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ASPECTS OF SYNTAX DEVELOPMENT OF A FIVE YEARS OLD, NON-NATIVE SPEAKER CHILD

In this paper I will discuss aspects of syntax development in yes/no questions, negative sentences, modals, wh-questions and complex sentences, in my daughter's English language development in a naturalistic environment as they are revealed in recorded data. Her English language developemt resembles in many respects that of a native English speaker as a comparison of my data with data reported by Cazden, 1968; Brown and Bellugi, 1971; Miller and Ervin, 1971; Dale, 1976 will show. The findings support the hypothesis that L_2 acquisition in a naturalistic environment develops along similar lines to L_1 acquisition.

1. The informant

The child, a native speaker of Greek, went to Lancaster, England in October 1976 when she was four years and three months old. When she went there she knew no English at all. The child first attended the pre-school centre attached to the University of Lancaster for the Michaelmas term (Fall term). In the Lent term (Spring term) the child was transferred to Scotforth Primary School in Lancaster.

The recordings¹ were made in February, March and April, 1977, when the child was four years and 8 months old to four years and 10 months old. In other words, data collection started after she had been exposed to English for four months and ended after she had been exposed to English for 7 months.

The recordings include conversations of the child (informant, from now on) with her mother, two friends (Nicky, a native speaker of English, and Ashalon, a native speaker of Persian) as well as egocentric speech performances made on her own.

2. Mother tongue acquisition: Basic assumptions

The early language development of the native speaker (Brown, 1970; Brown and Bellugi, 1971) is divided into two stages: Stage I (up to the age of 2.0 years of age for the native child). In this stage language learning consists primarily of expressions of a basic set of semantic relationships syntactically expressed as one-word sentences, two-word sentences, three or four word sentences. Inflections and grammatical morphemes are omitted. Stage II (extending from about 2.0 years of age to three and a half for the native speaker). The main characteristic of Stage II is the gradual development of the most important inflections and the acquisition of other grammatical morphemes. In this stage both syntactic complexity and semantic complexity contribute to the sequence of language acquisition.

^{1.} A complete transcription of the recordings can be provided on request.

3. An analysis of the data

3.1. Yes/No questions

The basic characteristics of the development of Yes/No questions of an English native speaker in Stage II (Dale, 1974) are as follows:

During the first developmental stage an English speaking child uses the structure of a declarative and simply adds to it the question intonation pattern.

$$S \rightarrow NP VP ?$$

Gradually the dummy «do» is attached to the declarative in the form of «D'you». «Do» is present not as a transformational constituent but as a question word element making up one word with «you».

The next step for the acquisition of the dummy «do» for transformation purposes is the appearance of «can + not» or «do + not» only before the verb. Elements like -ing forms, articles and auxiliary verbs are dropped, whereas the modality indicating verb system develops more extensively.

In my informant's language development a similar pattern can be traced. She also asked Yes/No questions with a declarative structure but a question intonation pattern, i.e.

Her age

4 years, 8 months 2/1, 1² Mummy, that goes³ over here?

4 years, 8 months 3/2, 22 You want this?

She also started producing the dummy «do» as one constituent with the pronoun «you» in questions, such as,

4 years, 9 months 4/1, 7 D' you want that?

Ravem (1974 in Richards ed. Error Analysis) also reports a similar development in his children's learning English as an L_2 in a naturalistic environment.

3.2. Negative sentences

My informant also used «can't» and «don't» only before the verb as a English native speaker does. «Can» and «do» do not function as auxiliaries but they make up a single negative element with the particle «not». This view is also supported by the fact that she did not use the dummy «do» as a transformation element elsewhere in the data, such as in questions or wh-questions.

i.e.

^{2.} The first number stands for the recorded tape number, the second number (after the stroke) stands for the side of the tape (side 1 or 2) and the third number stands for the numbered conversation in this particular side of the tape.

^{3.} My informant used the form «goes» as an independent word item. She did not use the third person singular morpheme yet to mark the present tense, third person, singular.

4 years, 8 months	2/2, 10 I don't like it reindeer.
4 years, 8 months	3/1, 6 I don't like this. You.
4 years, 8 months	3/1, 15 I don't like making towers
4 years, 8 months	3/1, 19 You can't make it, Nicky.
4 years, 9 months	6/2, 5 I don't want to know.

In the same fashion, «didn't» was used to form the negative simple past, however, «didn't» like «don't» fuctioned as a single negative particle to form the negative form of the simple past and not as a transformation element, i.e.

4 years, 10 months	7/1, 18	We didn't play with this.
4 years, 10 months	7/2, 20	I didn't play with this.
4 years, 10 months	7/2, 20	I didn't have it.

It is worth noting that the instances of the use of «didn't» as a negation element to form the past tense are all drawn from the last tape recorded in April, whereas «don't» as a negation element to form the present tense appeared as early as tape 2/2.

3.3. Modals

At this stage (which the native speaker reaches between 2.0 to three and a half years old) the modality indicating verb system of English develops more extensively not only in questions but also in declarative and negative sentences, (Dale, 1976).

My informant also came out with utterances, such as,

4 years, 8 months	2/2, 15	Can you find that piece?
4 years, 8 months	3/1, 19	You can't make it, Nicky.
4 years, 8 months	3/2, 1	You mustn't put over here.
4 years, 9 months	5/1, 3	It have to go like that, Ashalon.
4 years, 9 months	5/1, 28	It have to be you.
4 years, 9 months	5/1, 28	There must be you.

When my informant started using the auxiliaries «can», «have to» and «must» she was well aware of their modality meaning to indicate ability/inability and necessity.

3.4. Wh-questions

As Brown and Bellugi, 1971 report wh-questions serve as question introducers attached to declarative sentences rather than as true constituent replacements. As a result there appeared double negatives of the type i.e. «Why not cracker can't talk?» where «why not» is considered as just one constituent. The basic sentence patterns that appear in the speech of a native speaker during Stage II are:

What NP going, doing etc. What VP When VP

My informant's wh-questions development appears to resemble that of the native speaker. As the examples below drawn from the data indicate her wh-questions follow the same patterns as those reported by Brown and Belluqi, 1971as well as Cazden, 1968.

4 years, 8 months	2/1, 4	Mummy, where that goes?
4 years, 8 months	2/1, 8	When go to the tramboline?
4 years, 8 months	2/2, 20	What that colour?
4 years, 8 months	3/2, 1	Where put it?
4 years, 9 months	5/1, 3	Ashalon, why you come back here?
4 years, 10 months	7/1, 12	What this thing and two make?

Inversion and do-insersion do not apply to wh-questions, because wh-words stand for particular constituents and are moved to the beginning of the sentence by the wh-transformation. In my data there appear utterances such as,

4 years, 8 months	3/2, 22	What you say?
4 years, 9 months	4/1, 6	What d' you want?
4 years, 9 months	4/2, 7	What d' you want I buy to you?
7 years 10 months	7/1 11	Mummy how d' you make thirty one?

«d' you», however, still functions as one element in wh-questions, not as do-insertion transformation (See also p. 123). Ravem, 1974 reports a similar development in his informant's wh-questions.

3.5. Complex constructions

3.5.1. For the native speaker, the first complex constructions (which may occur anywhere between 2.0 and 3.5 years of age) are often object noun-phrase complements (Limber, 1973; Brown, 1973). A full sentence can take the place of the object of a verb, which would be a noun phrase in a simple sentence (Dale, 1976), i.e.

I think it's the wrong way.
I see you sit down.
Watch me draw circles.
I don't want read the book.

The embedded sentence, that is the object of the verb, is present in the surface structure in its unembedded form.

In the same way, my informant's first complex constructions were object noun-phrase complements, i.e.

4 years, 8 months	2/1, 26	Mrs Aitkin said you have to pay for the socks.
4 years, 8 months	2/2, 14	I know that goes over here.
4 years, 8 months	3/1, 5	I don't think goes.
4 years, 8 months	3/1, 34	I thought it I've got it.
4 years, 8 months	3/2, 22	I know the trees is that colour.
4 years, 9 months	4/2, 3	I thought you put it on your table.
4 years, 9 months	4/1, 1	I want you do another straw.
4 years, 9 months	4/2, 7	What do you want I buy to you.

3.5.2. A second type of complex construction to appear in the native speaker's language is that containing a wh-clause. The wh-clause is a general mechanism permitting one sentence to serve in virtually any role in another sentence. Although wh-words are present in these sentences (and they are sometimes called "embedded questions") they are actually declaratives. The question transformation does not apply. Some examples from native speaker children (Brown, 1973, Limber, 1973) are:

Know where my games are? When I get big I can lift you up. I don't know who is it.

Brown, 1973 reports that clauses referring to location and to time seem to emerge somewhat before other wh-clauses.

My informant's wh-clause complex constructions development resembles that of a native speaker as discussed above.

Examples drawn from the recorded data are:

4years, 8 months	2/1, 30	You know where I going to Friday?
4 years, 8 months	3/1, 1	I know how to play piano.
		I know how this goes.
4 years, 8 months	3/1, 38	You don't know how to do anything.
4 years, 8 months	3/2, 5	I show you where to leave this.
4 years, 8 months	3/2, 22	I don't know when do it.
4 years, 9 months	5/2, 2	Mrs Clark, Jonathan is sitting where Suzanna's chair.
4 years, 9 months	5/2, 17	I know (who) she is.
4 years, 10 months	7/1, 22	I don't know where is it now.
4 years, 10 months	7/1, 22	I don't know where you put it.

Brown, 1973 and Limber, 1973 maintain that in the native speaker, clauses referring to location and time seem to emerge somewhat before other wh-clauses. However, my informant produced not only wh-clauses referring to location and time but she also produced sentences referring to manner (how-clauses) and persons (who-clauses). This difference can be attributed to cognitive maturation which had already taken place during

mother tongue acquisition. We must bear in mind that native speakers develop these complex constructions between 2.0 to 3.5 years of age whereas my informant's age is between 4.8 years to 4.10 years old. She has already mastered one language, her native Greek. It seems that syntactic development can proceed quite a long way by combining such imitated strings or incorporating them as constituents into simple structures when a child is learning the $\rm L_2$ in a naturalistic environment without special instruction.

3.5.3. Relative clauses are related to wh-clauses, though they are distinct structures. In sentences with wh-clauses, the embedded sentence is the noun phrase in a particular slot. A relative clause, in contrast, is a sentence that modifies a noun phrase. In the native speaker, relative clauses appear slightly later than the constructions discussed above. Some examples of relative clauses from Brown, 1973 and Limber, 1973 are:

That box that they put it in. I show you the place we went. Now where's a pencil I can use?

Relative clauses are first produced to modify objects. Subjects are modified in this way only later. This may reflect a distinction in the child's grammar between noun phrases in subject position and noun phrases in object position. The child may think that subjects, which are often pronouns or proper nouns, cannot be modified by a relative clause. In contrast, noun phases in object position very often refer to inanimate objects. Objects, the child may think, can be modified by relative clauses. It is worth noting that in the native speaker's examples as well as those drawn from my data, the function of the utterance is that of a direct or indirect command.

My informant's relative clause development was similar to a native speaker child's. Some examples are:

4 years, 8 months 3/1, 38 Mummy, look what I make it.

4 years, 9 months 4/1, 9 Look what I've got.

4 years, 9 months 5/2, 7 Here, look what I can make.

In all these examples, the relative clauses modify objects.

3.5.4. In the native speaker's language development, compound sentences also begin to appear in Stage II, though mastery of their structure requires much longer time. The first compound sentences are simply groupings of two sentences without a conjunction, i.e.

You look it that book. I look it this book. (Dale, 1976)

Shortly afterwards the conjunction «and» appears. Examples from Dale, 1976 are:

I did this and he did that. He was struck and I got him out. or

He still has milk and spaghetti.

I went to the aquarium and saw the fish.

My informant's compound sentence productions indicate a similar development. Some examples from the data are:

4 years,	8 months	2/1, 16	Fallowdeer. That's his head. That's his eyes.
4 years,	8 months	3/2, 7	Is drawing book and writing book.
	8 months	2/1, 32	And Jack coming to Nicky's and Nicky said that and Nicky's mother.
4 years,	9 months	5/1, 19	I want to be a daddy policeman and Ashalon a mummy policeman.
4 years,	9 months	4/2, 6	I am going (to buy) oranges and apples.
	9 months	4/2, 34	I am Mrs Clark, Ahalon is Mr Heartley and another one boy is Mrs Dickinson.
4 years,	10 months	7/1, 8	Anyway I'll tell the policeman and the policeman will kill you with the gun.

Generalizations, however, about the emergence of complex constructions both in L_1 and L_2 can be viewed as tentative, given the limited amount of research in this area.

As Clark, 1974 and Ingram, 1975 have pointed out it is often fallacious to posit rules similar to those of adult grammar for sentences produced by children which resemble adult complex constructions.

3.5.5. My informant was also able to use if-clauses, adverbial clauses of cause and reported speech at this stage. Her cognitive maturity must again be taken into account. The child had already acquired the concepts of conditionality, of causality and of reported speech, which seems that it has facilitated her learning to express these concepts verbally in the L_2 .

Some examples drawn from the data are:

II Clauses		
4 years, 8 months	3/1, 38	If you not want that give it to me.
4 years, 8 months	3/2, 1	If you put it over here you could be breaks it, Nicky.
4 years, 8 months	3/2, 15	If you change it you be friend.
4 years, 8 months	3/2, 17	If you not playing you going to your house.
4 years, 9 months	4/2, 26	If you hit me, I am not be your friend.
4 years, 9 months	5/1, 15	If you not staying you have to give it to me.

She said that she is take it off

4 years, 10 months	7/1, 8	You be silly if you do that.
Adverbial-clauses of ca	ause	
4 years, 8 months	3/1, 36	I like that first because my dolly is big and strong.
4 years, 8 months	3/2, 11	I like it because my baby is like a children.
Reported speech		
4 years, 8 months	2/2, 5	My mummy said eat.
4 years, 8 months	3/2, 1	My mother says don't put over there, Nicky.

3.0. Conclusions and suggestions

4 years, 8 months

The comparison of the syntax development of the native speaker's and my informant's L_2 development strongly supports the assumption that L_2 learning in the L_2 environment resembles that of L_1 learning to a great extent.

3/2, 13

My informant's language did not only develop in a manner similar to a younger English speaking child but she was also able to produce and perform on a wider range of morphemes and structures than a native speaker at a similar stage of language development. This may be attributed to her cognitive development and fewer limitations of memory than one would expect to find in a child around three years old. She had already had the ability to understand and use a wide range of morphological and syntactical relations in L_1 , which probably makes it easier to map cognitions on different linguistic realisations. Yet cross-cultural differences of morpheme use may not make this job of mapping easy. It is important to remember, however, that within seven months of exposure to English my informant was able to handle the afor mentioned structures in communicative situations equally well as a 36 month-old native speaker. As other studies have also shown (i.e. Ravem, 1974; Dulay & Burt, 1974, 1975) it seems that greater maturity makes for faster learning.

My findings indicate that further research on language acquisition in a naturalistic environment with subjects of various ages is necessary. Similar research on language acquisition in the classroom situation also seems imperative. A comparison of the results will allow us to formulate questions about the relative importance of perceptual salience, grammatical complexity and semantic complexity of input data in a more precise way. This research may give us some insights into L2 acquisition under formal

instruction. It may also provide us with better understanding of the principles that we should take into consideration when selecting and grading materials, tasks and activities for the learner of English in a communicatively orientated approach to language learning and language teaching.

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ΠΕΡΙΛΗΨΗ

Σοφία Παπαευθυμίου - Λύτρα, Απόψεις συντακτικής ανάπτυξης της Αγγλικής σαν ξένης γλώσσας ενός πεντάχρονου παιδιού.

Στην παρούσα εργασία εξετάζεται η συντακτική ανάπτυξη των ναι/όχι ερωτήσεων, των αρνητικών προτάσεων, των βοηθητικών ρημάτων, των wh-ερωτήσεων και των συνθέτων προτάσεων στην ανάπτυξη της Αγγλικής σαν δεύτερης γλώσσας ενός πεντάχρονου παιδιού, όπως εμφανίζεται σε μαγνητοφωνημένα στοιχεία. Τα στοιχεία αυτά —συνομιλίες του παιδιού με φίλους του και την μητέρα του ενώ έπαιζαν— συγκεντρώθηκαν σε διάστημα τριών μηνών, δηλ. από τον Φεβρουάριο έως και τον Απρίλιο του 1977 κατά την παραμονή του παιδιού στην Αγγλία και ενώ παρακολουθούσε την πρώτη τάξη του Αγγλικού δημοτικού σχολείου.

Όπως αποδεικνύεται η ανάπτυξη της Αγγλικής σαν δεύτερης γλώσσας (Γ2) ομοιάζει με την ανάπτυξη της Αγγλικής ως μητρικής (Γ1). Τα συμπεράσματα θεμελιώνουν την άποψη ότι η εκμάθηση της Αγγλικής ως Γ2 στο φυσικό της περιθάλλον αναπτύσσεται κατά τον ίδιο περίπου τρόπο όπως η Αγγλική ως Γ1. Τα χρονικά περιθώρια εκμάθησης, μάλιστα, επιταχύνονται λόγω της πνευματικής ανάπτυξης και ωρίμανσης του παιδιού που έχει ήδη επιτευχθεί μέσα από τη

μάθηση και ανάπτυξη της μητρικής της γλώσσας.

Συμπερασματικά, η έρευνα που αναπτύσσεται στην παρούσα εργασία καθώς και η σχετική έρευνα όπου η Αγγλική ως Γ_2 μαθαίνεται μακρυά από το φυσικό της περιβάλλον μπορούν να βοηθήσουν στην επιλογή και κατάταξη του υλικού, των δραστηριοτήτων και του είδους των εργασιών που θα μπορούσε να κάνει ο μαθαίνων την Αγγλική ως Γ_2 εκτός του φυσικού της περιβάλλοντος.