

GENITIVE SUBJECTS IN CHILD ENGLISH¹

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0. Abstract

This chapter provides an analysis of children's so-called 'genitive subjects' (like *my* in *My want one*) within the framework of Principles and Parameters Theory. Child clauses with genitive subjects have been argued to have a very different syntactic structure from their adult counterparts, viz. to be nominal rather than clausal, or VPs rather than IPs, or projections of an underspecified (rather than a fully specified) INFL. I argue that the distribution of children's genitive subjects shows conclusively that the structures containing them are clauses rather than nominals. I go on to challenge the traditional analysis of *her/my/our/its* subjects as genitive pronouns, arguing instead that *her* subjects are objective, *my/its* subjects function as strong nominative pronouns for the children who use them, and that *our* subjects result from a lexical gap in the child's pronoun paradigm. I conclude that there is no evidence that English children go through a *genitive subjects* stage, and hence no evidence that the grammars developed by two- and three-year old children are radically different from their adult counterparts.

1. Introduction

In numerous acquisition studies over the past two decades, there have been reports of young children (aged 1-3 years) producing structures like those in (1) below with (italicized) genitive subjects:

- (1)(a) *My* put it up 'side my bus. *Her* is jolly strong, isn't she? (Douglas 3;2, from Huxley 1970)
- (b) *Her* fell off...*Her* didn't...*Her* did it again (Polly 2;3, from Chiat 1981)
- (c) Why did *her* have a runny tummy? Look, *our* found that other bit (Sophie 3;0, from Fletcher 1985)
- (d) Look what *my* got. *Her* crying now (Nina 2;3, from Vainikka 1994)
- (e) *My* can't get out of here (Child 9, from Rispoli 1995)

(For familiarity, I describe child pronouns like *my* as genitive since they function as such in adult English, setting aside for the time being the question of whether they have the same genitive status in child English.)

Rispoli (1995) has shown that children's case errors are not random: although oblique (objective/ genitive) pronouns are frequently extended to use as subjects, by contrast nominative pronouns are rarely extended to non-subject use. For example, in Rispoli's study, *me* was used as a subject 798 times and *my* 191 times: by contrast, *I* was used as a subject 11,791 times, as a possessor 3 times, but never as an object. In this chapter, my specific focus is on children's use of apparent genitive subjects. The theoretical framework I adopt is that of Principles and Parameters Theory (PPT).

Within acquisition studies in a PPT framework, children's use of genitive subjects has been argued to provide crucial evidence about the nature of early child grammars. For example, Vainikka (1994) argues that genitive subjects provide us with evidence in support of a *structure-building* model of acquisition in which children gradually build up more and more complex clause structures, first projecting VPs, then forming an extended projection of VP into IP, and then finally forming a further extended projection of IP into CP. By contrast, Schütze and Wexler (1996) argue that genitive subjects lend empirical support to a very different *underspecification* model of acquisition in which children's clauses have the same CP/IP/VP structure as their adult counterparts (so that there is continuity between adult and child structures), but in which functional heads are optionally underspecified with respect to grammatical features they carry in the corresponding adult grammars. A very different view (articulated in Rizolfi 1995) is that children's genitive subjects suggest that their earliest clause structures may be nominal rather than verbal in nature. In this chapter, I present a critique of all three analyses, ultimately arguing that children's so-called 'genitive' subjects may not be genitive at all. I begin by exploring the possibility that children's clauses with genitive subjects are nominals of some kind.

2. Nominal analyses

Pensalfini (1995) highlights potential parallels between child clauses with genitive subjects and adult gerund structures with genitive subjects such as that bracketed in (2) below:

- (2) John's computer replies to e-mail without [*his having to turn it on*]

He maintains that adult genitive+gerund structures are NPs, with the subject being assigned genitive case by virtue of being in spec-NP (i.e. in the specifier position within NP). He goes on to suggest that children's clauses with genitive subjects like those in (1) above are also NPs: he analyses them as nominalizations, though provides no details of their internal structure.

However, there are a number of reasons to be sceptical of Pensalfini's claim that child clauses with genitive subjects are nominal (ization)s. As Pensalfini himself observes, since +*ing* is the suffix most commonly used to nominalize verbs in English (and indeed the only one which is productive), his analysis would lead us to predict that genitive subjects would mainly occur with +*ing* verb forms. However, if we look at the distribution of *my* subjects in the utterances produced by Nina between 1;11 and 3;0, we find 134 examples of *my* used as the subject of an uninflected verb (e.g. *My have more*), 5 examples of *my* used as the subject of a past tense verb (e.g. *My saw that in a stocking*), 3 examples of *my* used as the subject of *got* (e.g. *My got that*), and 11 examples of *my* used as the subject of an +*ing* form (e.g.). The fact that only 7% (11/153) of Nina's *my* subjects occur with +*ing* verb forms casts doubt on Pensalfini's analysis².

What makes the nominalization analysis particularly problematic is the fact that a number of studies have reported children using genitives as subjects of verbs overtly inflected for (past) tense – as in the examples below:

- (3)(a) *My taked* it off. *My cracked* the eggs. *My blew* the candles out (Jeffrey 2;6, from Budwig 1995)
(b) *My finished* (Katriona 2;4, from Huxley 1970)
(c) And *my broked* it (Child 11, 2;8, from Rispoli 1995)
(d) *My caught* it. *My ate* outside. *My cried* in the bed. See *my made* a poopoo (Nina 2;1/2;1/2;3/2;4, from Vainikka 1994)
(e) *My bumped* it (Naomi 2;3, from Powers 1996)
(f) *My had* a tape recorder (Peter 2;5, from Schütze & Wexler 1996)
(g) *My did* get my leg dry (Betty 2;6, from the Bristol corpus)

Since tense is a verbal inflection (and verbs carrying past tense +*d* cannot be nominalized in English), it seems implausible to analyse structures like (3) as nominalizations.

A different nominal analysis of genitive clauses is proposed in Hamburger 1980, and modified in Powers 1996. Hamburger suggests that child clauses like *My did it* are noun phrases containing a determiner *my* which modifies a verb phrase. Recasting Hamburger's analysis within the DP framework, Powers (1996, p.132) proposes that *My did it* has the structure (4) below:

- (4) [DP [D *my*] [VP *did it*]]

However, Powers' analysis is no less problematic than Pensalfini's. For one thing, it fails to account for the fact that genitives can occur as the subjects of auxiliaries (since auxiliaries are positioned within IP, not within VP), as in (5) below:

- (5)(a) Oh, *my can't* open it by myself (Child 3, 2;6, from Rispoli 1995)
(b) *My will* do it again (Child 7, 2;4, from Rispoli 1995)
(c) *My would* be lonely, won't I? (Douglas 3;2, from Huxley 1970)
(d) *My don't* (Naomi 2;3, from Powers 1996)
(e) No, *my am* coming up to play in there (Child 6, 2;5, from Rispoli 1995)

The auxiliary status of items like *can't* and *don't* is underlined by the fact that they contain the clitic *n't* (which attaches only to auxiliaries). Structures like (5) are also problematic for Pensalfini's analysis, given that modals, *do* and finite forms of *be* cannot be nominalized in English.

Further evidence against a nominal analysis of genitive clauses comes from the fact that genitive subjects also occur in interrogative

structures which involve auxiliary inversion or wh-movement, as examples like those in (6) below illustrate:

- (6)(a) Can our do it again? (Sophie 3;0, from Fletcher 1985)
- (b) Should my make a airplane? (Child 9, 2;9, from Rispoli 1995)
- (c) Where my sit? (Sarah 3;0, from Vainikka 1994)
- (d) Look what my got (Nina 2;3, from Vainikka 1994)

Since auxiliary inversion and wh-movement are found in clauses but not nominals, sentences such as (6) fatally undermine both Salfini's and Powers' analyses. In short, it seems highly unlikely that genitive-subject structures like those in (1), (3), (5) and (6) are nominal in nature, and far more likely that they are clausal³. In the next section, I examine two recent clausal analyses of children's genitive subjects.

3. Clausal analyses

Vainikka (1994) notes that children around two years of age produce nonfinite clauses like those below with (italicized) genitive subjects:

- (7)(a) *My* get my car (Nina 1;11)
- (b) *My* see that (Adam 2;3)
- (c) *My* pet him (Naomi 2;0)

She argues that structures like (7) are simple VPs headed by nonfinite verbs, with the subject occupying spec-VP (the specifier position within VP). In terms of the assumptions she makes, a sentence such as (7a) *My get my car* would be analysed as having the simplified structure (8) below:

- (8) [VP *My* [V get] [NP my [N car]]]

with the possessor *my* in *my car* occupying spec-NP (the specifier position within NP), and the subject *my* in *My get...* occupying spec-VP (the specifier position within VP). Vainikka argues that just as the possessor *my* in (8) carries genitive case by virtue of being the specifier of the noun *car*, so too the subject *My* carries genitive case by virtue of being the specifier of the verb *get*. In terms of the specific version of Case Theory which she adopts, genitive case is assigned to the specifier of a head noun or nonfinite verb.

A rather different analysis of structures like (7) is proposed by Schütze and Wexler (1996). They argue that there is continuity between adult and child grammars, and that clauses have the same IP structure in both, with subjects occupying spec-IP. They also argue that there is continuity between the case systems found in adult and child grammars, so that children 'know' that:

- (9) An overt (pro)nominal subject is
 - (a) nominative if the subject of a [+agr] INFL
 - (b) genitive if the subject of a [-tns, -agr] INFL
 - (c) objective otherwise (= if the subject of a [+tns, -agr] INFL)

However, they claim that INFL may be underspecified in child grammars in respect of its tense and/or agreement features. Under their analysis, (7a) would be an IP which has the structure (10) below, with the subject *my* carrying genitive case by (9b):

- (10) [IP *My* [I -tns, -agr] [VP [V get] *my car*]]

They argue that an analysis such as (10) maximizes continuity between adult and child grammars, since (they maintain) adult English gerund structures like *my winning the race* are clauses headed by a [-tns, -agr] INFL and also have genitive subjects.

Unfortunately, there are empirical shortcomings in both Vainikka's analysis and Schütze and Wexler's analysis. The two analyses have in common that they assume that genitive subjects are found only in nonfinite clauses. However, sentences such as (3), (5) and (6) above show that this is not the case at all; one example of each type is repeated in (11) below:

- (11)(a) *My taked* it off (Jeffrey 2;6, from Budwig 1995)
- (b) No, *my am* coming up to play in there (Child 6, 2;5, from Rispoli 1995)

- (c) *Should* my make a airplane? (Child 9, 2;9, from Rispoli 1995)

Since *my* in examples like (3/5/6/11) is used as the subject of (italicised) verbs and auxiliaries overtly inflected for tense/agreement, it clearly cannot be maintained that genitives only occur as subjects of nonfinite verbs.

Moreover, both analyses are problematic from a developmental perspective. Vainikka assumes that nonfinite verbs assign genitive case to their subjects: but this raises the (unanswered) question of how children come to acquire this type of case marking (since e.g. infinitives don't allow genitive subjects in adult English), and how they later come to delearn it. Equally problematic is Schütze and Wexler's claim that genitives occur as subjects of a [-tns, -agr]

INFL in child and adult grammars alike. One developmental question which this raises is why Rispoli's (1995) data show that *my* subjects represent only 1.5% (191/12,780) of children's first person singular subjects: if child grammars license genitive subjects in root clauses, we should surely expect them to be used far more productively.

There are also theoretical questions posed by the two analyses. One such relates to descriptive adequacy of the claim in (9b) that a [-tns, -agr] INFL licenses a genitive subject in adult English. (9b) would appear to be falsified by *Mad Magazine* sentences such as that produced by speaker B in the dialogue below:

- (12) SPEAKER A: I heard that you got drunk at Nina's party last night
SPEAKER B: *Me/*my/*I* get drunk at Nina's party?! Impossible – I was at home in bed
with a good bottle of malt whisky

Here, INFL would seem to be [-tns], since the verb *get* is tenseless (It does not carry past tense even though the alleged incident took place in the past); and by hypothesis, INFL cannot be [+agr], since a [+agr] INFL requires a nominative subject by (9a). So, INFL is [-tns, -agr] in (12B), and yet has an objective subject – thereby falsifying (9b). Note that subjects in adult *Mad Magazine* sentences are clearly in spec-IP rather than spec-VP, as can be seen from speaker B's italicised reply in (13) below:

- (13) SPEAKER A: How can we have a serious conversation when you won't take me
seriously?
SPEAKER B: *Me not take you seriously?! You can't be serious!*

If the subject *me* were in spec-VP, it would follow negative *not* (which is positioned between INFL and V): the fact that *me* precedes *not* suggests that *me* is in spec-IP. And yet, the subject *me* clearly does not carry genitive case, so further undermining (9b).

4. The problematic status of genitive subjects

So far, I have argued that children's structures with genitive subjects are clauses rather than nominals. Does this mean that children's clauses systematically license genitive subjects? There are a number of reasons for doubting this. One is that it is far from clear that such structures are

consistent with principles of UG (= Universal Grammar). The key point to note here is that children sometimes use genitives as the subjects of verbs which are clearly inflected for agreement, as the examples in (14) below illustrate:

- (14)(a) Now see my *am* (Child 4, from Rispoli 1995)
(b) No, my *am* coming up to play in there (Child 6, 2;5, from Rispoli 1995)
(c) *My am mad* (Child 9, 2;10, from Rispoli 1995)

Now, while there are languages in which genitives can be used as subjects of finite verbs (e.g. Finnish, Icelandic and Russian), the verbs in the relevant constructions are typically impersonal (as Schütze 1997 notes). In other words, verbs don't agree in person and number with genitive subjects in finite clauses, but rather are in the default third person singular form, as the following Icelandic example (from Andrews 1990, p.171) illustrates:

- (15) Sjúklinganna var vitjað
The-patients(MGP) was(3S) visited(DEF)
'The patients were visited'

(MGP = masculine genitive plural; 3S = third person singular; DEF = default.) If UG determines that genitive subjects don't agree with finite verbs⁴, and if child grammars are constrained by UG principles, doubts arise as to whether *my* subjects like those in (14)

could be the result of child grammars systematically licensing genitive subjects in root clauses, since it would appear that *my* agrees with *(a)m* in such structures.

A second reason for questioning whether child clauses do systematically license genitive subjects comes from our earlier observation that genitive subjects are comparatively rare: Rispoli's (1995) study shows that *my* subjects represent only 1.5% (191/12,780) of children's first person singular subjects. If child grammars systematically licensed genitive subjects, we would expect them to be used far more frequently.

A third doubt about whether genitive subjects are licensed in children's clauses arises from the observation by Schütze (1997, p.220) that children tend to use a very limited range of genitive subjects. Pensalfini's (1995) study shows that the only genitive subjects used by the four children he studied were *my* and *her* in the case of Eve, Nina and Naomi and *my* in the case of Peter, as shown in the table below:

(16) **Number of recorded examples of genitive subjects**

CHILD	AGE	MY	HER	OTHERS
Peter	2;0-2;8	39	0	0
Eve	1;6-2;3	13	5	0
Nina	2;1-2;5	12	114	0
Naomi	2;0-2;5	4	2	0

It would appear that children like Peter, Eve, Nina and Naomi simply don't produce other genitive-subject structures such as the following (where the equals sign means 'is intended to be synonymous with'):

- (17)(a) *Our* were hungry (= 'We were hungry')
(b) *Your* were sleeping (= 'You were sleeping')
(c) *Their* might frighten me (= 'They might frighten me')
(d) *His* couldn't see me (= 'He couldn't see me')
(e) *Its* was raining (= 'It was raining')
(f) *Daddy's* has gone to work (= 'Daddy has gone to work')

So, for children like these, production of genitive subjects is limited to *her* and *my*. This obviously raises the question of whether such forms really do represent a systematic syntactic error (with finite verbs and auxiliaries allowing genitive subjects), or whether they can be accounted for in some other way⁵. In the next two sections, I show that there are other (more plausible) ways of analysing *her* and *my* subjects.

5. Her subjects

Schütze (1997, pp.78-9) suggests that *her* subjects in sentences like *Her likes me* are attributable to a gap in the child's lexicon, reasoning as follows:

'At least some children go through a detectable stage at which some of the English pronoun forms are not produced at all; this is particularly common with respect to *she*... The syntactic tree could be built up using feature bundles such as [pron, 3sg, fem, NOM]...If there is no vocabulary entry with exactly this set of features, then the item with the greatest subset of these features will be inserted. Thus, a child who knows the word *her*, and knows that it is a feminine singular pronoun, could insert it in a tree, producing *Her goes*.'

In other words, at a stage where the child's lexicon includes an entry for *her* but no entry for *she*, *her* would be used in contexts where adults require *she*. This would predict that children only use *her* as the subject of an agreement-inflected verb when they have no entry for *she*.

However, doubt is cast on the generality of such an account by the fact that some children continue to use *her* subjects long after they

have acquired *she*. For example, Pensalfini's (1995) study shows that Nina (from 2;1 to 2;5) used *her* 7 times as the subject of finite clauses, but also used *she* 12 times. Huxley's (1970) study suggests that Douglas went through a period of alternating between *she* and *her* subjects. Relevant examples are given in (18) below:

- (18)(a) She naughty girl (2;5). She doe(s)n't put them in (2;8). She is a big girl (3;2). She wasn't cooking (3;6)
- (b) Her haven't got her glasses (2;9). He big so her able to ride on her big donkey (2;10). Her up in bed. Yes her can (2;11). Her brought it (3;0). Her would just break it. Yes her sometimes locks it (3;4). But where is her coming? And her had yellow hair too (3;5). No her won't fit it right (3;5)

Indeed, we even find *she* and *her* subjects within the same sentence:

- (19) Her is jolly strong, isn't she? (3;2) She kept hiding our balls and I needed to shoo her away but her didn't go (3;5).

For children like Nina and Douglas, it is clear that the use of *her* subjects can't be attributed to nonacquisition of *she*.

A more plausible way of accounting for *her* subjects is to analyse them as objective rather than genitive forms: after all, adult English *her* serves both functions. Some evidence that *her* subjects are objective comes from the study by Pensalfini (1995) which shows that the three children in his study who produced *her* subjects (Eva, Nina and Naomi) also produced objective subjects; relevant figures are given in the table below:

(20) **Number of recorded examples of objective subjects**

CHILD	AGE	ME	US	HIM	THEM
Eve	1;6-2;3	13	1	2	2
Nina	2;1-2;5	2	*	12	*
Naomi	2;0-2;5	22	*	4	*

(* There were no examples *we/us/our* or *they/them/their* subjects in the relevant corpus.) Hence, it seems plausible (on distributional grounds) to conclude that (for such children) *her* subjects may be objective rather than genitive.

Huxley's (1970) study of Douglas reveals a similar pattern: alongside *her* subjects, Douglas also uses overtly objective subjects like *me/him/us/them*, as the examples in (21) below illustrate (Numbers in parentheses indicate the age at which the relevant recording was made):

- (21) How me get them out? Now take them out when me finished. Douglas can't say them big (2;8). Me finish that up. That's how us put them on again. Me filling it up now (2;9). It is pretty when me put my socks on. Us able to make two trees. Yes them go round like that (2;10). Me able to nip onto that one. Him jumping out. Him only in the picture. Them match. How me put it under? Now him happy. Now us able, going to get more horse (2;11). Know what me keep for you? Us going to make a road for our cars. Them putting their shoes into the water. Right, after me read all stories Douglas will. One day us went to Granny's. What's for us having for lunch? Douglas see if me can do it. Us must come to look for it now (3;0). And him bumped into prison (3;1). When me big, I will go to playgroup. Him did get stung, didn't he? Him pulled out the telephone. Then us taked off all our clothes (3;2). Us need to have two piles, mustn't we? Us got a jigsaw what has it. Them can't go (3;3). Us got some round ones in our garden. And then them drove away. Driver can peer out, couldn't him? Them got names (3;4). Yes, us got a toy one in our room. When them have gone away. Us can see seagulls from here. Us couldn't keep them in the right place. No us haven't, haven't we not Mummy? (3;5) Us can make fire engines with that. Us going to have a visitor. Us went to see her the other day (3;6). Could us draw a picture of that? No, us buyed this in a shop (3;9).

One way in which we can account for Douglas' use of objective subjects is to suppose that he has already acquired the adult English case system and hence 'knows' that:

- (22) An overt (pro)nominal is
- (a) nominative if in a checking relation with a [+agr] INFL
 - (b) genitive if in a checking relation with a [+agr] D
 - (c) objective otherwise

(Here I am assuming, following Abney 1987, that genitive possessors serve as specifiers of a DP headed by an D which agrees with its specifier, and that adult gerunds with genitive subjects are DPs with the genitive in spec-DP.)

Let's further suppose (following Schütze and Wexler) that the clauses children produce may be underspecified for tense, agreement or both. On this view, clauses containing a tensed verb or auxiliary with an objective subject (like *One day us went to Granny's* or *Could us draw a picture of that?*) are IPs headed by a [+tns, -agr] INFL, whereas clauses which lack a finite verb or auxiliary (like *Me filling it up now* or *Now him happy*) are IPs headed by a [-tns, -agr] INFL: both types of clause have a subject with (default) objective case by (22c), since it follows from (22c) that any clause headed by a [-agr] INFL has an objective subject. On this view, *her* subjects would carry objective case, and would be used as subjects of clauses headed by a [+tns, -agr] INFL in structures like *Her bringed it* and *Her would just break it*, and by a [-tns, -agr] INFL in structures such as *Her able to ride on her big donkey*.

One problem posed by this account, however, is that we find *her* used as the subject of *s*-inflected forms, as the examples in (17) and (18) above show (cf. *Yes her sometimes locks it, But where is her coming?, Her is jolly strong, isn't she?*). Analysing *her* as objective in such sentences would conflict with the claim implicit in (22) that objective subjects are used only in agreementless clauses. If we accept the assumption made by Schütze and Wexler that +*s* is an inflection marking (present) tense and (third person singular) agreement, we should expect that children would use only nominative (not objective) pronouns as the subjects of *s*-inflected forms. If so, *her* cannot be objective in sentences like *But where is her coming?*.

However, the data from Douglas in Huxley (1970) seem to call this assumption into question. Douglas alternates between nominative *he* and objective *him* subjects with *s*-forms, as the examples below illustrate:

- (23)(a) He's got a mother (2;11) He's a clever pilot, he can fly upside down. When he crashes into the sea, this rescue boat go. He's quite like a duck (3;4). He can go in the lorry too, but not Peter Rabbit 'cos he is naughty (3;5)
- (b) Him is driver. Him is bear. Him was at Granny's house, too (2;11). Him hits it with it. Then the postman comes to get it, then outs it, then puts it into big piles, doesn't him? (3;3). Him is getting some petrol (3;4) (Douglas, Huxley 1970)

One way of interpreting such data is to suppose that *s*-forms have a dual status. They can either mark agreement with a third person singular subject and so have a nominative subject by (22a), or they can represent an agreementless default form (i.e. a form which carries no agreement features in the syntax but is assigned the default third person singular value in the morphology) and so have an objective subject by (22c). At any rate, the fact that Douglas uses *him* as the subject of *s*-forms undermines the credibility of claiming that *her* cannot be objective when used as the subject of *s*-forms.

Having suggested that *her* subjects are probably best analysed as objective pronouns, I now turn to look at the status of children's *my* subjects.

6. My subjects

As already noted, *my* subjects occur in a wide range of structures such as those in (24) below:

- (24)(a) What my doing? (Eve 1;10, from Vainikka 1994)⁶
- (b) Where my sit? (Sarah 3;0, from Vainikka 1994)
 - (c) Know what my making? (Nina 2;4, from Vainikka 1994)
 - (d) My get my car (Nina 1;11, from Vainikka 1994)
 - (e) My seen Terrence the digger (Bill 2;5, from Anderssen 1996)
 - (f) My going in (Nina 2;3, from Powers 1996)

- (g) My taked it off (Jeffrey 2;6, from Budwig 1995)
- (h) My will do it again (Child 7, 2;4, from Rispoli 1995)

Interestingly *my* is often used in nominative contexts (i.e. contexts where adults require nominative *I*). This is particularly clear in the case of sentences like (25) below, where *my* is used as the subject of an auxiliary *am* which is inflected for both tense and agreement:

- (25)(a) Now see my am (Child 4, from Rispoli 1995)
- (b) No, my am coming up to play in there (Child 6, 2;5, from Rispoli 1995)
- (c) My am mad (Child 9, 2;10, from Rispoli 1995)

What this suggests is that *my* may be functioning as a lexical variant of *I*, and thus carry nominative rather than genitive case: one possibility is that children who use *my* subjects misanalyse *my* as a strong form of the nominative pronoun *I*.

Personal pronouns in English are generally of the form stem+affix, so that e.g. the pronouns *he/him/his* can be segmented as *h+e/h+im/h+is* and likewise the pronouns *they/them/their* as *th+ey/th+em/th+eir*. However, strong forms like *him/them* have weak (contracted) variants '*im/em*' which have a null stem (e.g. in colloquial structures such as *I want 'im to find 'em*). The adult first person pronouns *me/my/I* can be segmented as */m+i/*, */m+ai/*, */ø+ai/*, with the */m+/* stem being restricted to oblique (objective/genitive) use, and the null stem */ø+/* being restricted to nominative use (and with *+ai/* serving as a nominative/genitive suffix, and *+i/* as an objective suffix). Since null-stem forms like '*im*' and '*em*' are weak variants of the strong forms *him* and *them*, it may be (as Tom Roeper has suggested to me) that some children initially hypothesize that the null-stem nominative form */ai/`I* is a weak form, and that it has a strong form counterpart */m+ai/`my* containing the overt first person singular stem */m/* which is found in forms like *me/my/mine*. This would mean that *my* is the strong form and *I* the weak form of the first person singular nominative pronoun in the child's grammar. An obvious consequence of this would be that children's *my* subjects (which from an adult perspective would appear to be genitives) are (from a child perspective) actually strong nominatives: the fact that *my* subjects occur in nominative contexts in sentences like (33) is therefore entirely to be expected⁷.

The hypothesis that children who use *my* subjects misanalyse *my* as a strong nominative pronoun predicts that children will use *my* as the subject of strong (uncontracted) auxiliaries, but not of clitic (contracted) auxiliary forms (if we assume that auxiliary contraction involves cliticisation of a weak pronoun to a weak auxiliary, as argued in Radford 1997b). Although no relevant quantitative research has yet been undertaken, the data on genitive subjects reported in the existing literature (some of which are cited in (26) below) would generally appear to bear out this suggestion:

- (26)(a) My can't get out of here (Child 9, from Rispoli 1995)
- (b) Oh, my can't open it by myself (Child 3, 2;6, from Rispoli 1995)
- (c) My will do it again (Child 7, 2;4, from Rispoli 1995)
- (d) My would be lonely, won't I? (Douglas 3;2, from Huxley 1970)
- (e) My don't (Naomi 2;3, from Powers 1996)
- (f) Should my make a airplane? (Child 9, 2;9, from Rispoli 1995)
- (g) Now see my am (Child 4, from Rispoli 1995)
- (h) No, my am coming up to play in there (Child 6, 2;5, from Rispoli 1995)
- (j) My am mad (Child 9, 2;10, from Rispoli 1995)

As predicted, children seem to say *my will* rather than *my'll*, *my would* rather than *my'd*, *my am* rather than *my'm*, and so on⁸.

However, sentences such as (27) below at first sight seem to pose a problem for the assumption that *my* subjects are strong nominative pronouns, since they might appear to show that children sometimes use *my* as the subject of a nonfinite verb (e.g. an *+ing* or *+n* participle):

- (27)(a) My seen tractors. My seen Terrence the digger (Bill 2;5, from Anderssen 1996)
- (b) My been the sweeties shop. My driving this car (Kenny 2;8, from Anderssen 1997)
- (c) My moving the legs. My going in. My gonna make a egg (Nina 2;0/2;3/2;5, from Powers 1996)

Since nominative pronouns occur only as the subject of finite (not of nonfinite) verbs in adult English, it might be thought that

sentences like (27) undermine the claim that *my* is a strong nominative pronoun.

However, it is interesting to note that the same children also use other nominative pronouns as subjects of clauses which contain no finite verb or auxiliary, as the examples in (28) below illustrate:

- (28)(a) He sitting on he knee. He not bigger. He not on your shoes. He running. He not weeing in there. They jumping? I seen scarecrow in the park. He not hot (Bill 2;5-2;6, from Anderssen 1996)
- (b) He have to open it? I got to be in bed (Kenny 2;7, from Anderssen 1996)
- (c) I popping balloons (Nina 2;0, from Vainikka 1994)

One way of accounting for data like (27/28) is the following. Let's suppose that INFL in child grammars may be underspecified in respect of its tense or agreement features, and that in sentences like (27/28) INFL is specified for agreement but not tense. On this view, a sentence such as *They jumping* would have the simplified structure (29) below:

- (29) [IP They [I –tns, +agr] jumping]

Because INFL is unspecified for tense and finite auxiliaries in English can only lexicalise a [+tns] INFL, the head I position of IP is empty in (29). However, since nominative pronouns like *they* occur as specifiers of a [+agr] INFL, the subject *they* in (29) carries nominative case by (22a). In much the same way, we can argue that a sentence such as *My seen tractors* has the structure (30) below:

- (30) [IP My [I –tns, +agr] [VP [V seen] tractors]]

with the subject carrying nominative case by virtue of being the specifier of a [+agr] INFL, and with the strong form *my* being used because the subject is in spec-IP rather than cliticized to INFL⁹. The more general conclusion which this line of reasoning leads us to is that sentences like (27) do not undermine the claim that *my* subjects are strong nominative pronouns¹⁰.

7. Our subjects

Although most instances of (potentially) genitive subjects reported in the acquisition literature are occurrences of *my* or *her*, we nonetheless find sporadic reports of children using other types of genitive subject. For example, Fletcher (1985) reports that Sophie used *our* as a subject in sentences such as those below:

- (31) Can our do this – this red one? Look, our found that other bit. Can our do it again? Once our came back from somewhere. Once our came back from somewhere, and me found it there, Mummy (Sophie 3;0, from Fletcher 1985)

Since Sophie uses *our* as the subject of finite verbs and auxiliaries, one possibility (suggested in Radford 1997a) is that she extends the domain of genitive case assignment from the specifier of a [+agr] D in nominal structures like *our car* to the specifier of a [+agr] I in clausal structures

like *Once our came back from somewhere*. This would mean that corresponding to the adult pattern of case assignment found in (32a) below, Sophie develops the alternative pattern in (32b):

- (32)(a) A [+agr] D can check genitive case
(b) A [+agr] head can check genitive case

In comparison with (32a), (32b) is categorially underspecified, since (32a) allows the specifier of a DP (but not an IP) to carry genitive case, whereas (32b) allows the specifier of DP and IP alike to carry genitive case.

However, it is unlikely that Sophie's grammar systematically allows genitives to be used as subjects of clauses headed by a [+agr] INFL. For one thing, although she uses *my*, *your* and *his* as possessives in sentences such as the following (all produced by Sophie at 3;0):

- (33)(a) Give my one to - her. Why did you put that in my room? Mum, is this my xxx?

- (b) Me going to watch you doing your riding lesson. Here's your one.
 (c) There's his face

there are no examples of her using genitive *my/your/his* subjects. In fact, the only other potentially genitive pronoun she uses as a subject is *her*, e.g. in sentences such as the following (all produced by Sophie at age 3;0):

- (34) Why did her have a runny tummy? And why did her have – two sweets, Mummy? Why did you give her – to her when her been flu? What did her have wrong with her?

However, as noted earlier, *her* is not a clearcut example of a genitive subject since it could alternatively be analysed as an objective pronoun (As table (35) below illustrates, Sophie makes extensive use of *me* subjects).

The full range of subject pronouns used by Sophie in the four transcripts found in Fletcher 1985 is given in (35) below:

(35) **Number of times Sophie uses pronouns as subjects**

PRONOUN FORM	AGE			
	2;4	3;0	3;5	3;11
<i>I</i>	4	0	65	36
<i>me</i>	24	37	1	0
<i>you</i>	15	8	30	21
<i>he</i>	0	10	4	16
<i>she</i>	0	1	0	2
<i>her</i>	5	4	6	0
<i>we</i>	0	0	7	3
<i>our</i>	4	5	0	0
<i>they</i>	0	0	0	4

An interesting pattern which appears to emerge from the table in (35) is that *our* subjects are used prior to the acquisition of *we*, and that once *we* is acquired (by 3;5) *our* subjects no longer occur. Although Sophie appears not to have acquired *we* by 3;0, she has acquired *us* as we see from (36) below:

- (36) He given one to – two to Hester and two to us (Sophie 3;0, from Fletcher 1985)

This suggests that her only first person plural pronoun forms at 3;0 are *our* and *us*. But if this is so, a lexical gap analysis (of the sort proposed by Schütze (1997) for sentences like *Her goes*) might be appropriate. That is, lacking the form *we* in her lexicon, Sophie resorts to using another first person plural pronoun instead in nominative contexts: since nominative and genitive pronouns share in common (under the analysis proposed in (22)) the fact that their case is checked by a [+agr] head (nominatives in clauses, genitives in nominals), *our* is used rather than *us*. If so, Sophie's *our* subjects are not the result of a syntactic error in case assignment, but rather the result of a lexical error (reflecting the fact that she has an incomplete pronoun paradigm at the relevant stage).

8. Its subjects

Brown (1973) reports that Adam used *its* as a subject; examples (from Stromswold 1990) are given below (where # marks the number of the relevant file):

- (37) Why its came off? (#19) Its breaks. Its can't fit with dis (#24). Its doesn't write (#26). Its opens. No, its doesn't go (#27). Adam said: When it go outside its moves (#28). Its fell so hard. Why its flies all by itself? (#33). Its will knock Paul? Its popped. Its looks like a popper who pop. (#34). Its pulls it. Its will hold it. Its comes apart. Its keeps (#35). Its makes like a sword (#36). Its comes off. Its hurts. Its runs away. Its breaks (#37). Its keeps falling off. Its could go in the tunnel like dat, could it, huh? (#39). Its turns (#40). Its doesn't talk (#41). See its makes some more colours. Its won't hurt (#42). Its stopped OK (#43). Its is real (#45). Its writes [...] (#47)

The status of *its* in utterances like (37) is far from straightforward. One possibility is that *its* comprises the pronoun *it* and the contracted variant *'s* of the auxiliary *is*. We could then say that a sentence like *Its opens* comprises the subject pronoun *it*, plus a

contracted third person singular

present tense auxiliary 's, plus a third person singular present tense verb *opens*: and this would be compatible with the view that sentences like (37) involve the use of a nominative *it* subject (rather than a genitive *its* subject). On this analysis, structures like *Its comes apart* might involve some form of tense copying and have a (simplified) structure along the lines of:

(38) [IP It [I 's] [VP [V comes] apart]]

with (present) tense marked not only on the auxiliary *is* but also on the verb *comes*.

However, there are a number of aspects of the sentences in (37) which cannot be accounted for straightforwardly in terms of a tense copying analysis like (38), under which 's is a present tense auxiliary. Firstly, only the contracted form *its* is found in such structures, not the full form *it is*.

Secondly, although we find *its* in such structures, we don't find (e.g.) *he's*, *she's*, or *Daddy's*. Thirdly, *its* occurs as the subject of past-tense verbs like *came/fell/popped/stopped/could*. Fourthly, *its* occurs as the subject of sentences which already contain a tensed auxiliary like *can't/will/won't/could/doesn't*. And finally, other cases of tense-copying in non-interrogative sentences reported in the acquisition literature involve the use of the auxiliary *do* rather than *be*, as the examples produced by Ross in the files indicated below illustrate (The data are from Stromswold 1990):

(39) He's getting unhappy [#] and he doesn't likes to be unhappy (#32). I did fell (#34). But my boots does tickles. And he did jumped on there. I didn't disappeared (#35). Yeah [#] but for a long time it did worked (#39). You ask me [#] it doesn't exists (#55)

For reasons such as these, it seems more plausible to follow Brown (1973) in concluding that *its* is a single lexical item. But what is its status?

One possibility is that *its* is misanalysed as a nominative pronoun (so that the child's pronoun form *its* serves a dual nominative/genitive function). Such a misanalysis might come about via mis-segmentation of adult forms like *It's disappeared* or *It's raining*, where the sequence *its* is misanalysed as a strong nominative pronoun rather than as a combination of a weak pronoun *it* cliticized to a weak auxiliary 's. This type of mis-segmentation error is all the more understandable if Adam's speech input is to a large extent based on African American Vernacular English (in which unstressed *is* and *are* typically have a null realization). Of course, this begs the question of why sentences like *He's left* or *She's working* aren't similarly mis-segmented, with *he's* and *she's* being misanalysed as (strong) nominatives. A plausible answer is that pronouns form a closed system, and children only reanalyse forms for which they already have existing entries within their own lexicon: since the child has no entry for forms like *she's* and *he's* (but does have an entry for *its*), only *it's* can be mis-segmented as a single item *its*, not *he's* or *she's*. Such an analysis would also account for the fact that Adam makes no productive use of *thats* or *whats?* as subjects: since these pronouns have no inflected case forms (e.g. no genitive form **thats/*whats*), mis-segmentation of sentences like *That's broken* or *What's happening?* would not be expected.

9. Conclusions

There are two main conclusions which emerge from this study. The first is that children's structures with apparent genitive subjects are not nominals, but rather clauses. The second is that it is unlikely that children's clauses license genitive subjects in English: *my* and *its* subjects are arguably misanalysed as strong nominative pronouns; *her* subjects are objective; and *our* subjects are the product of a lexical gap in the child's pronoun paradigm. If so, we no longer have to concern ourselves with explaining why children acquiring English go through a stage when they produce genitive subjects in root clauses, even though there is no counterpart of this type of structure in adult English, and even though children acquiring other languages with nominative subjects don't appear to go through a stage of using genitive subjects (according to Schütze 1997, p.234). If our reasoning here is along the right lines, there is no genuine genitive-subject stage in the acquisition of English. More generally, there is no evidence that the grammars of two- and three-year-old children differ radically from their adult counterparts.

10. Footnotes

1. I am grateful to the Humanities Research Board of the British Academy for a grant which enabled me to undertake the research embodied in this paper, and to Martin Atkinson, Harald Clahsen, Roger Hawkins, Tom Roeper, Carson Schütze and two anonymous referees for helpful comments on an earlier draft of this paper.

2. Tom Roeper has suggested to me that the force of this conclusion is weakened by the fact that it overlooks the possibility that `a

child could be projecting a novel nominal that does not occur in the adult language' – a nominal headed by 'an invisible +ing nominalizer'. However, it is unclear what input data would lead the child to hypothesize an invisible nominalising morpheme for which there is no evidence in the adult English data which constitutes the child's speech input.

3. Tom Roeper has pointed out to me that this conclusion is potentially undermined by child structures such as 'That a my did it' reported by Hamburger. Note, however, that a DP analysis (of the type suggested by Powers) along the lines of (4) would fail to account for the co-occurrence of *a* with *my*. Perhaps (as Tom suggests) *my* is analysed by the child as an adjectival possessive (of the type which occurs in Romance languages). Joseph Galasso has pointed out to me that his son Nicholas (at around three years of age) frequently said 'It's my do it' in contexts where an adult would have said 'It's my turn.' One possibility is that *my do it* is an elliptical variant of 'my turn to do it': however, the fact that Nicholas did not generalize this structure to other verbs suggests the alternative possibility that Nicholas misanalysed *do it* as a noun. Confusion may have been caused by adult structures like *It's my go*, where *go* is a noun (with the plural *goes*), but might be mistaken by a child for a verb.

4. An anonymous referee has pointed out to me that a potential problem with this claim is posed by ergative languages in which ergative case is identical to the genitive. It may be, therefore, that this claim has to be weakened so as to apply only to non-ergative languages such as English.

5. Vainikka (1994) suggests that many examples of child genitive subjects are mistranscribed as nominative+copula structures: in other words, she claims that what is transcribed as *you're/they're/it's/he's* may be a mistranscription of genitive *your/their/its/his* subjects (though I am sceptical about whether all three independent transcribers who transcribed the Brown corpus would have confused *he's* with *his*, given the clear differences in vowel quantity and quality between them). If this were so, children would be using a wider range of genitive subjects than is claimed here. However, the fact that genitive *your/their/his/its* subjects don't occur in contexts like (17) where such confusion is unlikely in principle casts doubt on this claim.

6. The form transcribed as *my* here may represent a contracted form of *(a)m I?*, so that *What my doing?* could be a mistranscription of *What (a)m I doing?* For this reason, sentences like (24a) should not be taken as clearcut examples of (potential) genitive subjects.

7. Note that the suggestion that children have two first person nominative pronoun forms (strong *my* and weak *I*) does not entail that they will conversely use *I* as a weak counterpart of possessive *my*. The assumption made here is that children posit that weak pronouns with a null stem have strong counterparts (not that strong pronouns with an overt stem have weak counterparts with a null stem). Since adult overt-stem forms like *me/my/we/you/your/she* have no null-stem counterparts, there is no reason for the child to expect genitive *my* to have the null-stem counterpart *I*.

8. The only example of *my* used as the subject of a contracted auxiliary which I am aware of is the following:

(40) My'm gonna play cowboy (Child 9, 2;10, from Rispoli 1995)

However, what is not clear from the transcription in (40) is whether 'm represents an unstressed nonclitic form of *am* with a schwa nucleus, or whether it represents a true nonvocalic clitic form /m/.

An interesting question raised by (8d) *My would be lonely, won't I?* is why the subject in the tag should be *I* rather than *my*. It may be that tags typically involve cliticisation of a subject pronoun to an auxiliary, and that this is why the weak (clitic) form *I* is used here. The assumption that tags involve cliticisation of a subject to an auxiliary would account for the fact that tags do not allow (non-clitic) nominal subjects – hence the ungrammaticality of **Harry is lying, isn't Harry?*

9. An interesting question posed by the assumption that *I* is a weak (and potentially clitic) nominative pronoun form for children who use *my* subjects is what *I* cliticises to in a sentence such as *I got to be in bed*. The answer may be that *I* attaches to a clitic variant of the auxiliary *have* in INFL which ultimately surfaces as a null form (perhaps because the cluster /vg/ in 'I've got' is reduced to /gg/ by assimilation and /g/ by degemination). If so, this would suggest that *I* subjects are in INFL, whereas *my* subjects are in spec-IP. For arguments that clitic subjects in adult English are in INFL, see Radford 1997b.

10. A fact which the analysis offered here has to account for is that the use of *my* as a subject pronoun is relatively rare. Of 12,780

first person singular subjects produced by the children studied in Rispoli (1995), 92% (11,791) were nominative, 6% (798) were objective, and only 1.5% (191) were genitive. In terms of the analysis offered here, what might be claimed is that most children correctly identify the properties encoded by specific lexical items from the outset (in keeping with the lexical continuity assumption made by Schütze 1997), so that they know that *I* has a dual status as a strong/weak nominative form in English and hence don't make the error of thinking that *my* is a strong nominative pronoun. An alternative account of the rarity of *my* subjects is offered by Rispoli (1994, 1995, 1997), who claims that children's *my* subjects are the result of a sporadic retrieval error: more specifically, he claims that *my* subjects are retrieved when nominative *I* cannot be accessed in the child's lexicon. Rispoli's analysis amounts to the claim that *my* subjects are the result of a performance error: hence, his analysis is consistent with the more general claim made here that *my* subjects do not indicate that child grammars systematically license genitive subjects.

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