No As a Determiner in Child English: A Summary of Categorial Evidence

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Abstract: This paper summarizes the results of a descriptive syntactic category analysis of child English no which reveals that young children use and represent no as a determiner and negatives like no pen as NPs, contra standard analyses.

1. Two Hypotheses Regarding Child English No

Negation has been a central topic in child language research for decades. However, the categorial status of child English no in syntactic combinations like no pen, no more flour in there, and no more has never been determined. Descriptive studies either report few syntactic uses of no (Valian 1986) or discuss only the semantic or pragmatic aspects of no negation (e.g., Volterra & Antinucci 1979; Choi 1988). Theoretical syntactic analyses have traditionally analysed no in such constructions as an early ungrammatical negative auxiliary in combination with a reduced sentence (e.g., Klija & Bellugi 1966/1973; Bloom 1970/1991). I call this the NEGATIVE AUXILIARY HYPOTHESIS (NAH). More recent analyses simply ignore these constructions altogether (e.g., Deprez & Pierce 1993; Harris & Waxler 1996).

In this paper, I summarize the results of a categorial analysis of the uses of no in the spontaneous speech of 10 child English speakers which supports the alternative DETERMINER HYPOTHESIS (DH) that children, like adults, represent no as a determiner and build negative noun phrases (NNPs) by combining determiner no with common noun (phrases)(CN(P)s).

2. Determiner No and NNPs in English

The DH begins with the assumption that children’s uses of no and negative constituents are modelled on both standard and colloquial uses of negation in the input. In Standard English, no occurs perhaps most often as a determiner in NNPs. As NPs, NNPs appear in the major positions for NPs in English, including subject, object, indirect object, and copular predicate position. Like all other determiners, no occurs in all NNPs types (e.g., no more champagne, no champagne in the glass, no French champagne sitting on the table, no champagne that arrived yesterday, etc.). As opposed to determiners like every, no occurs with all CN

subclasses (csg (=count singular), cpl (=count plural), mssg (=mass singular), mspl (=mass plural)).

No appears in Colloquial English in a variety of elliptical expressions (e.g., no good, no longer) but perhaps most often as a determiner in “bare” NNP utterances like no champagne. Bare NNPs are categorized here using Quirk, Greenbaum, Leech, and Svartvik’s (1985)(henceforth, QGLS) gradable criteria for grammatical SITUATIONAL ELLIPSIS (SE).3 In QGLS’s system (pp. 883-90), an elliptical utterance is a clear instance of SE if it satisfies the following three criteria: (1) the missing expressions (typically subject (pronoun) + copula) must be precisely recoverable from previous context, (2) the elliptical construction should be grammatically “defective” (i.e., missing obligatory (in Standard English) words or phrases) and (3), the insertion of the missing expressions should result in a grammatical sentence with the same meaning as the elliptical utterance. Afraid not is an instance of SE in this system, since it is missing an obligatory, uniquely recoverable, subject pronoun and copula (I'm) which, when added to the original utterance, creates a grammatical sentence which preserves and does not add to the meaning of the original utterance.

Other cases of SE which can be classified as “weak” situational ellipsis (QGLS, p.890) include cases where the choice of omitted item(s) is restricted to a small set of alternatives in each context, e.g., (Are you/Are we) happy? and (He/She/ They/John . . .) Can’t play at all.

Excluded as cases of SE are cases where there “is no clear-cut choice between one verbalization and another” (Quirk et al. 1985:884), e.g., The door opened and (then, after, afterwards, after that, thereupon, etc.) Mary entered. Also excluded are NONSENTENCES (QGLS, p. 849-51), which are typically NPs which have no clear elliptical clause analysis. These include requests like the envelope, please) and ambiguous commands like the door!.

Children typically use elliptical negatives to express discourse functions including prohibition, rejection, and existential denial (see definitions below). QGLS (p.851) suggest that requests like the champagne, please (and by inference, rejections like no champagne, thank you),

3See QGLS for a typology of elliptical utterances.

QGLS give no clear criteria for nonsentences. However, they suggest that signs like Exit (analyzed as defective NPs) should not be considered elliptical subject complements because they do not occur with interrogative tags (??(The) Exit, isn’t it/isn’t there?) and have ambiguous grammatical functional status (Here is the exit, the exit is here), contra SE criterion (1).

See Drozd (1997) available from the author for detailed semantic/developmental analyses of the data presented here)
existential denials like no news, and prohibitions like no smoking! be analyzed as nonsentences with little discussion. I suggest instead that they are all examples of “weak” predicate nominal SE. Existential denial and prohibition NNPs occur with existential interrogative tags (No smoking/news, is there?)(see fn.3). Moreover, the choice of omitted items is limited to a small number of existential paraphrases, e.g., Prohibition: (There is (to be)) (must be) No smoking. NNP rejections do not occur with (existential) interrogative tags (??No champagne, will I do this here?). However, the omitted items minimally characterizing the rejection meaning seem to be limited to a small set of predicates (e.g., I want, I would like, I like, I prefer) all of which, like existential be, occur with predicate nominal complements, (Stowell 1978), e.g., I want no champagne sitting on this table. I suggest that rejection NNPs are SE versions of such sentences.

Interrogative bare NNPs categorized as instances of weak SE include recapitulatory echo questions (A: Roman found no champagne. B: (Did you/she/... say) No champagne?, and echoic exclamations (B: (Did you /she/... say) No champagne! You’re/She’s... joking!).

In contrast to existential denial, sentence denials involving nonexpletive subjects (referred to as RELATIONAL CLAUSES below) can be expressed by bare NNPs only in restricted contexts. The NNP no champagne can be used to assert denial in sentences like That is no champagne, Chantal drinks no champagne on Sunday, or No champagne is produced in Greenland. However, it generally cannot be used alone to convey these meanings (??, (No champagne) is produced . . . ). Exceptional cases seem to be limited to e.g., echoic confirmations (A: Chantal drinks no champagne on Sunday. B: No champagne (that’s right)), contrastive negation with deictic support (A: (That’s) Champagne (pointing to champagne), (That’s) No champagne. (pointing to soda)), and certain marked cases (Tom had) No luck). This result can be derived, in part, from the nature of SE: Recoverable items must be semantically “light”, like expletives and copula verbs, if their addition to an elliptical utterance is not to add to the meaning of that utterance.

If children are modelling their no uses on the input, then we would expect them to use no in a majority of cases as a determiner in (bare) NNPs. In particular, their uses of bare NNPs should be consistent with (weak) SE analyses.

3. The Determiner No Study

The goal of this study is to determine whether children’s no negatives provide evidence that they represent no as a determiner and utterances like no pen as NNPs, following the DH.

**Subjects and Method:** To get an idea of how children use no in syntactic combinations, I extracted the no utterances from the CHILDES transcripts of 10 English-speaking children, beginning with a child’s first transcript and ending with the child’s final transcript at age 3;4 (when available)(Child/Corpus Age:Month: Abe/Kuczaj/2;4-3;3, Adam/Brown/2;3-3;4, Eve/Brown/1;6-2;3, Naomi/Sachs/1;2-2;3, Nath’l Snow/2;5-3;4, Nina/Suppes/1;11-3;3, Peter/Bloom/1;10-3;1, Ross/MacWhinney/2;6-3;4, Sarah/Brown/2;3-3;4, Shen/Clark/2;2-3;1).

The 10 children produced a total of 183,261 utterances in this time window. 5% (8590) were negatives consisting of or containing the word no.

Excluded from this set were single word uses of no, immediate repetitions, negatives including unintelligible speech. negatives found in songs, etc., Also excluded were negatives which were unanalyzable (no semantical analysis possible given the context). This left a total of 384 analyzable syntactic uses of no.

I then performed a preliminary assignment of words to adult categories which revealed that 65% (251) of the nos occurred in DETERMINER POSITION, (ADJ +CN(P)). The remaining tokens occurred in preverbal (no have it)(13%), presentential, (No the sun shining) (5%) “reported speech” (He said no)(8%), and “other” (e.g., no good)(9%) positions. I then investigated whether the nos in determiner position satisfied categorial criteria for determiners.

**Syntactic Category Assignment:** The fact that children produce no in preverbal and presentential position, in particular, has led previous researchers to hypothesize that no occurs across the board as an early negative auxiliary in combination with (reduced) sentences, e.g., nouns, verbs, adjective, etc. (What I called the NAH above). Under the DH, we take the alternative view that children, like adults, have different categorial representations for no, one of which is as a determiner. However, simply showing that children’s uses of no in constructions like no pen satisfy syntactic criteria for determiners is not sufficient to argue against the NAH. It is also necessary to show (1) that the complement to no in this position is a CN(P) rather than a reduced sentence, and (2) that (elliptical) utterances like no pen function as NNPs in child English.

To this end, I conducted a categorial analysis of the 251 analyzable negatives in which no appeared in determiner position using four categorial criteria. (Henceforth, TERM = any constituent whose categorial status has not been confirmed by criterial test).

The first three criteria are based on Valian’s (1986:564-65) general categorial criteria. The DISTRIBUTION CRITERION says that a term is a member of a particular category if it observes the occurrence and precedence properties typical of members of that

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*Other factors include topic/focus structure

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35
category. No can be assigned to the determiner category only if it (1) occurs in determiner position in NP (see above), (2) does not occur preceding or following other determiners or NPs in NP (*No I, *No every girl) and (3) does not occur alone (*no). NNP terms are assigned to the NP category if they appear in all of the major NP positions in Standard English relational and copular sentences (see Section 2).

The Multiple Appearances Criterion tells us to expect to see syntactic variation characteristic of a category across syntactic positions. Thus, we expect to see NNP terms occur in expected NNP subtypes, e.g., [no+CN], [no+more], [no+ADJ+CN+PP], etc. in all of the major syntactic positions for NPs.

Valian's (1986:565) Determiner Criterion is adopted here to test for nhood. CNs occur in four subclasses (e.g., csg. cpl. msg. msgp (see above)) in head of NP position in NPNs. Children who represent the CN category should use NPNs in which the CN head exhibits CN subclass variation.

The Situational Ellipsis (SE) Criterion repeats the criteria for SEs above. If children are using bare NNP terms like adults, we should be able to assign them felicitous paraphrases which consist of the bare NNP together with the (presumed) omitted items, e.g., (There is) No champagne. This criterion is an important constraint on the kinds of constituents one can reasonably assume are missing from a child's ellipsed utterances. Even though one may show a child's no pen is an NP consisting of a determiner and CN, another might still argue that such a negative is an ungrammatical reduced version of some more complex string such as I bought no pen for my sister or No pen can replace my old ballpoint. However, the finding that a child's bare NPNs satisfy the SE Criterion would be rather strong evidence that these NPNs are grammatical elliptical negatives, although compatible with an infinite variety of more elaborate paraphrases.

Results: NPNs: By the Distribution and Multiple Appearances Criteria, children's NNP terms can be categorized as NPs if they occur (1) in all of the major positions for NPs and (2) in syntactic variation characteristic of NPs in those positions.

Table 1 shows that the children's NNP s overall meet both of these criteria. Children's NNP terms consisted of 8 different NNP subtypes which distribute to 5 different NP positions (bare NNP is also considered a syntactic position here).

<table>
<thead>
<tr>
<th>NNP Type</th>
<th>Relational Clause</th>
<th>CopPred</th>
<th>Bare NNP</th>
<th>Tots</th>
</tr>
</thead>
<tbody>
<tr>
<td>NNP+CN</td>
<td>3 / 20 / 1</td>
<td>16</td>
<td>62</td>
<td>102</td>
</tr>
<tr>
<td>NNP+more*</td>
<td>1 / 1 / 0</td>
<td>6</td>
<td>25</td>
<td>33</td>
</tr>
<tr>
<td>NNP+ADJ+CN</td>
<td>1 / 2 / 0</td>
<td>9</td>
<td>79</td>
<td>51</td>
</tr>
<tr>
<td>NNP+CN+PP+LOC</td>
<td>15</td>
<td>37</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>NNP+more+PP</td>
<td>1 / 1 / 0</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>NNP+ADJ+CN+PP</td>
<td>3</td>
<td>4</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>NNP+CN+VP</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NNP+CN+ADV</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Total: 5 / 23 / 1 53 169 251

SBJ—subject position, OBJ—direct object position, OBL—oblique object position, CopPred—Copular predicate position, LOC—locative, ADV—adverb, VP—infinite verb (phrase), VP—infinite verb (phrase)

*more mentioned separately only when it occurs as a deadjectival noun

Table 1. Distribution of analysable NPNs by NNP type (and syntactic position)

NNPs appeared in all major NP positions at least once across children, satisfying the Distribution Criterion for NPNs. NPNs appeared most often as bare NPNs (67%) and next most often in copular predicate position (21%) and in SBJ, OBJ, and OBL positions in relational clauses (12%). NPNs occurred as bare NPNs at least once in the speech of all 10 children, at least once in relational sentences in the speech of 8/10 children, and at least once in copular predicate position in the speech of 7/10 children. The relative frequency of NPNs in relational, copular predicate, and bare NPN positions does not significantly differ across the 6 children who used NPNs in all 3 positions (Kendall's W = .57).

Table 1 also shows that children used a variety of NNP types across syntactic positions, satisfying the Multiple Appearances Criterion. Type [no+CN] occurred most often (41%) followed by the more complex [No+ADJ+CN] (20%) and [No+CN+PP+LOC] (20%) types. More NNP type variation was found in positions with higher NNP frequency, as expected. All children used at least 3 different NNP subtypes as bare NPNs and 4 children used 5 different NNP types as bare NPNs.

No in Determiner Position: The preliminary word to category assignment makes all 251 analysable determiner no tokens consistent with the Distribution Criterion for determinerhood. However, a number of potential counterexamples exist outside this set.

No occurred with an ADJ other than more in [No+ADJ] combinations in 16 cases. 9 of these are grammatical examples of no good which occurred

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5 Satisfaction of this criterion also provides indirect evidence of determiner category representations. A finding that children combined no with CN subclasses can be taken as evidence that they are able to represent the abstract syntactic connection between determiner and CN complement.

6 NNP s appearing inside WH-questions (Why no Adam in the bathtub? (N=3) were also categorized as bare NPNs in this study.

7 The relative frequency of NPNs across syntactic positions reflects the relative frequency found in the input (Drozd 1977).
either as adjectival copular predicates (*This is no good*)
or as elliptical negatives, e.g., Adam: No (taking pencil back from Ursula). *No good* (*That one’s* no good)
(Adam, 2:5). One case, *No sunny outside* (Adam, 2:3),
is interpreted as metalinguistic exclamatory negation
(Drozd 1995)(*No way it’s sunny outside!*) where *no*
combines with an echoic copy of a previous utterance
the speaker is objecting to (the mother’s *Is it sunny outside?*)
rather than the adjective to its right. The remaining
7 cases appear to be instances where *no*
suppletes preadjectival *not* and hence do not count as
NNPs, e.g., *no ready yet* (*not* ready yet)(Eve, 1:11);
*This is no sharp* (*This* is not sharp)(Shem, 2:9).

No never preceded another determiner or NP in NNP.
No preceded a determiner in 3 cases of presentential
negation, e.g., *No the sun shining* (Adam, 2:4), in which
*no* combines with the following clause rather than a
determiner or subject NP (Drozd 1995), and one case of
apparent *not* suppletion, *There’s no any water in
here* (Abé, 2:9). No also occurred preceding a
pronominal, proper name, or demonstrative NP in 14
cases, consisting of 13 presentential negations (e.g., *No
I see truck* (Adam, 2:3) and one *not* suppletion, because
*there is no someone in the house* (Shem, 2:5).

No never followed a determiner, a CN, or an ADJ in
NNP. No did follow a CN in two cases of preverbal
(rather than NNP) negation, *man no taste it?* (Eve, 1:6)
and *Does the needle no working?* (Nina, 3:2).9 No
followed a proper name or pronominal NP in 22 cases.
17 of these occur in elliptical copular sentences, e.g.,
*There no country* (Peter 2:2). These were cases in
which *no* combined with CN to form a copular
predicate NNP, e.g., Adam: *Dai no Mommy* (*That’s*
no Mommy) *Dai Mommy*. Mother: *That’s Mommy.*
(Adam 2:5)10 Of the remaining 5 cases, 4 are
preverbal (*I no want go home* (Peter, 2:2) and one post-
demonstrative (that *no*? (Naomi 2:1)) (= counter-
exemple).

No never occurred alone as an NP. It did occur alone
31 times as an instance of reported speech (e.g., *He
said no*) and once as a quote (*No is a bad word (Ross)).
These are all grammatical uses.

These results reveal that children make very few
errors in constructing NNPs with *no*, strongly
supporting the DH.

NNPs in NNP: By the Determiner Criterion, we expect
CN terms to exhibit CN subclass variation across NNP
type and NP position. Table 2 (see Table 1 for legend)

<table>
<thead>
<tr>
<th>NNP Type</th>
<th>Relational Clause</th>
<th>CopPred</th>
<th>Bare NNP</th>
</tr>
</thead>
<tbody>
<tr>
<td>N==CN</td>
<td>csg cpl msgg</td>
<td>csg cpl msgg</td>
<td>csg cpl msgg</td>
</tr>
<tr>
<td>N==ADJ+CN</td>
<td>11 12 1</td>
<td>8 6 2</td>
<td>37 13 12</td>
</tr>
<tr>
<td>N+CN+PP</td>
<td>1 1 1</td>
<td>1 6 2</td>
<td>13 19 7</td>
</tr>
<tr>
<td>(+LOC)</td>
<td></td>
<td>7 2 6</td>
<td>15 12 10</td>
</tr>
<tr>
<td>N+ADJ+CN+PP</td>
<td>2 1 1</td>
<td></td>
<td>1 3</td>
</tr>
<tr>
<td>N+CN+VP_1</td>
<td>1 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N+CN+ADV</td>
<td>1 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Totals 12 13 2 18 15 13 65 46 32

Table 2. Occurrence of CN subclasses across NNP
type and syntactic position (N=216)

As the data suggest, the children use all three CN
subclasses productively, satisfying the criterion.

An additional test was performed to check if the
children’s sentential negatives exhibited obligatory
number agreement between subject and verb (e.g.,
*There are* (*is*) *no pens, No champagne* (*are*)
*coming*). If children know that it is CNs (rather than
reduced sentences) that combine with determiner *no*,
they should consistently produce number agreement
between CN and verb when appropriate. To test this,
I compiled all of the negative sentences containing
either (1) an uncontracted copular verb followed by
an NNP, or (2) a relational clause with an NNP
subject and an inflected (finite) verb. Only clauses
with unreduced or reduced plural (*’re*) copular verbs
are relevant to the test since the contracted copula (*’s*)
is unspecified for number. I collected 5 such copular
negatives from four children, *There were no cars
coming* (Abé, 3:1), *They’re no dogs in their
yard* (Nina 2:5), *There was no more candy in this
egg* (Ross 3:3), *There is no mouth* (Shem 2:7), and *There
isn’t no babies* (Shem 3:0), and 2 relational clauses,
*No recipe calls for anything* (Abé 2:10), and *No
wheels are going around* (Shem 2:7). Correct number
agreement occurred in the two singular existentials
and in 2/3 plural existentials. Both relational
sentences show correct number agreement.

These results suggest that the children represent CN
terms in NNPs as CNs. This result is unexpected
under the NAH, but strongly supports the DH.

Bare NNPs: Due to their elliptical character, typical
short length, presumed simple syntactic structure, and
early emergence in child languages, bare NNPs like
*no pen* in child English are often assumed to be
ungrammatical elliptical expressions. However, if

9 I take *man no taste it* as a possible counterexample, since it
is impossible to tell from context whether the first negative isn’t an ungrammatical version of *No man taste*?

10 One might argue that negatives like *Dai no Mommy* are to
be modelled as standard English *That is not Mommy*. However, the no versions are often productive in the input
(Drozd 1997). For example, Adam’s mother often uses
(ungrammatical) negatives like *That’s no ladder for that
(Adam 2:3).
these negatives satisfy the SE Criterion, we have evidence that they may be grammatical instances of (weak) SE, as expected under the DH.

The children's bare NNPs typically occurred as assertions, directives, and interrogatives. The interrogatives were separated out and directly interpreted using the SE Criterion. To check if the others satisfy the SE Criterion, I first performed a preliminary assignment of NNPs to discourse functional categories to get an idea of what kinds of items, if any, might have been omitted from these utterances. An NNP was categorized as an EXISTENTIAL DENIAL if the existence of the denotation of the CN(P) in context was negated. An NNP was categorized as a RELATIONAL DENIAL if the NNP could be interpreted as a sentential argument (e.g., subject, object) in a negative sentence with a nonexpletive subject, e.g., (That is) No champagne, (Chantal drinks) No champagne, or No champagne (is produced in Greenland). Existential and relational bare NNP denials were kept separate because they have different occurrence restrictions in discourse, as discussed above. An NNP was assigned to the REJECTION category if the denotation of the CN(P) was not desired by the speaker, to the PROHIBITION category if the addressee was dissuaded from interacting with the denotation of the CN(P), and to the EXCLAMATIVE OBJECTION category if the NNP was used to object to the meaning of a previous utterance which the speaker finds offensive or inappropriate (All of these were cases of No way!)

The preliminary assignment exhausts all of the noninterrogative analyzable bare NNPs in the sample: Existential denial (64%), rejection (11%), prohibition (7%), relational denial (5%), metalinguistic exclamative negation (2%). Interrogatives constituted 10% of the sample, and reported speech 1%.  

EXISTENTIAL DENIAL, REJECTION, PROHIBITION:

All of the existential denials, rejections, and prohibitions could be interpreted as elliptical predicate nominal instances of (weak) SE. Representative examples are in (1)-(3) with paraphrases (**) showing assumed missing items.

(1) Existential Denial: Nina (2,4) Mother: Are there many monkeys hanging there? Nina: Uhhuh. No more monkeys. (** There are no more monkeys)  
Mother: No more. Where are they?

(2) Prohibition: Nina (3,0) Mother: Do you want me to jump? Here, let me have it. Nina: No. No jump rope out here (** There is' there will be no jump rope out here!)

(3) Rejection: Peter (2,8): Pat: That's the kind you want isn't it? Peter: No hard board on it (** I want no hard board on it) Pat: Oh, you just want plain

**The metalinguistic (no way!) and reported speech tokens e.g., Do you know why she says 'No way, Jose?' (Ross, 3,3) are all grammatical uses of no (Drozd 1997).

Peter: Yeah.

Like all of the other examples, the negatives in (1)-(3) can be naturally interpreted as missing an obligatory subject and (copular) verb, which, when added to the utterance, creates a grammatical sentence which does not add to the intended meaning of the original utterance, as required by the SE Criterion. Furthermore, all of the glosses are felicitous in context.

This analysis makes an added prediction about "complex" bare NNPs with PP, gerundive, and infinitival complements expressing existential denial (e.g., no more flour in there). One might argue that these NNPs are not bare NNP instances of SE ((There is) no more flour in there) at all but ungrammatical utterances missing a copula in medial position, e.g., No more flour (is) in there. I call this the MISSING MEDIAL COPULA (MMC) analysis.

Of the bare NNP existential denials, 30% were complex bare NNPs. Though all of these satisfied the SE criteria, 91% were also compatible with a MMC analysis as well, due to the large number of such NNPs with locative adjuncts. These are consistent with either analysis (as shown just above). However, two pieces of evidence support the SE analysis. The first that only the SE analysis covers ALL of the analyzable nonexistence bare NNPs. NNPs with benefactive PP or infinitival complements, which are only compatible with the SE analysis, also appear several times in this sample: e.g., No place for the dolly (Nina, 2,4)** There is no place for the dolly.

** No place is for the dolly.

Secondly, MMC paraphrases are typically awkward in context when locative adjuncts are present, as in (4).

(4) Abe (2,9) Abe: Mom please I want my squirt gun. Mother: Ok, here you go, don't squirt me any more, ok? Abe: My squirt gun! I can't get water in it, help me please, I can't get water in it. No water in here, Daddy. (** There is no water in here, ??No water is in here.)

A felicitous context for a SE or "presentative" paraphrase is one like (4) "in which the event is introduced within a situation where no preparation has been made for it" (e.g., Bolinger 1977:94). A felicitous context for the MMC paraphrase would be one in which the (non)existence of water in the gun was already topicalized in context. But this condition is missing in (4). Hence, the MMC paraphrase is awkward.

I conclude that the complex NNPs expressing existential denial are also grammatical instances of SE.

RELATIONAL DENIAL: 5% (9/169) of the bare NNPs conveyed relational denial. 2 of these are ungrammatical, because the omitted items appear to be non-expletive subjects and predicates (see Section 2), e.g., Richard: Looks like a square. Is it a square?
Adam: No square, is clown. That's it, it's no square. That's it, it's a clown.

(5) Naomi (1;10) Mother: Nom, what baby has no clothes on? Naomi: No clothes on. That baby (deictic gesture) has no clothes on. Mother: Yes, that's the right baby. That has no clothes on.

(6) Ross (2;10) Father: You're a little baby and you get pajamas and you get a bottle, and what else? Ross: And a bottle. Father: And what else? Ross: And no baby food. Of these, perhaps my analysis of (5) is the most debatable. I would argue that the mother's remark could not have been made unless Naomi made some gesture telling her which was the "right" baby. This makes the "deictic" SE analysis felicitous.

In sum, these results suggest that children, rather surprisingly, obey the strict constraints on using bare NNP s to express relational denial in the vast majority of cases.

**Interrogatives:** 10% (16) of the bare NNP s occurred as interrogatives. Of these, 9 are recapitulatory echo questions, as in (7), and 4 are Y/N existential questions, as in (8).

(7) Peter (2;0) Lois: I just put them in there for no reason at all. Peter: No reason at all? (For no reason at all you put them in there?)

(8) Nina (3;3) Mother: Ok. Let me go see if I have any oranges. Uh oh (trouble). Nina: No oranges? (Are there no oranges?)

The remaining 3 cases are ungrammatical (echoic) why nonexistence questions, e.g., Why no peanuts in it? (Why are there no peanuts in it?) (Nathaniel, 3;0) and are considered counterexamples.

Thus, 81% (13/16) of the NNP interrogatives can be considered grammatical examples of SE.

In summary, the children's bare NNP s, with few exceptions, can be analyzed as grammatical instances of SE. Like the previous results, this result strongly supports the DH but is unexpected under the NAH.

**4. Summary**

I have presented evidence here that children's uses of no in determiner position are legitimate, grammatical uses of determiner no, and that children's negatives like no pen are grammatical NPs, even when they occur as elliptical negatives. This supports the hypothesis that the CN and NP categories and at least some determiner categories are established early in child English. These findings undermine the Negative Auxiliary Hypothesis which claims that child English no in negatives like no pen is an early auxiliary sentence negation marker in combination with a reduced sentence. This hypothesis is still applicable to the preverbal and presentential no negatives. However, these examples only comprise 18% of the data. These findings also argue against the hypothesis that early child languages lack functional categories (Radford 1990). Rather, these findings introduce the interesting possibility that "weak" (existential, cardinal) determiner systems may emerge in child languages early, perhaps before the emergence of "strong" or presuppositional determiner systems (Drozd 1997).

**5. References**


