The Early Interpretation of Expletive Pronouns

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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

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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[1].

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

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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:

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(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 Joao 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)   ADAMØ1   "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):

(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"
        SARAH5Ø   "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

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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
refering 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

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[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.

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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.[5] 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.

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[5] An alternative interpretation of C. Chomskys 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
could be interpreted as
       (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.

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        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:

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

        b)   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[6]. 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.

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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 extraposed 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[7]. These are represented in Tables 1 and
2.

**Percentage of Responses Elicited
in Act Out Section**

Ages of Children	2;0-2;8	2;11-3;7
	80%	75%

Table 1

**Percentange of Responses Elicited
in Picture Section**

Ages of Children	2;0-2;8	2;11-3;7
Activity Predicates	81.3%	95.8%
Weather Predicate	81.3%	97.9%

Table 2

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[7]For 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 succesful 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.

Number of Expletive Responses in Act Out Section of Experiment out of Total Number of Responses Elicited		
Ages of Children	2;0-2;8	2;11-3;7
	17/54 (35.4%)	22/54 (42.2%)

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

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behavior[8]. 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
seemed to be a correlation between the number of
expletive responses and the stage of the grammar of the
child with respect to omitting subjects.

Number of Expletive Responses in Picture Section of Experiment out of Total Number of Responses Elicited		
Ages of Children	2;0-2;8	2;11-3;7
Activity Predicates	20/59 (33.8%)	33/69 (47.8%)
Weather Predicates	25/39 (64.1%)	29/48 (61.7%)

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

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[8] 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:

NULL   SUBJECT   PARAMETER

+	−
Well behaved languages: SPANISH, ITALIAN + optional subject	ENGLISH − optional subject (at least in subordinate)
− expletive pronoun	+ expletives
Mixed languages: NORTHERN PORTUGUESE, GALICIAN + optional subjects	GERMAN − optional subject at least in subordinate clauses (topic deletion in matrix)
+expletives	+ expletives 1) obligatory expletive with weather verbs 2) optional expletive deletion with impersonal passives and extraposed clauses. Subject to dialectal differences. 3) obligatory expletive drop with raising verbs.

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

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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.
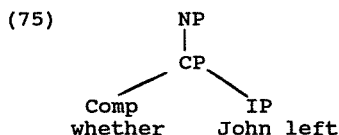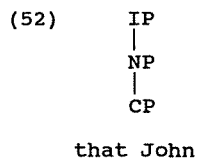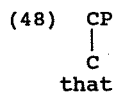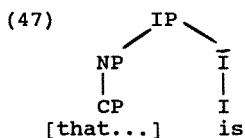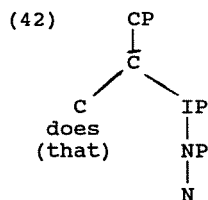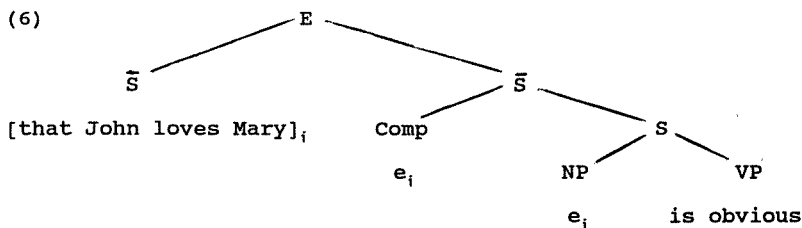
Under this view the acquisition sequence reported by Hyams would be nicely explained, but at the same time the theory would allow for languages that differ from the majority, like Galician and Northern Portuguese. A child learning one of these languages is not, like the English child, "looking for the 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)

$\tilde{S}$ E $\bar{S}$

[that John loves Mary]$_i$ Comp   S

e$_i$ NP   VP

e$_i$ is obvious

(42) CP
C
C   IP
does   NP
(that)   N

(47) IP
NP $\bar{I}$
CP   I
[that...]   is

(48) CP
C
that

(52) IP
NP
CP
that John

(75) NP
CP
Comp   IP
whether   John left

In addition, 'S' should be replaced by '$\bar{S}$' in the following locations:

p. 151   NP --> $\bar{S}$ (in text)   p. 157   ...but not $\bar{S}$.
p. 153   NP --> $\bar{S}$ (14a)   p. 158   ...(as well as $\bar{S}$).
      VP --> $\bar{S}$ (14b)   p. 159   ...prevents $\bar{S}$ from...
p. 154   NP --> $\bar{S}$ (in text)   ...are not simply $\bar{S}$...

p. 160   ...as well as $\bar{S}$ 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.

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