

Learning definite determiners: genericity and definiteness in English and Spanish *

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1. Introduction

Languages are characterized by an intricate system of form-to-sense correspondences. In the vocabulary part of the mental lexicon, researchers believe that children solve part of the mapping problem by making use of the linguistic context in which lexical items appear (Gillette et al. 1999). A more complex variant of this problem is the problem of mapping form to sense in the functional subdomain of the mental lexicon, where the problem of polysemy is often complicated by complex grammatical constraints. We are particularly interested in the crosslinguistic comparison of the acquisition of functional elements such as the definite determiner, which can have comparable syntactic distributions across languages, but map into overlapping but non-identical semantic spaces. This paper is part of ongoing work (Pérez-Leroux, Munn and Schmitt, 2003, Pérez-Leroux, Munn and Schmitt, in press) examining the development of the acquisition of the definite determiner in contexts where a) the definite does not have its canonical use/interpretation of referring to a unique and specific discourse-identified entity; and b) there is cross-linguistic and intra-linguistic variation in the distribution of non-canonical uses.

We present here two studies examining the effect of the determiner and tense on children's generic interpretations in English and Spanish.

2. Linguistic background

The syntactic literature has identified a series of differences on the syntax/semantic mappings of noun phrases across languages, even in situations where languages share comparable morphosyntactic inventory of determiners and number, as is the case of the Romance and the Germanic languages (Chierchia 1998, Longobardi 1994, 2001, Vergnaud and Zubizarreta 1992). For the purpose of our study, we concentrate on Spanish and English, although it is worth noting that the typological contrast is broader, and the picture is more complex. The basic generalization is that, at least in canonical argument positions such as subjects, Spanish and some other Romance languages do not allow bare plural NPs, whereas, English does. These NPs are capable of obtaining a generic interpretation (i.e., to be used in kind-reference, and on generalizations about classes of individuals). Conversely, English disallows the generic interpretation with definite plural NPs, but such interpretation is possible in Spanish. Consider (1) and (2).

Table 1: NP types and mapping of generics in English and Spanish

Language	Bare plural generics	Definite plural generics
Spanish	no	yes
English	yes	no

- | | | | |
|-----|----|-------------------------|-----------------|
| (1) | a. | Zebras have stripes. | (√kind) |
| | b. | *Cebras tienen rayas. | |
| (2) | a. | The tigers eat meat. | (√object/*kind) |
| | b. | Los tigres comen carne. | (√object/√kind) |

What prevents definite from being interpreted as generics in English? One possible explanation is presented in Chierchia 1998, who argues that the existence of bare plurals in English blocks plural definites from being generic in English. In contrast, in Romance, the absence of the bare plural allows the definite to expand its interpretive range.

* Thanks to Pamela Bincang, Jennifer Buss and Karen Miller for running subjects at Michigan State University.

Chierchia proposes that the generic uses of the plural definite articles are simply modalized versions of the 'normal' definite meaning (the ι operator). Furthermore, under Chierchia's view, Romance noun phrases are full DPs but English bare plurals are bare NPs. The principle of avoid structure will force type-shift of NPs to kinds and it would prevent such shift of DPs in English, thus excluding definite plural generics from the grammar.

3. Children's acquisition of definites

Previous research provides with various indications that, while children appear to acquire definiteness early, acquisition of the full range of interpretations of definites, and the restrictions that govern them, may be a delayed development. There is evidence that preschool-aged children overuse of the definite in contexts that do not meet the uniqueness requirement of standard definites (Maratsos 1976; Schafer and deVilliers 1999; Schaeffer and Matthewson 2000, Matthewson, Bryant and Roeper 2002, and others). Furthermore, deVilliers and Roeper (1995) find that children treat definites as transparent, non-referential domains comparable to definites in Romance.

Recent experimental work has accumulated relevant evidence in the domain of inalienable construal, showing that children fail to restrict inalienable construal of definites in sentences such as (3) where English disallows the definite determiner and where uniqueness is not trivially satisfied in languages that allow the definite determiner (Ramos 1999; Baauw 2000; Pérez-Leroux, Schmitt and Munn 2003, in press). That is, children allow (3a) to refer to Bill and Mary's body parts, rather than another potential referent included in the experimental stories (i.e., body parts belonging to toys or other entities).

- (3) a. Bill and Mary scratched the arm.
- b. Bill and Mary scratched their arms.

Interestingly, some theoretical proposals link unrestricted availability of definite generic and of definite inalienable construal in Romance (Vergnaud and Zubizarreta 1992). Under this view, acquisition of the definite presents an interesting subset problem, as the child would have to sort out the differentiation between languages that unrestrictedly allow definites to receive kind and inalienable interpretations, in addition to the canonical readings, and languages which only allow the latter. In the next section we present four studies aimed to explore the following questions:

- (4) a. Do children allow generic interpretation of definite plurals in English and in Spanish?
- b. Are the rate of acceptance of the definite plural generic comparable across languages?
- c. If children in English allow generic readings of the definite plural, are they able to differentiate these from the bare plural?
- d. If they allow the definite plural to receive a generic interpretation, given that generic interpretations are sensitive to tense, is there an effect of tense in these interpretations? In other words, can tense interpretation play a role in children's interpretation of definites as generics?

4. Definite Plural subjects in present tense characterizing statements.

4.1 Hypothesis

We assume with Chierchia (1998) that the definite determiner is semantically the same in both languages but in English the bare plural blocks the definite plural generic. If children have problems deciding which form can be shifted to be interpreted as a kind, then they will accept a generic reading for the definite determiner. Assuming that children start out having a comparable analysis of the definite, and acquisition of the crosslinguistic difference depends on semantic competition from the bare nouns, we make the following predictions:

- (5) (i) Children in both languages will allow generic interpretations of the definite plural;
 (ii) The rate of acceptance of generic interpretations for the definite plural generic will not be identical for both languages. Since only English allows bare plural generics in subject position, we predict less generic interpretations for the definite plural in English than in Spanish;
 (iii) Since genericity is not a property of the definite determiner but rather a property of a clause/sentence, tense differences may trigger different rates of generic interpretation. We predict that present tense will be correlated with more definite plural generic interpretations than past tense if the story is narrated in the past.

Gelman and Raman (2003) compared comprehension of generic (bare) NPs with definites. While they established that children discriminated between these NP types, they also found a proportion of errors. These findings and findings on inalienable possession provide partial support for the above predictions. Our tests were designed to help complete the empirical picture of children's understanding of definiteness.

4.2 Methods

To investigate the status of definite plurals in generic contexts we designed 8 stories containing two atypical members of a kind, and one observer, member of another kind. Subjects were presented with yes/no questions about the atypical characters (spotted zebras, cats who love to be in the water, vegetarian tigers, lions who live on boats instead of the jungle, monkeys who prefer grass to bananas, robins who live in caves rather than nests, 3-legged horses, and bubble-breathing dragons). The answer to the question served to identify the semantic status of the noun phrase, and the determiner type. Affirmative answers to questions about canonical properties of the kind and, conversely, negative answers to questions about the atypical (i.e., noncanonical) property would indicate acceptance of a generic interpretation of a noun phrase, and vice versa. Each story was followed by 4 questions: one immediate question, two distractors (one positive, one negative) and a delayed question. The delayed question was introduced to evaluate whether definite errors had a performance basis. If this was the case, we predicted that there would be less definite generic errors when the question was presented immediately, as opposed to later, after the distractors. Question prompts were counterbalanced across stories for canonicity (typical and atypical properties, i.e., for zebras, having stripes vs. having spots), determiners and order of presentation (immediate/delayed). The English version of the study's counterbalanced schema is presented in Table 2. The Spanish version counterbalanced definites and demonstratives. Half the stories started with the canonical question, half the stories started with the noncanonical question.

Table 2: counterbalancing schema for the English Study

		Version A		Version B	
		Canonicity	NP type	Canonicity	NP type
4 stories	Presentation				
	Immediate	Canonical	Definite	Canonical	bare noun
4 stories	Delayed	Noncanonical	Bare noun	Noncanonical	definite
	Immediate	Canonical	Definite	Canonical	bare noun
	Delayed	Noncanonical	Bare noun	Noncanonical	definite

4.3 English Test

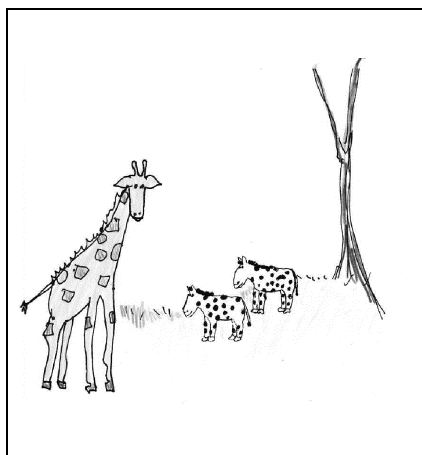
To test whether children accept generic readings of definites (i.e., is there a 'plural generic' error in the interpretation of English definites), and whether they are able to distinguish between bare and definite DPs, we presented a stories such as in (6), followed by prompts containing bare nouns (interpreted generically by adults) or definites DPs (interpreted only specifically by adults). The target answer to different conditions is summarized in Table 3.

Table 3: Target answer to different conditions in the English study

	Canonical	Non-canonical
Definites	Do the zebras have stripes? NO	Do the zebras have spots? YES
Bare nouns	Do zebras have stripes? YES	Do zebras have spots? NO

The English experiment contained additionally a question to control for story comprehension. If a child gave only generic answer to one story, we followed up with a demonstrative question, presented right after delayed question “*How about those? Do those X do Y?*”

(6) Example of English stories, Study I

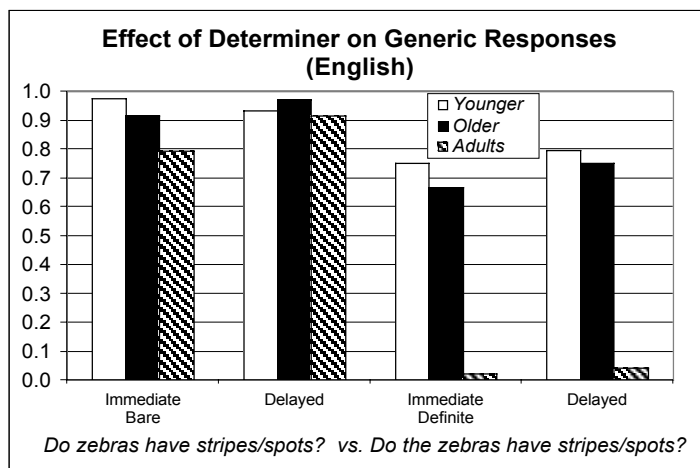
	<p>Story Zippy the zebra and Suzy the zebra are spotted. The giraffe wonders why they look different. Now let me ask you some questions...</p> <p>Immediate question: Do the zebras have spots? Positive distractor: Are the zebras black and white? Negative distractor: Do you have spots? Delayed question: Do zebras have stripes? Demonstrative follow-up questions: How about those zebras? Do those zebras have stripes?</p>
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Child participants were 20 children recruited from preschools in Toronto (Younger group age range was 4;5-6;0, N=11; Older group age range was 6;5-7;3, N=9) and adult participants were 12 undergraduate students recruited at Michigan State University.

4.4 English Results

We ran two ANOVAs on proportion of target response in children to evaluate the effectiveness of the method: one controlled for a “yes” bias, and the other to examine the effect of canonicity, (i.e., predicate type is canonical or noncanonical) a non-linguistic variable. There was no response bias nor was there an effect of canonicity.

Figure 1: Mean proportion of generic responses per determiner type per group.



We performed an ANOVA on subjects mean proportion of generic responses for determiners and order of presentation. Both the older and younger children give a substantial proportion of nontarget generic responses to definite determiners (~70%). For the older children, this proportion of error is slightly reduced in the immediate presentation, but does not yield statistical significance. Performance with bare nouns was high, as mean proportion of correct generic responses to bare nouns is high for children, and comparable to adults (~90-95%). Adults perform at ceiling with definite determiners, producing no definite generic errors. Results showed highly significant effects of Group ($F_{2,29}=39.203$, $p<.0001$), Determiner ($F_{1,29}=140.794$, $p<.0001$) and Determiner by Group interaction ($F_{2,29}=42.855$, $p<.0001$). Neither Order of Presentation nor any of its interactions were significant.

We presented a demonstrative control question to children who failed to answer the definite correctly. This question was a check for story understanding in these children. We wanted to ensure that definite error did not depend on a non-linguistic preference for generic responses, but on the interpretation of the NP type itself. If the high proportion of definite generic error was a result of a non-linguistic factor, children should also have high error rates with the demonstrative. In fact, generic errors with demonstratives were low, with an average generic error rate of 13%, supporting the view that the possibility of the generic error depended on children's representation of definites, and not with the task itself. The very high rate of generic responses to the definite may have been caused by the fact that the animals in the story were introduced by name, and subsequent reference to them with a definite (rather than by their names) would be a marked option. The results of the second study support this idea, as the generic bias drops when this factor was controlled for.

4.5 Children's generic interpretation of definite plurals in Spanish

In Spanish, where genericity can be expressed by plural definite NPs in subject position, we conducted the test as a contrast between definites (ambiguous between generic and specific reading) and demonstratives (specific in this context). We also asked, in view of the English results of high proportion of generic definite errors, whether definites in Spanish would have a bias towards the generic, given similar experimental conditions to the ones in the English study. We used the same pictures with a Spanish translation of the stories. An example of one of these is presented in (7):

- (7) **Spanish Present Tense story:** Fredi el tigre y Papo el tigre son vegetarianos. Mira, una zanahoria. El conejo está contento porque Papo y Fredi no comen carne y lo dejan tranquilo. Ahora dime una cosa...('Freddy the tiger and Papo the tiger are vegetarians. See, there's a carrot. The rabbit is happy because Papo and Freddy don't eat meat and leave him alone. Now, tell me something...')

Prompts:

Immediate question: ¿Los tigres comen carne? ('Do the tigers eat meat?')

Positive distractor: ¿Los tigres tienen rayas? ('Do the tigers have stripes')

Negative distractors: Y tu, ¿tienes rayas como ellos? ('Do you have stripes?')

Delayed question: ¿Esos tigres comen zanahorias? ('Do these tigers eat carrots?')

The counterbalancing schema used was comparable to that of the English experiment, as summarized by Table 2, with the difference that demonstratives was what alternated with definites, rather than bare nouns. The interpretive possibilities, naturally, are different. In Table 4 we summarize the target responses to the various conditions.

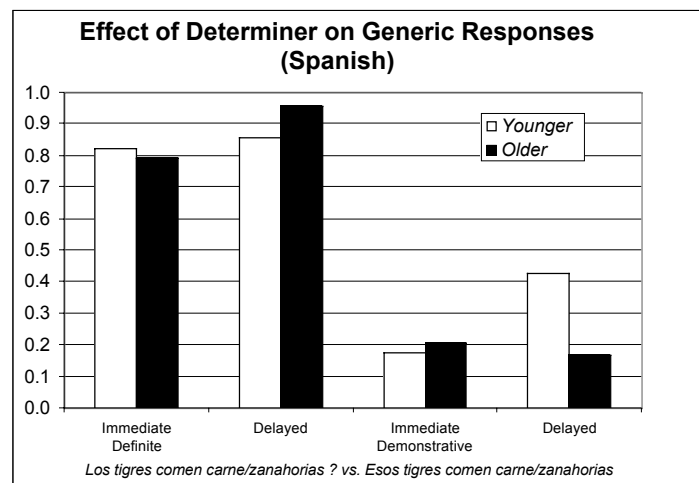
Table 4: Target answer to the different conditions in the Spanish present tense experiment

	Canonical	Non-canonical
Definite	¿Los tigres comen carne? YES or NO The tigers eat meat?	¿Los tigres comen zanahorias? YES or NO The tigers eat carrots?
Demonstrative	¿Esos tigres comen carne? NO These tigers eat meat?	¿Esos tigres comen zanahorias? YES These tigers eat carrots?

4.6 Spanish results

Thirteen Spanish-speaking children recruited in a Montessori school in Santo Domingo, Dominican Republic participated in the study. The younger group (N=7) age range was 3;5-5;3, and the older group (N=6) age range was 6;0-6;7. We compared the proportion of generic responses across the determiner and presentation conditions. The Spanish children show a clear preference for generic responses (~80-95%) to the definite, despite the fact that both the generic and the specific interpretation of the definite determiner are possible for definite plural subjects of characterizing sentence in Spanish. It is also clear that they distinguish the definite from the demonstrative, which receives generic response that average between 17% and 42%.

Figure 2: proportion of generic responses to definite plurals and demonstratives in Spanish



As before, we conducted ANOVAs to test for response bias and for the effect of canonicity, and found those factors to be irrelevant. A repeated measures ANOVA on proportion of generic responses resulted on highly

significant effect of Determiner ($F_{1,11} = 58.080$, $p < .0001$), significant effect of presentation (immediate vs. delayed) ($F_{1,11} = 6.681$, $p = .0254$) and significant interaction determiner x presentation x group ($F_{1,11} = 5.158$, $p = .0442$).

5. Study 2: Definite determiners and Tense in English and Spanish

5.1. Linguistic background and hypothesis

In English, the present tense forces a habitual/generic interpretation on sentences containing eventive predication. This is not the case in languages like Spanish (8b), where the present tense is ambiguous between a generic/habitual interpretation and one of ongoing activity at the speech time. Past tense in English favors the non-generic reading of eventive predicates. It should be noted that the generic/habitual reading is also possible in narrative contexts and also under special circumstances, as when discussing extinct species (9b) (Krifka et al 1995).

- (8) a. She eats apples.
 b. Come manzanas.
 ‘She eats/is eating apples.’
- (9) a. Children ate meat. (existential only)
 b. Sabre-toothed tigers ate meat. (generic ok)

In order to evaluate the grammatical basis of the definite generic bias in child English and child Spanish, we conducted a second pair of studies in comparing the interpretation of tense in the present and the past tense. We sought to examine whether children were sensitive to the role of tense in restricting the generic response. Specifically, we focused on the following questions:

- a) Do children accept generic readings of definites in the past when the stories are in the past (i.e., is there a ‘plural generic’ error in the interpretation of English definites)?
 b) Is there a difference in behavior between as the result of employing past versus present tense?

5.2 English past tense experiment

The task employed was a variant of the one in Experiment 1, but the stories were presented in the Past tense. An additional difference introduced was that we did not introduce the characters by name as we had done in Study 1, following the study in Raman and Gelman (2003).

- (10) **English Past Tense Story:** Once upon a time there were two spotted zebras. They were really funny and the giraffe loved to play with their spots. Now I am going to ask you questions about the zebras.

Prompts

- Immediate question: Do the zebras have spots?
 Positive distractor: Were the zebras black and white?
 Negative distractor: Do you have spots?
 Delayed question: And what about the zebras? Did the zebras have stripes?

As in the present tense study, we had a four question series: immediate question, two distractors, delayed question, with the delayed question alternating in canonicity with respect to the immediate question. Both target questions had definite plural subjects, and the linguistic variable under consideration here was use of the past and present tense. The target response for the different experimental conditions was presented in Table 5, below:

Table 5: Experimental Conditions in the English past tense study

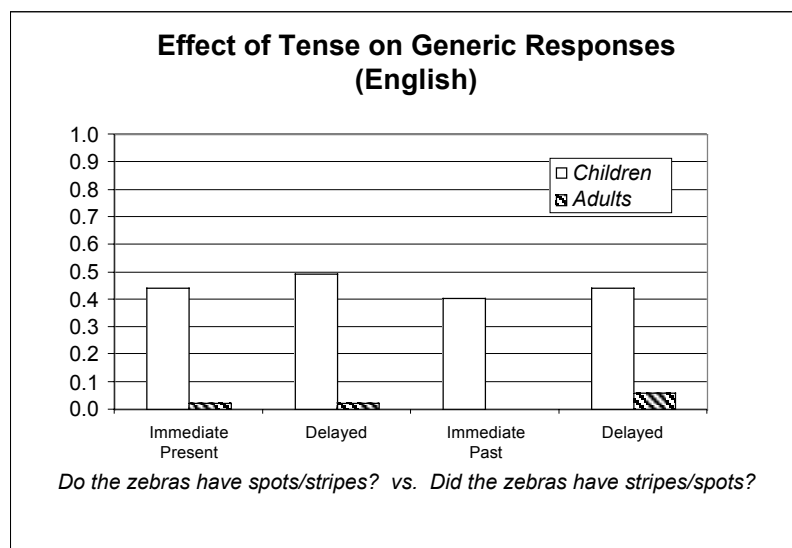
	Past	Present
Canonical	Did the zebras have spots? YES	Do the zebras have spots? YES
Noncanonical	Did the zebras have stripes? NO	Do the zebras have stripes? NO

5.3 English past tense results

To date, we have results only on a group of younger children (N=10, aged 3;0-5;2), and an adult control group (N=12). The children were recruited in daycares in East Lansing, Michigan, and the adults were undergraduate students enrolled at Michigan State University. As in the previous study, we conducted an analysis of variance on the proportion of generic responses. As shown in Figure 3, adults did not produce any generic responses on either the present tense or past tense sentences. This is expected given the unavailability of generic readings for definite DPs in the adult grammar. For the children, we had hypothesized that the children would show reduced error rates for the past tense sentences, since the Past tense can have an episodic reading.

What we find instead was an overall reduction in the proportion of the generic responses in the English children, in comparison with the first study. With the past tense stories, children give generic responses quite a bit (30-40%), slightly more when in the delayed presentation. Crucially, there is no effect of past tense vs. present tense presentation for sentences with definite plural subjects: the anticipated reduction in the proportion of generic responses to past tense sentence did not take place. A repeated measures ANOVA showed a significant effect of Group ($F_{1,20} = 10.464$, $p = .004$), an effect of presentation which barely missed statistical significance ($F_{1,20} = 4.160$, $p = .054$), and no effect of Tense as a sentence condition ($F_{1,20} = .480$, $p = .496$). There were no significant interactions of Tense by Group ($F_{1,20} = .942$, $p = .343$), or of tense by presentation ($F_{1,20} = .060$, $p = .809$), or tense by presentation by group ($F_{1,20} = .325$, $p = .575$).

Figure 3: Mean proportion of generic responses by determiner and by tense



So, while these preliminary results show that tense in the stimulus question did not have a specific effect in the children's generic response, it did seem to have a global effect as part of the story design. Children in this study seem to have an overall lower proportion of generic responses than they did in Study 1. We attribute this to an overall effect of past tense in the narrative, and possibly, to the changes in the narrative format. We return to this issue in the discussion.

5.4 Definite plurals and past tense in Spanish

The materials for the past tense stories in Spanish followed the same design as in the English past tense study. That is, stories were presented in the past tense with no mention of characters by name. In Spanish, which has two simple past tenses, perfective and imperfective; The generic characterization (of either individuals or kinds) are expressed in the imperfective past tense. Given the nature of these stories, which is to characterize atypical members of a kind, and to contrast these characterization with typical members, the choice of imperfective was natural.

- (11) a. La niña comió manzanas. (episodic statement)
 'The girl ate apples.'
 b. La niña comía manzanas. (characterizing statement)
 'The girl used to eat apples.'

Outside the narrative mode, the use of past imperfective, in contrast with the present tense introduces the implicature that the characterization is no longer valid. In such case, past characterization of kinds in current existence should receive only the specific reading, not the generic-kind referring reading.

- (12) a. Los tigres comían carne. (characterizing statement about specific tigers)
 'Tigers ate meat.'
 b. Los dinosaurios comían carne. (characterizing statements about dinosaurs in general)
 'Dinosaurs ate meat.'

We wished to examine whether children acquiring Spanish accept generic readings of plural definite subjects (i.e., is there a 'plural generic' error in the interpretation of Spanish past tense sentences, or are children able to use tense as a cue in selecting a specific interpretation of past tense sentences?). We used stories and prompts parallel to those of the English past tense study.

- (13) **Spanish Past tense story:** En un lugar muy lejano vivían dos tigres vegetarianos. El conejo no les tenía miedo porque no comían nada de carne. Mira, les encantan las zanahorias. Ahora te voy a hacer unas preguntas sobre la historia. (In a far away place lived two vegetarian tigers. The rabbit was not afraid of them because they didn't eat any meat. Look, they love the carrots. Now I am going to ask you a few questions about the story.)

Prompts

Immediate question ¿Los tigres comen carne? ('Do the tigers eat meat?')

Positive distractor ¿Los tigres tenían rayas? ('Did the tigers had stripes?')

Negative distractor ¿Te gustan las zanahorias? ('Do they like carrots?')

Delayed question ¿Los tigres comían zanahorias? ('Did the tigers eat carrots?')

As in the English study, there were four experimental conditions, according to tense, and order of presentation. In Spanish, the present tense condition is theoretically ambiguous, but the past tense condition must refer only to the atypical characters described in the story. The target response patterns are summarized in Table 6, below.

Table 6: Experimental Conditions in the English past tense study

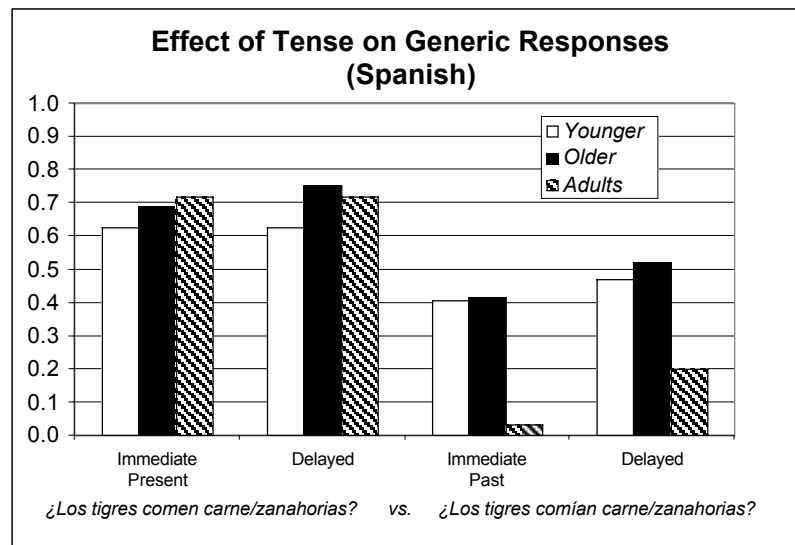
	Past	Present
Canonical	¿Los tigres comían carne? Did the tigers eat meat? NO	¿Los tigres comen zanahorias? Do the tigers eat carrots? YES/NO
Noncanonical	¿Los tigres comían zanahorias? Did the tigers eat carrots YES	¿Los tigres comen carne? Do the tigers eat meat? YES/NO

5.7 Spanish past tense results

Participants in this study were twenty Spanish-speaking children recruited at a Montessori school in Santo Domingo, Dominican Republic. The younger children (N=8) ranged in age from 2;9-4;7, and the older group (N=12), ranged in age from 5;0-to 7;6. The adult control group (N=8) were recruited in the same community and socioeconomic group as the children.

The analysis of generic responses showed substantially more generic responses for the present tense stories as predicted. Adults show a high proportion of generics in the present tense (~72%), and a low proportion in the past tense questions (3% in the immediate condition, 19% in the delayed condition). Children's generic responses were higher to the present tense question from (~60%-70%) than the past tense (40-50%). Both groups of children had slightly more generic responses in the delayed condition, as did the adults.

Figure 4: Proportion of generic responses to present and past tense definite plural sentences in Spanish



This overall picture is confirmed by the statistical analysis: the repeated measures ANOVA on proportion of generic responses showed a highly significant effect of Tense ($F_{1,25} = 58.201, p < .0001$), a non-significant effect of presentation ($F_{1,25} = 2.570, p = .121$), and a non-significant effect of group ($F_{2,25} = 1.748, p = .1947$). The interaction of tense by group was significant ($F_{2,25} = 7.517, p = .002$), but the other interactions were not (presentation by group had $F_{2,25} = .169, p = .845$; tense by presentation had $F_{1,25} = 1.036, p = .318$; and tense by presentation by group had $F_{2,25} = 7.517, p = .830$).

Overall, rates of generic response in the present tense condition are much lower than in the present tense study, so that preference for the generic response drops from 90% to 60-70% in the past tense study. In contrast with the preliminary results from the English past tense, children in the Spanish study show sensitivity to the effect of tense as a sentence condition. Although they still exhibit a certain proportion of past tense generic responses (a proportion, in fact, comparable to that of English children), they show strong and statistically reliable discrimination between the past tense and the present tense condition.

6. Discussion and conclusions

We had considered kind readings as one of the basic possibilities of reference covered under definite determiners across languages. On this basis, and supported by evidence from the literature pertaining to inalienable possession, as well as recent work on the role of language in understanding genericity (Raman and Gelman 2003, Hollander, Gelman and Star 2002) we predicted that English-speaking children would, like Spanish children, have a grammar of definites that includes the possibility of the generic reading. The results of the first study confirmed this prediction. The generic reading, that is, accepting a canonical property or rejecting a noncanonical property applied to a definite DP, was the most common response in both language groups. The English children showed reliable discrimination between definites and bare nouns, but they produce high rates of definite generic errors. The Spanish children showed a 100% preference for the generic reading of the definite.

Our second predictions pertained to the role of past tense as a potential restrictor of this definite generic errors. As explained above, a characterizing predicate in the present tense (i.e., *eat grass*, *lives in the jungle*) would be the proper way of making generic statements about kinds. Presented in the past tense (*ate grass*) has the implicature that such characterization belongs within a narrative or is no longer true. Thus, when applied to kinds, these make sense in two contexts: with extinct species, or to indicate that a property has changed, as in (14).

- (14) a. Dodos ate grass.
 b. White tigers lived in the Siberian steppes, but nowadays they only exist in captivity.

On this basis, we predicted that children would reduce their proportion of generic responses when the prompts were presented in the past. Past tense statements about non-extinct kinds should be interpreted existentially. While both the English and the Spanish-speaking children in the second study showed lower rates of generic interpretations, the results diverged across languages. For both groups we found an overall effect of the past tense narratives, when the data is compared to the first study. However, in English, there was no effect of tense in the prompt, just an overall reduction of the definite generic error. In Spanish we had, in addition to the overall effect of stories, significant discrimination for Tense in the prompt. Spanish children lagged behind adult controls in allowing a certain proportion of generic interpretation to past tense, overall the imperfective past allowed a major reduction on the generic interpretation of the definite plural. This suggests that children are not using all the information available to them in computing the interpretation of these characterizing sentences. Since, however, the imperfective can also be used with generic statements the results are not totally surprising. With respect to the overall decrease in definite plural generic interpretation in both languages, we must take into consideration that two features distinguish testing in Study I and Study II. One was that Past tense was used in the story presentation. The second was that the characters were not mentioned by name. Possibly, introducing names in the stories in Study I, a manipulation aiming to increase saliency of the antecedent for the definite DP, may have created an unintended bias toward the generic, since once the characters have names, it is pragmatically marked to refer to them with a definite rather than their names.

The acceptance of generic readings for definite plurals is predicted by Chierchia's (1998) proposal that the definite semantics is not different in both languages. As expected, if the lack of definite plural generics in English is due to the fact that English has a bare plural generic, Spanish-speaking children allow more definite plural generic interpretations than do English-speaking children a fact explainable within current ideas about grammar competition in the process of acquisition (Roeper 1999, Yang 1999).

It is also important to note that we cannot say that the definite plural generic is used because children don't yet know that the bare plural can receive a generic reading, since English-speaking children accept generic readings of the bare plural 90-95% of the time. It is evident from our data that this is not the case. However, it is also clear that they are failing to exclude plural definites from this potential interpretation. This state of affairs is similar to what we find in descriptions of the Acquisition of Principle B of the Binding Theory (Grodzinsky and Reinhart 1993), where children seem to have a good understanding of what is possible but not a clear understanding of what is not possible.

References

- Baauw, S. 2000. *Grammatical features and the acquisition of reference*. Utrecht: LOT.
- Chierchia, G. 1998 Reference to kinds across languages. *Natural Language Semantics* 6 339-405.
- de Villiers, J. and T. Roeper. 1995. Barriers, binding and acquisition of the NP/DP distinction. *Language Acquisition* 4, 73-104.
- Gillette, J, H. Gleitman, L. Gleitman and Anne Lederer 1999. Human simulations of vocabulary learning, *Cognition* 73:135-176.
- Grodzinsky, Y. and T. Reinhart. 1993. The innateness of binding and coreference. *Linguistic Inquiry* 24, 69-101.
- Hollander, M.A., S.A. Gelman and J. Star. 2002 Children's interpretation of generic noun phrases. *Developmental Psychology* 38, 883-894.
- Longobardi, G. 1994. Reference and proper names. *Linguistic Inquiry* 25 609-665.
- Longobardi, G. 2001. How comparative is semantics? A unified parametric theory of bare nouns and proper names. *Natural Language Semantics* 9, 335-369.
- Maratsos, M. 1976. *The use of definite and indefinite reference in young children*. Cambridge: Cambridge University Press.
- Matthewson, L. T. Bryant and T. Roeper. 2001. A Salish stage in the acquisition of English determiners: unfamiliar 'definites'. The Proceedings of SULA: The semantics of under-represented languages in the Americas. *University of Massachusetts Occasional Papers in Linguistics* 25.

- Matthewson, Lisa and Jeannette Schaeffer. 2000. Grammar and pragmatics in the acquisition of article systems. in Jill Gilkerson, Misha Becker, and Nina Hyams (eds.) *UCLA Working Papers in Linguistics: Language Development and Breakdown* 1, University of California, Los Angeles, 1-39.
- Perez-Leroux, A.T., C. Schmitt and A. Munn. (in press) The development of inalienable possession in English and Spanish. in R. Bok-Bennema, B. Hollebrandse, B. Kampers-Manhe and P. Sleeman (eds.) *Romance Languages and Linguistic Theory* 2002, Amsterdam, John Benjamins.
- Pérez-Leroux, A.T., C. Schmitt and A. Munn. 2003 Syntactic features and discourse factors in children's interpretation of definite determiners in inalienable possession. *Actes de l'ACL 2002/ 2002 Canadian Linguistics Association Proceedings*, 245-255.
- Raman, L. and S. Gelman. 2003. Preschool children can use linguistic form class and pragmatic cues to interpret generics. *Child Development* 74, 308-325.
- Ramos, E. 1999. *The syntax of NPs in SLI*. Doctoral dissertation, U of Massachusetts, Amherst.
- Roeper, T. 1999. Universal Bilingualism. ms. U. of Massachusetts, Amherst.
- Schaeffer, J. and L. Matthewson. 2000. On the determiner systems of St'át'imcets and English child language. *UCLA Working Papers in Linguistics*.
- Schafer, R. and J. de Villiers. 1999. Imagining articles: What *a* and *the* can tell us about the emergence of DP. In S. Catherine Howell, S. A. Fish, and T. Keith-Lucas. *Proceedings of BUCLD 24*, Sommerville, Cascadia press, 609-620.
- Vergnaud, J.-R. and M. L. Zubizarreta. 1992. The definite determiner in French and English. *Linguistic Inquiry* 23, 595-652.
- Wexler, K. 2003. Maximal trouble. Talk given at the CUNY Conference on Sentence Processing, MIT 2003.
- Yang, C. 1999. The variational dynamics of natural language: acquisition and change. Ph.D. dissertation, MIT.

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