NULL SUBJECTS IN NORTHEAST ENGLISH[*]

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Abstract

This paper presents data and analysis relating to null subjects in spoken colloquial English. While English is not a 'pro-drop' language (i.e. subjects must usually be overt), a corpus of speech collected on Tyneside and Wearside in 2007 shows that null subjects are permitted in finite clauses in certain contexts. This paper analyses these examples and follow-up questionnaires, and compares the data with the other types of null subject described in the literature (pro-drop, topic-drop, early null subjects, aphasics' null subjects and 'diary-drop'), ultimately concluding that the colloquial English phenomenon is most closely related to diary-drop.

1. Introduction

Languages may be classified according to whether they allow null subjects (i.e. have an empty category in Spec,TP). Many of the Romance languages, for example, have optional subjects in all registers, and Mandarin allows null subjects and objects:

(1) *Portuguese*
(Juan) vio ese film
(Juan) saw.3SG that film
'Juan/he saw that film' (Jaeggli & Safir 1989: 9)

(2) *Chinese*
(ta) kanjian (ta) le
(he) see (he) PERFECT
'he saw him' (Huang 1989: 187)

This empty category is *pro* in null-subject languages (NSLs), or another type in non-NSLs (precisely what type is discussed in section 3.3 below). Empty categories are subject to Rizzi's Empty Category Principle (ECP), given in (3) (Haegeman 2000: 137):

(3) *ECP (i): formal licensing*
An empty category must be governed by an appropriate head.

ECP (ii): identification
An empty category must be chain-connected to an antecedent.

While standard English is not classified as a pro-drop language, in colloquial spoken varieties it is acceptable to omit the subject in some contexts. This phenomenon is observed in a

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corpus of data collected in 2007 from speakers in Tyneside and Wearside in Northeast England. This paper examines this data in order to determine the nature of the null subjects. As well as corpus data, questionnaires designed to test informants' acceptance of constructions with null subjects are analysed. The results are compared with accounts of types of null subject found in the literature, namely pro-drop, topic-drop, early null subjects, aphasics' null subjects and 'diary-drop'. The issue under discussion is whether null subjects are permitted in English, and if so under what circumstances the phenomenon is licensed. The data is taken from a corpus collected in 2007 by the SANE project (see Buchstaller & Corrigan 2011) from twelve informants in Newcastle upon Tyne, Gateshead and Sunderland.

2. Northeast English null subjects

The data used for this study were collected in 2007 for a pilot study for the Syntactic Atlas of Northern England (SANE). Three local researchers each targeted one of the three areas Gateshead, Newcastle and Sunderland. Four informants were found for each area, two male and two female. All were over 60, all were working class and all of them had lived in the relevant area for their whole life. The informants were interviewed in pairs and the results orthographically transcribed. Each informant was interviewed in a same-sex dyad, and they were familiar with their partner. The 'interviewer' did not speak during the interview other than to prompt conversation where necessary, in order to keep the language as natural as possible. The 'questions' were given in the form of prompt cards which asked questions about the informants' lives or showed photographs of their town to encourage spontaneous, colloquial speech.

For the present study, the transcripts were obtained and all instances of null subjects in finite clauses extracted. Non-finite clauses such as infinitives with PRO were not included. The examples found were marked for the following factors:

(i) *Person and number*:
Marked as first, second or third person and singular or plural, or expletive.
Hates Newcastle = 3sg
Used to be a dance hall above that = Expletive

(ii) *Recency*:
Marked as how recent (in clauses) the linguistically expressed antecedent of the null subject is in the discourse.
This was the farthest I ventured into Gateshead when I came to live here.
Gradually moved about a little bit in Low Fell = 1 clause previous
but just came here. = 2 clauses previous

(iii) *Tags*:
Marked for the presence/absence of a tag following or preceding the null subject.
Can't take everybody, ***can they****?*

(iv) *Animacy*:
Animate/inanimate null subject.
Sailed a few weeks ago = Inanimate (a boat)
Don't know if you remember = Animate ('I')

(v) *Initial position*:
Marked for whether the null subject is sentence-initial (the highest element).
Keeps the place alive, doesn't it? = Initial
But only happened once = Not initial

(vi) *Personal or demonstrative*:
Whether the null subject replaces a personal pronoun was identified from the context. There are no instances of null demonstratives (unlike in De Roo (2003)'s work on aphasia, discussed in section 3.4). Other null subjects are expletives.

(vii) *Conjunctions*:
If a conjunction is present, a null subject in the second clause is a feature of standard English and not a special case of subject-drop[1].
They'd told us how nice Menorca was ***and persuaded us to go***.

(viii) *Imperatives*:
If the utterance is an imperative, the null subject is a feature of standard English.
Hey, hoy a hammer ower (Northeast dialect for 'throw a hammer over')

(ix) *Deleted auxiliary or copula*:
An auxiliary or copula verb may also be omitted (here, *you will*).
See it on the way out

(x) *Generic reference*:
For some second person null subjects, the reference is generic and should be read as 'one' rather than the specific 'you'.
Might get one at midday. (Talking about the difficulty of finding a newspaper early in the morning in rural Ireland.)

In addition to the interview data, fifteen further informants were asked to complete a questionnaire comprising seventeen grammaticality judgements (see section 2.1.2).

Previous analyses of null subjects (e.g. Haegeman 1990, 2000, Rizzi 1994) suggest that their distribution in the data is predicted to be as follows:

(4) i. Null subjects occur in main clauses only
ii. Subjects are dropped in sentence-initial position only
iii. Null subjects may be specified for any person and number
iv. There must be a recent antecedent to identify the null subject

The data are analysed with respect to these predictions in the next section.

[1] This is only true if the two subjects are co-indexed. For discussion of mismatched conjuncts, i.e. conjoined clauses in which the null subject of the first clause is not co-indexed with the overt subject of the first clause, see section 3.5.

2.1. Results
2.1.1. Interview data

The total number of null subjects in around five hours of speech is only 163: this is clearly not the unmarked option (as Horsey (1998) suggests it may be for English more generally, based on the null subjects found in children's speech and in many informal contexts). However, the fact that it occurs with even this frequency means that null subjects must be regarded as a genuine option for this variety of English.

The analysis of the interview data largely bears out the predictions given in (4) in the previous section, although they do not hold absolutely. (5), for instance, illustrates a null subject in a subordinate clause, contrary to (4i). However, this was the only example found in the corpus, and as such may be a performance error. Combined with the lack of an antecedent, this is ungrammatical, even in the context of casual speech.

(5) you're probably more aware that Ø[2] happens through the television[3]

Given (4i), (4ii) and (4iv), in conjunctive or disjunctive constructions, the null subject in the second clause should match that of the (overt) subject in the first clause (discussed in 3.5). Nonetheless, there are two examples of a mismatched conjunct, from different speakers, given in (6) and (7):

(6) he_i can't bear to see his own blood but $Ø_j$ only happened once

(7) I think $someone_i$'s got it and $Ø_j$ probably be executive housing

(4ii) states that subjects should null be in sentence-initial position only, as in (8):

(8) Ø makes you wonder what's going to happen in like twenty years time though

In other words, the null subject should be the left-most element in the sentence and should not occur with *wh*-fronting or topicalisation. This prediction is supported by the data, provided false starts and interjections are disregarded as not part of the clause, and conjoined clauses are each considered to be separate CPs (and in any case, see (vii) above for discussion of null subjects and conjunctions). Instances of possible non-initial null subjects are given in (9)-(12). Those in (9) and (10) could be considered to be topicalisation, but are more likely to be relative clauses with zero markers, a separate phenomenon not examined here. That in (11) contains an adverbial which may precede or follow the null subject. *Then* in (12) would normally precede the subject, so it seems to be possible to have an adverbial preceding a null subject.

(9) I've got my – my sister, Ø lives over Newcastle

(10) I had a cousin, Ø married a lad who was an artist

[2] Where it aids the reader's interpretation, missing subjects are marked with a neutral 'missing subject marker', Ø.
[3] Although a possible interpretation of this sentence is that *that* is the subject of the subordinate clause, the pronunciation of the word with the unstressed schwa vowel makes it clear that this is not the case in this instance.

(11) ...and (Ø) eventually (Ø) got married

(12) ...then Ø lived at the coast

Prediction (4iii), which states that null subjects may have any person and number specification, is true to some extent but not at the same rate for all persons and numbers. Expletives may be dropped, and there were eleven instances of this in the data (6.75%). First person null subjects are the most common, with 47.24%, followed by third person with 33.13%. This is not surprising, with first person subjects tending to have the most identifiable referents. Second person null subjects accounted for 13.50% of the examples collected (n=22), but eight of these had generic reference and almost all of the rest were imperative. Only one was clearly specific:

(13) Ø moved here?

This, as a question asked after the other participant had been describing where he had lived, is comparable to the examples in (50)-(53) in 3.5, with a strong antecedent established and the question intonation making the referent unmistakeable.

Haegeman (2000: 134) finds examples of second person null subjects in fiction, but even these might be considered to be generic:

(14) Chap as always wears an old duffle coat,... he lives up the road a couple of mile, Pebwater Farm, Ø can't mistake it...

(15) No, it wouldn't do for me. Sharing everything with your neighbours, Ø haven't even got a bit of garden to call your own...
(Julian Symons 1967, *The end of Solomon Grundy* and *The progress of a crime*)

Singular null subjects accounted for 70.55% of the total, but as the informants were talking to one other person about themselves, they simply produced a smaller total number of plural subjects. However, it may also be the case that singular null subjects are more easily identified[4].

Virtually all of the examples had a recent linguistically expressed antecedent, bearing out prediction (4iv) almost to the letter. Some (7.98%) had a following tag question instead of or in addition to the antecedent. The majority (53.37%) had their antecedent in the preceding clause. 17.18% had an antecedent in the last clause but one, and 13.48% (n=22) had an antecedent three or more clauses previously. In some of these cases there was a list-type construction, so one antecedent could be argued to hold for all of the clauses. However, some were genuinely far from their antecedents, and in these cases other mechanisms identified the null subject.

(16) Ø got them out the drawer

(17) Ø had to go and find the material

(18) Ø feel sorry for, er…

[4] Other corpora of Northeast English include descriptions of group activities, so further research is in order here.

(19) Ø can't take everybody can they?

In (16), with a referent five clauses earlier, the discourse topic was 'some spanners', which was the only inanimate object that had been mentioned. Conversely, in (17), whose referent occurs seven clauses before, the speaker and his colleague were the discourse topic and the only possible referent. In (18) the referent (five clauses previous) is a first person null subject, and easily identifiable from the verb used. In (19) the referent (seven clauses previous) involves a tag, but would still have been identifiable as the women were discussing not being allowed to go into the WRNS, which is the only possible subject of the sentence.

2.1.2. Questionnaire results

Null subjects have been noted in colloquial English more generally, not just Northeast English. Clarke (2004: 312), for instance, notes in passing that 'pro-drop, or the deletion of a subject personal pronoun, is extremely common in NfldE [Newfoundland English]'. The phenomenon has also been studied in non-dialect-specific contexts by Haegeman (1990, 2000), Rizzi (1994, 2000), Horsey (1998) and Haegeman & Ihsane (2001), all discussed in this paper. To test the attitude of speakers of other varieties of English towards null subjects, a questionnaire was presented to speakers from around the UK.

The informants were eleven female and four male participants, four of whom were in their 50s, eleven in their 20s. The seventeen sentences in (20) were presented in the random order shown here, containing first, second and third person null subjects, embedded and main clause null subjects, some with no antecedent and some with null expletives (including weather expletives). Three minimal pairs were also included. (b) and (o) compare the same sentence with and without a linguistic antecedent for the first person singular null subject, (k) and (p) compare a sentence with and without a tag (for third person singular), and (f) and (l) compare a sentence with an antecedent in the immediately preceding sentence and with a potential antecedent intervening between the null subject and the true antecedent[5].

(20) *Questionnaire sentences:*

a. Saw Phil the other week. Wants to get back into the music business, would you believe?
b. No, I wouldn't do that. See myself as a professional, you know.
c. Don't like junk food much, do you?
d. I don't think have enough money to go out this week.
e. Lots of things have changed round here. Used to be able to go up to the top of the Monument, for one.
f. Marie was here on Wednesday, she's just had a baby. They're calling her Samantha. Doesn't look much like her father, though.
g. Was just about to get back to sleep when was woken up by the dustmen.
h. It's pointless going there now. Won't be there this early.
i. Rained really hard last night, did you hear it?
j. Dunno what the problem is. Might be a leaky pipe somewhere. Take about a week to get someone out to look at it.
k. Always puts himself out for others.

[5] See the conclusions for discussion of how this questionnaire could be improved for future research.

l. Marie was here on Wednesday, she's just had a baby. They're calling her Samantha. Doesn't look like she was pregnant only a month ago, though.
m. Seen that park over the road lately? Wants looking after a bit better, I'd say.
n. Can't really see the stars at night when you live in the city.
o. See myself as a professional.
p. Always puts himself out for others, that guy.
q. We get such moderate weather here. Hardly ever snows.

Second person specific null subjects were accepted by 80% of informants, the rest marking it as marginal. With generic reference, the percentage rose to 93.33% (all but one of the informants). Third person subjects were equally well accepted, with first person less so (60%) perhaps due to the semantic content of the sentences: some comments on the completed forms indicated this.

Embedded null subjects averaged just 20.51% acceptance. This is consistent with the expectation that embedded null subjects should not be grammatical in speech, although they are in some diary dialects (discussed in section 3.5). Taken with the interview data it appears that it is disallowed in speech and confined to the diary format (which is relatively little-attested in any case, most of the examples coming from one author).

Examples with no antecedent were accepted by 60% of informants on average, with many of those that did not accept the construction feeling that there was not enough context. The example with a distant antecedent and intervening potential antecedent (20l) was accepted by 46.67%, and its counterpart (20f), with 'the intervening DP' as the actual antecedent, 86.67%. The intervening potential antecedent caused trouble for those that did not accept (20l), with those that did perhaps 'working it out' – they may even have re-read it and then marked it as acceptable. 86.19% of informants marked null expletive constructions as grammatical, with one sentence getting a 93.33% rating. The lower-rated two were weather expletives, and the highest began with the common abbreviation *dunno*, which may have influenced the high score. It also included plenty of context for the expletive.

It is interesting to note that the examples in (21)-(28) were obtained, unsolicited, from comments made on the questionnaires. The nature of the questionnaires (anonymous, requiring written feedback) tends to elicit this kind of telegraphic response:

(21) Ø probably would say this.

(22) Ø don't even know what this sentence means!

(23) Ø sounds fine.

(24) Ø would use this sentence.

(25) Ø wouldn't say this.

(26) Ø hope this helps.

(27) Ø don't think I'd leave out the 'I'.

(28) but Ø would have to hit anyone who spoke like that.

The preceding discussion shows that null subjects are permissible in informal spoken English. The next section, by a comparison with other types of null subject found in English and other languages, determines the syntactic status of the null subjects found in the corpus.

3. Null subjects in the literature

In this section the data from the SANE corpus are compared with types of null subject, namely pro-drop, topic-drop, early null subjects, aphasics' null subjects and 'diary-drop'.

3.1. Rich agreement null subject languages

It has been suggested (e.g. by Hyams 1986) that null subjects in early language development (and by extension possibly also the null subjects in adult casual speech under consideration here) are produced as a result of the pro-drop parameter, also known as the null subject parameter, being set positively as in null subject languages (NSLs) of the Italian type. Hyams' proposal is that a positive setting is the initial, default setting and it is reset at around the end of the second year for non-pro-drop languages like English. This is discussed further in section 3.3 below, but for now it is useful to identify the characteristics of pro-drop languages and compare them to the variety under discussion.

3.1.1. Syntactic properties of pro-drop languages

Chomsky (1981: 240) gives the characteristics of pro-drop languages of the Italian type as in (29):

(29) i. missing subjects
ii. free inversion in simple clauses
iii. long *wh*-movement of subjects
iv. empty resumptive pronouns in embedded clauses
v. apparent violation of the *that*-trace filter
vi. rich agreement morphology

Apart from (i), missing subjects, there are no examples of any of the other characteristics of (29) in the SANE data. Although the sample size is small[6], and therefore there is little probability of obtaining a sentence containing a resumptive pronoun, *that*-trace violation or long *wh*-movement, these characteristics are not generally attested in English corpora. The examples in (30)-(32) are uncontroversially ungrammatical[7]:

[6] Around five hours of speech. The sample is small because the corpus used was collected for a pilot study. Other corpora could be included in future research.

[7] A reviewer makes the interesting point that utterances like those in (30)-(32) might be found in spoken English, especially given that the null subjects discussed here are also generally considered ungrammatical in English. My own intuition is that they are not acceptable, but it is a suggestion worth investigating. Time and space constraints prevent me from doing so in this paper.

(30) *Empty resumptive pronoun in embedded clause:*
Here is the girl who I wonder who thinks that *(she) might come. (Sheehan 2007:14)

(31) *That-trace violation*
*Who$_i$ do you think that t_i has telephoned? (Haegeman 2000:138)

(32) *Long wh-movement:*
The man that I ask myself who has seen. (Sheehan 2007:13)
(The man x such that I wonder who x saw)

Certainly there is no free inversion in the data, though there are many opportunities for this to occur, and (33) (Haegeman 2000: 137) shows it to be ungrammatical in English:

(33) *Has telephoned the dean.
(with the intended reading 'the dean has telephoned')

Finally, there is a lack of rich morphology. This is true of registers that allow null subjects (many spoken registers and very informal written contexts or those whose audience is oneself) as well as of those that do not (more formal speech and writing), and it is therefore not clear how the null subject could be licensed in one instance but not the other.

The one characteristic in (29) present in the SANE data, namely the missing subjects under discussion, is much less frequent or consistent than is attested for pro-drop languages. In such languages subjects may be missing in any register, even the very formal. Furthermore, owing to the greater semantic recoverability of subjects in these languages (assumed to be a result of richer verbal morphology), pronouns are null in the great majority of instances. If English were to be considered a pro-drop language, the ratio of null to overt pronouns would be expected to match that of the other pro-drop languages, and it falls far short of that.

3.1.2. The distributional properties of null subjects in pro-drop languages

The previous section showed that the characteristics of pro-drop languages differ from those of English null subjects. This section shows that pro-drop languages also exhibit a different distribution of null subjects from that of the English type. In Italian, for instance, a null subject can occur in an embedded clause (34) (Haegeman 2000: 139), whereas the English equivalent is ungrammatical (35), as would be the example in (36) if the italicised subject were null[8]:

(34) Gianni canta quando *pro* è felice
Gianni sings when *pro* is happy
'Gianni sings when he is happy'

(35) *Gianni sings when is happy

(36) Cried yesterday morning: as if *it* were an hour for keening.
(Haegeman 2000: 138, extract from Sylvia Plath's diary 10/01/1959)

[8] This is discussed in relation to 'diary-drop' in section 3.5.

Null subjects in the English registers that allow them cannot co-occur with *wh*-fronting (either in *wh*-questions or exclamations with *wh*-preposing) or with subject-auxiliary inversion in yes/no questions. Haegeman (2000) attributes this to the need for the null subject to be the leftmost element in the sentence. (The reason for this is discussed in section 3.3.) In Italian, conversely, null subjects may freely co-occur in these constructions (Haegeman 2000: 140):

(37) quando *pro* tornerà?
when *pro* return.FUT.3SG
'when will he/she return?'

(38) che bel regalo *pro* mi hanno dato!
what nice present *pro* me have.3PL given
'what a nice present they have given me!'

(39) tornerà *pro* presto?
return.FUT.3SG *pro* soon
'will he/she return soon?'

The lack of syntactic properties normally associated with pro-drop languages in the casual speech of English adults, together with the different distributional constraints on these null subjects, would appear to show that the null subjects seen in certain English registers, including the SANE data, are not due to a positive setting of the null subject parameter in this variety.

3.2. Discourse null subject languages

Since in the previous section it was shown that the null subjects attested in adult spoken English are not an instantiation of pro-drop, it is necessary to consider other types of null subject. One of these is the null subject found in Chinese-type languages. It has been suggested that the empty category in these languages is topic-drop, and this is a potential explanation for the English phenomenon.

Identification of the null subject is thought to be discourse-related in Chinese, with a null topic operator licensing the empty category. This analysis is inappropriate for the null subjects found in English for two reasons: firstly, the null subject may not necessarily be a topic, as is evident from the existence of null expletive subjects (an expletive can never be a topic)[9] shown in (40), and secondly, objects may also be null in Chinese, as shown in (2), repeated here as (41) for convenience. This is consistent with the null topic analysis, but is not seen in English except in the very restricted context of the instructional register, as in (42):

(40) Looks like there's a storm on the way

(41) (ta) kanjian (ta) le
(he) see (he) PERFECT
'he saw him' (Huang 1989:187)

[9] Chinese has what might be termed null expletives, but I follow e.g. Oshita (2004) in viewing these as different from English expletives, as there is no overt counterpart. Oshita argues that null expletives have no psychological existence in topic-drop languages.

(42) Slice onions. Fry Ø until golden.

3.3. Early null subjects

Children learning every language omit subjects up to around the end of their second year, regardless of whether their language is a null subject language or not. This phenomenon can be viewed as analogous either to adult pro-drop or to diary-drop. This section merely aims to provide an overview of the main arguments and a comparison with the adult null subjects discussed in section 2. The theories fall broadly into two categories: the variation/processing theories and the grammatical theories, or alternatively the 'performance' accounts and the 'competence' accounts.

3.3.1. Processing accounts

Kim (2000) surveys a number of studies of early null subjects and concludes that although processing has a role to play, especially in the early stages, the frequency of subject drop is closely related to the frequency of null subjects in the adult language that the child is exposed to.

In the one-word stage no subjects are expected to be produced, as the verb is the one word uttered in most cases. This expectation is confirmed by Kim's own data, with 0% of subjects produced initially. Other studies tend to consider only data from children who have already passed the one-word stage, but it seems reasonable to tentatively extend this assumption. However, Kim argues that in the two- and three-word stages the subject-drop rates precisely reflect the rate of null subjects in the adult target language. American children studied by Valian (1991), for instance, produced around 70% of subjects when the mean length of the utterance (MLU) (in words) was 1.77, but almost 90% when the MLU rose to 2.49 (for older children). Italian children in the same study produced 30% of possible subjects throughout the study. Similarly, Chinese children in Wang *et al*. (1992) produced subjects at a rate of 53% (adult rate 64%) compared to 85% for American children of the same age, and Brazilian children in Valian & Eisenberg (1996) produced 57% of subjects (adult rate 56%) by the time they were aged 2;3–2;10.

An important point to note is that the rate of subject drop (children's or adults') cannot be predicted on the basis of the language type (i.e. whether it is an agreement- or discourse-based NSL). Hyams & Wexler (1993) argue that children should drop subjects less in discourse-oriented languages, as in an agreement language a null subject is always a grammatical option (AGR is present in every finite sentence), whereas in a discourse language there is not always a suitable (subject) topic, and therefore topic-drop (of the subject) cannot always apply. They argue that Wang *et al*.'s (1992) and Valian's (1991) Chinese and Italian data confirm this. However, Kim notes that Korean and Brazilian Portuguese data show the opposite: adult Korean-speakers (a discourse language) produce fewer subjects than adult speakers of Brazilian Portuguese (an agreement language). 35–45% of subjects are produced in Korean compared with 56% in Brazilian Portuguese, and children drop subjects at the same rate as adult speakers of the same language (Kim 2000: 332–4).

On the basis of the universality of subject drop in children, Kim argues that there is a non-syntactic explanation. It would be an optimal solution if a common reason accounted for children's use of null subjects across all varieties. Kim offers the simple explanation (based on

Valian 1991) that the null subject parameter remains unset until enough evidence accrues to set it correctly, and the variation seen between languages is due to the characteristics of the target language.

Paul Bloom (1990) argues for an account of child null subjects based on processing limitations: an 'imperfect mapping' between what children mean and what they actually say. He claims that there is a 'processing bottleneck' caused by long or complex sentences and children's smaller working memory. He argues that the theory that children start with a pro-drop grammar cannot account for several facts about children's production of subjects: firstly, they omit more subjects as the length of the sentence increases, indicating that memory load is a factor. They omit other constituents as well, not just subjects. Finally, some children reduce subjects to schwa, rather than omit them entirely. This, according to Bloom, indicates that children know that a subject is required, but have difficulty producing one (Bloom 1990: 492).

Bloom (1990) bases his argument on data collected by Lois Bloom (1970) from a 22-month-old child. In this data, if the subject was expressed, another element was not (this element could be a verb, an object or an adverbial). Hyams (1986) points out that it was frequently an adverbial that was omitted in these cases, and adverbials are by their nature optional. However, Bloom (1990) argues that this is irrelevant for a processing account. He claims that all that is predicted is that there will be a cost, so the rest of the sentence need only be shorter for the theory to be supported. He also notes that the VP is longer, on average, in sentences that lack a subject, indicating that this cost does appear to be manifested: of 45 sentences with the verb *make*, the 13 that had a subject had a mean VP length of 2.77, whereas the 32 without subjects had a mean VP length of 3.25. Bloom notes that this difference is significant (1990: 495). Furthermore, sentences with negation lacked subjects more often than non-negated sentences, which indicates a correlation with increased complexity, and the same is true for sentences with grammatical particles and adjectives. A further reanalysis of data by Bloom (1990) found a significant difference in VP length for three children (1990: 497), confirming the predictions of this theory.

Bloom (1990) also claims that the presence or absence of a constituent cannot be predicted by its information status (whether it represents old or new information). This would appear to confirm the argument in section 3.2 above, namely that topic-drop cannot be extended to English subject omission in either child or adult language.

A related suggestion, that the longer VPs attested by Bloom provide more context and so allow subjects to be dropped more often, is dispelled by his observation that there is a difference in VP length between sentences with null subjects, pronoun subjects and complex subjects. This is not explained by a pragmatic theory of context, as there should be no difference between long and short subjects provided both are unambiguous. Unfortunately, this is difficult to verify as young children rarely produce subjects of more than one word, and pronouns are very often ambiguous, especially if the child has not yet mastered the me/you alternation.

Bloom's final argument in support of his processing theory is the less frequent, yet attested, omission of objects. On a grammatical account objects should either be omitted as often as objects (if topic-drop is active) or not at all (if null subjects are allowed). He gives the frequencies as 55% for null subjects and 9% for null objects (1990: 499-500). Bloom takes this to be evidence for the processing theory, if it is assumed that there is more processing load at the start of the sentence (he terms it 'unexpanded nodes') than at the end. He gives as support for this argument the independent observations that subjects are more often pronouns than objects, and that non-pronoun NPs are longer as objects than subjects (1990: 500).

However, a processing limitations account cannot explain the higher proportion of null subjects in less complex non-finite sentences, or the fact that subjects are rarely dropped in conjunction with *wh*-fronting (Breheny, no date). Hyams & Wexler (1993) provide further arguments against the processing account, discussed in the next section.

3.3.2. Grammatical accounts

3.3.2.1 Early null subjects are topic-drop

Hyams & Wexler (1993) essentially propose that early null subjects and adult null subjects in topic-drop or discourse-oriented languages (they treat these two as the same) are equivalent. While this argument fails for the reasons given in section 3.1–3.2, their argumentation against a processing account is very strong, and bears consideration.

They note that any adequate account must explain both the statistical facts about early null subjects, that is, the subject/object asymmetry, and the relationship with other aspects of the grammar, such as the correlation with acquisition of V2, inflections and sentence-external negation. They argue that a processing account cannot do this, and is not explanatory: it does not give an independent theoretical reason why subjects should systematically be omitted in child language. A grammatical account, on the other hand, predicts this and the correlations noted.

Hyams & Wexler's account crucially relies on the subject/object asymmetry. They claim that 'children omit lexical subjects, but rarely objects, because null subjects are a grammatical option for the child' (1993: 427). This appears to imply that the child has set the null subject parameter to positive, as Hyams claimed in earlier work (e.g. 1986). Although this answers the asymmetry question, it encounters the same problems as discussed in section 3.1, if the parameter is that which is active in pro-drop languages with agreement, or section 3.2 if it is that of discourse-oriented languages. Despite English being a topic-drop language (as they argue) at the null subject stage, subjects are dropped but not objects. They explain this by appealing to a scope argument. A constituent can only be omitted if it is outside the VP, so subjects can always be dropped. However, because English children do not yet 'know' topicalisation, whereas Chinese children do, English children cannot topicalise an object outside the VP and then drop it, while Chinese children (and German and Dutch children) can. Though plausible, the authors offer no evidence to support this claim.

Their dismissal of Greenfield & Smith's (1976) Principle of Informativeness is sound, however. It states that children drop elements that are presupposed, given or less informative. Hyams & Wexler argue that children speak in the 'here-and-now' and almost all items can be recovered and are given in context. They give the example of Kathryn, cited in Bloom (1990), who says *man making muffins* while looking at a picture of a man making muffins. All elements of this sentence are therefore candidates for omission. It is impossible to know what the child counts as salient and therefore not omissible. In addition, this theory cannot account for the subject/object asymmetry. Rizzi (2000) also notes that the non-occurrence of null subjects with *wh*-preposing contradicts this argument: the *wh*-word is focused, serving to defocalise the subject. This ought to make it a favourable candidate for omission, but this is not the case.

This fact also provides evidence against the processing load argument. If processing load is gradually lessened towards the end of the sentence, a categorical distinction between first position and anywhere else is not expected (rather, the likelihood of dropping an element should decrease gradually from first to last position in the sentence). The absence of null subjects with *wh*-fronting shows precisely this kind of categorical distinction (Rizzi 2000: 278). As for longer

sentences being more complex and therefore containing more null subjects, Hyams & Wexler also remain unconvinced. They cite a paper by Bloom, Miller & Hood (1975) in which it was found that there was a significant effect of complexity in only half the trials in half the children they tested. Complicating factors like prepositions, determiners, double objects and inflections were found to have no significant effect. Furthermore, they argue (contra Bloom 1990) that children who produce subjectless sentences also can and do frequently produce longer utterances: they give the figures as 54% verb-object utterances to 34% subject-verb-object in the child with the biggest disparity. As they note, '34% is hardly "occasional"' (1993: 437).

They also cite evidence showing that the beginning of a sentence does not have a greater processing load for children, or that longer subjects are more difficult for them. Ferreira & Morrison (1990) in fact showed the precise opposite to be true, with children most often deleting the head noun of a complex DP (the end of a production unit) and repeating subjects more accurately when they were 2-syllable lexical subjects than pronouns (88% vs. 56%). Furthermore, the VP-length effects noted by Bloom (1990) (longer VPs correlate with more null subjects) are also in evidence in adult NSLs (specifically, Italian). One would not wish to attribute this to processing effects, and given the similarity between the two, Hyams & Wexler argue that early null subjects cannot be placed under a processing account either. Their final argument in support of this is the 'strong continuity' between children's null subjects and adults' pronoun use. The null subjects appear to be 'replaced' by pronouns as the child leaves the null subject stage. They believe this can only be explained if the null subjects are not deleted, but licensed as grammatical empty subjects; otherwise, one must assume that young children select a far higher proportion of lexical subjects than older children, an unsatisfactory solution.

Though there are problems with the assimilation of early null subjects and adult pro-drop or topic-drop, it is clear that there are many more problems with a processing theory.

3.3.2.2. Early null subjects are adult null subjects

Rizzi, too, assimilates early null subjects with the adult phenomenon, but with the English null subject rather than with either pro-drop or topic-drop. He argues this on the basis of the distributional constraints of children's null subjects and those found in the diary registers of adult speech which he examines. The distribution is exactly similar (not with preposed *wh*-words[10], and not in tensed subordinate clauses) and is the opposite of that in adult NSLs like Italian. Rizzi argues that early null subjects in English cannot have a parameter setting explanation, as Italian children do produce null subjects in these contexts at a very young age, indicating that their parameter is already fixed by around the age of two. English children ought, then, to have fixed theirs the other way by the same age, whereas they continue to produce null subjects after this. The facts lead Rizzi to state that the English early null subject is 'characterised by the fact that it is limited to the initial position, the specifier of the root' (1994: 155).

Referring to Haegeman (1990), Rizzi shows that English diary drop can occur in just those contexts in which early null subjects can occur, namely in initial position and with subjects but not objects. He therefore claims that this kind of subject-drop is an option of Universal

[10] In Rizzi (2000) it is noted that null subjects may occur with *wh*-preposing, but only in uninflected contexts, and it is assumed that untensed main clauses, an option in child language, license null subjects precisely as untensed clauses do in adult language. It is assumed that the null category here is PRO, and the phenomenon is independent of the tensed-clause null subjects under discussion.

Grammar. Haegeman (1990), while noting the problem caused by the subject/object asymmetry, suggests a topic-drop analysis, with a null topic operator in Spec,CP preventing its co-occurrence with *wh*-movement or embedded clauses. However, Rizzi points out that this cannot be the case, as operators are in general marked for 3rd person (1994: 158), and unlike object drop, subject drop can occur with any person specification (though see section 2 for further discussion of this statement). Also, many languages allowing topic-drop do not allow expletive drop (Rizzi 2000), which is freely allowed in early English, together with diary-drop and spoken subject-drop.

Based on the empty category's non-quantificational and therefore non-variable status, Rizzi terms it the null constant (nc). Combining the features [±anaphor], [±pronominal] and [±variable] yields the description [-a, -p, -v] for the nc as the only remaining unassigned combination: a null R-expression (1994:159). Rizzi then asks what forces the binding of the nc by a null operator, as opposed to its free occurrence like its overt counterparts, and answers the question with the requirement that, like all null elements, it must satisfy the identification requirement (given in (3) above).

The identification requirement in (3) also explains the 'leftmost element' restriction referred to in section 3.1.2 above. Reformulated as in Rizzi (1994), the principle essentially forces this restriction:

(43) *ECP (ii): identification*
An empty category must be chain-connected to an antecedent **if it can be.**

If there is any potential antecedent the category must be connected, but if there is not, i.e. if the category is the highest (or leftmost) element, it is licensed. Rizzi suggests that children have not yet acquired the principle (44):

(44) Root = CP

This principle is roughly equivalent to saying that the topmost node in the tree is CP, or that main clauses are CPs. Before (44) is acquired, subjects can be dropped as they will be in the specifier of the root (TP), and so licensed. When (44) is acquired, children move out of the null subject stage, losing root infinitives at the same time. However, he notes the problematic fact that some adult registers allow null subjects, and cannot be considered immature systems. He suggests that categorial uniformity, which normally has precedence over structural economy (the preference for simpler structures, or those with fewer projections), generally causes all clauses to be CPs. However, in certain cases (including ECM, small clauses, early null subjects and the adult null subjects in the registers that allow them), economy may prevail, allowing clauses to be truncated (the root is TP rather than CP) and subjects to be null.

3.3.3. Concluding remarks

It is clear that early null subjects cannot be accounted for under a processing limitations account. It also seems that there is more evidence for the assimilation of early null subjects with the adult spoken null subjects attested in the data discussed in section 2 than with either NSLs or topic-drop[11].

[11] Adult second language learners of English also drop subjects, and those whose native language is pro-drop behave differently in this respect from those whose first language is not pro-drop. There is also a difference in the

3.4. Null subjects in aphasics' language

Patients suffering from Broca's aphasia are also known to drop subjects from their spontaneous speech. De Roo (2003) analyses these null subjects and claims that they are instances of topic-drop.

De Roo cites Friedmann & Grodzinsky (1997, 2000) as postulating a deficient Tense head, thereby preventing nominative Case from being assigned and therefore a subject from being produced. However, she notes that the underlying structure must be intact, as the Dutch patients whose speech she studied showed knowledge of finiteness (shown by the correct placement of the verb in the clause, dependent on finiteness in Dutch). They also produced some subjects in finite sentences, but almost none in non-finite constructions, where an overt subject is not found in 'normal' speech (PRO being inserted instead). In addition, non-aphasic speakers produce non-finite sentences in casual speech, and one would not wish to say that their underlying structure is deviant. Instead, De Roo argues that underspecification of Tense is part of normal grammar, available in an elliptical register, and Broca's patients over-use the option. She suggests a reduction of processing load as motivation for this over-use.

As well as non-finite sentences with missing subjects, aphasics produce finite sentences, correctly specified for Tense and with Case available for a subject, with no subjects. This, De Roo claims, is analogous to topic-drop, an option in the casual speech of Germanic V2 languages including Dutch. Support for this position comes from the distribution of null subjects, *viz* clause-initially and in main clauses only. This means that it cannot occur with topicalisation or with *wh*-questions, which is consistent with the empirical facts. The semantic content must be recoverable, generally through a discourse referent in the preceding sentence (De Roo 2003: 1060). Demonstrative pronouns are more often omitted than personal pronouns, consistent with their uncontroversial status as topics. The first person singular pronoun *I* is also very frequently dropped, which De Roo terms *I*-drop, and attributes to the pronoun's unique referent and therefore strong recoverability. However, where Broca's omission differs from child language and casual speech is that both subject and object pronouns may be omitted. This supports De Roo's argument that the phenomenon is that of topic-drop, but indicates that it cannot be the same phenomenon as is observed in the Northeast English data or, indeed, in child language. All of the null subjects in the data are personal pronouns or expletives, rather than demonstrative pronouns, and so do not fit the pattern De Roo establishes. Further, De Roo herself (2003: 1061) notes the problem of null expletives, which cannot be topics.

De Roo in fact argues that children do exhibit topic-drop (she does not discuss adult casual speech) and that the missing expletives merely show that children, like adults, have two kinds of null subject (2003: 1061). Null subjects are optional in finite sentences, and are an instance of topic-drop, found largely with demonstrative pronouns and with *I*. This amounts to a processing account. In addition, non-finite root clauses are optional in aphasic speech, and if this option is selected, a null subject becomes obligatory. This is a grammatical explanation, given as

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subject production of speakers of agreement languages like Spanish and discourse languages like Korean. According to Liceras & Díaz (1999), the licensing of null subjects is determined by their L1, as the grammar may mature only once (consistent with the biological basis of language acquisition). However, they argue that the licensing of null subjects in L2 Spanish is achieved by 'restructuring' the licensing procedure, rather than any transfer of the licensing or identification procedures in the relevant languages. This process would provide interesting further comparison with adult null subjects, but this is beyond the scope of the present paper. As an interlanguage, it is presumed for the present to be a different phenomenon from the present topic of discussion.

underspecification of T (though D may also be underspecified, which will also lead to null subjects and also, crucially, null objects).

For the reasons given above, the subject omission of Broca's patients will be regarded as a different phenomenon from that under discussion in this paper. It may well be that topic-drop is the appropriate explanation in this case, especially due to the presence of null objects. However, it would be of interest to examine Broca's patients who are speakers of other languages and determine whether the same topic-drop effects are evident in a language that lacks this option in normal speech.

3.5. 'Diary-drop'

So-called 'diary-drop', the omission of subjects in diaries, informal letters and notes and the examples in (21)-(28), is argued by many, including Rizzi and Haegeman, to be a close analogue of early null subjects and the same phenomenon as spoken null subjects in colloquial English Haegeman & Ihsane (2001) argue for diary-drop to be a closer analogue of early null subjects than spoken subject-drop). In fact, there are some significant differences between diary-drop and spoken null subjects, as will be discussed in this section, but the comparison is the closest available and the similarities far outnumber the differences.

If null subjects in diaries are the same as those in spoken language, they too should have the characteristics in (4), given (slightly modified) in (45):

(45) *Null subjects in diary contexts*
- i. Occur in main clauses only
- ii. Occur sentence-initially (may not occur with *wh*-fronting or topicalisation)
- iii. May have any person specification
- iv. Must have a recent antecedent (or the referent must be recoverable from the context)

In fact, (45iii) is limited, and (45i-ii) are not strictly true, as will be discussed. However, in the main this list covers the essential points. Typical examples are given in (46)-(49):

(46) Saw no one. Took the bus to Southwark Bridge.
(*The diary of Virginia Woolf*, vol 5, 1936-41. p203. Cited in Haegeman 1990)

(47) Seen any good films lately?

(48) Wish you were here.

(49) Rained in the night, wind, rain and hail.
(Elizabeth Smart, *On the side of the Angels*, 19/01/1945, p27. Cited in Haegeman 2000)

All of (46)-(49) are grammatical in a diary or colloquial spoken register. (46) illustrates first person singular, (47) second person[12], (48) first person singular or plural, and (49) third

[12] The fronted auxiliary is also omitted in this example. This is presumably related to the null subject having to be the first element in the sentence: the subject cannot be deleted until the auxiliary has been deleted. This may support the case for diary-drop being an instance of ellipsis. Jespersen (1922) notes this in his discussion of what he terms 'prosiopesis'. However, null subjects seem unable to occur with certain auxiliaries in spoken English, at least, as can be seen from the ungrammaticality of (i - ii), though cf. the acceptability of (iii):

(i) *Will be able to help.

(ii) *Have seen it already.

(iii) Won't be going there again.

person, in this instance an expletive, though third person referential subjects may also be deleted (Haegeman 2000).

Second person null subjects are difficult to pin down, especially in diary writing, where there is no other participant in the conversation. This makes it difficult to compare with speech, where they also appear to be rare (as discussed in section 2). The example Haegeman & Ihsane (2001) give (their (152)) is more appropriately identified as the generic pronoun *one*, and this appears to be the case more generally. Why this should be is unclear, but it might be that *you* as a genuine pronoun is focussed, and cannot be omitted. The dialogue in (50) is grammatical, with the referent of the null subject in B's question established in A's statement. It crucially requires the tag, perhaps to mark the utterance as a question as well as to help with identification. (51) is infelicitous[13]. Finally, (52) is comparable with (50), where the referent is established and the tag is required:

(50) A: I used to go to Tenerife every year.
B: Liked it there, didn't you?

(51) A: Ted's going to Tenerife this year.
B: # Liked it there, didn't you?

(52) A: Ted's going to Tenerife this year.
B: Liked it there, didn't he?

The exchange in (53) is marginally acceptable to me, despite the lack of an antecedent for the null subject, with a first person null subject rather than second person. Again, the tag is required:

(53) A: Ted's going to Tenerife this year.
B: Oh, love it there, I do.

3.5.1. Embedded null subjects

Haegeman & Ihsane (2001) discuss the surprising fact that embedded null subjects are frequent in some diaries. They argue, based on this observation, that there are two diary dialects: the majority dialect (i.e. the usage of most diary authors) allows root null subjects only, and the minority dialect (used by fewer authors) allows them in embedded clauses as well.

Bridget Jones' Diary, a fictional diary by Helen Fielding (1996), is by far the biggest source of the embedded null subjects analysed by Haegeman & Ihsane. Examples such as (54)-(58) are typical:

(54) Ø think Ø will cross that last bit out as Ø contains mild accusation.

(55) Ø understand where Ø have been going wrong.

(i – ii) are acceptable in a diary or other written context. Hyams & Sano (1994) note that children are reluctant to license the null subject with the copula or an auxiliary.

[13] It is acceptable on a reading where Ted is the partner of A and *you* refers to 'A and Ted'.

(56) But even that is inadvisable since Ø am fat.
(all Fielding 1996, cited in Haegeman & Ihsane 2001: 332–3)

(57) will deffo give them up if Ø win $2m in out-of-court settlement.
(Barham 1998: 15, cited in Haegeman & Ihsane 2001: 333)

(58) Felt Ø had to show face at post-finals party in Gary Brigg's room.
(Faulks 1998: 9, cited in Haegeman & Ihsane 2001: 333)

Haegeman & Ihsane note that there is a striking regional difference in the acceptability of this kind of construction: British readers willingly accept them, whereas American readers find them sharply ungrammatical (2001: 333). This is partly, they suggest, because the diary is an artificial construct. An option that they do not explore is that it may be to do with the comic nature of the book, particularly clear in example (56), where an elaborate first clause is written out in full and a simple second clause has subject omission. It is very much a parody of the diary style, and it might be fruitful to examine how familiar American readers are with this style. However, this is certainly beyond the scope of this paper. Haegman & Ihsane claim that other instances of embedded null subjects also appear to be found only in British English, with examples given from British newspapers, postcards and text messages. In addition, the following two examples (both letters written by readers) appeared in two separate (British) publications within the space of a week or two, showing that the phenomenon is obviously not unusual:

(59) I didn't have time to investigate this before, as Ø was swamped with coursework and revision.
(Guardian 'Work' supplement, 5/7/2008)

(60) Anyway, Ø love your mag etc. etc. and Ø appreciated the Hello Goodbye on Killing Joke, though Ø am puzzled by your total silence regarding the recent reissues…
(Mojo 177, August 2008)

What is interesting to note is that (60) was written by a reader from Minnesota, USA. Perhaps the phenomenon is spreading, perhaps the reader is influenced by the British style of the magazine, or perhaps it is to do with the jocular style of the letter. Certainly, it appears to be a usage almost entirely confined to British English at present[14].

Embedded null subjects cause certain problems for the analyses discussed so far. For instance, they do not lend themselves to a truncation (where the clause is analysed as TP rather than CP) or topic-drop analysis. Clearly, in an embedded sentence, the CP is present, rendering truncation impossible. As well as the standard arguments against the topic-drop explanation, embedded null subjects occur in cases where subject extraction is ungrammatical, such as (55) above. As a solution to this problem, Haegeman & Ihsane (2001) suggest that the empty category may in fact be a non-overt pronoun. They give examples such as (61) and (62) in support of this theory, where the reflexive part of the anaphor is pronounced, but the pronominal part is not (from Fielding 1996):

[14] A reviewer and a questioner at the 6th Newcastle Postgraduate Conference in Linguistics both mention the social networking site Facebook as a potential data source. The reviewer notes that 'status updates' force variation between 1st and 3rd person subjects ('(Laura) is working on her NWPL paper' vs. '(I) am working on my NWPL paper', for example). The variable use of null subjects in this medium would indeed be a valuable object of study.

(61) Find **self** constantly scanning face in mirror.

(62) Have cigarette to cheer **self** up.

This kind of construction appears only in the same contexts as the embedded null subject. The analysis would entail that other constraints on null subjects in majority dialects do not hold in the minority dialect, such as occurrence with interrogatives and topicalisation. Haegeman & Ihsane do not find any occurrences of null subjects in these constructions in the minority dialect texts, but the sample is a small one and not decisive (2001: 341). One final argument which appears to offer support is that of co-ordinated null subjects. These are freely allowed in standard English and the majority diary dialect if the (null) subject of the second clause is co-referent with the (overt) subject of the first, as in (63). However, diary writing with embedded null subjects (the minority dialect) also allows sentences as in (64) and (65) (both from Fielding 1996), with non-co-referenced null subjects in co-ordinated sentences.

(63) Mary_i was in the kitchen. John_j arrived and $Ø_{j/*i}$ opened the door.
Haegeman & Ihsane (2001: 341)

(64) $Ø_{1SG}$ badly need water but $Ø_{3SG}$ seems better to keep eyes closed.

(65) [the shepherd's pie]$_{3SG}$ is still in pans all over the kitchen floor and $Ø_{1SG}$ have not yet washed hair

The minority dialect does appear to represent a relatively small minority and carries with it a very noticeable sense of ellipsis: it is almost a deliberate marker of diary style. Further research is needed on spontaneous writing, as opposed to fiction, to determine the extent of this 'dialect'.

It is certainly the case that the embedded null subjects found here are far more widespread than in casual speech, where they are rare (although attested a few times in the corpus). The majority dialect, on the other hand, appears to obey much the same constraints as speech, and may well be a similar phenomenon.

4. Conclusion

A comparison of Northeast English data with accounts of null subjects in the literature has revealed that the null subject in spoken English differs in several ways from pro-drop or topic-drop. There are some similarities with early null subjects and with diary-drop.

The syntactic status of the empty category is likely to be the null constant (nc) (Rizzi 2000), as discussed in section 3.3.2.2. This is an antecedentless non-variable, licensed by the Top head merged in CP (Horsey 1998). Top has a [D] feature which the nc can satisfy, provided it is the closest candidate. This allows null subjects to occur with fronted adverbials, but correctly predicts the ungrammaticality of the occurrence of null subjects with *wh*-preposing, with argument topicalisation and in subordinate clauses: there is an element with D-features closer to Top^0 than the nc, so are attracted to it and block the nc from raising. In a subordinate clause the matrix subject always intervenes between the matrix TopP and the empty category of a subordinate clause, thereby blocking this movement. (Note, though, that this does not explain

why this construction is allowed in the minority diary dialect described by Haegeman & Ihsane (2001), discussed in section 3.5.) Early null subjects and diary-drop, although both more permissive in different ways, are reasonable analogues for the adult spoken null subject.

Wagner (2008) has also investigated null subjects in English (in Newfoundland English) and concludes that VP length, the value of the preceding token and turn length are all decisive factors. These factors were not investigated in this analysis, and the next step in characterising this phenomenon more precisely is a more comprehensive study, incorporating other English varieties and more data, with more closely regulated criteria of analysis. The questionnaire described in section 2.1.2, for instance, requires refinement. A number of the sentences contained more than one null subject, so it was not possible to determine which the respondents were rating. It would also be preferable to use a more sophisticated rating scale, such as Magnitude Estimation. A crucial next step is to investigate the 'diary-drop' null subjects more closely, using informal writing such as Facebook comments, emails and other computer-mediated communication and short notes as data, rather than works of fiction.

However, at present, it appears that the adult null subject is a common, widely-used and unstigmatised (colloquially, at least) option in English.

References

Barham, D. (1998). Paula Jones's diary. *The Independent* 20/01/1998, p.15, columns 1-3.

Bloom, L. (1970). *Language development: Form and function in emerging grammars*. Cambridge, MA: Massachusetts Institute of Technology Press.

Bloom, L., Miller, P. & Hood, L. (1975). Variation and reduction as aspects of competence in language development. In Pick, A. (ed.), *The 1974 Minnesota symposia on child psychology*, 3-55. Minneapolis, MN: University of Minnesota Press.

Bloom, P. (1990). Subjectless sentences in child language. *Linguistic Inquiry* 21: 491-504.

Breheny, R. (2008). Principles and parameters in language acquisition - Subject Omission. Handout from lecture 6, PLIN7304 Psycholinguistics: Language Acquisition. University College London. Accessed 14/06/08. www.phon.ucl.ac.uk/home/richardb/teaching/lang%20acq/handout%207.pdf

Buchstaller, I. & Corrigan, K. (2011). How to make intuitions succeed: Testing methods for analysing syntactic microvariation. In McMahon, A. & McGuire, W. (eds.), *Analysing variation in English*, 30-48. Cambridge: Cambridge University Press.

Chomsky, N. (1981). *Lectures on government and binding*. Dordrecht: Foris.

Chomsky, N. (1986). *Barriers*. Linguistic Inquiry monographs 13. Cambridge, MA: Massachusetts Institute of Technology Press.

Clarke, S. (2004). Newfoundland English: Morphology and syntax. In Kortman, B., Burridge, K., Mesthrie, R., Schneider, E. W., & Upton, C. (eds.), *A handbook of varieties of English* Vol 2: *Morphology and syntax*, 303-318. New York, NY: Mouton.

De Roo, E. (2003). Null subject pronouns in Broca's speech production. *Aphasiology* 17: 1057-1072.

Faulks, S. (1998). Jack the Lad. *Guardian* 07/01/1998, p.9, columns 4-5.

Ferreira, F. & Morrison, F. (1990). Children's knowledge of syntactic constituents. Unpublished paper cited in Hyams & Wexler (1993).

Friedemann, M. A. & Rizzi, L. (eds.) (2000). *The acquisition of syntax: Studies in comparative developmental linguistics*. Harlow: Longman.

Friedmann, N. & Grodzinsky, Y. (2000). Split inflection in neurolinguistics. In Freidemann & Rizzi (eds.), 84-104.

Greenfield, P. M. & Smith, J. H. (1976). *The structure of communication in early language development*. New York, NY: Academic Press.

Haegeman, L. (1990). Non-overt subjects in diary contexts. In Mascaró, J. & Nespor, M. (eds.) *Grammar in progress: GLOW essays for Henk Van Riemsdijk*, 167-174. Dordrecht: Foris.

Haegeman, L. (2000). Adult null subjects in non *pro*-drop languages. In Freidemann & Rizzi (eds.), 129-169.

Haegeman, L. & Ihsane, T. (2001). Adult null subjects in the non-pro-drop languages: Two diary dialects. *Language Acquisition* 9: 329-346.

Horsey, R. (1998). Null arguments in English registers: A minimalist account. Ms., La Trobe University, Australia.

Huang, C. (1989). Pro-drop in Chinese: a generalized control theory. In Jaeggli & Safir (eds.), 185-214.

Hyams, N. (1986). *Language acquisition and the theory of parameters*. Dordrecht: Reidel.

Hyams, N. & Wexler, K. (1993). On the grammatical basis of null subjects in child language. *Linguistic Inquiry* 24: 421-459.

Jaeggli, O. & Safir, K. (eds.). (1989). *The null subject parameter*. Dordrecht: Kluwer.

Jaeggli, O. & Safir, K. (1989). The null subject parameter and parametric theory. In Jaeggli & Safir (eds.), 1-44.

Jespersen, O. (1922). *Language*. London: Allen & Unwin.

Kim, Y. (2000). Subject/object drop in the acquisition of Korean: A cross-linguistic comparison. *Journal of East Asian Linguistics* 9: 325-351.

Liceras, J. M. & Díaz, L. (1999). Topic-drop versus pro-drop: Null subjects and pronominal subjects in the Spanish L2 of Chinese, English, French, German and Japanese speakers. *Second Language Research* 15: 1-40.

Oshita, H. (2004). Is there anything there when there is not there? Null expletives and second language data. *Second Language Research* 20: 95-130.

Rizzi, L. (1994). Early null subjects and root null subjects. In Hoekstra, T. & Schwartz, B. D. (eds.), *Language acquisition studies in generative grammar: Language acqusition and language disorders 8*, 151-176. Amsterdam: John Benjamins.

Rizzi, L. (2000). Remarks on early null subjects. In Friedemann & Rizzi (eds.). 269-292.

Sheehan, M. (2007). *The EPP and null subjects in Romance.* PhD dissertation, Newcastle University. http://people.pwf.cam.ac.uk/mtb23/NSP/Sheehan%20dissertation.html Accessed 05/11/07.

Valian, V. (1991). Syntactic subjects in the early speech of American and Italian children. *Cognition* 40: 21-81.

Valian, V. & Eisenberg, Z. (1996). The development of syntactic subjects in Portuguese-speaking children. *Journal of Child Language* 23: 103-128.

Wagner, S. (2008). Frequencies, quality and quantity – how best to analyse null subjects in English. Presentation, via personal communication 26/07/08.

Wang, Q., Lillo-Martin, D., Best, C. & Levitt, A. (1992). Null subjects and objects in the acquisition of Chinese. *Language Acquisition* 2: 221-254.

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