*The Acquisition of Verb Second in German: The Prefunctional Stage**

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Abstract

In this paper I discuss the acquisition of German word order. For this purpose I will first of all outline the possible adult word orders and how they are derived (section 1). In section 2 I will introduce three current approaches to language acquisition: a maturation of UG approach; an approach that attributes language acquisition to the learning of properties of functional categories and, finally, an approach in terms of maturation of functional categories. In section 3 I show how the latter two apply to data from the prefunctional stage of the acquisition of German. As the learning approach cannot account for all the data, I will argue in the conclusion (section 4) that it should be abandoned and I will summarise the reasons for adopting the approach in terms of maturation of functional categories.

1 The Verb Second Phenomenon

The so-called verb-second phenomenon is present in almost all Germanic languages. Here, I want to look at verb-second as it occurs in German. The idea is, roughly, that the finite verb moves from its base-generated, sentence-final position to a sentence-initial position. After this, another movement applies, namely movement of any phrasal constituent to a position before the verb (cf. Koopman, 1983; Haegeman, 1990 and references quoted there). Thus, in declarative main clauses and in wh-questions, the finite verb is always in second position, for example:

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(1) Er möchte einen Kaffee trinken.
he wants a coffee to drink
(He wants to drink coffee)
(2) Einen Kaffee möchte er trinken.
a coffee wants he to drink
(He wants to drink coffee)
(3) Wer möchte einen Kaffee trinken?
who wants a coffee to drink
(Who wants to drink coffee?)
(4) Was möchte er trinken?
what wants he to drink
(What does he want to drink?)

In other syntactic structures the finite verb occurs not in second but in initial or final position. For example in yes/no-questions like (5) the finite verb is placed in initial position, whereas in embedded clauses like (6) it occurs sentence-finally:

(5) Möchte er einen Kaffee trinken?
wants he a coffee to drink
(Does he want to drink coffee?)
(6) ..., dass er einen Kaffee trinken möchte.
that he a coffee to drink wants
(that he wants to drink coffee)

There is strong evidence in favour of the assumption that the embedded clause structure is the base-generated one and that the word order in main clauses is derived by movement (Koster (1975), amongst many others). Thus, since in embedded clauses the verb always follows the its complements, we assume that the verb phrase is head-final, for example:

(7) ...,dass er [$_{VP}$ein Auto kaufen] wollte.
that he a car to buy wanted
(...that he wanted to buy a car)
(8) ..., dass sie [$_{VP}$sein Buch lesen] konnte.
that she his book read could
(...that she could read his book)

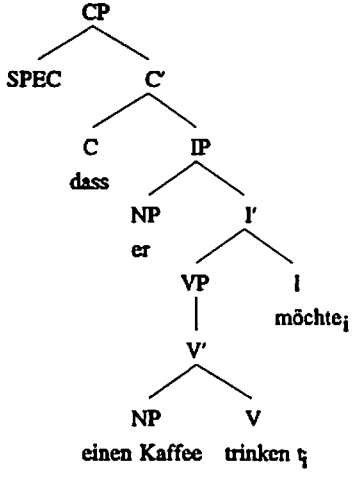
IPs, too, seem to be head-final as auxiliaries tend to follow nonfinite verbal elements in embedded clauses (which are base-generated), compare:

(9) ..., dass [$_{IP}$sie mit dem Auto gekommen ist].
that she with the car come is
(that she came by car)

(10) ..., dass [$_{IP}$sie angerufen hat].
that she phoned has
(that she has phoned)

The structure of embedded clauses is the underlying structure of the other sentence types mentioned earlier. Verb-second in main clauses and verb-initial in yes/no-questions are derived by movement. The structure of the embedded sentence in (6) is represented in the following (schematic) tree diagram:

(11)



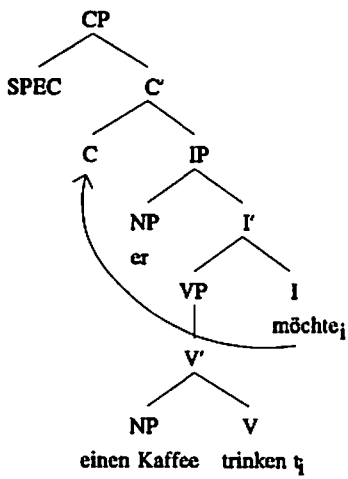
The finite verb has moved to I where it merges with inflectional elements. In German this becomes visible by affixation in many cases. These affixes reflect tense as well as subject-verb agreement, for example:

(12)

addier-en	add-infinitive
addier-0-en	add-present-1/3plural
addier-0-st	add-present-2singular
addier-te-0	add-past-1singular

To derive a yes/no-question with the finite verb initially, the complex moves from I to C, compare for example the tree diagram for (5):

(13)



Evidence for this close relationship between C and I comes from the fact that structures with complementisers and structures with fronted verbs are in complementary distribution, as seen in (14):

(14)

a. ...[$_{CP}$daß [$_{IP}$sie ihn sieht
that she him sees

b. [$_{CP}$sieht$_i$ [$_{IP}$sie ihn t_i
sees she him
(does she see him?)

c. [$_{CP}$sie [$_{C}$sieht$_i$ [$_{IP}$ihn t_i
she sees him

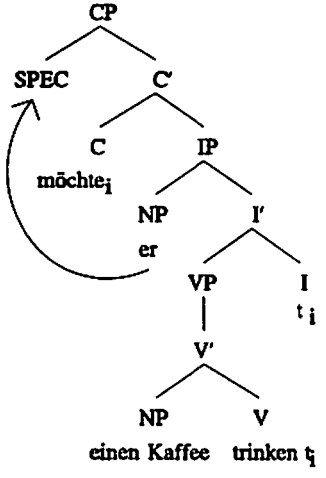
d. * ...[$_{CP}$[$_{C}$daß sieht$_i$ [$_{IP}$sie ihn t_i

e. * ...[$_{CP}$[$_{C}$daß sie [$_{IP}$sieht$_i$ ihn t_i

Notice that in German, complementisers cannot be deleted in embedded clauses as they can in English in sentences like "He said he couldn't come". One of the explanations that has been suggested for the V2-phenomenon is that in German nominative case is assigned from C, which must therefore have to be lexically filled (cf. Haegeman 1990: 530). In embedded clauses this is achieved by complementisers, in main clauses the finite verb has to move to C.

To derive the main clause word order from the verb-initial structure, a phrasal element is moved up to spec of CP. Normally, this would be the subject NP, but it could be any other phrase if the speaker wanted to focus ot topicalise it. The structure of the main clause in (1) is represented in the following tree diagram:

(1')



To derive the sentence structure of (2) we move the object-NP to spec of CP instead of the subject-NP.

2 Language Acquisition

All syntacticians agree that language is acquired partly with the help of innate knowledge and partly with the help of information from the input, although

the proportion of each is still very controversial. Innate knowledge accounts for the fact that every human being, except people with certain mental or physical handicaps, learns a language quickly and efficiently. This innate knowledge is identified with "Universal Grammar" (UG). In Chomsky's (1981) model the latter consists of principles and parameters. With the help of these concepts we can also explain the many similarities between all languages, because UG entails principles, for example the structure dependence principle, which apply to all natural languages.

It has been argued that even the syntactic variation that occurs between languages is not completely free but that there are for most, if not all, types of structure only a few alternatives for languages to choose between. These options are represented by parameters, according to recent theories for example the head-first/head-last parameter. Within the GB-framework parametric variation in syntax is due to differences between the properties of functional categories (Borer 1983; Chomsky 1991; Ouhalla 1991). This theory is accepted, as far as the adult syntax is concerned, by most researchers in language acquisition. In this framework, then, we can also account for different settings of the same parameter inside one language (cf. Manzini & Wexler 1987). In German, for example, the maximal projections of some categories are head-final, whereas others are head-initial.

An approach in terms of principles and parameters is necessary not only to explain similarities among and variation between languages but can also be used to account for the quick and efficient way in which language acquisition is achieved by children. As every child is already equipped with the principles of UG it just has to fix the right value for each parameter in order to reach the correct grammar for his/her language. There is, however, much disagreement about the exact process of language acquisition.

In this paper, I want to look at the earliest stages of the acquisition of German and Dutch. This has been widely discussed in the linguistic literature and several positions have emerged.

2.1 Maturation of UG

Felix (1984) maintains that a child learns his/her language according to a maturational program which affects Universal Grammar, whose principles are not available right from the start, but become available to the child in the course of acquisition. The emergence of the correct word order in German is a result of the maturation of the X-bar principle and the Case Filter, according to Felix. One problem with Felix' (1984) approach, as Tsimpli (1991) points

out, is that the account of language acquisition is left very vague, e.g. he does not specify which projections are available to the child. His approach is therefore very difficult to evaluate.

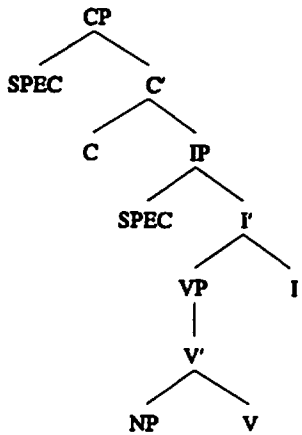
Borer/Wexler (1987) also believe that language acquisition is brought about by maturation of UG. They deal specifically with A-chains, which are part of Universal Grammar.

An account of language acquisition in terms of the maturation of UG implies that children start out with an "impossible" language, something that is not supported by empirical data. It also contradicts theoretical argumentation because it would lead to serious learnability problems (cf. Gleitmann (1981), Tsimpli (1991). For the present purposes, I will therefore not attempt to provide a full evaluation of these approaches to language acquisition.

2.2 The "Learning" Theory of Language Acquisition

Hyams (1986), De Haan/Frijn (1990) and Weverink (1989) support a completely different theory: they believe that all UG principles are available to the child from the start. To reach the adult grammar, the child only has to fix the parameters to the values appropriate for the language that s/he is learning. These parameters are associated with functional categories. Central to this theory is the claim that functional categories, as well as their projections are always available to the child, although s/he has not acquired all their properties in the early stages of acquisition. Fixing of parameters means acquiring all the properties of functional categories. The acquisition of syntax, according to this approach, does not involve maturation at all, only learning of properties of certain categories. If this claim is true, we would expect to find the same structures in child speech as we find in the adult language, i.e. in German child speech we should find evidence for the structure in (15) below:

(15)



According to this approach, the differences between child and adult grammar are due to the fact that the child still has to learn that, for example, C is the landing-site for finite verbs in German, and other such properties of functional categories. However, crucially the child has already the same structure as an adult available to him/her.

Weverink, for example, claims that although Dutch children at early stages of language learning have not yet acquired the agreement paradigm, they already have a "systematic difference between final and fronted verbs." (Weverink, 1990:30). The distinction made by the child is similar to the one that adult speakers make, in that the fronted verbs occur in a finite form and the final verbs seem to be infinitives. Weverink believes that the child categorises all fronted verbs as AUX and all final verbs as V because of their different form and distribution, and then inserts these two categories under different nodes in the tree. To attain the adult state of grammar, the child has to realise that AUX has to be recategorised as V. The acquisition of the agreement paradigm enables the child to do this (ibid.,32). She gives some data from Dutch children to support her points. Given the similar structure of Dutch and German, we should find the same "systematic difference" in early child German.

2.3 Maturation of Functional Categories

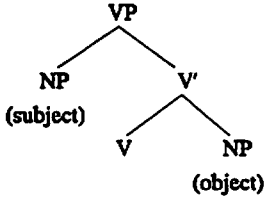
A third approach to the acquisition of syntax, in terms of maturation of functional categories, is proposed by Guilfoyle/Noonan (1988), Radford (1990) and Tsimpli (1991). They support the theory that parametric variation among languages is restricted to functional categories.

Functional categories include, for example, determiners, complementisers, inflection. They constitute a closed class and are realised mainly as affixes. According to Ouhalla (1991), they project and can have complements which they c-select, i.e. they select the category of their complement. Lexical categories s-select their complements, i.e. they choose their complements according to the thematic roles they assign; this is a characteristic of all lexical categories). If parameters are associated with functional categories exclusively, as Tsimpli (1991) claims, then this would account for the speed of acquisition of lexical categories : children would not have to learn the set of lexical categories, which would be universal, i.e. innate. The theory would explain why all lexical categories are acquired before any of the functional categories.

In the absence of functional categories, the child's grammar also lacks the projections of functional categories, because according to X-bar-theory there can be no projection without a head.

The tree structure for a sentence uttered in the prefunctional stage would look like (16):

(16)



Tsimpli claims that the word order within VP is free, because only functional categories restrict the word order, for example by providing a landing-site for the subject. In the prefunctional stage the object-NP can occur to the right or the left of V, and the subject-NP to either side of V'.[1]

Tsimpli's theory of language acquisition connects some aspects of continuity theories of language acquisition with some claims from maturational approaches: she believes that UG principles

[1]Tsimpli accounts for subjectless sentences with PRO as an argument in subject position. Further discussion can be found in Tsimpli (in prep.).

are available right from the start (= continuity), whereas functional categories, which give rise to parametric variation, are subject to maturation.

In the early stages of language acquisition, before functional categories are available (18-24 months), the child's grammar will be regulated only by UG principles,i.e its grammar is not parametrised. We therefore expect child speech to show similar patterns across all languages at this stage, which could mean that early child speech contains sentences with a word order that is not allowed in the target language.

With the emergence of functional categories, we should see restrictions in word order, and once the child has acquired full control of all functional categories we expect to see the adult word order, as their acquisition goes hand in hand with the fixing of parameter values. For example,once the child has acquired INFL (i.e. the affixes indicating person and number should be correct at this stage), we expect all finite verbs to be in final position, similarly with the acquisition of COMP we predict the emergence of the verb-second word order with only finite verbs in second position. The order of emergence of functional categories is an empirical question. One possibility is that it is determined by the hierarchical order, i.e. COMP would be acquired last because it is the topmost node. However, work remains to be done in this direction, to shed some light on how exactly language acquisition proceeds from the prefunctional stage.

3 Discussion of the Data

In this section I will look at the predictions made by the learning theory of language acquisition and by the approach involving the maturation of functional categories, and whether these predictions are borne out by data from early child German.

The data is taken from a variety of sources not all of which state the age of the child making the utterance. Where the age of the child is given, I have put it in brackets after the utterance. All examples are from the prefunctional stage of language acquisition.

3.1 Verb-final Constructions

a. nonfinite verbforms

(17)	ich ziehn I pull	(Clahsen, 1988a)
(18)	ich schaufel haben I shovel have	(Jordens, 1990)
(19)	deckel drauftun lid on-put	(Jordens, 1990)
(20)	da papa anrufen there daddy phone	(Jordens, 1990)
(21)	mädi lafen (19;1) girl sleep	(Miller, 1976)
(22)	sofa fahren (20;2) tricycle ride	(Miller, 1976)
(23)	lala suchen (20;3) pacifier look-for	(Miller, 1976)
(24)	mone schlafen (21;0) Mone sleep	(Miller, 1976)
(25)	mama lafen (21;2) mummy sleep	(Miller, 1976)
(26)	papa suchen (21;3) daddy look-for	(Miller, 1976)
(27)	mama sitzen (22;0) mummy sit	(Miller, 1976)
(28)	buch angucken (22;0) book look-at	(Miller, 1976)
(29)	teddy haben (22;0) teddy have	(Miller, 1976)

b. finite verbforms

(30)	licht seh light see-no affix	(Clahsen, 1988a)
(31)	boden bürs floor brush-no affix	(Clahsen, 1988a)
(32)	purzel pierkorb rausräum Purzel paper-basket empty-no affix	(Clahsen, 1988a)

(33) hier bett leg (Jordens, 1990)
here bed lay-no affix

(34) hier autos fahr (Jordens, 1990)
here cars drive-no affix

(35) die auto hier boot umkipp (Jordens, 1990)
the car here boat overturn-no affix

(36) teddy schläft (20;2) (Miller, 1976)
teddy sleeps

(37) mone weint (20;3) (Miller, 1976)
Mone cries

(38) oma kommt (22;0) (Miller, 1976)
granny comes

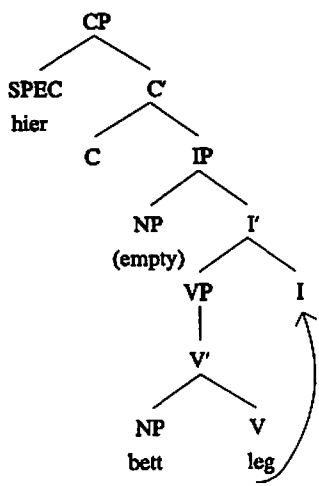
(39) hammer hol (22;0) (Miller, 1976)
hammer fetch-no affix

(40) das auch passt (22;0) (Miller, 1976)
this also fits

(41) mone auch läft (22;3) (Miller, 1976)
Mone also sleeps

Many of the verbs in early child German occur without an affix. The problem is that in these cases we do not know whether there is an empty affix present, as in adult 1st singular present tense and imperative forms, or whether the child does not use any affix at all. As these forms are clearly no infinitives I have listed them here as finite forms. Another problem, specifically with Miller's data is, that one of the children he uses utterances from (Simone) seems to speak a regional variant of German, which marks infinitives with an "-e" affix rather than an "-en" affix. To complicate matters further, she does not use this form consistently, but uses both kind of infinitive-affixes. Because of the uncertainties involved, I have not used these data where the distinction between finite and nonfinite is crucial for the argumentation.

(42)



Representatives of the learning approach would claim that the nonfinite verb in a verb-final construction just remains in V. Compare (42), the tree structure for (33).

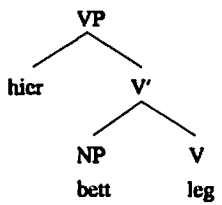
Finite verbs should be in second position in main clauses, i.e. before any objects (unless these have been topicalised), as the child is supposed to have the same structure available as an adult. Yet the finite verb does not occur in second position, i.e. before the object, in some of the examples given above. Data like (32) and (35) with a subject and an object-NP before a finite verb can only be accounted for by claiming that the child in early stages of acquisition has not yet acquired the properties of INFL, and that therefore the verb remains in situ. Alternatively, we could assume that the verb has moved to INFL, as this movement is string vacuous, in which case the child would already know at least some of the properties of the functional category INFL in the early stages of language acquisition (this suggestion is indicated by the dotted arrow in the tree structure above).

As the finite verb does not move to second position in the same way as in adult speech, representatives of the learning theory propose that the child has not yet learnt the properties of C. Another indication for this is the fact

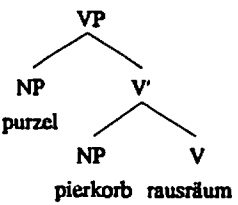
that children at this age do not use any complementisers. The learning theory, then, does provide us with a satisfactory account of verb-final structures in child language.

The other approach to language acquisition, maturation of functional categories, accounts for the data with a completely different tree structure, compare:

(43)



(44)



The word order within VP is free, therefore, according to Tsimpli (1991), objects and subjects can occur to either side of the verb.

What this structure suggests is that there is no functional category available to the child. Without INFL the child should not be able to analyse verb forms consisting of a stem and an inflectional affix, they should be an unanalysable unit for him/her. In Miller's data we can find evidence for this:

(45) puppe turn (21;0) (Miller, 1976)
doll do gymnastics-no affix
[a little bit later]: puppe turnt

(46) beide läft (21;2) (Miller, 1976)
both sleeps
beide lafen
both sleep
mama lafen
mummy sleep

(47) mama drehn (22;0) (Miller, 1976)
mummy turn
mama dreht
mummy turns
mama drehn
mummy turn

(48) kuche back (21;2) (Miller, 1976)
cake bake-no affix
kuche backe
cake bake

Not only are finite and nonfinite verbforms used interchangeably, the child even uses affixes that do not exist in adult speech at all, compare:

(49) fenster gucken (22;1) (Miller, 1976)
window look-infinitival affix
fenster gucki, fenster gucki
window look-i
(50) fenster gucke
fenster gucki

Affixes are not corrected by the child, even though corrections are supplied in the input, as in the following examples:

(51) Simone (21;3): hände wasche, hände wasche
hands wash-infinitive"-e"
Mother: Ach, genug, Fräulein, Hände waschen
infinitive"-en"
Simone: hände wasche (Miller, 1976)
(52) Simone (22;3): hände wasche
hands wash-infinitive"-e"
Mother: Oma soll deine Hände waschen.
granny can your hands wash-infinitive"-en"
Simone: hände wasch
hands wash-no affix (Miller, 1976)

The only affixes used by the child are -0, -en, -t and -e. In adult German these affixes are used to express person and number, with the addition of -st, which does not occur in early child speech. Affixes indicating tense are used extremely rarely by children in the prefunctional stage. The data show that inflectional affixes at this stage are used inconsistently and in an arbitrary way, and that in general the child has not yet acquired the inflectional paradigm.

On the basis of these data we cannot rule out any of the two theories of language acquisition. The learning theory can explain it by claiming that the child has not acquired the properties of INFL, nor the properties of C yet,

whereas the maturational approach would suppose that the child has no node for INFL and that s/he would have no means of recognising inflection. The fact that a child cannot analyse a verb is a precondition for the validity of the maturational approach. As this precondition is fullfilled, we have to conclude that utterances with a verb in final position can be explained by both theories.

3.2. Constructions Other Than Verb-final

a. finite verbs

(53) hol hund (Clahsen, 1988a)
fetch-no affix dog
(= I fetch the dog)

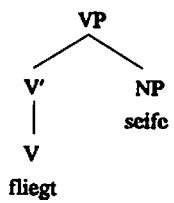
(54) nein schaffe ich (Felix, 1984)
no manage-1singular I
(= I can't manage)

(55) hol auto (22;0) (Miller, 1976)
fetch-no affix car

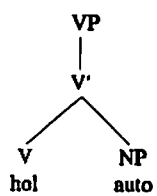
(56) fliegt seife (22;3) (Miller, 1976)
flies soap

These constructions can easily be accounted for with Tsimpli's (1991) approach to language learning: the subject-NP, instead of occuring to the left of V', in these cases occurs to the right. The free word order within a VP enables the child to do this. Compare the following tree structures:

(57)



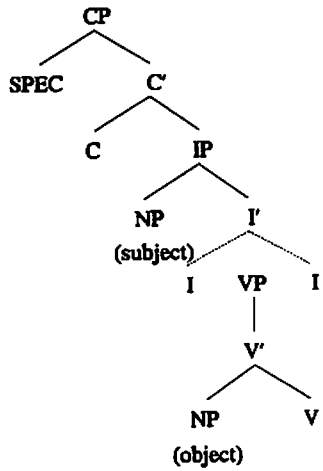
(58)



However, for the learning theory of language acquisition utterances with finite verbs before the subject or object poses a big problem. To account for all the verb-final constructions occuring in child speech we had to rule out that the child has learnt the properties of C. Without knowing the properties of C, the

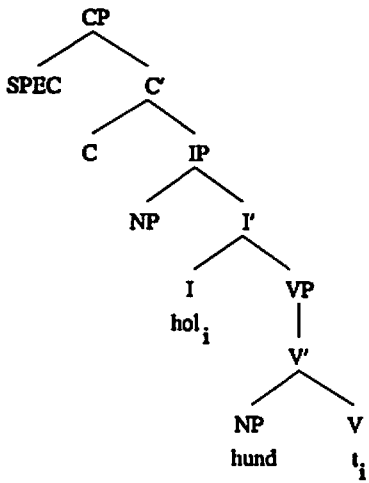
child should not be able to front the finite verb, as happens in (53) to (56). Of course we can assume that the position of INFL is not yet fixed in the child's grammar, i.e. that INFL can occur to the right or to the left of VP, as in (59):

(59)



In the verb-final utterances INFL occurs to the right of VP (cf. (42)), whereas it would be to the left of VP in the examples (53) to (56), as in (60) below:

(60)

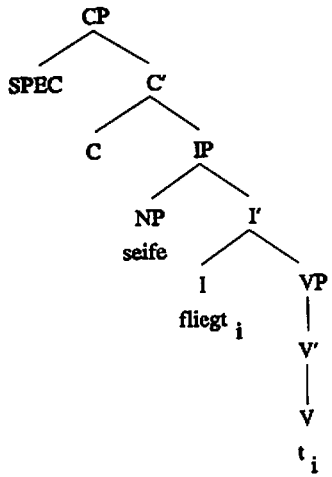


Thus, with the help of the stipulation that in child speech INFL can occur to either side of VP, we can account for utterances with a finite verb in front of an object. However, we cannot explain a construction like (56) repeated here:

(56) fliegt seife

where the finite verb is in a position before the subject-NP, compare (61) below:

(61)



To derive the construction found in child speech, the verb would have to move from I to C. This is impossible, because as we had to propose earlier (4.1), C cannot be a possible landing site for verbs in child speech according to the learning approach.

b. nonfinite verbforms

(62) so ziehn pferd (28;2) (Clahsen, 1988)
like-this pull horse
(= this is how you pull a horse)

(63) drehen brücke (Clahsen, 1988a)
turn bridge
(= I turn the bridge)

(64) setzen mann (Clahsen, 1988a)
set-down man

(65) sitzen bein (Clahsen, 1988a)
sit leg
(= I want to sit on your leg)

(66) ich machen hier (Clahsen, 1988a)
I make here

(67) nein spielen katze (Felix, 1984)
no play cat
(= I don't want to play with the cat)

(68) Julia schieben zug (Jordens, 1990)
Julia push train

(69) ranstecken an zug (Jordens, 1990)
on-put at train

(70) finden sachen (20;0) (Miller, 1976)
find things

(71) sitzen puppa (22;0) (Miller, 1976)
sit doll

(72) festhalten wauwau (22;0) (Miller, 1976)
hold dog

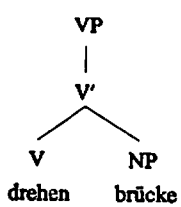
(73) angucken männer (22;0) (Miller, 1976)
look-at men

(74) haben seife (22;0) (Miller, 1976)
have soap

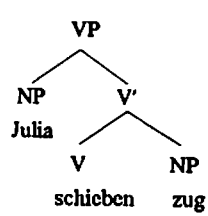
In adult speech, infinitives always remain in their base-generated position. If it is true that the child grammar contains the same structures as the adult grammar (as claimed by representatives of the learning theory), we would expect to find all nonfinite verbforms in the sentence-final, base-generated position. Within the learning approach to language acquisition we have therefore no way of accounting for structures like (62) through to (74).

Tsimpli's (1991) theory, on the other hand, can easily explain this type of construction, compare:

(75)



(76)



With a free word order inside VP, in the prefunctional stage the object-NP can occur to either side of V, so that this word order is also ruled in by Tsimpli's account.

Further evidence for free word order comes from utterances, in which a child uses different word order with identical lexical items, compare:

(77) Father: Guck! Der Robert, der weint. (Miller, 1976)
look! the Robert, he cries
Simone (22;3): robert weint
robert cries
Father: Weint der Robert?
cries the Robert (=is Robert crying?)
Simone: weint robert
cries robert

(78) Simone (22;3): mone läft. (Miller, 1976)
mone sleeps
Father: Mone schläft?
Mone sleeps?
Simone: mone läft
mone sleeps
Father: Mone schläft. Schläft die Mone?
Mone sleeps. sleeps the Mone?
Simone: läft mone, läft mone
sleeps mone

(79) Father: Ich back'n Kuchen. Du? Mone? (Miller, 1976)
I bake a cake. You? Mone?
Simone (22;3): backe kuche
bake cake
Father: Soll Maxe Kuchen backen?
shall Maxe cakes bake
Simone: kuche backe
cake bake

The child clearly perceives a different word order in its input and imitates it (unlike the inflectional affixes). In child speech, however, different word order does not indicate different types of sentences, as it does in adult German, where declaratives have a different word order than yes/no questions. The phenomenon of an interchangeable word order can be observed not only when the child is influenced by the word order in adult speech but also in consecutive spontaneous utterances, compare:

(80) Simone (22;3): läft männche, läft männche
sleeps man
manne läft
man sleeps (Miller, 1976)

(81) Simone (22;3): huste
cough
huste maxe
cough Maxe
maxe huste
Maxe cough
huste maxe huste
cough Maxe cough (Miller, 1976)

(82) Meike (22;0): mama abmachen
mummy remove
abmachen mama
remove mummy (Miller, 1976)

(83) Meike (22;0): zumachen mami
close mummy
mama zumachen
mummy close (Miller, 1976)

(84) Meike (22;0): geht auch nicht
works also not
das auch geht nicht
that also works not (Miller, 1976)

In Miller's data there is even an example where both the affix and the word order are changed by the child in two consecutive utterances:

(85) Meike (22;0): puppe weint (Miller, 1976)
doll cries
sitzen puppa
sit doll

Although these utterances do not contain the same verb, this example is still quite revealing as to the child's knowledge of inflectional affixes and word order, especially since the verbs involved are quite similar (both are intransitive and used to describe something that the child sees).

Examples (77) to (85) show that the child in the prefunctional stage of language acquisition does not distinguish finite and nonfinite verbforms, nor sentence-final and fronted verb position. The fact that word order is

completely free can be accounted for with Tsimpli's (1991) theory (where there is no constraint on the side to which objects and subjects can occur relative to V and V' respectively), but not with the learning approach.

4 Conclusion

The discussion of the data in the previous section shows clearly that the approach according to which language acquisition is due to the maturation of functional categories is much superior to the learning theory.

The maturational approach is able to account for all the data from prefunctional German in a very elegant way, whereas the learning approach is unable to explain some of the data altogether, while for other data it has to resort to an ad hoc solution (i.e. an I-node that can occur to either side of V to account for constructions with a finite verb before an object, cf. (59)).

Phenomena like free word order and arbitrary inflectional affixes, which are predicted by the maturational theory, can either not be accounted for by the learning theory (free word order) or have no adequate explanation (arbitrary inflectional affixes).

For these reasons, a theory of language acquisition of the type proposed in Tsimpli (1991) (cf. also references quoted there) is to be favoured when looking at the prefunctional stage of language acquisition.

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