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THE EARLY INTERPRETATION OF EXPLETIVE PRONOUNS

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1. Introduction

One could equate the task of a young learner of a language to that of fitting the pieces of a puzzle together. The child, like the puzzle-solver, does not know what the final picture will look like. The task is not infinite, however. The puzzle is limited in space, and the language is fixed within the limits of possible human language variation, known within linguistic theory as Universal Grammar (UG). Like the sides of the different pieces join together to form a part of the picture, various bits of syntactic information are articulated to develop the syntax of the language. The prevalent view is that the language acquisition process takes the form of structured parameters, and the task of

We would like to acknowledge our gratitude to the children and the teachers of the daycare centers at Redwing School, Sand Hill School, in Amherst, and Nonotuck and Sunnyside in Northampton, as well to our many toddler friends who made conducting this research more pleasure than work.

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the child is to assign values to each individual parameter.

One problem is that the complexity of the adult language does not provide an obvious answer as to the value a given parameter should be assigned. One way out of this problem is to consider a specific class of words responsible for the transfer of the appropriate syntactic information. The idea that the acquisition of closed class items plays precisely that role is an attractive view and has been extensively exploited in the field. For example, the acquisition of an important crosslinguistic difference, the possibility of producing sentences without overt subjects has been linked to diverse functional elements. What could the piece be that puts this side of the puzzle together? Hyams (1986) proposes that the initial value of the relevant parameter, the prodrop parameter, like the grammars of languages similar to Italian or Spanish, allows for null subjects. The early null subject grammar is restructured into an obligatory subject grammar by the analysis of some relevant information in the language. The restructuring in the developing grammar is said to be provoked by some triggering information. Among others, expletive pronouns, unstressed subject pronouns, and the inflectional morphology of the verb, have been suggested as possible triggers for the null subject parameter.

In this paper we will examine the role of expletives in different types of languages. We will provide experimental data on the interpretation of expletive pronouns, based on the ambiguity of the subject pronoun in extraposed infinitival clauses. We will also review relevant literature on the acquisition of tough movement, because the adjectives used in our experiments are tough type adjectives. Finally, we will explore the consequences of our data for the theory of the null subject parameter.

2. Acquiring the Expletive

Expletive are pronouns which do not have a referent. In sentences such as (1) and (2):

(1) It rains
(2) It is likely that Ernie discovered the parameter

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1 Hyams (1986), Jaeggli and Hyams (1988), among others.
there are supposedly no entities in the world to which the pronoun it refers. It is assumed that this kind of pronoun is inserted in positions where no thematic roles are assigned, only to fulfill the syntactic requirement that all sentences have to have subjects, namely, Chomsky (1981) Extended Projection Principle (EPP). Note, however, that parallel examples (3) and (4), are perfectly possible in Spanish and similar languages.

(3) Llueve
rain-3Sg

(4) Es probable que Ernie descubriera el parametro
be-3Sg likely that E. discover-3Sg-SUBJ the parameter

Just as in English, there is no thematic role to assign to the subject position, but in contrast to English, there is no overt subject in the Spanish cases. To satisfy the EPP, these cases are analyzed as shown in (5) and (6), as having a null pronominal in subject position. This subject, an expletive pro, behaves like the other null pronominals in the language, except in that it has no referential value.

(5) [Ip pro [I' INFL [VP llover]]]

(6) [Ip pro [I' INFL [VP ser probable [cp que Ernie descubriera el parametro]]]

Under this view, a child learning a language expects to find expletive pronouns, and her task consists of figuring out whether those expletives have phonetic content or not. For that respect, she would have to examine the pronominal categories in the input data as possible candidates for expletives.

Nishigauchi and Roeper (1987), raise the interesting question of why expletives are morphologically identical to referential pronouns. They suggest that this may be a consequence of a three step procedure through which functional elements can be acquired. In the first stage the lexical item is learned as a referential object, and categorized as a noun (a word is connected to a feature of the environment). In the second stage the lexical item triggers the syntactic function so that the pronoun is identified as occupying the subject NP position (the word is connected to a syntactic environment), and in the third stage, the referential value of the word is
optionally deleted, and only its syntactic value remains. In English, the child could learn the pronoun it at an early age. Eventually, the appropriate syntactic analysis is given to the structure, and finally, the child finds out that in sentences like the ones we have discussed, the subject pronoun is an expletive. They could also recognize that in extraposed infinitival clauses like:

(7) It would be nice to drink
(8) It is fun to fly

the subject pronoun can have two different readings: one with the pronoun interpreted as a referential expression (for example, (8) would mean something like "a kite is fun to fly") and the other with an expletive reading (meaning: "flying is fun").

3. The Parameter, the Expletive, and the Construction
3.1 The Prodrop Parameter

The crucial issue for the parametric approach to null subjects in early child grammar is the source of the triggering information that causes the restructuring to a -null subject grammar. As it has been pointed out, the answer cannot be that they hear sentences without subject. For them, overt subjects are always a possibility. The issue is how they learn that subjects are obligatory. Hyams (1986) landmark work pointed out that the early grammar of English resembles the grammar of prodrop languages like Italian and Spanish. Typical children's utterances like "play it", "see window", "want more apple", have the definite subject interpretation of subjectless sentences in those languages. Within the Principles and Parameters approach she attempts an explanation to these facts assuming that the early grammar of English patterns with the adult grammar of Italian or Spanish, at least for the value of the parameter crucial to the possibility of producing null subject sentences. Noting that in English modals and the contractible be are acquired shortly after children start consistently producing overt subjects, including the previously lacking overt expletives, she proposes that all these phenomena could be related to a single syntactic property, that of the agreement node in the verb being equal to PRO, and thus needing to be ungoverned.
Hyams proposed several possible elements in the adult data that could trigger the child out of her initial incorrect assumption about English. These included the presence of lexical expletive pronouns, the use of sentence initial modals, and the realization by the child that in the adult grammar, referential subject pronouns are used without emphasis in violation of the "Avoid Pronoun Strategy".

The claim that overt expletives are a trigger for setting a parameter faces two important problems. One empirical problem is presented by the existence of languages that the theory would predict not to exist. The other problem would be a lack of synchrony between the presence of expletives in a child's grammar and the resetting of the parameter.

Crucial to the hypothesis that overt expletives are a trigger for resetting the null subject parameter was the generalization that prodrop languages do not contain expletive subjects. Hyams (1986) notes several apparent counterexamples to this generalization. One was the Italian expletive ci, but clitics being different from lexical pronouns, she claims that it could not be counted as a possible triggering element. The other cases are the Old Italian pronoun egli, of which there is only literary evidence, and the Modern Hebrew ze, which is used optionally in extraposition constructions. For Hebrew she suggests two possibilities, one that it is not a pure prodrop language, and the other that the optional expletive is artificially, scholastically acquired.

3.2 Expletives in Galician and Northern Portuguese

A more serious problem is presented by the historically related dialects of Galicia and Northern Portugal. These dialects, like the other well behaved prodrop romance dialects have a well developed verbal agreement morphology, and follow the tendency to use overt subject pronouns only when these are required for emphasis. If the hypothesis that expletives are the trigger for the abandonment of the initial prodrop grammar in languages like English, is correct, it would be a problem if these pronouns existed in such languages. In Galician and Northern Portuguese they do. The following sentences are grammatical in Northern Portuguese:
(9) Ele chove.
   it rain-3Sg
   "it rains"

(10) Ele consta que o presidente morreu.
    it is-said-3per.S that the president die-past-3Sg
    "It is said that the president died"

The expletive subject is also possible in dependent clauses:

(11) O João disse que ele estava a chover.
    The John say-3sg that it be-past-3Sg to rain
    "John says that it was raining"

As one could expect of a prodrop language, subject pronouns can be omitted, as shown in the synonymous sentences (12) and (13):

(12) Chove
    rain-3Sg

(13) (Eu) vou lavar os pratos.
    (I) go-1Sg wash the dishes

For the same reasons that (13) is used with an overt pronoun eu if the sentence means something like "I am the one who is going to do the dishes", the expletive subject is used more often when there is sentence emphasis, as in (14):

(14) Ele chovia que se fartava
    it rain-past-3Sg that self fill-up-past-3Sg
    "It was raining cats and dogs"

This data shows that if the presence of expletives is involved in conditioning the restructuring of early English to a non prodrop language, it might be only as a necessary but not a sufficient condition.

3.3 Production Data on Expletives
At this point, it might be useful to examine the naturalistic data on the acquisition of the English expletive it. To locate production of expletive pronouns we conducted a computer search in the Brown Corpus of the Childes database. The search was limited to instances of use of the weather/condition predicates rain, snow, cold, and dark, and the raising verbs appear and seem and the use of the pronoun it, in general, were examined in the transcripts of Adam, Eve and Sarah.
In the initial transcripts the pronoun *it* appeared mostly in object position, as in examples like:

(15) ADAM01 "move it"

This observation is congruent with the observation that English speaking children in their initial utterances do not produce many subject pronouns. The first instance of the pronoun in subject position appears in file Ø4.

(16) ADAMØ4 "there it go...it drop"

It is clear that the initial subject and object pronouns are referential expressions, not expletives. We did not find evidence for use of expletives until much later. Weather verbs appeared fairly early, but without overt subjects.

(17) ADAMØ3 "No raining"

ADAM23 "Down, rains. Over that one"

The first clear cases of overt expletives for weather predicates coexist with null subjects, as in examples in:

(18) ADAM25 "It's raining"

ADAM25 "I can keep this when it get dark"

ADAM25 "why can I put dem on when get dark"

In Adam's speech, the expletive appears after the inflectional morphology and the correct use of the auxiliary *be*. The sequence is not observed in Sarah's data.

(19) SARAH17 "when rains"

SARAH21 "It cold"

SARAH37 "because raining out"

SARAH50 "It snow. I go on a picnic"

SARAH72 "It didn't rain yesterday"

In Sarah's case, for a long period, the use of the expletive coexisted with null subject sentences and lack of inflexional morphology on the verb and of the auxiliary *be*. We will discuss the implication of this data in section 6 below.

3.4 More Production Data

We will now return to the discussion of the sequence for acquiring an expletive. The first issue is
to examine the possible contexts in English that would allow the children to identify that a given pronoun it in subject position is inserted only to fulfill a grammatical requirement. For obvious reasons, ambiguous sentences like the extraposed infinitival examples mentioned above should be discarded. Only contexts where it is clear that the pronouns are not referential could serve that purpose.

The immediate candidates for syntactic contexts triggering the realization that it can function without a referent are weather predicates and raising verbs. Subjects of weather verbs are sometimes discussed as having a doubtful status. Chomsky (1981) refers to them as "quasi-arguments". It has been claimed that the pronoun could refer to an unidentified agent in the sky. Adam's use of the verb snow around the age of three seems to support that idea. The example in (20) shows that for Adam, at that age, snow is just like any other transitive verb, with an agentive subject and a theme direct object.

(20) ADAM39 "I will snow dis"

Data of this sort lends support to the theory that weather expletives might not be real expletives.

Raising verbs would be perhaps a better candidate for a trigger, for they have a clearly unambiguous interpretation when appearing with an object clause, as in (21):

(21) It seems that linguistics is fun.

But there is little spontaneous evidence for use of raising verbs in the Brown data, since a raising verb appeared only once in the data, and it did not contain an expletive subject:

(22) ADAM21 "That seems fun"

Another problem with raising verbs is some people's intuition that the subject pronoun might be referring to "the fact" expressed by the lower clause, obscuring the expletive nature of the subject pronoun in this context.

The remaining case is the extraposition clause construction, ambiguous when infinitival, unambiguous
when tensed. Again, no production data was found with these in the Brown Corpus.

3.5 Tough Movement in the Acquisition Literature

At this point we would like to make a parenthesis in order to discuss the previous acquisition literature on the tough movement construction. Note that the referential interpretation of the subject pronoun in the extraposed infinitival construction is a case of the tough movement construction. Since all the adjectives used in the activity section of our experiment were tough type adjectives, it is relevant to briefly discuss some of the pertinent acquisition literature.²

The acquisition of the tough movement construction, or better said, the supposed failure of it to happen, was first studied experimentally by C. Chomsky. In her study, children were asked about a blindfolded doll whether the doll was hard to see or easy to see. The results showed that children well over seven years gave incorrect answers, interpreting the sentence as meaning "it was hard for the doll to see", as if "hard" were an eager-type predicate with subject control instead of object control. In the design stage prior to running the experiment some children were asked, given the sentence "John is easy to please", who was doing the pleasing. Similar results were obtained. Of the children tested, ranging from ages five to ten, individuals in all age groups gave correct and incorrect answers.

These results were interpreted as evidence that the children that were answering the questions incorrectly were still in the process of doing "fairly basic syntactic learning"³ that involved such constructions. However, note that these results may express a simpler process, that does not involve the kind of syntactic learning implied by C. Chomsky. The sentences in question involve what we may call object control, and the alternative interpretation of the sentences, as if they involved an eager-type predicate, would be the product of subject control.⁴ So, in

² We are indebted to M. Takahashi for first pointing out the relevance of this issue.
³ Chomsky (1969, p. 24)
⁴ Cf. Chomsky (1977) analyzed both these structures as having an empty operator in the embedded Comp, controlled by the matrix subject, and binding a variable in the clause. The adjective in the matrix clause would be predicated, not of the matrix subject, but of the whole subordinate clause.
contrast with early analysis of the distinction, which considered the tough construction as the consequence of a rule of movement, the two structures are essentially identical, with the kind of predicate indicating the type of control involved. So, once control structures are acquired (and empty categories, for that matter), the acquisition of the distinction is reduced to lexical acquisition. That is, given a certain adjective, what type does it belong to? This approach explains the fact that the incorrect responses appear in different age groups, ranging over a period of almost four years, for it is not expected that lexical properties of individual words be acquired at particular points in the acquisition sequence.

Further evidence in support of this conclusion is found in a similar set of experiments conducted by Solan (1979). He studied the interpretation of both easy and eager type sentences ("the monkey is eager to bite", "the tiger is easy to kiss"), and cases superficially similar to the easy sentences where there is no predication of the lower clause, just of the subject, as in "the tiger is pretty to look at". Solan found that the children in his experiment, ranging in ages 3;11 to 5;11 were found to be in one of three stages. In the first, they interpreted correctly only the eager type sentences. The second group understood correctly both the eager and the easy type sentences, but misinterpreted the pretty sentences. The third group had adult interpretations for all three types. Again, the evidence gathered in the experiment can be interpreted as relating the acquisition of the easy and eager sentences to the lexical distinction and not to the structure of the sentences.

Interestingly for us, Solan tested one case of an easy sentence, where no tough movement had occurred, with an expletive subject: "It is easy to bite the tiger". Of the seventeen subjects in the sample, no one failed to comprehend this sentence.

To summarize, the evidence gathered around the easy/eager distinction only shows that in ambiguous contexts, the children are unsure when asked to differentiate between the two types of predicates. It does not show that there is something in the construction that makes it out of reach for young children. Also, the ambiguity presented in our experiment was not one in which the children could interpret the adjectives as eager type adjectives. Such an interpretation would have implied that the pronoun
would have been given a referent, and then that referent would have acted as a subject controller, a pragmatically impossible interpretation given that the activity verbs required +animate subjects. Thus, the syntactic ambiguity that formed the core of our experiment is not affected by the difficulties in the acquisition of the easy/eager distinction.

4. Experiment
4.1 Methodology
Limitations in techniques for eliciting grammaticality judgements in young children have often restricted the sources of data in language acquisition research. Interpretation of structures has been tested experimentally with success through act out tasks and picture identification tasks in older children. We have found that these techniques are effective even with very young children if the appropriate methodology is used. The experimental design was oriented towards examining the choices that the child makes and noting the interpretations present, working with the child's available grammar.

4.2 Design
We tested twenty-four children between the ages of 2;0 and 3;7, selected randomly from local child care centers. The interviews lasted for approximately half an hour, and they were videotaped or audiotaped.

An alternative interpretation of C. Chomsky's findings would imply precisely that. Taking her evidence to suggest that the children are actually interpreting the sentence (i) as (ii):

(i) the doll is hard to see
(ii) the doll has a hard time seeing

In terms of our experiment this could imply that sentences of the form

(iii) x is fun to climb
(iv) x has fun climbing

where x would not be the intended pronominal antecedent (the object of climbing), but the agent of climbing. That is, it could take as antecedent the animal or puppet involved in the scenario. If such analysis of the tough construction was the only option available for the child, the target sentences in our experiment would not be ambiguous to begin with.

However, the problem with such claim is that it basically amounts to asserting that children are not paying any attention to syntactic structure, just merely connecting strings of words into a pragmatically acceptable scenario. Although that could be the case in some particular instance, as a general hypothesis it makes no advances towards an explanation of the acquisition of these sentences.
The central task was to examine the interpretation of expletives when presented in ambiguous contexts in extraposed infinitivals. The first section of the experiment, the act-out activity, served as supporting information for the main experiment, in that it provided the children with an opportunity to produce their own interpretation of the question at hand. We read a brief story containing the target sentence. We offered the child some toys and requested that she play with the toys in order to show us what happened. The child was provided with toys that would allow her to carry out either interpretation of the question. The first half of the children tested were given three ambiguous sentences testing the interpretation of *it* in the extraposed clause construction, for example "Here is a hamburger. Is it good to drink", and three unambiguous imperatives with the pronoun in object position, like "Here is a hamburger. Drink it", as controls. With the object sentences we were trying to test if there was an overgeneralization of the expletive to object position.

In the second section of the experiment, the picture selection activity, the task was to select one of two readings of the pronoun by choosing one of the pictures. Two types of predicates were used:

- activity predicates in extraposition contexts such as: "Is it fun to fly?"

- weather or condition predicates such as: "Is it snowing?"

In the six activity predicates ("eat, drink, paint, climb, walk, fly"), the referential reading was the one in which the pronoun, construed with a salient antecedent given prior to the target sentence, was interpreted as the object of the subordinate verb. In the expletive reading, no referent was assigned to the pronoun, and the question was interpreted as referring to the activity in general. In the four weather/condition predicates, the subject pronoun could be interpreted as referring to a particular object. For the adult, these were acceptable in the case of "dark" and "cold" and absurd in the case of "snow" or "rain". But, the children had no problem selecting the absurd referential interpretation of *it* in those cases. The expletive interpretation was the one referring to weather conditions.
The target task in each of the sections was interspersed with filler questions. Some of these fillers were designed to provide us with some information as to the child’s stage in language development. They included testing for prodrop elicitation by asking the child “what happened?”, and the answer to that question often had the positive by product of clarifying an otherwise unclear response to the target question. Also included were more complex fillers. One class was testing for the comprehension of contrastive stress, similar to the ones used in Solan (1983), for example: “Robbie hugged Freddie and then HE hugged the dog.”. Other fillers were testing the use of inversion in questions: “Ask Ana what her favorite color is?”. These were related to proposals in the literature concerning possible triggering information.

Other fillers included in the picture section were very simple pre-test types of activities that would serve as confirmation that the child was not just randomly pointing to pictures to please the experimenters, and that she was aware of the possibility of selecting both pictures, or rejecting them. An additional benefit from this last type was to offer the child opportunity for immediate success thus clarify her role in the interaction. The multi-task design of the experiment had many advantageous features. Primarily, it served to keep the child’s attention on the experiment without boredom or intimidation. Secondly it provided us with opportunities to gather information on various indicators of that particular child’s stage of development. It diverted the attention of the child enough to keep her from falling into a pattern of responses.

5. Results
5.1 Responses

We divided the children in two groups according to age. The younger twelve children ranged from 2;0 to 2;8. The older group ranged between 2;11 to 3;7. In the younger group, seven were in the prodrop stage, two were clearly no longer in the prodrop stage, and for the others it was not possible to determine their grammar from our interaction with them. In the older group two

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6 We used the transcriptions of children's utterances during the interviews as data for assessing their stage of grammatical development. We considered them in the prodrop stage if over 50% of the utterances recorded were subjectless. We did not take into account whether the subjects produced were pronominal or referential NPs.
seemed to be still productively omitting the subjects, for two there was not enough data to determine, and the rest seemed to have clearly abandoned the null subject stage.

The experiment was fairly successful in eliciting data from both the younger and the older group. In the act out section of the experiment we obtained a 75% rate of response for the older group, 80% for the younger group. In the picture test, we obtained much higher rates of response. In the extrapolated sentence construction, the response rates were 81.3% for the younger children, and 95.8% for the older children. For the sentences with weather or condition predicates we obtained 81.3% for the younger group, and 97.9% with the older group. These are represented in Tables 1 and 2.

<table>
<thead>
<tr>
<th>Percentage of Responses Elicited in Act Out Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ages of Children</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Table 1

<table>
<thead>
<tr>
<th>Percentage of Responses Elicited in Picture Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ages of Children</td>
</tr>
<tr>
<td>Activity Predicates</td>
</tr>
<tr>
<td>Weather Predicate</td>
</tr>
</tbody>
</table>

Table 2

7For the contrastive stress test and the inversion test, there was not a sufficient number of responses for us to build a correlation with the expletive results. The tasks involved in those tests were not very successful in actively engaging the children, especially the younger ones.
5.2 Act Out Section.

The expletive responses for the act out sections were of 42.2% for the older children and 35.4% for the younger children. This is presented in table 3, below.

<table>
<thead>
<tr>
<th>Ages of Children</th>
<th>2;0-2;8</th>
<th>2;11-3;7</th>
</tr>
</thead>
<tbody>
<tr>
<td>17/54</td>
<td>22/54</td>
<td></td>
</tr>
<tr>
<td>(35.4%)</td>
<td>(42.2%)</td>
<td></td>
</tr>
</tbody>
</table>

Table 3

It seemed relevant that all the children produced at least one expletive response in this part of the experiment. The object sentences that were included in this section to test whether children would ignore complement pronouns yielded no mistakes. That is, in an example like "Here is a hamburger. Drink it.", they appropriately interpreted the pronoun as the object of the verb, following the appropriate pragmatic strategy of selecting the NP in the previous sentence as the referent for the pronoun, and then, interpreting the sentence against their common sense knowledge of the world, they would make the puppet try to drink the hamburger by fitting it inside the toy glass. After the first twelve subjects, since the responses were consistent, we modified this part of the experiment to all target sentences of the first type. However, this data is interesting for a different reason. It shows that the children do not randomly select referents for the pronoun just from the items given to them in the task, but that they follow their linguistic knowledge in picking an appropriate antecedent in the discourse. So, in this sense, these correct responses support the pragmatic intuitions that form the basis for our experiment.

5.3 Picture test.

The expletive responses for the extraposed sentence construction were 33.8% in the younger group, and reached 47.8% for the older group, an adult like
behavior\(^6\). For the weather/condition predicates, the percentages were of 64.1\% for the younger children and 61.7\% for the older children. These figures are represented in table 4. We used a t-test for statistics standard proportions to compare, per question, the number of expletive responses for the two groups. The test showed that the differences between the two age groups were not significant. Furthermore, there did not seem to be a correlation between the number of expletive responses and the stage of the grammar of the child with respect to omitting subjects.

<table>
<thead>
<tr>
<th>Ages of Children</th>
<th>Activity Predicates</th>
<th>Weather Predicates</th>
</tr>
</thead>
<tbody>
<tr>
<td>2;0-2;8</td>
<td>20/59 (33.8%)</td>
<td>25/39 (64.1%)</td>
</tr>
<tr>
<td>2;11-3;7</td>
<td>33/69 (47.8%)</td>
<td>29/48 (61.7%)</td>
</tr>
</tbody>
</table>

Table 4

Our results showed that children are able to productively interpret expletives as such, before producing them, and before abandoning the prodrop stage. The case of our youngest subject, Rebecca, age two, still actively omitting subjects, is an excellent example of this. She would say things like:

(22) REBECCA "Flying up the water spout" "spilled"

and at that same time she interpreted the pronouns as expletives one third of the time.

6. Conclusion

The main results of our data unfortunately have a negative implication. If correct, they disconfirm the idea that the expletive could be the factor in English

\(^6\) We tested six adult subject and obtained 50\% expletive responses for each of them.
triggering the children out of their initial null subject grammar, since that stage seems to coexist with the possibility of interpreting the pronoun. This data is congruent with the facts discussed above about expletives in the adult grammar of languages like Galician and Northern Portugal. That leaves us is with a need to refine the distinctions involved in the definition of the parameter. Consider the array of possibilities of linguistic variation:

<table>
<thead>
<tr>
<th>NULL SUBJECT PARAMETER</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
</tr>
<tr>
<td>Well behaved languages:</td>
</tr>
<tr>
<td>SPANISH, ITALIAN</td>
</tr>
<tr>
<td>+ optional subject</td>
</tr>
<tr>
<td>- expletive pronoun</td>
</tr>
<tr>
<td>Mixed languages:</td>
</tr>
<tr>
<td>NORTHERN PORTUGUESE,</td>
</tr>
<tr>
<td>GALICIAN</td>
</tr>
<tr>
<td>+ optional subjects</td>
</tr>
<tr>
<td>+ expletives</td>
</tr>
<tr>
<td>- optional subject at</td>
</tr>
<tr>
<td>least in subordinate</td>
</tr>
<tr>
<td>clauses (topic deletion in matrix)</td>
</tr>
<tr>
<td>+ expletives</td>
</tr>
<tr>
<td>1) obligatory expletive</td>
</tr>
<tr>
<td>with weather verbs</td>
</tr>
<tr>
<td>2) optional expletive</td>
</tr>
<tr>
<td>deletion with impersonal</td>
</tr>
<tr>
<td>passives and extraposed</td>
</tr>
<tr>
<td>clauses. Subject to</td>
</tr>
<tr>
<td>dialectal differences.</td>
</tr>
<tr>
<td>3) obligatory expletive</td>
</tr>
<tr>
<td>drop with raising verbs.</td>
</tr>
</tbody>
</table>

We have pointed to some of the problems of a theory that takes expletive pronouns as the trigger for the restructuring in Child Grammar that eliminates early null subjects from the speech of young children learning languages like English. There is one drawback, however in separating expletives from the resetting of the prodrop parameter, in that one loses the explanation for Hyams' findings that expletive pronouns appear in
children's speech concurrently with subject pronouns becoming more productive.

We would like to advance a slightly different suggestion from what has been previously proposed. We could hypothesize that the relationship is actually the opposite. That is, instead of expletive pronouns triggering a non prodrop grammar, it is the resetting of the prodrop parameter to a negative value that forces the acquisition of the lexical form of the expletive pronouns.

Under this view the acquisition sequence reported by Hyams would be nicely explained, but at the same time the theory would allow for languages that differ from the majority, like Galician and Northern Portuguese. A child learning one of these languages is not, like the English child, "looking for the overt expletive", but can analyze it if he finds it. In addition this would explain the acquisition sequence observed in Sarah's data in the Brown Corpus. It would still be the unusual case that a child learns the expletive before developing a non pro drop grammar, for she would not have the strong motivation to do so, that an obligatory subject grammar entails.

This proposal has some consequences. One is that it firmly advocates for a continuity approach to language acquisition. By considering the expletive as "present", in some sense, in the early grammar, we are arguing for a representation of subjectless sentences in which null expletive pronouns exist, that is, a possible adult grammar. It would appear that such representation is necessary for the children to understand the ambiguity of the sentences we tested. By two years old, they have already taken the deductive steps for the optional deletion of the meaning of the pronoun in specific contexts, as suggested in Nishigauchi and Roeper, and they are able to give the expletive interpretation of the extraposed infinitivals, as well as the pronominal interpretation.

It seems that direct parametric decision, as it is, cannot cover all these facts. It is either syntactic theory has not achieved a deep enough explanation behind the differences between null subject and obligatory subject languages, or that the theory of acquisition needs to be enriched. There are many interesting ways to do this. One is the notion of parameter interaction, a position advocated by Roeper and Weissenborn (1989), and Weissenborn (1988). Another would be the notion of
Errata Sheet

In 'Sentential Subjects', by Jaye Padgett, trees should appear as shown below.

(6)

\[
S \quad \text{[that John loves Mary]}_t \quad \text{Comp} \quad e_i \quad \text{NP} \quad \text{VP}
\]

In addition, 'S' should be replaced by 'S' in the following locations:

- p. 151 NP --> (in text) p. 157 ...but not S.
- p. 153 NP --> (14a) p. 158 ...(as well as S).
- p. 154 VP --> (14b) p. 159 ...prevents S from...
- p. 160 ...as well as S complements...
"subparameters". Given the possibility of a subparameter for expletives, and appropriate thematic analysis of the constructions, a child can proceed to do construction specific learning of a value of the subparameter that disagrees with the value of the main parameter. That partial independence would allow for the other input problem that the child faces: that is, contradictory evidence that does not arise from sociolinguistic variation, or performance error, but from the grammar itself.

To return to the notion of the child as the puzzle-solver, the main parameter could be represented by a corner piece, a key connector in the frame of the puzzle, upon which the solution to the big picture rests. The setting of the main parameter could offer enough information to pull together some smaller elements, or subparameters, of the child's grammar. These can have without contradictions, opposite values to the main parameter. The final picture can be formed, with all the complexity of the adult syntax.
REFERENCES

Childes Data Base, Brown Corpus


