide)
b. Arnold is looking for students. (narrow/*wide)

(4) a. Julie didn’t eat a french fry. (narrow/wide)
b. Julie didn’t eat french fries. (narrow/*wide)

In (3) the indefinite singular and bare plural are in the scope of an intensional predicate while in (4) they are in the scope of a negated predicate. The indefinite singulars in (3a) and (4a) can have either a narrow-scope reading or a wide-scope reading, making both of these sentences ambiguous. For example, sentence (3a) has two readings; it can mean that Arnold is looking for a student in general
(narrow-scope reading of the indefinite) or that there is a particular student that Arnold is looking for (wide-scope reading of the indefinite). The same is true for sentence (4a). On the other hand, the bare plurals in sentences (3b) and (4b) can only have a narrow-scope reading. These sentences can only mean that Arnold is looking for students in general and Julie didn’t eat any French fries.

Spanish bare singulars behave a lot like bare plurals except that their distribution is much more restricted. The examples in (5) and (6) show that Spanish bare singulars and indefinite singulars also pattern differently when in the scope of intensional and negated predicates, with bare singulars only allowing a narrow-scope reading, as shown in the (b) sentences.

(5)  
   a. Nicolás está buscando una casa.   (neg > a, a > neg)  
   Nicolás is looking for a house  
   “Nicolás is looking for a house.”

   b. Nicolás está buscando casa.   (neg > a, *a > neg)  
   Nicolás is looking for house  
   “Nicolás is looking for a house.”

(6)  
   a. Pedro no trajo una pelota.   (neg > a, a > neg)  
   Pedro didn’t bring a ball  
   “Pedro didn’t bring a ball.”

   b. Pedro no trajo pelota.   (neg > a, *a > neg)  
   Pedro neg brought ball  
   “Pedro didn’t bring a ball.”

Sentences (5a) and (5b) are ambiguous; (5a) can mean that Nicolás is looking for any house (i.e. he is house-hunting) or this sentence can mean that there is a certain house that Nicolás is looking for (i.e. a friend’s house). Sentence (6a) can have the interpretation that Pedro didn’t bring any balls or that there was a particular ball (out of a set of balls) that Pedro didn’t bring.

Unlike bare plurals, the distribution of Spanish bare singulars is restricted (Bosque, 1996). Spanish bare singulars can occur only in complement position, and are licensed under negation, intensional predicates in questions and with a certain class of verbs that seem to belong to a semantic class associated to HAVE or not HAVE. Some examples are shown below in Table 1.

<table>
<thead>
<tr>
<th>Table 1. Spanish Bare Singulars</th>
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<tbody>
<tr>
<td>a. Ando buscando casa.</td>
</tr>
<tr>
<td>I go looking for house</td>
</tr>
<tr>
<td>“I am house-hunting.”</td>
</tr>
<tr>
<td>b. Me falta cuchara.</td>
</tr>
<tr>
<td>Me lacks spoon</td>
</tr>
<tr>
<td>“I am missing a spoon.”</td>
</tr>
<tr>
<td>c. ¿Hay secretaria?</td>
</tr>
<tr>
<td>Is there secretary</td>
</tr>
<tr>
<td>“Is there a secretary?”</td>
</tr>
<tr>
<td>d. Tengo casa en Punta Arenas.</td>
</tr>
<tr>
<td>I have house in Punta Arenas</td>
</tr>
<tr>
<td>“I have a house in Punta Arenas.”</td>
</tr>
<tr>
<td>e. Me compré auto.</td>
</tr>
<tr>
<td>I bought car</td>
</tr>
<tr>
<td>“I bought a car.”</td>
</tr>
<tr>
<td>f. Me conseguí perro.</td>
</tr>
<tr>
<td>Me I got dog</td>
</tr>
<tr>
<td>“I got myself a dog.”</td>
</tr>
<tr>
<td>g. No traje pelota.</td>
</tr>
<tr>
<td>neg he brought ball</td>
</tr>
<tr>
<td>“He didn’t bring a ball.”</td>
</tr>
<tr>
<td>h. Quiero usar computador.</td>
</tr>
<tr>
<td>I want to use computer</td>
</tr>
<tr>
<td>“I want to use a computer.”</td>
</tr>
<tr>
<td>i. No tengo camisa limpia.</td>
</tr>
<tr>
<td>neg I have shirt clean</td>
</tr>
<tr>
<td>“I don’t have a clean shirt.”</td>
</tr>
<tr>
<td>j. Rodrigo necesitaba ayudante.</td>
</tr>
<tr>
<td>Rodrigo needed assistant</td>
</tr>
<tr>
<td>“Rodrigo needed an assistant.”</td>
</tr>
<tr>
<td>k. ¡Encontré polola!</td>
</tr>
<tr>
<td>I found girlfriend</td>
</tr>
<tr>
<td>“I got myself a girlfriend!”</td>
</tr>
<tr>
<td>l. Tomamos colectivo.</td>
</tr>
<tr>
<td>Let’s take taxi</td>
</tr>
<tr>
<td>“Let’s take a taxi.”</td>
</tr>
</tbody>
</table>
The distribution of nonspecific indefinites is not unique to Spanish. For example, Matthewson (1999) discusses the distribution of what she refers to as *polarity indefinites* in St’át’mcets (Lillooet Salish). Although St’át’mcets indefinite determiners are marked for number and spatio-temporal distance from the speaker, polarity indefinites are headed by the determiner *ku* which lacks these features. In other words, like Spanish bare singulars, indefinites headed by *ku* are featureless. Matthewson notes that St’át’mcets polarity indefinites are licensed by modals, negation and in questions and they always have a narrow-scope reading. Farkas and de Swart (2003) discuss what they refer to as *PredOp bare nominals* in Hungarian that are also licensed by negation in addition to the progressive aspect and the subjunctive. Again, these bare nominals always have a narrow-scope reading. Van Geenhoven (1998) discusses incorporating nouns in West Greenlandic, which always have a narrow-scope reading. Interestingly, verbs that incorporate nouns in West Greenlandic are very similar to those that take bare singulars in Spanish. Some examples are *get, buy, have, look for, sell,* and *eat.* Finally, Neidle (1988) points out that indefinite direct objects marked with genitive case (as opposed to accusative case) in Russian always take narrow-scope. The genitive case on indefinite objects is licensed by negation and also by verbs like *achieve, attain, want, look for* and *wish for.* Although this list of non-specific indefinites is not exhaustive, it is easy to find patterns in their distribution. Like Spanish bare singulars, they are often licensed by negation, in questions and under a certain class of verbs.

One account of Spanish bare plurals and bare singulars, put forth by Masullo (1992), proposes that they are defective nominal projections (not DPs but NPs) that must incorporate to a verb or preposition in order to satisfy the Visibility Condition. Since there is no overt manifestation of incorporation, these nominals must incorporate at LF. Evidence for his analysis includes the absence of Spanish bare nominals in subject position (as in (7)), where they are unable to incorporate, and the requirement of strict adjacency between the verb/preposition and the bare nominal that must incorporate to it (as in (8)).

(7)  a. El niñito no   trajo      pelota.
    The boy neg brought ball
    “The boy didn’t bring a ball.”

    b. *Ninito no  trajo       pelota.
       Child neg brought ball
       “A child didn’t bring a ball.”

(8)  a. Llegaron ayer          todos los invitados.
    Arrived   yesterday all       the guests
    “All the guests arrived yesterday.”

    b. *Llegaron ayer           invitados.
       Arrived      yesterday guests
       “Guests arrived yesterday.”

Although there is no exact consensus on the appropriate analysis of the lexical distribution of Spanish bare singulars (under negation, in questions and with a certain class of verbs), there are two properties of Spanish bare singulars that are important for the purposes of the experiment presented in this paper. First, Spanish bare singulars, are syntactically restricted to object position and secondly, bare singulars, unlike indefinite singulars, always receive the narrowest scope.

2. **Wide-scope Indefinites in Child Language**

Several experimental studies have looked at whether children can access both the wide-scope and the narrow-scope readings of indefinites. The following experimental studies look specifically at
whether children can access both readings when these indefinites occur in sentences involving negation.

Krämer (2000) examined child interpretation of indefinite singulars in Dutch. Dutch object noun phrases have either a wide-scope or narrow-scope reading depending on the surface position of the indefinite. If the indefinite occurs lower than negation, it has an obligatory narrow-scope reading in the adult grammar (as shown in (9a)). If it occurs higher than negation, it has an obligatory wide-scope reading (as shown in (9b)).

(9) a. De jongen heeft geen vis gevangen. (neg > a; *a > neg)
    The boy has not+a fish caught
    “The boy didn’t catch a fish.”

b. De jongen heeft een vis niet gevangen. (*neg > a; a > neg)
    The boy has a fish not caught
    “The boy didn’t catch a fish.”

The results of this study showed that Dutch children between the ages of 4 - 7 years old (mean: 5;8) do not distinguish between these two sentence types; instead, they assign narrow-scope readings to both scrambled and unscrambled object noun phrases.

In a similar study, Su (2001) examined child interpretation of indefinite noun phrases in English and Chinese by testing sentences like those shown in (10). Children were between 3 – 5 years old (mean: 5;0).

(10) a. Milaoshu meiyou qi yi-zhi gou. (neg > a; a > neg)
    Mickey Mouse didn’t ride a-CL dog
    “Mickey Mouse didn’t ride a dog.”

b. Mickey Mouse didn’t ride a dog. (neg > a; a > neg)

Both Chinese and English indefinite objects in (10) are ambiguous between a wide-scope and narrow-scope reading. While English children differed significantly from English adults by preferring a narrow-scope interpretation of the indefinite, Chinese children patterned with Chinese adults by preferring what appeared to be a wide-scope interpretation.

Lidz and Musolino (2002) tested 3 – 4 year-old (mean: 4;4) English- and 4 year-old (mean: 4;5) Kannada-speaking children on their interpretation of ambiguous sentences involving quantified noun phrases and negation, as in (11).

(11) a. Donald didn’t find two guys. (neg > two; two > neg)

b. Anoop eradu kaaru toley-al-illa. (neg > two; two > neg)
    Anoop two car drive-inf-neg
    “Anoop didn’t drive two cars.”

They found that while adults readily access either scopal interpretation for the quantified noun phrase, English- and Kannada-speaking children prefer the narrow-scope reading of the quantified noun phrase.

Two proposals put forth to account for previous findings on child interpretation of indefinites are the Non-Integration Hypothesis (Kramer, 2000) and what we will call the Number Reading Hypothesis based on Su (2001). The Non-Integration Hypothesis proposes that children acquire the predicative interpretation of indefinites early and the specific interpretation later (after age 7). The specific interpretation is acquired later because it requires discourse integration and children are unable to integrate discourse at this age.
The Number Reading Hypothesis proposes that the difference between English and Chinese child interpretation of indefinites (Chinese children patterned with adults while English children did not) is due to the lexical differences between English *a* and Chinese *yi-ge*. In Chinese, *yi-ge* is also the word for *one* while this is not true for the English indefinite. Chinese number expressions can be quantity-denoting or quantificational when lexically governed (Li, 1998). In Su’s study, an answer of “true” could mean that the child accessed either a quantity-denoting reading (scopeless) or a wide-scope reading of the indefinite/numeral while an answer of “false” means that the child accessed the narrow-scope reading of the indefinite. Su suggests that in the experiment Chinese children behaved differently from English-speaking children (Chinese children provided more “true” responses) because Chinese children have a quantity-denoting reading of the indefinite (i.e. *Mickey mouse didn’t ride one dog, he rode three*).

3. Main Experiment: Spanish Bare Singulars and Indefinite Singulars

Given the findings of previous experiments, Spanish is an interesting language to test because it has an indefinite article that is ambiguous in denoting either an indefinite or the number *one* (*un/una*) but also allows bare singulars with obligatory narrow-scope in a restricted set of contexts. If as predicted by the Non-integration Hypothesis, children are unable to access a specific interpretation for indefinites under negation, Spanish children should always interpret bare singulars as having a narrow-scope reading. Moreover, Spanish children should also prefer the narrow-scope reading for indefinite singulars. If this is the case, they should treat bare singulars and indefinite singulars identically. However, if, as predicted by the Number Hypothesis, that the numerical form of the indefinite singular plays a role in child interpretation of these sentences, then Spanish children, like Chinese children, should pattern with adults on their interpretation of indefinite singulars. In this case, they should not treat bare singulars and indefinite singulars identically. The goal of this study is to test whether Spanish children understand the lack of scope ambiguities in Spanish bare singulars and whether they treat indefinite singulars and bare singulars the same.

The target sentences in the present study involved Spanish bare singulars and indefinite singulars under negation. As noted above, while indefinite singulars under negation are ambiguous between a narrow-scope and a wide-scope interpretation (as shown in (12)), bare singulars under negation have only a narrow-scope interpretation (as shown in (13)).

(12) El niño no se compró un perro. (neg > a; a > neg)
    “The boy didn’t buy a dog.”

(13) El niño no se compró perro. (neg > a; *a > neg)
    “The boy didn’t buy a dog.”

Sentence (12) with the indefinite singular can mean that the boy didn’t buy any dogs or that there was a particular dog (out of a set of dogs) that the boy didn’t buy while sentence (13) with the bare singular can only mean that the boy didn’t buy any dogs.

3.1 Participants

We tested 24 Spanish-speaking children between the ages of 4;5 and 5;11 (mean: 5;0). All children were recruited from daycare centers and kindergartens in the city of Punta Arenas, Chile. In addition, we tested 30 Spanish-speaking adults, all of whom were undergraduates at the Universidad de Magallanes located in Punta Arenas, Chile.
3.2 Procedure

We tested child interpretation of sentences like (12) and (13) by using the Truth Value Judgment task (Crain & Thornton, 1998). Participants listened as an experimenter read a short story presented on picture cards. At the end of the story, a puppet made a statement about what he believed happened in the story. Participants had to determine whether the puppet’s statement accurately described the story or not.

All children were tested individually in a quiet classroom. Before running the task there was a practice session in which the puppet had to guess the age and name of the child. This allowed each child to become comfortable with the task. Afterwards, each child was presented with two fillers (one in which the puppet’s statement was true and one in which the puppet’s statement was false). If the child answered both filler items correctly, they would be presented with 18 more stories. There were four experimental stories which involved sentences with indefinite singulars like those in (12), four experimental stories which involved sentences with bare singulars like those in (13), four controls, and eight fillers. Stories were presented in pseudo-random order.

Adult participants were tested in quiet classrooms in groups of three to five. Stories were presented on picture cards in the same way they were presented to children. However, instead of feeding the puppet, participants were given a score sheet and were instructed to indicate whether the puppet’s statement was an accurate or inaccurate description of the story.

3.3 Materials

The experimental stories were the same in both the Bare Singular and Indefinite Singular conditions. The stories were written so that either an answer of “true” or “false” was correct in the Indefinite Singular condition. An answer of “true” indicated a wide-scope interpretation of the indefinite while an answer of “false” indicated a narrow-scope interpretation of the indefinite. In the Bare Singular condition, “false” (a narrow-scope interpretation) was the only correct answer. All experimental stories were presented on a set of three cards. Figure 1 shows a sample experimental story.

![Figure 1. Sample Experimental Story](image)

<table>
<thead>
<tr>
<th>Card 1</th>
<th>Card 2</th>
<th>Card 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Este niño está pensando en llevar algo al jardín para jugar con sus amigos. Primero, pensó en llevar sus pelotas pero después decidió llevar sus peluches.</td>
<td>Así es que el niño fue a buscar sus peluches pero se acordó que a sus amigos les gusta jugar a la pelota. Así es que decidió no llevar ningún peluche. (plausible dissent)</td>
<td>Al final el niño decidió traer sus pelotas al jardín. El niño trajo la pelota amarilla, la pelota azul y la pelota verde, pero no trajo la pelota naranja porque estaba desinflada.</td>
</tr>
</tbody>
</table>

The experimental story translated in English is as follows: **Card 1:** This boy is thinking about taking something to school to share with his friends. First he thought about taking his balls but he thought he’d rather take his teddy bears instead. **Card 2:** So he went to find his teddy bears and then he remembered that his friends really liked playing soccer. So he decided not to bring any teddy bears.
Card 3: So finally the boy decided to bring his balls to school. He brought the yellow ball, the blue ball and the green ball but he didn’t bring the orange ball because it was flat (had no air in it).

After hearing the target story, participants were presented either with an Indefinite Singular sentence (as in (14)) or a Bare Singular sentence (as in (15)) and had to decide whether the sentence was an accurate description of the story or not.

(14) El niño no trajo una pelota. (neg > a; a > neg)
    The boy neg brought a ball
    “The boy didn’t bring a ball.”

(15) El niño no trajo pelota. (neg > a; *a > neg)
    The boy neg brought ball
    “The boy didn’t bring a ball.”

All of the target sentences are shown in Table 2. To ensure that a particular noun was not responsible for participant responses, we divided sentences up into two groups. Half of the participants received the sentences in Set A in the Bare Singular condition and the sentences in Set B in the Indefinite Singular condition while the other half received the sentences in Set A in the Indefinite Singular condition and those in Set B in the Bare Singular condition. All children and adults received four experimental sentences from both the Bare Singular and Indefinite Singular conditions giving rise to a 2 X 2 mixed design with Condition as a within subjects factor and Age as a between subjects factor.

<table>
<thead>
<tr>
<th>Table 2. Experimental Sentences in both Conditions</th>
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<tbody>
<tr>
<td><strong>Set A: Bare Singular</strong></td>
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<tr>
<td>1. La niñita no se compró polera.</td>
</tr>
<tr>
<td>The girl neg rfl bought shirt</td>
</tr>
<tr>
<td>“The girl didn’t buy a shirt.”</td>
</tr>
<tr>
<td>2. El niño no usó lápiz.</td>
</tr>
<tr>
<td>The boy neg used pencil</td>
</tr>
<tr>
<td>“The boy didn’t use a pencil.”</td>
</tr>
<tr>
<td>3. El chico no trajo pelota.</td>
</tr>
<tr>
<td>The boy neg brought ball</td>
</tr>
<tr>
<td>“The boy didn’t bring a ball.”</td>
</tr>
<tr>
<td>4. La señora no se puso chaqueta.</td>
</tr>
<tr>
<td>The lady neg rfl put on jacket</td>
</tr>
<tr>
<td>“The lady didn’t put on a jacket.”</td>
</tr>
</tbody>
</table>

3.4 Results

Graph 1 shows the percentage of narrow-scope responses for adults and children.
The dependent measure is the number of times participants rejected (indicating a narrow-scope interpretation) target sentences. Adults rejected target sentences 43% of the time while children rejected target sentences 36% of the time in the indefinite singular condition. On the other hand, adults rejected target sentences in the Bare Singular condition 99% of the time and children 76% of the time. The proportion of “false” responses for each participant was entered into a 2 (Age: adults, 4-5 year old children) X 2 (Condition: bare singular, indefinite singular) mixed design Analysis of Variance (ANOVA) with Condition as a within subjects variable and Age as a between subjects variable. The analysis revealed a main effect for Age (F(1,52) = 4.388, p = .041) and a main effect for Condition (F(1,52) = 61.781, p = .0005). However, there was no significant interaction between Age and Condition (F(1,52) = 1.641, p = .206. The main effect for Condition indicates that like adults, children between the ages of 4 and 5 distinguish between bare singulars and indefinite singulars. The main effect for Age indicates that children are still not reaching adult levels on their interpretation of bare singulars and indefinite singulars. However, despite this fact, these findings do not challenge the underlying observation that Spanish children, like Spanish adults, are clearly treating bare singulars differently from indefinite singulars.

4. Discussion and Conclusion

The experiment presented in this paper examined child interpretation of Spanish bare singulars and indefinite singulars under negation. Specifically, we asked whether Spanish-speaking children would distinguish between both types of indefinites or whether they would treat them identically. The results presented above clearly show that like Spanish-speaking adults, Spanish-speaking children by 4 years of age distinguish between bare singulars and indefinite singulars. This means that Spanish-speaking children know that bare singulars have obligatory narrow-scope while indefinite singulars are ambiguous.

One proposal put forth to account for child interpretation of indefinites is the Non-integration Hypothesis (Krämer, 2000). This hypothesis proposes that children start out with the predicative, non-specific interpretation of indefinites and it is only later (after age 7) that children acquire the free variable, specific reading of indefinites (see Krämer, 2000 for more details). Our findings do not appear to support the Non-integration Hypothesis as Spanish-speaking children are able to distinguish between the obligatory non-specific (narrow-scope) reading and the optional specific (wide-scope) reading of indefinite singulars and for children to interpret indefinite singulars specifically, they must use information from prior discourse; in other words, they must be able to integrate discourse when assigning an interpretation to the indefinite (i.e. the child must remember that one of the balls was left unaffected in the sample story in Figure 1 in order to get the reading there was a ball that the boy...
However, before we can conclude that the results of the present study do not support the Non-integration Hypothesis, we must first take a look at our results in light of the Number Reading Hypothesis.

Su (2001) suggested that Chinese children behave differently from English-speaking children because of the lexical nature of the indefinites in both languages; in Chinese the indefinite is identical in form to the word for *one* but this is not true for English. Su (2001) concluded that Chinese children have a number, scope-independent reading of the indefinite while English-speaking children have a narrow-scope reading of the indefinite. It is possible that, as in the Chinese case, the lexical nature of the Spanish indefinite article may be playing a role in the interpretation of these sentences.

Table 3 shows the percentage of narrow-scope readings for indefinite singulars in the experiments discussed in section 2. Experiments were run in four different languages, and in all four, experimental sentences involved negation. Note that in adult Dutch scrambled indefinites have obligatory wide-scope readings, while in adult English, Chinese and Spanish indefinites under negation are ambiguous; they can have a narrow or wide-scope reading. This explains why Dutch adults behave so differently from English, Chinese and Spanish adults.

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</thead>
<tbody>
<tr>
<td>Children</td>
<td>84%*</td>
<td>67%*</td>
<td>23%</td>
<td>36%</td>
</tr>
<tr>
<td>Adults</td>
<td>0%</td>
<td>50%</td>
<td>36%</td>
<td>43%</td>
</tr>
</tbody>
</table>

* significant (p<.05) difference between child and adult responses.

Table 3 shows that while Dutch and English children rejected target sentences significantly more often than adults, Chinese and Spanish-speaking children pattern with adults. The results from Dutch indicate that children are unable to access the wide-scope interpretation for indefinite singulars since this is the only interpretation allowed in adult Dutch in the scrambled condition. The results from English-speaking children indicate a preference for a narrow-scope interpretation of indefinites. Although Chinese and Spanish experimental sentences were ambiguous, just like the English experimental sentences, there is a reduction in the amount of narrow-scope interpretations by adults and more interestingly Chinese and Spanish children patterned with adults (there was not a significant difference between child and adult responses). This finding makes sense if we take a closer look at the interpretations available for the Spanish and Chinese indefinite singulars.

There is at least one additional interpretation for Chinese and Spanish sentences that is not available for English or Dutch sentences because of the lexical nature of the indefinites in these four languages.

(16) Milaoshu meiyou qi yi-zhi gou.
Mickey Mouse didn’t ride a-CL dog
“Mickey Mouse didn’t ride a/one dog.”

(17) El niño no trajo una pelota.
The boy neg brought a ball
“The boy didn’t bring a/one ball.”

Sentences (16) and (17) have at least three possible interpretations. Sentence (17), for example, can mean that (i) the boy didn’t bring any balls (neg > a), (ii) the number of balls that the boy didn’t bring is one (number reading), and (iii) there was a particular ball (out of a set of balls) that the boy didn’t bring (a > neg). If participants rejected sentence (17) after hearing the story in Figure 1, they would be accessing interpretation (i); however, if participants accepted this sentence as an accurate description of the story, they could be accessing one of two possible interpretations, either (ii) or (iii). Based on the fact that previous studies have shown that children have difficulty accessing the wide-scope
interpretation of the indefinite in negated sentences (but see Miller and Schmitt, 2003), and because the Spanish indefinite article is lexically ambiguous between having a number reading or an indefinite reading, we conclude that Spanish-speaking children, like English-, Dutch, and Kannada-speaking children, are accessing a narrow-scope reading of the indefinite under negation and in addition, like the Chinese children, are accessing a number reading of indefinites under negation. This being the case, our findings do not provide evidence against the Non-Integration Hypothesis but they do provide support for the Number Reading Hypothesis.

The present study set out to test whether Spanish-speaking children distinguish between bare singulars and indefinite singulars under negation. This study accomplishes this goal by showing that by four years of age children understand the obligatory narrow-scope property of bare singular objects and the ambiguity of indefinite singular objects in relation to negation. As a result, Spanish-speaking children treat bare singulars and indefinite singulars differently. Based on our findings as well as findings from several experimental studies on child interpretation of indefinites, we suggest that Spanish-speaking children are accessing a narrow-scope reading and number reading of the indefinite.

Notes

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