What Crosslinguistic Acquisition Differences Can Tell Us about Invisible Syntax: The Case of Spanish *parecer*

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1. Introduction

This study investigates the acquisition of a notoriously challenging structure, Subject-to-Subject Raising (StSR) with *seem*-type predicates. An example is given in (1), where the DP *John* has undergone A-movement from the embedded subject position to the matrix subject position across the intervening experiencer argument, *Mary*.
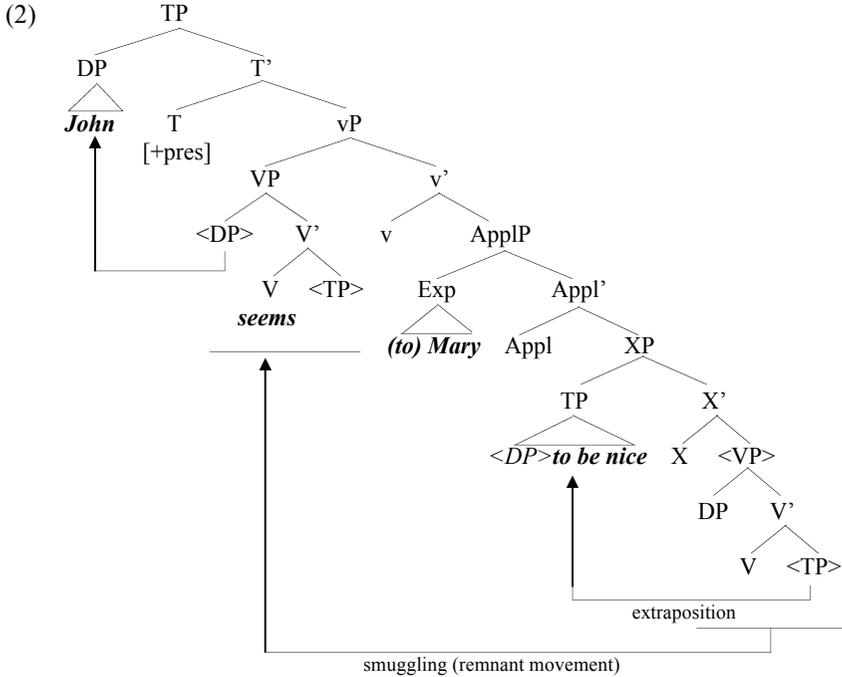
(1)   John seems (to Mary) t_i to be nice.

Despite the extensive literature on the acquisition of StSR in English, there remain competing explanations for the delay. One prominent account is that the experiencer argument induces an intervention effect, either for grammatical or processing reasons. The results of our experimental study provide evidence for this claim –English-speaking children perform poorly on raising with *seem*, whether the intervening experiencer argument is overt *or implicit*. Conversely, Spanish-speaking children show adult-like performance with the raising semi-modal verb *parecer* 'seem', which does not select an experiencer argument. This discrepancy suggests that the experiencer argument of *seem* is always syntactically projected and that implicit arguments may induce intervention effects.

1.1. Intervention accounts

According to Hyams and Snyder's (2005, 2015) Universal Freezing Hypothesis (UFH), immature children do not have access to the smuggling operation that adults use to circumvent the intervening experiencer argument, as illustrated in (2) (Collins 2005a). Thus, for these children A-movement in raising (and passives) is reliably blocked due to minimality constraints.

(2)

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                    TP
          ┌─────────┴─────────┐
         DP                   T'
         │              ┌──────┴──────┐
       John             T             vP
                     [+pres]     ┌─────┴─────┐
                                VP           v'
                           ┌─────┴────┐  ┌────┴─────┐
                         <DP>        V'  v        ApplP
                                  ┌───┴───┐    ┌────┴────┐
                                  V     <TP>  Exp      Appl'
                                seems        (to) Mary ┌──┴───┐
                                                      Appl    XP
                                                          ┌────┴────┐
                                                         TP         X'
                                                    ┌────┴────┐  ┌───┴───┐
                                                  <DP> to be nice X    <VP>
                                                                    ┌───┴───┐
                                                                   DP      V'
                                                                        ┌──┴───┐
                                                                        V    <TP>

                                                              extraposition

                          smuggling (remnant movement)
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Abstracting away from specifics, Orfitelli (2012) proposes the Argument Intervention Hypothesis (AIH) which holds that children cannot A-move across a structurally intervening argument. Importantly, these two accounts hypothesize that the experiencer in StSR *seem* is always syntactically projected (see Landau 2010), even when not overtly produced, similar to the covert external argument in passives (see Baker, Johnson & Roberts 1989; Collins 2005b; Gehrke & Grillo 2008, *inter alia*).

The diagnostics of implicit argumenthood that exist for the passive *by*-phrase are mostly agent-oriented and hence not available for the experiencer of StSR sentences. However, examples from binding (3a-b), 'speaker/experiencer'-oriented modifiers (3c), and instrumental phrases (3d) may suggest the presence of an implicit experiencer argument. For instance, in (3a-b) the implicit experiencer must be disjoint from *Mary* and *Nixon* respectively. In (3c), it is the implicit experiencer who was convinced that James loved the woman. However, when *seem*, the licenser of the implicit experiencer, is removed, as in (3d), the sentence becomes severely degraded. Similarly, in (3e), the diamond is perceived to be of good quality by the implicit experiencer.

(3) a. John seems {$ec_{*i/k}$ /to her$_{*i/k}$ } to like Mary$_i$.
   b. (Because of his arrogance) To implicate Nixon$_i$ seemed {$ec_{*i/k}$ /to him$_{*i/k}$ } to be impossible.
   c. James killed the woman he so convincingly seemed to love.
   d. ??James killed the woman he so convincingly loved.
   e. This diamond seems to be of high quality, at least with the naked eye.

Assuming implicit experiencers are syntactically represented, intervention accounts therefore predict that children should perform poorly with StSR both when the experiencer is overtly produced, and when it is not.[1]

1.2. Testing intervention accounts: Previous studies

The experimental literature offers divergent results with respect to children's performance on StSR *seem* without an overt intervening experiencer. Hirsch, Orfitelli and Wexler (2007), Hirsch (2011), and Orfitelli (2012) found that children do poorly with StSR *seem* without an overt experiencer. Becker (2006), on the other hand, found that English-speaking children were able to understand *seem* sentences when the experiencer was implicit, but failed at raising past an overt experiencer. Similarly, Choe (2012) found that children had difficulty comprehending StSR sentences with an intervening experiencer, but the difficulty disappeared when the experiencer was fronted. One of the main goals of this paper was to provide new experimental evidence by testing the same group of English-speaking children on raising with both explicit and implicit experiencers, using the same materials and procedure.

Additionally, we tested the intervention hypothesis by investigating the development of raising in Spanish, where the semi-modal verb *parecer* 'seem' does not select for an experiencer. In the following section we provide an overview of the syntactic and distributional properties of *parecer*. We will then provide a summary of our predictions.

1.3. Spanish *parecer*

The Spanish verb *parecer* represents an interesting test case for intervention accounts due to its dual status as both a functional and a lexical verb (see Ausín & Depiante 2000; Ausín 2001; Fernández-Leborans 1999; Torrego 1996, 1998, 2002):[2]

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[1] This is in contrast to processing-based intervention accounts such as Choe's (2012) Performance-based Intervention Effects hypothesis, which predicts intervention effects only with overt intervening arguments. For more in-depth discussion of processing effects, see Mateu (2016).

[2] See Cinque (2004) and Haegeman (2006) for a similar analysis of Italian *sembrare*.

a) F-*parecer* (also known as 'bare' *parecer*): A functional verb (of epistemic modality) with no argument structure (i.e. it does not select an experiencer).

b) L-*parecer* (also known as 'opinion' *parecer*): A lexical verb with a meaning closer to 'think/consider', which selects an experiencer.

Evidence for the dual status of this verb is provided by differences in complement selection. Both verbs allow for CP complements (4); however, while F-*parecer* can select (non-finite) vPs or AP small clauses (5a), L-*parecer* only selects APs that are individual-level predicates (5b).

(4) a. *Parece que Juan es bastante listo*.
   seems that John is quite   smart
   'It seems that John is quite smart.'

  b. *Me   parece que Juan es bastante listo.*
   1SG.DAT seems that John is quite   smart
   'It seems to me that John is quite smart.'

(5) a. *Este chico parece {(ser) listo / cansado}*.
   this boy   seems   be   smart tired
   'This boy seems {(to be) smart / tired}.'

  b. *Este chico me   parece {(*ser) listo / *cansado}.*
   this boy   1SG.DAT seems   be   smart   tired
   'This boy seems to me {(to be) smart / tired}.'

Further evidence for the dual status of *parecer* comes from tense, aspect, and mood selection. Both F-*parecer* and L-*parecer* can appear in the present and imperfect, but F-*parecer* cannot occur in the preterit, perfect, or progressive (6).

(6) a. *Juan {parece   /parecía   /*pareció   /*ha parecido/*
   John   seem-PRS.3SG seem-IMPF.3SG seem-PRET.3SG   has seemed
   *está pareciendo} (ser) listo.
    is   seeming   be   smart
   'John seems/ used to seem/ seemed/ has seemed/ is seeming (to be) smart.'

  b. *Juan me   {parece   / parecía   / pareció   /*
   John 1SG.DAT seem-PRS.3SG seem-IMPF.3SG seem-PRET.3SG
   ha parecido / está pareciendo} listo.
   has seemed   is   seeming   smart
   'John seems/ used to seem/ seemed/ has seemed/ is seeming (to be) smart.'

On the other hand, while F-*parecer*, as in the case of other modals, allows the subjunctive mood in the subordinate clause (7a), L-*parecer* does not (7b):

(7) a. {*Parece* / *puede* } *que lloviera*.
    seems / may   that rain-SBJV
    'It seems that it is raining / It may have rained.'

  b. *Me   *parece que lloviera*.
    1SG.DAT seems that rain-SBJV
    'It seems to me that it is raining.'

As noted in Torrego (2002), the fact that F-*parecer* allows clitic-climbing with certain verbs (8) is also consistent with this modal analysis:

(8) a. *Juan parece haber*lo *resuelto*.
    John seems have-it solved
    'John seems to have solved it.'

  b. *Juan* lo *parece haber resuelto*.
    John it seems have solved
    'John seems to have solved it.'

Additional evidence for the modal-like behavior of F-*parecer* comes from the possibility of stacking other modals behind it, (9a), as is possible with other modals (9b).

(9) a. *El*   *candidato parece poder hablar zapoteco*.
    The candidate seems may   speak Zapotec
    'The candidate seems to be able to speak Zapotec.'

  b. *El*   *candidato debe poder hablar zapoteco*.
    The candidate must may   speak Zapotec
    'The candidate must be able to speak Zapotec.'

Finally, as noted by Fernández-Leborans (1999), neither modals nor F-*parecer* allow pseudo-clefts, (10a). However, other (restructuring) verbs do, (10b).

(10) a. *Lo que {*puede* / *debe* / *parece*} *Juan, es saber la noticia*.
    It   that may   must seem   John is know the news
    'What John {may/ must/ seems}, is to know the news.'

  b. *Lo que* {*pretende* /*quiere*} *Juan, es saber la   noticia*.
    It   that hope   want   John is know the news
    'What John {wants/ desires}, is to know the news.'

A summary of these characteristics is contained in Table 1.

Table 1. Summary of morphosyntactic characteristics of F-*parecer* and L-*parecer*.

Morpho-syntactic characteristics	F-*parecer*	L-*parecer*
Present T/Asp	✓	✓
Imperfect T/Asp	✓	✓
Perfective T/Asp (perfect/preterit)	✗	✓
Progressive T/Asp	✗	✓
parecer + CP	✓	✓
subjunctive mood in CP	✓	✗
parecer + vP	✓	✗
clitic climbing	✓	N/A
modal stacking	✓	N/A
pseudo-clefting	✗	N/A
parecer + AP	✓	✓
individual-level predicate	✓	✓
stage-level predicate	✓	✗
Experiencer argument selection	✗	✓

These, among other diagnostics, show that F-*parecer* is a modal-like verb, which does not select an experiencer – a property of modals in general, while L-*parecer* is closer to a lexical verb, and selects an experiencer argument. Crucially, the appearance of the dative clitic experiencer forces the lexical verb 'think' reading, and the absence thereof forces the F-*parecer* analysis (Ausín 2001; Ausín & Depiante 2000; Fernández-Leborans 1999; Torrego 2002).

1.4. Questions we address

In this paper we address two questions: i) Are the delays observed in StSR with *seem*-type verbs due to intervention effects? If so, ii) can implicit arguments induce intervention effects? In order to answer these questions, we will compare English-speaking children's performance on StSR *seem* with a covert and overt experiencer, and Spanish-speaking children's performance on StSR with F-*parecer* (no experiencer) and L-*parecer* (overt experiencer). Following the discussion of our comprehension study (Section 2), we will analyze and compare children's naturalistic productions of these constructions (Section 3).

2. Comprehension study

If the intervention hypothesis we are entertaining is correct, we should find English-speaking children perform poorly with StSR *seem*, both when the experiencer is overt and when it is covert. However, Spanish-speaking children should only perform poorly with L-*parecer*, but not F-*parecer*, since there is no (overt or covert) intervening argument to by-pass in the latter case. The predictions of grammar-based intervention accounts are represented in Table 2.

Table 2. Predictions of grammar-based intervention accounts (UFH, AIH).

Construction	Performance
Performance on StSR *seem* with a covert experiencer in English.	Poor
Performance on StSR *seem* with an overt experiencer in English.	Poor
Performance on StSR F-*parecer* with no experiencer in Spanish.	Good
Performance on StSR L-*parecer* with an overt experiencer in Spanish.	Poor

2.1. Subjects

A total of 30 monolingual English-speaking children (16 girls, M = 5;6, range = 4;2-6;7) and 36 Spanish-speaking children (18 girls; M = 5;8, range = 4;5-6;11) participated in this study. Children were grouped into three age categories equal in number: four-, five-, and six-year olds. The English study was conducted primarily in a childcare center in Los Angeles and in an elementary school in Ventura County. The Spanish experiment was conducted in a preschool and a primary education center in Granada, Spain. Ten native English-speaking adults (M = 34.22, range = 22-66) and 12 native Spanish-speaking adults (M = 31.66, range = 25-61) were also tested.

2.2. Materials and Procedure

The methodology employed was a Truth-Value Judgment task (TVJT; Crain & McKee 1985). In this paradigm, the child observes a story and then a puppet comments on it. The task of the child is to indicate whether the puppet commented truthfully or not. Two training trials preceded each test session to ensure the child understood the task and would correct the puppet when the comment was inappropriate. Six unique test scenarios were used to keep children engaged in the task. An example set of pictures is shown on Figure 1. In general, the stories were similar to those employed in Hirsch et al. (2007), Becker (2006), and Orfitelli (2012). However, in our experiments, all stories involved individual-level predicates in order to match the Spanish stimuli for L-

parecer. Following the story, the puppet, commented on it using one of the sentence types included in Tables 3 and 4.

Table 3. Subject-to-subject raising test items for the English experiment.

Condition	True Test Items	False Test Items
Copula	The dog is definitely white.	The dog is definitely grey.
Unraised	It seems that the dog is grey.	It seems that the dog is white.
Raised *seem*, covert exp.	The dog definitely seems to be grey.	The dog definitely seems to be white.
Raised *seem*, overt exp.	The dog seems *to the cat* to be grey.	The dog seems *to the cat* to be white.

Table 4. Subject-to-subject raising test items for the Spanish experiment.

| Condition	True Test Items	False Test Items
Copula	*El perro es definitivamente blanco.* 'The dog is definitely white.'	*El perro es definitivamente gris.* 'The dog is definitely grey.'
Unraised	*Parece que el perro es gris.* 'It seems that the dog is grey.'	*Parece que el perro es blanco.* 'It seems that the dog is white.'
Raised F-*parecer* (no exp., vP)	*El perro definitivamente parece ser gris.* 'The dog definitely seems to be grey.'	*El perro definitivamente parece ser blanco.* 'The dog definitely seems to be white.'
Raised F-*parecer* (no exp., AP)	*El perro definitivamente parece gris.* 'The dog definitely seems grey.'	*El perro definitivamente parece blanco.* 'The dog definitely seems white.'
Raised L-*parecer* (exp., AP)	*El perro* le *parece* al gato *gris.* 'The dog seems to the cat (to be) grey.'	*El perro* le *parece* al gato *blanco.* 'The dog seems to the cat (to be) white.'
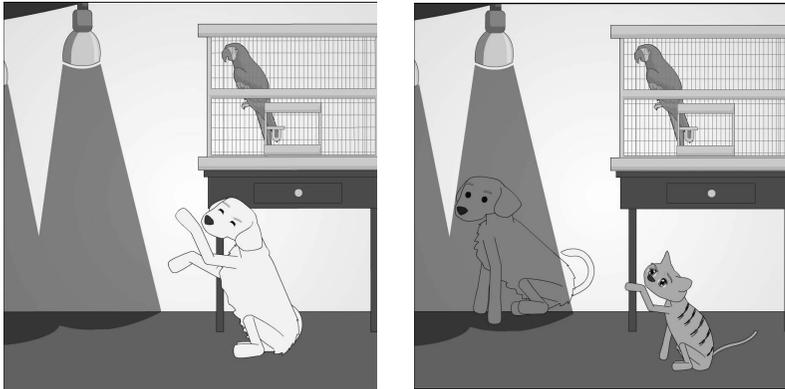
Figure 1. Experiment sample pictures: The left picture shows reality – the dog is white. The right picture shows appearance – the dog seems grey.

The purpose of the copula condition was to make sure children understood the difference between reality and appearance in our stories.[3] The unraised condition served to verify that children had an understanding of the lexical and semantic properties of the verb *seem/parecer*. Their performance on the raised conditions must therefore be considered separate from this matter. Children scoring less than 5/6 items correct on either the copula or unraised conditions were excluded from the study.

Crucially, the inclusion of Spanish StSR F-*parecer* condition served to determine if children could perform well with raising when there is no (overt or covert) experiencer. This is in contrast to English, where the experiencer is syntactically present but not overtly expressed. Finally, we included a second F-*parecer* condition with only the AP, since L-*parecer* only allows for small clauses. This would ensure that any behavioral difference between children's performance on the F-*parecer* and L-*parecer* conditions was exclusively due to the presence of the intervening experiencer and not related to the difference of the complement.

2.3. *Results*

The English-speaking subjects' performance on the four different conditions is shown in Figure 2. As expected, while the children did well with the unraised *seem* trials ($M = 5.63/6$), all three groups of children performed poorly in the raised *seem* with an overt experiencer condition ($M = 3.37/6$).

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[3] Following Hirsch et al (2007) we included d*efinitely/definitivamente* in the copula condition to disambiguate between a stage- versus individual-level predicate reading of the copula, i.e. in order to rule out the interpretation in which adults would accept that the dog *is* grey *when* he stands under the light. We added the modifier on the 'raising with a covert experiencer' condition to match the copula condition.

Importantly for us, children performed rather poorly in the raised with a *covert* experiencer condition as well ((M = 3.17/6). In fact, they did not perform any better in this condition than in the overt experiencer condition. Wilcoxon signed-rank tests confirmed this, Z = -.8, p = .42. This result replicates the findings in Hirsch et al. (2007), Hirsch (2011), and Orfitelli (2012), and contradicts those of Becker (2006) and Choe (2012), suggesting that children experience difficulties with movement over arguments even when they are not overtly expressed.
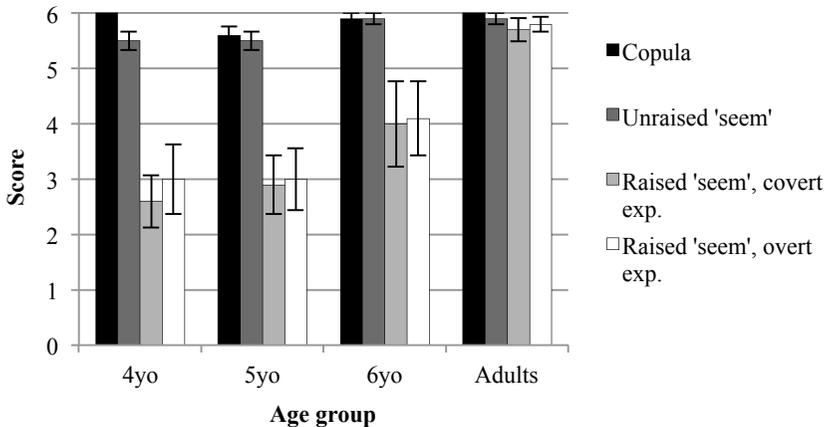
Figure 2. English Subject-to-Subject Raising study results by age group and condition.

In stark contrast to the English-speaking children, we found that Spanish-speaking children did as well in the raised F-*parecer* condition (M = 5.5/6) as in the unraised one (M = 5.58/6). Wilcoxon signed-rank tests confirmed this, Z = -.456, p = .648. On the other hand, as predicted by the intervention hypothesis, children did worse with raised L-*parecer* (M = 4.5)[4] as compared to F-*parecer* (AP, *M*=5.31/6). A Wilcoxon signed-rank test confirms this, Z = -2.726, p = .006. The Spanish-speaking subjects' performance on the five different conditions is shown in Figure 3.

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[4] In Section 3 we briefly speculate about why the average score of raised L-*parecer* may be higher than the average score of raised *seem* with an overt experiencer.
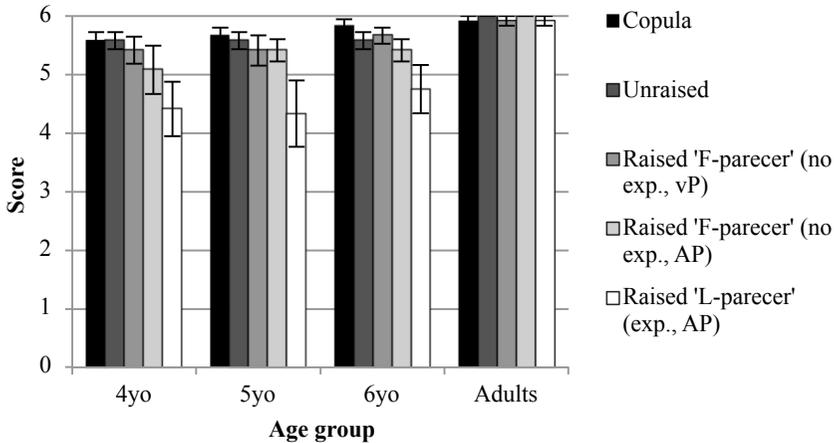
Figure 3. Spanish Subject-to-Subject Raising study results by age group and condition.

Summarizing, English-speaking children show difficulties with raising *seem* with and without an overt experiencer, e.g. 'The dog seems to be grey' until at least age six. Meanwhile, Spanish-speaking children succeed on superficially analogous sentences, e.g. 'El perro parece ser gris', scoring as well as in these as in the unraised condition by age four. This asymmetry strongly suggests that the covert experiencer argument of *seem* is always syntactically represented in English, inducing intervention effects even when it is not overtly expressed, as suggested by some grammar-based intervention accounts (Orfitelli 2012; Snyder & Hyams 2015). Additionally, our results lend support to the theoretical literature that claims F-*parecer* and L-*parecer* have different argument structures (Ausín & Depiante, 2000; Ausín, 2001; Fernández-Leborans, 1999).

3. Corpus study

The main goal of our corpus study was to evaluate the predictions of intervention accounts (UFH, AIH) in (naturalistic) production. If the implicit experiencer argument of *seem* is always syntactically projected, English-speaking children may be less likely to use the raising construction, as opposed to the unraised construction, when we compare it to adult speech. However, Spanish-speaking children should only show this inclination with L-*parecer*, but not F-*parecer*, since intervention accounts only predict difficulties with raising when there is a structurally intervening argument.

Utterances containing the raising verb *seem* and (F-/L-)*parecer* were extracted from all the English and Spanish corpora available in the CHILDES database (MacWhinney 2000) as of July 2016 and classified into two groups – speech produced by adults and speech produced by children younger than 6;11.29. The results are given in the Tables 5 and 6.

Table 5. Results from CHILDES corpus study for English *seem*.

Construction	Adults	Children
***seem,* covert exp.**	**95.8% (1213)**	**94.1% (64)**
Unraised *seem*	7.5% (91)	23.4% (15)
Raised *seem*	92.5% (1122)	76.6% (49)
***seem,* overt exp.**	**4.2% (53)**	**5.9% (4)**
Unraised *seem*	41.5% (22)	50% (2)
Raised *seem*	58.5% (31)	50% (2)

Table 6. Results from CHILDES corpus study for Spanish *parecer*.

Construction	Adults	Children
F-*parecer,* no exp.	**40.1% (460)**	**65.9% (143)**
Unraised F-*parecer*	18.9% (87)	22.4% (32)
Raised F-*parecer*	81.1% (373)	77.6% (111)
L-*parecer,* exp.	**59.9% (686)**	**34.1% (74)**
Unraised L-*parecer*	63.7% (437)	75.7% (56)
Raised L-*parecer*	36.3% (249)	24.3% (18)

Consistent with intervention accounts such as UFH (Snyder & Hyams 2015) and AIH (Orfitelli, 2012), we find some interesting differences regarding children's likelihood of using the raised construction in comparison to adults. Fisher exact tests show that the unraised / raised ratio is significantly different in English-speaking adults and children. Specifically, children are more likely to use the unraised construction than the adults. This is not only true for *seem* overall (with and without an experiencer), $p < .001$, but crucially, also for *seem* with a covert experiencer, $p < .001$. These results are in line with grammatical accounts that claim that the implicit experiencer of English *seem* is nonetheless syntactically projected thus causing intervention (Orfitelli 2012; Snyder & Hyams 2015).[5]

Contrastively, we found that the distribution of unraised / raised in the Spanish-speaking children is on a par with the adults in the case of F-*parecer, p* = .39. However, in the case of L-*parecer*, children are more likely to use the unraised construction than the adults, $p = 0.04$. These results are compatible with the theoretical analyses presented in Section 1.3 regarding F-*parecer;* namely, that F-*parecer* is a functional verb with no argument structure (no implicit or explicit experiencer is projected) and is therefore not expected to cause difficulties related to intervention.

Finally, it is worth noting the striking cross-linguistic difference concerning the use of an overt experiencer. While English-speaking adults produce *seem* with an overt experiencer, as opposed to a covert experiencer, 4.2% of the time; Spanish-speaking adults use L-*parecer* (with a dative clitic or dative clitic + DP

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[5] The data values regarding children's use of the unraised / raised construction with overt experiencers are too small to be able to reject the null hypothesis.

experiencer), as opposed to F-*parecer*, approximately 60% of the time. In fact, while English-speaking children hear raised *seem* with an overt experiencer approximately once in every 100,000 utterances, Spanish-speaking children hear raised L-*parecer* once in every 1,000 utterances, that is, a hundred times more often.[6] It is thus plausible to expect that the higher frequency of L-*parecer* may have led to earlier acquisition in comparison to the English-speaking children (see Figures 2 and 3).

4. Conclusion

The results from our experimental study show that while English-speaking children perform poorly with raised *seem* whether the experiencer is overly produced or not, until the age of six, Spanish-speaking children succeed with F-*parecer* by age four. We interpret this behavioral difference as evidence for a syntactic difference; namely, English *seem* always has a syntactically projected experiencer while Spanish F-*parecer*, a modal-like verb, does not.

The results from our comprehension task were also reflected in production. English-speaking children proportionally use fewer instances of raised constructions than adults. Spanish-speaking children, on the other hand, only show this tendency with L-*parecer*, but not F-*parecer*.

Overall, our results suggest that children do not have difficulties with raising *per se*, as suggested by their adult-like performance in the raising with F-*parecer* condition (no experiencer). The difficulty seems to lie in raising *across an intervening argument*. Crucially, intervention effects will arise both with overt (e.g. Spanish L-*parecer* and English *seem* with an overt experiencer) and covert intervening experiencers (e.g. English *seem* with implicit experiencer).

References

Ausín, Adolfo. 2001. *On A-movement*. Storrs, CT. UConn dissertation.

Ausín, Adolfo & Marcela Depiante. 2000. On the syntax of *parecer* with and without experiencer. In *Proceedings of the 3rd Hispanic Linguistic Symposium*, 155-170. Somerville, MA: Cascadilla Press.

Baker, Mark, Kyle Johnson & Ian Roberts. 1989. Passive arguments raised. *Linguistic Inquiry* 20. 219-251.

Becker, Misha. 2006. There began to be a learnability puzzle. *Linguistic Inquiry* 37. 441-456.

Choe, Jinsun. 2012. *Children seem to know raising: Raising and intervention in child language.* Honolulu, HI. University of Hawaiʻi at Mānoa dissertation.

Choe, Jinsun & Kamil Deen. 2016. Children's difficulty with raising: A performance account. *Language Acquisition* 23(2). 112-141.

Cinque, Guglielmo. 2004. Restructuring and functional structure. In Belletti, Adriana (ed.) *Structures and beyond. The cartography of syntactic structures 3*. 132-191.

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[6] At the time of the corpus study, there were 2,800,324 adult utterances in English and 270,411 adult utterances in Spanish.

Collins, Chris. 2005a. A smuggling approach to raising in English. *Linguistic Inquiry* 36. 289-298.

Collins, Chris. 2005b. A smuggling approach to the passive in English. *Syntax* 8. 81–120.

Crain, Stephen. & Cecile McKee. 1985. The acquisition of structural restrictions on anaphora. In Berman, Stephen, Jac-Woong Choe & Joyce McDonough (eds.). *Proceedings of the 16th North East Linguistics Society* [NELS 16]. 94-111. Amherst, MA: GLSA Publications.

Fernández-Leborans, M. Jesús. 1999. La predicación: Oraciones copulativas. In Bosque, Ignacio & Violeta Demonte (eds.) *Gramática descriptiva de la lengua Española*, 2357-2460. Madrid: Espasa.

Gehrke, Berit & Nino Grillo. 2008. How to become passive. In Grohmann, Kleanthes K. (ed.), *Explorations of Phase Theory: Features, Arguments, and Interpretation at the Interfaces*, 231-268. Berlin: De Gruyter.

Haegeman, Liliane. 2006. Clitic climbing and the dual status of sembrare. *Linguistic Inquiry* 37(3). 484-501.

Hirsch, Christopher, Robyn Orfitelli & Kenneth Wexler. 2007. When *seem* means *think*: The role of the experiencer phrase in children's comprehension of raising. In Belikova, Alyona, Luisa Meroni & Mari Umeda (eds.) *Proceedings of the 2nd Conference on Generative Approaches to Language Acquisition North America* [GALANA 2], 135-146. Somerville, MA: Cascadilla Press.

Hyams, Nina & Snyder, William. 2005. Young children never smuggle: Reflexive clitics and the Universal Freezing Hypothesis. Paper presented at the *30th Boston University Conference on Language Development* [BUCLD 30]. Boston, MA.

Landau, Idan. 2010. The syntax of implicit arguments. *Linguistic Inquiry* 41. 357-399.

Mateu, Victoria E. 2016. *Intervention effects in the acquisition of Raising and Control: Evidence from English and Spanish*. Los Angeles, CA: UCLA dissertation.

MacWhinney, Brian. 2000. *The CHILDES project: The database*. Vol. 2. Psychology Press.

Orfitelli, Robyn. 2012. *Argument intervention in the acquisition of A-movement*. Los Angeles, CA. UCLA dissertation.

Snyder, William & Nina Hyams. 2015. Minimality effects in children's passives. In Domenico, Elisa Di, Cornelia Hamann, & Simona Matteini (eds.) *Structures, strategies and beyond: Studies in honor of Adriana Belletti,* 343-368. Amsterdam/Philadelphia: John Benjamins.

Torrego, Esther. 1996. Experiencers and raising verbs. In Freidin, Robert (ed.) *Current issues in comparative grammar*, 101-120. Netherlands: Springer.

Torrego, Esther. 1998. *The dependencies of objects*. Cambridge, MA: MIT Press.

Torrego, Esther. 2002. Arguments for a derivational approach to syntactic relations based on clitics. In Epstein, Samuel & T. Daniel Seely (eds.), *Derivation and explanation in the Minimalist Program*, 249-268. Malden, MA: Blackwell.

Wexler, Kenneth & Culicover, Peter. 1980. *Formal principles of language acquisition*. Cambridge, MA: MIT Press.

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