

Root Infinitives are Finite

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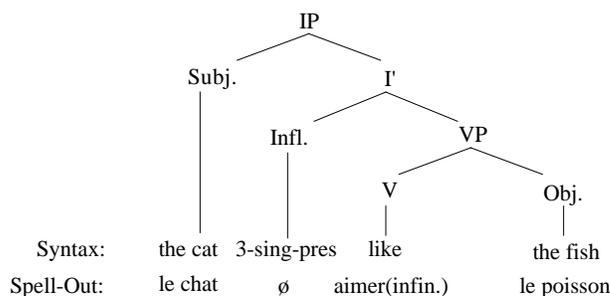
1. Complete Representations, Incomplete Derivations

Root Infinitives (RIs) are default verb forms which young children use in root clauses, where they are generally not possible in the target language. They have been found in the early speech of two-year old children learning a number of different languages, and their basic properties have been extensively documented elsewhere (Weverink 1989; Wexler 1994; Rizzi 1994). For my purposes here their most important property is that they are not distributed randomly throughout a child's speech—they are almost invariably *unmoved* verbs (Pierce 1992; Poeppel & Wexler 1993).

There is a rapidly growing variety of accounts of RIs, but there is one key property that the majority of them share, and that is that two-year olds produce RIs because they have some deficit of syntactic *representation*. The details of what children can omit from their representations vary quite dramatically from theory to theory, and range from general deficits in all functional projections (Guilfoyle & Noonan 1988; Radford 1990), to deficits in specific heads (Tense: Guilfoyle 1984; Wexler 1994; COMP: Clahsen et al. 1994), plus intermediate views in which the deficit is in knowledge about what is *obligatorily* projected (Rizzi 1994; Roeper & Rohrbacher 1994; Weissenborn 1994; Haegeman 1995). However, the basic assumption is the same across all of these accounts, namely that something is missing from children's structures.

I want to argue here that children's syntactic trees contain *all* of the ingredients of an adult structure. All that is ever missing is the derivational step which would normally combine the verb with inflection. So a root infinitive clause would look something like the French example in (1).

(1)



The verb and all of the appropriate inflectional features are present, but since they aren't syntactically joined, when morphological items are inserted to realize

the syntactic items¹, a default verbal form is used to spell-out the verb — which happens to be an infinitive in many languages, though it doesn't need to be (Crago & Allen 1995; Rohrbacher et al. 1995). The inflectional features are left unrealized, because no independent spell-out is available for them.

The plan of the paper is as follows. In part 1 I reexamine what I think are probably the best arguments in the literature in support of the claim that root infinitives are due to a representational deficit, and argue that when we look at the relevant phenomena cross-linguistically, we find that they turn out to support the missing head-movement view.

In part 2 I address the question of *why* children's derivations sometimes lack a step of head movement, and whether this is a grammatical possibility in adult languages. I suggest that failure of verb movement is linked to difficulties the children encounter in accessing morphological knowledge, and try to show that so-called *anti-agreement* effects in adult languages are close syntactic analogs of children's RIs.

2. Root Infinitives and Verb Movement

The first argument for a representational deficit account of RIs involves the disappearance of RIs in *wh*-questions demonstrated in a number of corpora (Crisma 1992; Rizzi 1994; Haegeman 1995). The argument is that if RIs become impossible in more 'complex' structures like questions, then RIs must involve structures which are, in some sense, simplified.

The second argument focusses on the clustering of RIs with null-subjects in the speech of two-year olds (Weverink 1989; Krämer 1993; Behrens 1993; Wexler 1994). This is argued to be fit naturally with the claim that clauses with RIs are syntactically non-finite, given that non-finite clauses in adult languages often allow null subjects. I will try to show that neither of these arguments holds up to cross-linguistic scrutiny.

A crucial assumption that I will be making in this paper is that there are two different ways in which structures can be ruled out by grammars—both for children and adults. On the one hand there are rigid constraints, which must be satisfied or else the sentence is ruled out automatically. Meanwhile, there are constraints which are in principle violable, but which can only be violated if nothing better can be done. The notion of violable constraints is most closely associated with work in *Optimality Theory* (Prince & Smolensky 1993), but it can in fact straightforwardly be implemented in any theory in which alternative representations *compete* (eg. Chomsky 1993).

In particular, I'm assuming that verb raising to inflection is not itself an absolute requirement. There are nevertheless absolute requirements that *entail* verb raising—for example, whatever it is that gives V2 effects in Germanic languages, and in V-raising languages Nominative case licensing may be an absolute requirement that depends on verb movement. But just putting the verb and the inflection together is not *of itself* an absolute requirement. And this is what I suggest allows children to sometimes fail to combine the verb and inflection in the syntax, which in turn is why they produce RIs.

This predicts that children will be able to use RIs, unless some other *absolute* requirement is operative in the clause which forces V–I movement to happen. Any such absolute requirement will automatically override the possibility of not moving the verb, and hence block RIs.

2.1 *Wh*-Questions and Verb Second

The first specific prediction this theory makes is as follows. I assume that in the Germanic verb second languages *wh*-questions and topicalizations are CPs, in which the verb raises to C, but that subject-initial declaratives are IPs, in which the verb raises only as far as I (Travis 1984; Zwart 1993). If this is so, then we expect to find lots of RIs in subject-initial declaratives, because V–I movement is not an absolute requirement. But if V–I–C in questions and topicalizations is an absolute requirement, then this requirement will override the ability to leave the verb in V. Therefore, the verb will raise to C, picking up Infl on its way and surfacing as a finite form.

If, however, question formation does not require V–I–C movement in a language, we expect that RIs should be just as prolific in questions as in declaratives. Cross-linguistically, therefore, RIs are predicted to disappear in *wh*-questions and topicalizations *only* in children learning V2 languages.

The first part of this prediction is confirmed. (2) shows Haegeman's (1995) evidence that root infinitives disappear in *wh*-questions in early Dutch.

(2)

Hein 2;4–3;1	+ <i>finite</i>	– <i>finite</i>	% – <i>finite</i>
All clauses	3768	721	16%
<i>wh</i> -questions	88	2	2%

Total = 4579, $\chi^2 = 12.71$, $p < 0.001$
(Hein corpus: Elbers & Wijnen 1992)

The same effect has been shown for German by Kursawe (1994): only one of Kursawe's sample of 307 early German *wh*-questions was non-finite (0.3%). This is among children whose baseline rate of RIs is 20–30%. Santelmann 1994 reports a similar effect in early Swedish *wh*-questions. 574 of 579 *wh*-questions (99%) had the verb in second position, and there is a strong correlation between second position and finiteness in early Swedish (Santelmann p.c.). These children also use large numbers of RIs in declaratives.

Not surprisingly, given that topicalization in Germanic V2 languages also involves V–I–C movement, RIs are also not found in children's topicalization structures. Haegeman 1995 shows that in the Hein corpus 101 of 1324 sentences with an overt subject in initial position (8%) are non-finite, whereas just 5 of 1351 sentences with a non-subject in initial position (0.3%) are non-finite. Similarly, Poeppel & Wexler 1993 show that 24 of 154 subject initial declaratives (16%) are non-finite in the Andreas corpus, but none of Andreas' 50 non-subject initial declaratives are non-finite.

Since I'm claiming that root infinitives disappear in questions and topicalizations in V2 languages just because of the verb movement requirement that applies in questions in these languages, we predict that in languages which

don't require verb movement to C in questions, root infinitives should be just as prolific in questions as they are in declaratives.

This prediction can be tested in child English subject questions. This is because subject questions in English don't involve any movement of main verbs. Most of the available corpora of early English contain very few subject questions, but if we consider the one child who *does* ask a lot of subject questions, Adam (Brown 1973: CHILDES), we can compare his rates of inflection in declarative clauses and subject questions (3), and see that there is no difference between the two rates, as the theory predicts.

(3)	Adam 2;3-3;1	<i>inflected V</i>	<i>uninflected V</i>	<i>% inflected</i>
	Declaratives	134	203	40%
	<i>wh</i> -questions	69	92	43%

We expect to find a similar lack of contrast in child French, since question formation in colloquial French also doesn't involve verb movement to C: the non-inversion questions in (4) are taken from the parental input in the Philippe corpus (Suppes et al. 1973: CHILDES). Unfortunately, this prediction cannot be tested with currently available corpus data, because French children's spontaneous questions are flooded with auxiliaries, which are always finite, even in declaratives. It has been claimed that root infinitives are blocked in early French *wh*-questions (Crisma 1992). But as table (5) shows, Crisma's effect is entirely due to the proliferation of auxiliaries in questions. Phillips 1995a shows that the same distribution of verb types in questions and declaratives is found in three further corpora of early French. Therefore we do not yet know whether question formation affects the possibility of RIs in early French or not, but I for the time being I make the conservative assumption that it does not.

- (4) a. Où tu veux la mettre? *where do you want to put it?*
 b. Avec qui on fait de la musique?*who is music being played with?*

(5)	Philippe 2;1-2;3	<i>finite Aux</i>	<i>infin. Aux</i>	<i>finite V</i>	<i>infin. V</i>
	Declaratives	166	0	444	182
	<i>wh</i> -questions	63	0	0	0

So the first cross-linguistic contrast that we capture by assuming that root infinitives are just due to failure of head movement is the difference between V2 and non-V2 languages in the interaction between finiteness and question formation or topicalization.

2.2 Root Infinitives and Null Subjects

The second area I want to look at involves the licensing of overt subjects. While V-to-I movement might not be an absolute requirement in its own right, in languages where finite verbs raise it may be a precondition on the licensing of an overt Nominative subject. I take Case licensing to be to be an absolute,

inviolable requirement, and assume that it is regulated by the *Generalized Visibility Condition* (Shlonsky 1987; Baker 1991). This condition states that phonetically interpreted NPs must be case licensed by PF, whereas semantically interpreted NPs must be case licensed by LF. What this means is that overt subjects will need to be case licensed in the overt syntax, but null subjects will not.²

This predicts that in languages where licensing of overt subjects requires V raising, root infinitives will be impossible in sentences with overt subjects, because Nominative case licensing will force V-raising. But in languages where licensing overt subjects does not require V-raising, overt subjects will be just as legitimate in root infinitive clauses as they are in clauses with finite verbs. This prediction seems to be correct.

The table in (6) is drawn from Krämer 1993, and shows that in early Dutch there's a large drop in proportions of overt subjects between finite and non-finite clauses.

(6)	Thomas 2;3–2;8	+finite	-finite
	overt subject	431	21
	null subject	165	246
	% overt subject	73%	8%
Total = 863, $\chi^2 = 307.07$, $p < 0.0001$			

This finding has been replicated for a number of children learning V-raising languages. Haegeman (1995) shows that in the early Dutch of Hein 2569 of 3768 finite utterances (68%) have an overt subject, whereas only 106 of 721 non-finite sentences (15%) have an overt subject. Krämer 1993 shows that in the Maarten corpus (Flemish) 69 of 92 finite clauses (23%) have overt subjects, compared with only 11 of 100 non-finite clauses (11%). For early German, Behrens 1993 reports that in the Simone corpus (age 1;8–4;1: Miller 1976) 2918 of 3699 finite utterances (79%) have overt subjects, compared with 278 of 2477 non-finite utterances (11%). Similar proportions are found in the Andreas corpus (Krämer 1993; Poeppel & Wexler 1993), even when auxiliaries are ignored (Phillips 1995a).

For early French Krämer (1993) shows that if postverbal subjects are classified with null-subjects, the same kind of interactions are found as in German and Dutch (cf. Pierce 1992).

(7)	<i>prevb-subj./fin.</i>		<i>prevb-subj./inf.</i> ^a	
	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>
Nathalie 1;9–2;3	209/304	69%	49/295	17%
Philippe 2;1–2;6	523/782	67%	11/194	6%
Daniel 1;8–1;11	96/273	35%	11/205	5%

^a The denominator in these counts is the sum of all preverbal, postverbal and null subjects. Auxiliaries and main verbs have not been separated here.

An important thing to notice about these figures is that there is more than just a massively significant interaction between finiteness and null-subjects. What is really rare in these counts is examples of overt subjects with RIs. They make up on average 5% of the children's utterances. Of course, this is not a vanishingly small rate, but it is comparable to the level of exceptions to classic generalizations about finiteness and word order in French (Pierce 1992) and German (Poeppel & Wexler 1993). If the overt subjects with root infinitives are therefore just 'noise' in the data, then we may conclude that RIs disallow overt subjects in V-raising languages. This is what we predict, if nominative case licensing is contingent on V-raising.

To check the second half of the prediction about finiteness and null-subjects, we need to look at a language in which nominative case licensing clearly can't be dependent on verb raising, because there is no verb raising. And here we expect the effect of finiteness on rates of null-subject use to go away. English is an appropriate test language here. (8–9) show the results of my counts of the Adam and Eve corpora (Brown 1973: CHILDES), based on main verbs in 3rd person singular contexts only. In striking contrast to the V-raising languages, root infinitives do *not* lead to any decrease in the rate of overt subjects in English.³ For Eve, the rate of null-subject use is just the same with inflected and uninflected verbs, and for Adam there's a slight but significant trend in the *opposite* direction from the children learning V-raising languages. But this effect is *much* smaller than anything we saw for the French, German and Dutch children, and I ignore the difference here.

(8)	Eve 1;6–2;3	+ <i>finite</i>	- <i>finite</i>
	overt subject	78	138
	null subject	8	17
	% overt subject	91%	89%
Total = 241, $\chi^2 = 0.17$, $p = 0.68$			

(9)	Adam 2;3–3;0	+ <i>finite</i>	- <i>finite</i>
	overt subject	79	195
	null subject	34	47
	% overt subject	70%	81%
Total = 355, $\chi^2 = 4.98$, $p = 0.026$			

Thus there's no effect of finiteness on the overtness of subjects in early English, and this is just what we expect, given that nominative case licensing has nothing to do with head movement in English.

So this is the second cross-linguistic difference in the distribution of root infinitives, and again it divides up languages according to their head-movement properties. Whereas in section 2.1 we were looking at languages with or without I-to-C movement, this section we have been interested in whether or not a language has V-to-I movement.

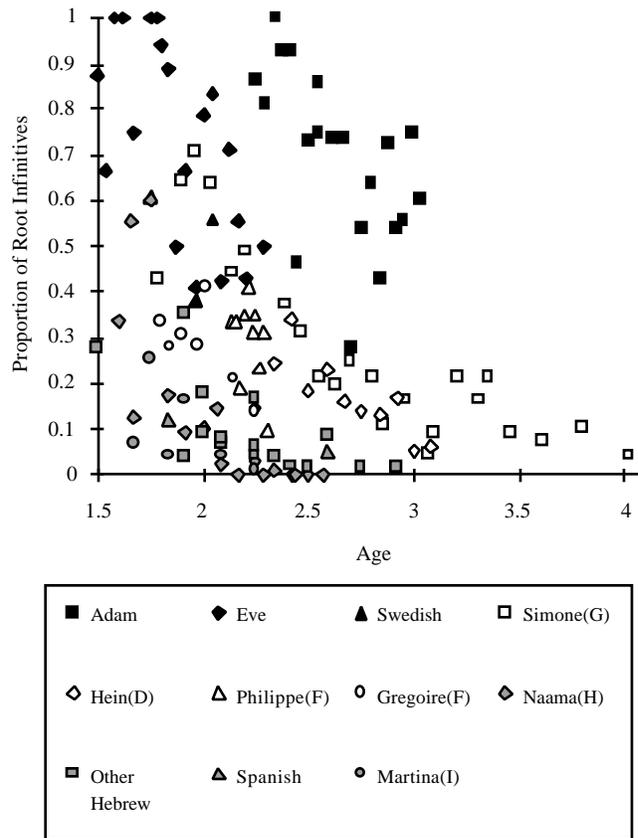
Summarizing where we are so far, then. We have looked at two kinds of evidence that have been put forward in support of the view that two-year olds

have some deficit of syntactic representation. But in both cases we failed to find the cross-linguistic uniformity that theories based on representational deficits predict. The disappearance of root infinitives in questions in V2 languages can't be due to clausal truncation, because then we'd expect the same effect in non-V2 languages, which we don't. And the interaction of finiteness with the overtiness of subjects isn't uniform across languages, contrary to what we'd expect if the effect was due to root infinitive clauses being syntactically non-finite.

3. Why Verbs Fail to Raise

A clue to what causes children to omit steps of overt verb movement may be provided by the chart in (10).

(10)



Sources: Italian, Guasti 1992; Spanish, Grinstead 1993; Catalan, Torrens 1992; German, Behrens 1993; Dutch, Haegeman 1994; Hebrew, Rhee & Wexler 1995; Swedish, Platzack 1990; English, Phillips 1995a

The chart in (10) shows that there's a correlation between the richness of the inflectional paradigm of the target language and how often and for how long children use root infinitives. The black marks at the top represent English and Swedish, which have very little verbal inflection. The white marks in the middle represent French, German and Dutch, which draw a number of distinctions in their inflectional paradigms, but less than null-subject languages. The grey marks at the bottom represent null-subject Romance, plus Hebrew, which is a fairly highly inflected language. Despite collapsing across around 35 different children learning different languages, the 3 groups use significantly different proportions of root infinitives at each of the time periods that could be compared (based on one-tailed t-tests: see Phillips 1995a for details).

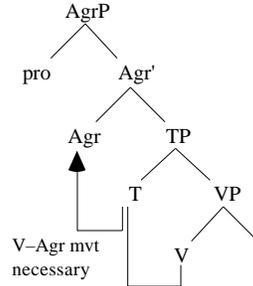
This is, of course, not a surprising new discovery. It merely confirms what has been noted impressionistically for a long time. But it has not to my knowledge been adequately incorporated into accounts of RIs.

Children clearly seem to know the syntactic consequences of their morphological simplifications, and they also seem to have near perfect knowledge of the morphological paradigms of their target language—this is reflected in the fact that whenever they use a finite form, they use it correctly.

Therefore I suggest that the cause of the children's problem is not a problem with syntactic or morphological knowledge, but difficulty they encounter with connecting the two systems. In particular, for some reason there's some difficulty associated with one-to-many relations between morphological forms and bundles of syntactic features. If children don't connect their verbs with inflection syntactically, then they don't have to face this morphological problem. The one-to-many access problem is clearly going to be more acute in less richly inflected languages, like English and Swedish, and therefore we expect RIs to be used more often and decline at a later age in children learning less highly inflected languages.

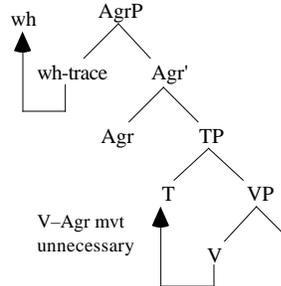
The remaining question is: is there any independent motivation from what we know about adult languages for the claim that V-to-I movement is a violable syntactic requirement? I think there is, and it is what has become known in the syntactic literature as the *anti-agreement effect* (Ouhalla 1993). It's what is found in some languages in which *pro* must be identified by agreement in declarative clauses, and this entails verb raising at least as far as the agreement head. This is shown in (11a). But when *wh*-movement takes place, as in (11b), and there is a trace in the argument position instead of a *pro*, there's no longer any need for agreement to identify *pro*, and so agreement disappears from the verb. And this may mean that the verb doesn't move as far as the agreement head. An example of this alternation in Breton is shown in (12).

(11) a.



Declarative

b.



Wh-extraction

(12) a.

Levrioù a lennent
books PCL read:3pl
'They read books.'

(Breton: Borseley & Stephens 1989)

b.

Petore paotred a lenne (*lennent) al levrioù
which boys Comp read read:3pl the books
'Which boys read the books?'

So far this looks only a little like the root infinitive phenomenon in children. And you could take it or leave it. But where anti-agreement really looks very much like root infinitives, is in extraction contexts when other head-movement requirements are active. Recall how we saw with children's root infinitives that when the verb needs to move to C, or V-raising is required for Nominative licensing, this requirement *overrides* the possibility of having RIs. We find just the same kinds of effect with anti-agreement. If there is a clitic negation head above the agreement head, then the verb has to raise to NEG, and anti-agreement is blocked in negative questions. This is the situation in Berber and Breton (13a–b). If negation is lower than agreement, then it doesn't block anti-agreement. This is what is found in Turkish (13c).

(13) a.

man tamghart ay ur t-ssn Mohand?
which woman Comp Neg 3fs- know Mohand
'Which woman doesn't know Mohand?'

(Berber)

b.

Petore paotred ne lennent (*lenne) ket al levrioù
which boys Neg read:3pl (*read) not the books
'Which boys did not read the books?'

(Breton)

c.

Hoca -yi gör-me -yen (*-ler) öğrenciler
lecturer-Acc see-Neg-Part (*-3pl) students
'The students who did not see the lecturer.'

(Turkish)

If there's a higher *agreement* head than the one that's affected by extraction, then anti-agreement will be blocked. We can see this in the split ergative language Yimas (Foley 1991), shown in (14), which has the interesting property

of displaying object agreement either higher or lower than subject agreement, depending on the person of the object. Yimas shows subject and object anti-agreement, but only when the extracted argument is marked by the *highest* agreement head in the clause (Phillips 1995b). So there is subject anti-agreement when the object is marked by a lower agreement head. But when the object agreement is higher than subject agreement, and the subject is extracted, subject agreement shows up just as in a declarative clause, because the verb has to pick it up on the way to object agreement (14c).

- (14) a. nawm m- Ø- kul- cpul -um?
 who-pl Comp Ø_{3pl-Erg} 2pl-Acc hit PLUR
 ‘Who hit you all?’
 b. nawn Ø impa- tpul?
 who-sg Ø 3dl-Abs hit
 ‘Who did those two hit?’
 c. nawrm na- mpi -tpul?
 who-dl 3sg-Abs 3dl-Erg hit
 ‘Who hit him?’

And there are various other related effects involving complementizers or mood particles in various languages which also show that anti-agreement is a very fragile phenomenon. By this I mean that as with RIs, it is possible to miss out a step of verb movement and fail to pick up some inflection, *unless* any other element around in the clause requires verb movement in order to be licensed, in which case the anti-agreement effect is blocked (cf. Phillips 1996).

- (15) a. Mood blocks AAE (Palauan: Georgopoulos 1991)
 b. Embedded I-C requirement blocks AAE in long extraction: Berber, Breton, Turkish

What the discussion of anti-agreement shows is not that adults are omitting verb movement steps for the same reasons as children—I am assuming that there is *some* difference between the adults and the children—what hope to have demonstrated is that the *syntax* of root infinitives has just the characteristics of a fairly widely distributed phenomenon in adult languages, and so root infinitives really don’t show that there’s any difference at all between children’s and adults’ syntax. This strengthens the conclusion from section 2 that root infinitives are not due to a deficit in children’s syntactic representations, and are realizations of entirely finite clauses.

Endnotes

* I am grateful to Alec Marantz, David Pesetsky, Carson Schütze, Ken Wexler and Andrea Zukowski for extremely useful discussion of this work. Standard disclaimers apply. This research was supported in part by NSF Research Training Grant #DIR9113607 awarded to MIT.

¹ I assume an approach to morphosyntax in which morphological items are the post-syntactic spell-out of syntactic heads (e.g., Halle & Marantz 1993).

² I assume for the sake of discussion that early null subjects are *null topics* (cf. Jaeggli & Hyams 1988; Rizzi 1994a; Hyams & Wexler 1993), though little turns on this assumption in this paper.

³ Some papers have claimed that early English does show an increase in null-subject rates in non-finite clauses, but I am sceptical of this claim. Sano & Hyams 1994 reports a relatively small difference, but I have been unable to replicate this finding in my counts: their effect may be due to the fact that they were combining figures from disparate sources.

Roeper & Rohrbacher (1994) and Bromberg & Wexler (1995) claim that in early English *wh*-questions null subjects are only possible in non-finite clauses. However, these claims are unwarranted: all that has been shown is a replication of Sano & Hyams' finding that overt *auxiliaries* always have overt subjects in early English. The samples in these studies consist entirely of nonsubject questions, constructions which require auxiliaries in adult English. Just as in declaratives, null subjects occur only when the auxiliary is null.

References

- Baker, M. (1991) On some subject-object non-asymmetries in Mohawk. *Natural Language and Linguistic Theory* 9, 537–576.
- Behrens, H. (1993) Temporal reference in German child language. Ph.D. dissertation, University of Amsterdam.
- Borseley, R. & J. Stephens (1989) Agreement and the position of subjects in Breton. *Natural Language and Linguistic Theory* 7, 407–428.
- Bromberg, H. & K. Wexler (1995) Null-subjects in declaratives and *wh*-questions. In C. Schütze, J. Ganger & K. Broihier (eds.), *Papers on Language Processing and Acquisition*, MITWPL #26.
- Brown, R. (1973) *A first language*. Cambridge, Mass.: Harvard University Press.
- Chomsky, N. (1993) A Minimalist Program for Linguistic Theory. In K. L. Hale & S. J. Keyser (eds.), *The view from Building 20: Essays in linguistics in honor of Sylvain Bromberger*, Cambridge, MA: MIT Press.
- Clahsen, H., M. Penke & T. Parodi (1994) Functional Categories and Clause Structure in Early German. *Language Acquisition*.
- Crago, M. & S. Allen (1995 in press) Building the case for impairment in linguistic representation. To appear in M. Rice (ed.), *Towards a genetics of language*, Hillsdale, NJ: Erlbaum.
- Crisma, P. (1992) On the acquisition of *wh*-questions in French. *Geneva Generative Papers* 1992, 115–122.
- Foley, W. (1991) *The Yimas language of New Guinea*. Stanford: Stanford University Press.
- Georgopoulos, C. (1991) *Syntactic variables: Resumptive Pronouns and A-bar Binding in Palauan*. Dordrecht: Kluwer.
- Guilfoyle, E. (1984) The acquisition of tense and the emergence of lexical subjects in child grammars. *McGill Working Papers in Linguistics*.

- Haegeman, L. (1995) Root infinitives, tense and truncated structures. *Language Acquisition* 4, 205-255.
- Halle, M. & A. Marantz (1993) Distributed morphology and the pieces of inflection. In K. L. Hale & S. J. Keyser (eds.), *The view from Building 20: Essays in linguistics in honor of Sylvain Bromberger*, Cambridge, MA: MIT Press, 111-167.
- Hendrick, R. (1988) *Anaphora in Celtic and Universal Grammar*. Dordrecht: Kluwer.
- Krämer, I. (1993) The licensing of subjects in early child language. In C. Phillips (ed.), *Papers on Case & Agreement II, MITWPL* 19, 197-212.
- Kursawe, C. (1994) *Fragesätze in der deutschen Kindersprache* [Interrogative sentences in German child language]. M.A. thesis, University of Düsseldorf.
- MacWhinney, B. & C. Snow (1985). The Child Language Data Exchange System. *Journal of Child Language* 12, 271-296.
- Ouhalla, J. (1993) Subject extraction, negation, and the anti-agreement effect. *Natural Language and Linguistic Theory* 11, 477-518.
- Phillips, C. (1995a) Syntax at Age Two: Cross-Linguistic Differences. In C. Schütze, J. Ganger & K. Broihier (eds.), *Papers on Language Processing and Acquisition, MITWPL* #26.
- (1995b, in press) Ergative subjects. In C. Burgess, K. Dziwirek & D. Gerdts (eds.), *Grammatical relations: Theoretical approaches to empirical issues*, Stanford, CA: CSLI Publications.
- (1996) Disagreements between Adults and Children. Talk presented at Linguistic Society of America meeting, San Diego.
- Pierce, A. (1992) *Language acquisition and syntactic theory: A comparative analysis of French and English child grammars*. Dordrecht: Kluwer.
- Poepfel, D. & K. Wexler (1993) The Full Competence Hypothesis of clause structure in early German. *Language* 69, 1-33.
- Rhee, J. & K. Wexler (1995) Optional infinitives in Hebrew. In C. Schütze, J. Ganger & K. Broihier (eds.), *Papers on Language Processing and Acquisition, MITWPL* #26.
- Rizzi, L. (1994) Some notes on linguistic theory and language development: The case of root infinitives. *Language Acquisition* 3, 371-393.
- Roeper, T. & B. Rohrbacher (1994) Null subjects in early child English and the theory of economy of projection. Ms., UMass, Amherst & UPenn.
- Sano, T. & N. Hyams (1994) Agreement, finiteness, and the development of null arguments. *Proceedings of NELS 24*, Amherst, Mass.: GLSA, 543-558.
- Santelmann, L. (1994) Topicalization, CP and licensing in the acquisition of Swedish. Paper presented at the Boston University Conference on Language Development, November.
- Shlonsky, U. (1987) Null and displaced subjects. Ph.D. dissertation, MIT. Available from MITWPL.
- Travis, L. (1984) Parameters and effects of word-order variation. Ph.D. dissertation, MIT. Available from MITWPL.
- Weverink, M. (1989) *The subject in relation to inflection in child language*. M.A. thesis, University of Utrecht.
- Wexler, K. (1994) Optional infinitives, head movement, and economy of derivation. In N. Hornstein & D. Lightfoot (eds.), *Verb Movement*, Cambridge, UK: Cambridge University Press, 305-350.
- Zwart, J.-W. (1993) *Dutch syntax: A minimalist approach*. Ph.D. thesis, University of Groningen.