CAS LX 500 Lg Acq and Ling Thy Fall 2013, September 5

2. Beginnings of morphology, syntax

1 Background

1.1 Fast forward

Stages

- For the first year, children are not really producing words ("babbling").
- Perception studies show sensitivity to order, constituents, clauses, phrases along the way, developing.
- At about a year, single words. At about a year and a half, pairs of words.
- At about two years, longer sentences and functional morphemes.

Inflection missing

Syntax is about distribution, categorization, putting nouns where nouns go. (examples from Radford 1990, ch. 2, Allison)

- One word stage, hard to say if words are where they should "go."
- Another clue to category is inflection (-s, -ing, -ed).
- Children up to about 18 months produce nearly no inflection (bare nouns, verbs).
- Not much *evidence* of awareness of syntactic category.
- (1) What should I do? Baby (16)
- (2) Who rides the car? Gone (16)
- (3) Who's Bob Home (19)
- (4) Where's the girl? Girl (16)
- (5) Where will the truck go? Brrmmm (19)

Inflection

Inflection like plural, 3sg -s, past tense, progressive -ing starts being used around 20 months. Functional words like *the* still mostly missing. Even in imitation (examples again from Radford 1990), both things often get left out.

- (6) Mr. Miller will try. Miller try (Susan 24)
- (7) I will read the book. Read book (Eve 25)
- (8) I can see a cow. See cow (Eve 25)

Development of inflection



Figure 12. The development of progressive and plural inflections in Sarah

Average stages (Brown 1973)

	Morpheme	Average Rank	
1.	Present progressive	2.33	
2-3.	in, on	2.50	
4.	Plurai	3.00	
5.	Past irregular	6.00	
6.	Possessive	6.33	
7.	Uncontractible copula	6.50	
8.	Articles	7.00	
9.	Past regular	9.00	
10.	Third person regular	9.66	
11.	Third person irregular	10.83	
12.	Uncontractible auxiliary	11.66	
13.	Contractible copula	12.66	
14.	Contractible auxiliary	14.00	

Table 38. Mean order of acquisition of 14 morphemes across three children

1.2 Missing morphology and auxiliaries

Missing morphology and auxiliaries

(9)	a.	Papa have it.	(Eve 1;6)
	b.	Cromer wear glasses.	(Eve 2;0)
(10)	a.	Eve gone.	(Eve 1;6)
	b.	Eve cracking nut.	(Eve 1;7)
(11)	a.	That my briefcase.	(Eve 1;9)
	b.	You nice.	(Sarah 2;7)
(12)	a.	Fraser not see him.	(Eve 2;0)
	b.	Where ball go?	(Adam 2;3)

Progression

It kind of looks like children slowly start using inflection, and eventually start getting it. And there is a time, basically between 2 years and 3 years that children seem to sometimes use inflection and sometimes not.

So, maybe they're learning how inflection works, getting better and better at it, and finally getting it.

Hypothesis

Children don't understand inflection, then come to. They learn different morphemes at different times.

What are the predictions? What kinds of things would this lead us to expect?

Committing errors

Children will say things lke *Mommy go* plenty. Sometimes at the same age as they will say things like *Mommy goes*. But they don't seem to say things like *They goes*.

That is, errors of *omission* are common, errors of *commission*—misuse of inflection—is vanishingly rare.

So, which of these is right?

- Children don't understand inflection.
- Children sometimes don't use inflection.

If the children don't always use inflection, but when they do, they use it correctly, then...

What inflection is evidence for

What is the difference between *Mommy go* and *Mommy goes* for adults? (Why *goes*?)

Subject-verb agreement. What's the subject? What's agreement? Consider *Mommy does/did not go*.

Missing morphology beyond English

In English, we find verbs missing morphology as we saw. In a lot of other languages, we find something similar, although it seems like it is not really *missing* morphology, but rather *infinitive* ("non-finite") morphology. That is, the kind of verb form you get in English after *to*.

(13)	Dormir petit bébé.	
	sleep-INF little baby	
	'Little baby sleep.'	(Daniel [Fr] 1;11)
(14)	Earst kleine boekje lezen.	
	first little book read-INF	
	'First (I/we) read little book.'	(Hein [Du] 2;6)

Across languages



Figure 4.1

Percentage of root infinitives (RI) in early languages. Each bar shows the overall percentage of RIs produced by a single child in the age range (given in months)

Variation with finite verbs

At the same time, children also seem to sometimes use correctly finite (tensed, agreeing) verbs as well. Sometimes the tense/agreement morphology is missing, sometimes it isn't.

(15)	Dort bébé.	
	sleeps baby	
	'Baby sleeps.'	(Daniel [Fr] 1;11)
(16)	Hij doet 't niet.	
	he makes it not	
	'He does not make it'	(Hein [Du] 2;4)

This could either mean that children can't tell the difference between finite and non-finite, or that sometimes their trees are just VPs and sometimes they're taller.

1.3 Differentiating finite and non-finite forms

Adult differences between finite and non-finite verbs

In adult French, infinitives come *after* negative *pas*, not before—that is, infinitive verbs don't move to I. In adult German, infinitive verbs don't move to C.

(17)	um nicht ze essen	
	in-order-to not to eat in order not to eat'	(German)
(18)	pour ne pas manger in-order-to not eat-INF	
	' in order not to eat'	(French)

Verb placement in child French

Although they will sometimes fail to make a verb finite, leaving it in the infinitive form, French children seem to put infinitives where infinitives go. (Pierce 1992)

(19) Pas manger la poupée. not eat-INF the doll 'The doll does not eat.' (Nathalie 1;9)
(20) Elle roule pas.

(Grégoire 1;11)

20)	Ell	e roule pas.	
	it	rolls not	
	'It	does not go.'	

	Finite	Non-finite
verb-neg	173	2
neg-verb	9	122

Verb placement in child German

The same holds of child German as well (Poeppel & Wexler 1993). Finite verbs are in second position, non-finite verbs are in final position.

(21)	Thorsten C Thorsten C 'Thorsten h	aesar hal .(=doll) hav as the doll	en. ve-INF		(Andreas 2;1)
(22)	Eine Fase h a vase h 'I have a va	nab ich. nave I nse.'			(Andreas 2;1)
	Finite	Non-fini	e		
V2	192	,	6		
V-f	ïnal 11	3	7		

1.4 Memories of syntax

A simple English sentence

This is where we'll start in terms of the structure of simple English sentences (mostly as in LX250, though it can be easily translated into a more modern LX522-type tree.)

"DP" here means "determiner phrase" and is a common (and more accurate) name for "NP" (noun phrase).

Auxiliaries

To express aspect (complex tenses), English makes use of "auxiliaries" like those "helping verbs" *have*, *be*, etc.

We will incorporate auxiliaries into the structures by giving them a specific phrase. So, for the progressive *be*, a "ProgP."

We will also assume that these *move* from their initial position up to I.

Verb movement





One of the reasons to assume that auxiliaries move in English has to do with the fact that they are pronounced *before* the negation *not*, although there is reason to believe that the NegP for *not* is right under IP.

Also, it will be common to abbreviate trees by not drawing specifiers when there is nothing in them, as here.

Main verbs vs. auxiliaries in English, and do Main verbs in English differ from auxiliaries in that they do not move up to I. Only auxiliaries move up to I. So, in these cases, where there is something like *not* between I and V, we insert the "dummy auxiliary" do.

In the textbook, "not moving" is also referred to as "covert movement" but for the moment we will just take that to be two names for the same thing.



