On the Delayed Acquisition of Functional Categories

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I. Introduction

According to the language acquisition studies in the generative tradition, all the various modules of Universal Grammar (UG) are hypothesized to be ready to activate from the very beginning, requiring only a limited amount of experience to make them operative (cf. Pinker, 1984). This view has been referred to as the Continuity Hypothesis. In contrast, the Maturational Hypothesis (cf. Borer and Wexler, 1987) argues that the modules of UG themselves develop gradually, in the sense that a certain UG Principle becomes available only after a certain period of maturation.

As for the account for the delayed acquisition of a certain UG principle, the two contrastive hypotheses make different predictions. According to the Maturational Hypothesis, if a child cannot set the parameter P in a certain stage, it means that he has not reached a certain stage of maturation which will make it possible to set the parameter P. The Continuity Hypothesis, however, will rely on the factors outside UG to explain the matter of delayed acquisition of a certain parameter P.

Early child grammar is radically different from adult grammar. A child's phrase and sentence structures are projections of the four major lexical categories (Noun, Verb, Adjective, and Preposition). Many linguists, like Lebeaux (1988), Platzack (1989), Radford (1990a, b), argue that this property of early child grammar can be rephrased as the delayed acquisition of functional categories. In this paper I will argue that the Maturational Hypothesis provides a more reasonable account of the delayed acquisition of functional categories if it is supplemented by the parametric theory of language acquisition.

II. Early Child Grammar and the Lexical Thematic Structure

One of the major characteristics of the early child grammar is that children's phrases and sentences are composed of (i) lexical but not functional, and (ii) thematic but not nonthematic constituents (Radford, 1990b: 201). According to the classification of generative grammar, word level syntactic categories are divided into lexical and functional categories. Lexical categories comprises Noun, Verb, Preposition, and Adjective (or Adverb). They can independently theta-mark any sisters they have, and their maximal projections can be theta-assignees. In contrast, functional categories (Determiner, Inflection, and Complementizer) do not contribute to semantic interpretation crucially. Their syntactic function is functionally extending relevant lexical categories in order to satisfy various constraints imposed by UG principles. In this sense, Determiner, Inflection, and Complementizer systems are absent from the early child grammar.

First, let us consider the Determiner System. As we can see in (1), the nominal structure of the adult grammar is normally extended to a DP:[1]

(1) [DP [D' [D this] [NP [N' [N picture] [PP [P of] [DP [D' [D the] [NP man]]]]]]]]

In (1), the determiner *this* heads the whole projection DP. It is worth to note that the dummy Case-marker *of* which introduces the complement of the noun is nonthematic in nature since the complement *the man* is theta-marked by the noun *picture*. This configuration shows that adult English nominals can contain both functional and nonthematic elements.

On the other hand, child English nominals have somewhat different structures. Let us consider the following imitations of adult model sentences produced by Eve at the age of 25 months in Brown and Fraser (1963):

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1) The DP analysis of nominal structure was originally suggested by Abney (1987). Before the introduction of DP analysis, determiners were treated as a specifier of NP.

(2) Model Sentence | Child's Imitation
a. Read *the* book. | Read book.
b. I am drawing *a* dog. | Drawing dog.
c. I will read *the* book. | Read book.
d. I can see *a* cow. | See cow.

In each, Eve systematically omits the italicized determiner in her imitation. Instead she responds only with bare NPs such as *book*, *cow*, and *dog*. If the suggestion of Slobin (1979) is correct, that children can only consistently imitate correctly items whose morphosyntax they have acquired, it can be inferred from (2) that young children at Eve's stage of development have not yet acquired the functional category of D.[2]

Now, let us consider the clause system. In adult English, ordinary clauses are also composed of functional and nonthematic constituents.

(3) There is no reason to think that it would be politic for the president to back down.

The expletives *there* and *it* are purely nonthematic.[3] Moreover, there are a number of functional categories in (3) including the I(nflection) constituents (*would* and *to*), the D(eterminer) constituents (*there*, *it*, *no*, *a*, and *the*), and the C(omplementizer) constituents (*that* and *for*). Thus, it is reasonable that we call adult ordinary clauses functional- nonthematic structures in the sense of Radford (1990a, b).

In contrast, early child clauses are lexical-thematic structures. In Bloom (1970), we can find typical examples of early child clauses which are given (4) below:

(4) a. Man drive truck. (='The man drives the truck', Allison 22)
b. Baby eating cookies. (='I am eating the cookies', Allen 22)

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2) Early child nominals also lack the genitive 's morpheme which is another kind of Determiner: (The number following the chid's name indicates his (or her) age calculated by month.)
(i) *Mommy* cottage cheese. *Mommy* milk. *Mommy* hangnail. (Kathryn 21)
(ii) *Daddy* coffee. *Daddy* shell. *Mommy* shell. (Jonathan 24)
(Radford, 1990b: 206)
3) Hence they cannot have their reference questioned by *where?/ what?*.

The most striking feature of the child clauses in (4) in comparison with their adult counterparts is that the child clauses lack all the functional and nonthematic constituents which appear in the corresponding adult sentences given in single quotation marks.[4] In this sense, Radford (1990a, b) argued that children's clauses are purely lexical-thematic structures. Let us consider the respective structures of the child clauses in (4) with labelled brackets which are indicated in (5) below:

(5) a. $[_{VP} [_{NP}$ Man] $[_{V'} [_V$ drive] $[_{NP}$ truck]]]
    b. $[_{VP} [_{NP}$ Baby] $[_{V'} [_V$ eating] $[_{NP}$ cookies]]][5]

As we can see in the configurations given above, child clauses can be analyzed only with lexical categories. If our observations here are on the right track, then it follows that child clauses are lexical-thematic structures which are projections of lexical heads (V, P, and A)[6] whereas adult clauses by contrast are functional-thematic structures which are projections of functional heads I and C.

Brown and Fraser (1963), Brown and Bellugi (1964), and Ervin-Tripp (1964) observed that children systematically omit modals when asked to repeat model sentences including them, as illustrated by the following examples:

(6) a. Adult: Mr. Miller will try.
        Child: *Miller try.* (Susan 24, from Ervin-Tripp (1964))
    b. Adult: I will read the book.
        Child: *Read book.* (Eve 25, from Brown and Fraser (1963))
    c. Adult: I can see a cow.
        Child: *See cow.* (Eve 25, from Brown and Fraser (1963))

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4) For example, the child sentences in (4) lack the D constituents like *the* and the I constituents like *am* and the inflectional markings -s.
5) The fact that the gerundive affix *-ing* and the plural marking -s are being used in Allen's statement does not indicate she has acquired the relevant functional categories. Actually Allen may understand the gerundive affix *-ing* and the plural marking -s are parts of relevant words.
6) In Radford (1990b: 210) we can find the examples of child clauses which are projections of A and P:
   (i) a. Bear in chair. (='The bear is in the chair', Gerald 21)
       b. Hand cold. (= 'My hand is cold', Elen 20)

When we compare the labelled bracket structure of the adult sentence in (6a) with that of the child sentence, we can easily find the absence of an I(nflectional)-system in children's grammar:

(7) a. $[_{IP} [_{DP}$ Mr. Miller] $[_I$ will] $[_{VP}$ ...... $[_V$ try]]]$^{7)}$
    b. $[_{VP} [_{NP}$ Miller] $[_V$ try]]

Thus, the absence of an I-system means that the child uses the lexical counterpart of IP (=VP) in contexts where adults require IP.

Studies of *wh*-questions in child speech have generally agreed that children under two years of age do not show any evidence of having acquired a productive syntactic rule of *wh*-movement (cf. Klima and Bellugi, 1966; Brown, 1968; Bowerman, 1973; Wells, 1985). This finding obviously indicates that early child clauses have no C(omplementizer)-system.$^{8)}$ For example, where they attempt to imitate an adult question containing a preposed auxiliary and a preposed *wh*-word, children typically omit both the auxiliary and the *wh*-word. The following examples from Brown and Fraser (1963) illustrate this property of the child grammar:

(8) Adult Model Sentence   Child's Imitation
    a. *Where does* Daddy go?   Daddy go? (Daniel 23)
    b. *Where shall* I go?   Go? (Eve 25)
    c. *Where does* it go?   Go? (Adam 28)

A similar pattern (no preposed *wh*-word or preposed auxiliary) is found in child counterparts of adult *wh*-questions in spontaneous speech, as examples from Radford (1990a) in (9) below illustrate:

(9) a. Bow-wow go? ('*Where did* the bow-wow go?', Louise 15)
    b. You got? ('*What have* you got?', Harriet 18)

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7) Under the VP-Internal Subject Hypothesis, the Empty specifier position of VP is occupied by the trace of the subject DP which has moved out of this position. So it is natural that the subject of *try* is in the specifier position of VP in (7b).

8) It is the general assumption that preposed *wh*-phrases in the adult English occupy the specifier position of CP.

    c. Mummy doing? ('*What is* mummy doing?', Daniel 21)
    d. Car going? ('*Where is* the car going?', Jem 21)
    e. Doing there? ('*What is* he doing there?', John 22)
    f. My shoes gone? ('*Where have* my shoes gone?', Jenny 22)
    g. Mouse doing? ('*What is* the mouse doing?', Paula 23)

The omission of the italicized preposed *wh*-phrases and preposed auxiliaries is obviously consistent with the assumption that children have not yet developed a syntactic C-system, and thus lack a landing site for preposed auxiliaries and preposed *wh*-phrases.[9]

III. Explanations on the Delayed Acquisition of Functional Categories in Early Child Grammars

    The observation which has been presented in section II leads us to the conclusion that early child grammars of English are lexical-thematic systems in which thematic argument structures are directly mapped into lexical syntactic structures. This finding is not confined to English. Platzack (1989) argues that the early child clause structures in Swedish are purely lexical structures which lack functional categories.

    Now it is time to ask the question of 'why lexical-thematic systems should come into operation before functional-nonthematic systems in early child grammars'. In this section, a variety of possible answers to this question will be explored. At the same time the implications of each of the proposed explanations will be considered, too.

    According to the traditional Continuity Hypothesis, all the UG principles are present at birth, while development from initial state to steady state is determined by factors outside UG. Various aspects can play a role in this development such as general cognitive growth, or memory growth in particular, in short these factors determine the learning process rather than acquisition. Thus, as for the matters of language development, explanations based on the Continuity Hypothesis usually focus on learning difficulty.

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  9) Omission of preposed *wh*-expression is also reported in the early stages of acquisition of French by Guillaume (1927: 241).

Let us consider one type of account for the delayed acquisition of functional categories which is based on the Continuity Hypothesis. It relies on the speculation that the formal linguistic properties of items belonging to functional categories make such items more difficult to learn than those belonging to lexical categories (cf. Gleitman and Wanner, 1982; McNeill, 1966). This kind of learning explanation clearly requires us to be able to identify just what are the linguistic properties of functional items which make them more difficult to learn.

Abney (1987: 64-65) notes that items belonging to lexical categories generally have a more salient phonological form than those belonging to functional categories. Concretely speaking, lexical categories typically contain a potentially stressed syllable whereas functional categories by contrast are generally stressless, often clitics or affixes, and sometimes even phonologically null (Abney, 1987: 65). Gleitman and Wanner (1982: 17) supposes that the relative acoustic saliency of different items is manifested in stress so that stressed items are more salient than unstressed items. If this is so, we can easily expect that stressed items are acquired before unstressed ones.[10]

However, a learning account for the differential development of lexical and functional category systems is problematic both from an empirical and psycholinguistic point of view. If the formal linguistic property like stress is the crucial factor for the delayed acquisition of functional categories, then children whose mother tongue is Korean which employs a flat intonation pattern will have no difficulty in acquiring the functional categories in the early stages. Contrary to our expectation, it has been pointed out that the child grammars of Korean in the early stages also lack functional categories (Cho, 1982).

In addition to the empirical objection to the learning account, we can also adduce a psycholinguistic objection. Functional categories are "more expressive" than lexical categories in the sense that the former is more complex than the latter with respect to phonological, morphological, and syntactic properties. For example, items belonging to lexical categories typically have a unique stem-form, while those belonging to functional categories may have a variable stem-form as illustrated in (10):

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10) A similar suggestion is found in McNeill (1966).

(10) a. cat: [kæt]
     b. a : [ei], [ ], [n]
        the: [ ], [i]

As we can see in (10), the noun *cat* has the sole allomorph [kæt], whereas the determiners *a* and *the* have a variety of allomorphs. In this respect, Fordor's (1981) argument militates against the learning account. According to Fordor (1981), if learning is to be viewed as hypothesis testing, the hypotheses must be *available* to be tested: a "more expressive" system cannot develop out of a "less expressive" one. Thus the learning account has difficulty in explaining why the more expressive functional systems develop out of the less expressive lexical systems.

An alternative explanation from the Continuity Hypothesis might be that items belonging to functional categories have more complex (and more abstract) semantic properties than those belonging to lexical categories, and in consequence are acquired later. According to Brown and Fraser (1963), items can be divided into two classes on the basis of their semantic properties, namely 'contentives' and 'functors'. Contentives are morphemes which have a (relatively) concrete semantic content, whereas functors are *items with a more abstract meaning*, and which fulfil an essentially grammatical function. They argue that children acquire contentives before functors because contentives have a more concrete meaning which is more readily identifiable by children. Since, by and large, contentives belong to lexical categories and functors to functional categories, it follows that lexical categories are acquired before functional ones. Similarly, Hyams (1986) concedes that relative semantic complexity may be one reason why functional modal I constituents are acquired later than simple lexical V constituents:

> To understand the modals, the child must be able to conceptualize possible (or future), but presently non-existing situations. An account along semantic-conceptual lines might provide insight into the late appearance of modals relative to verbs. (Hyams, 1986: 82)

If we appeal to *semantic complexity* as a factor in determining the order of acquisition of items, we implicitly invoke cognitive

immaturity as the relevant explanatory factor. This kind of approach, however, has a critical shortcoming. There is no reliable and empirical language-independent way of determining the child's cognitive capacity at any given stage of development. In this respect, Atkinson (1982: 205) says that attempts to explain aspects of linguistic development in terms of cognitive development have hitherto been characterized by 'a remarkable lack of awareness of the complexities' involved in approaching this relationship. Therefore, the account based on semantic complexity should be preceded by the comprehensive understanding of cognitive (im)maturity.

As seen in the discussion presented above, the Continuity Hypothesis does not provide us with an explanatory account of the delayed acquisition of functional categories. There is another explanation which is worthy of our concern, and does seem to be more reliable. It is the Maturational Hypothesis (cf. Cinque, 1988; Borer and Wexler, 1987; Radford, 1990a, b). The main point of the Maturational Hypothesis is that different principles of UG are genetically programmed to come into operation at different biologically determined stages of maturation (Radford, 1990a: 274). As a specific example, Borer and Wexler (1987) suggest that the notion of A-chain becomes available in earlier phrases of a number of properties that all seem to come in rapidly and simultaneously once the A-chain capacity has matured. In this vein, the maturational theory also implicitly invokes children's immaturity as the relevant explanatory factor for the delayed acquisition of a certain UG principle. This characteristic of the maturational theory is subject to the same objections which were given to the explanation based on semantic complexity.

Contrary to the explanation based on semantic complexity, however, there does seem to be some empirical support for the maturational theory. Extending the Maturational Hypothesis of Cinque (1988), Radford (1990a) conjectures that the principles which enable the child to map theta-marked argument structures into lexical category systems come 'on line' at around the age of 20 months (±20%), and that the child progresses to a later functional-nonthematic stage at around 24 months (±20%). In this connection, a number of studies (cf. Smith, 1926; Benedict, 1979; McCune-Nicolich, 1981) have reported that the

rate of acquisition of vocabulary items undergoes a sudden rapid increase at around the age of 20 months.[11] For example, McCune-Nicolich (1981) shows an increase from a mean figure of 31 words at a mean age of 20 months to a mean of 69 words a month later. Such a study suggests a strong correlation between vocabulary growth and the beginning of the lexical-thematic stage. This means that at around 20 months, children reach a 'critical stage' at which they progress to a more advanced (biologically determined in a sense) stage of linguistic development.

By the way, Anisfeld (1984: 129-130) reports that 'after a period of slow increase in sentence production, there is a period of accelerated growth around the second birthday (=24 months)'.[12] In this connection, Radford (1990a: 284-288) cites abundant examples which shows that at around 24 months children begin to use functional categories:

(11) Elizabeth at 26 months
    a. That one.
    b. I'm drinking my cup of tea there.
    c. What are all these doing, mummy?

(12) Jem at 26 months
    a. The lovely little room.
    b. Jem can't go down.
    c. Can Jem go out?

(13) Adam at 26 months
    a. My bottom.
    b. I'll take my shoes off.
    c. Where's the book?

The structures produced by the children in the examples above are plausibly analysed as DPs in the case of the (a)-examples, IPs in the case of (b)-examples, and CPs in the case of the (c)-examples. Each data set in (11-13) above is taken from a single recording of a child aged 26 months (i.e. a child who has only just entered the functional stage of development). But each set
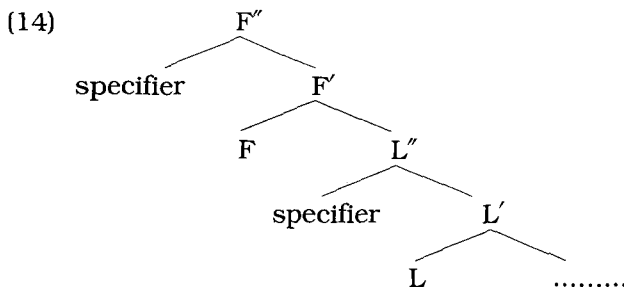
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11) Radford (1990a) refers to this phenomenon as 'vocabulary spurt'.
12) Radford (1990a) refers to this phenomenon as 'syntax spurt'.

of examples shows evidence of a well developed D-system, I-system, and C-system. This observation strongly suggests that these three functional systems do indeed develop in parallel.
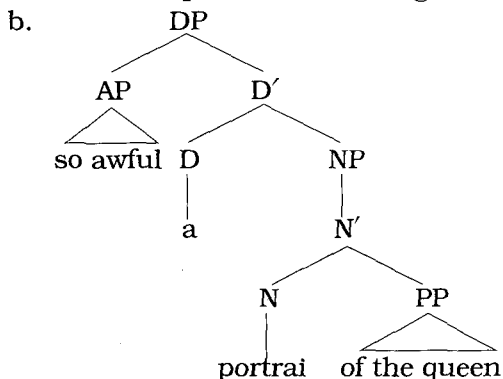
However, the maturational theory of acquisition by Borer and Wexler (1987) is severely criticized by Hoekstra (1990). Their maturational theory of language acquisition is basically based on the concept of cognitive maturation. For instance, the major motivation for Borer and Wexler's maturational approach drives from the growth of passives. They found that verbal passives do not occur at early stages. Borer and Wexler explain this developmental delay by assuming that A-chains mature. An important result of their argument is that children cannot discern the ergativity of the verb until they finally acquire the device of NP-movement. But Hoekstra (1990) argues against this claim by showing that Dutch children are correct in discerning ergativity very early, long before the purported emergence of A-chains. On the basis of this observation, Hoekstra (1990) concludes that what really grows in the course of language acquisition is not the cognitive capacity of children, but the language system itself.

In this respect, the maturational theory should be supplemented by a teleological explanation. It might be argued that it is in the nature of the structure of the grammatical system being acquired (itself determined by properties of UG) that some parts of the system must already be 'in place' before others can develop. One of important findings in generative grammar is that universal X-bar schema is formed like this: any word-level lexical category L would not only permit a lexical category L″, but might also permit a functional projection (via a head functional category F) into F″, in the manner schematized in (14) below:

(14)

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                        F″
                   ____/\____
        specifier            F′
                        ____/\____
                      F            L″
                            ____/\____
                      specifier       L′
                                ___/\___
                              L          .........
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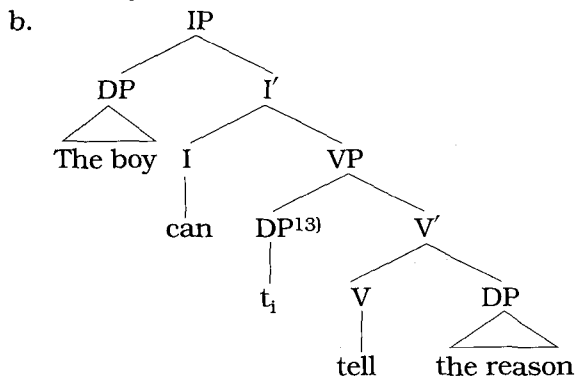
Let us consider the concrete inter-relationship between lexical and functional categories. The essential syntactic function of the D-system in adult grammars is to be regarded as functionally projecting NP into DP:

(15) a. so awful a portrait of the king
　　 b.

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                    DP
                  /    \
               AP        D'
              /  \      /   \
        so awful  D      NP
                  |      |
                  a      N'
                       /    \
                      N      PP
                      |     /  \
                   portrai  of the queen
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The essential syntactic function of the I-system is to be regarded as functionally projecting VP into IP:

(16) a. The boy can tell the reason.
　　 b.

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                     IP
                   /    \
                DP        I'
               /  \      /   \
          The boy  I      VP
                   |     /   \
                  can  DP13)    V'
                        |      /   \
                        t_i   V      DP
                              |     /  \
                            tell  the reason
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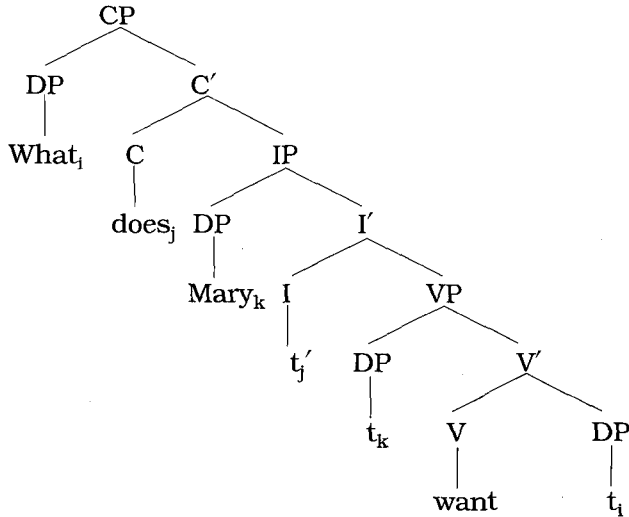
Likewise the essential syntactic function of C-system is to provide a further functional projection of VP (via IP) into CP:

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13) Here, we assume the VP-Internal Subject Hypothesis in the sense of Kitagawa (1986).

(17) a. What does Mary want?

b.

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                        CP
                      /    \
                   DP        C'
                   |        /  \
               Whatᵢ      C       IP
                          |      /  \
                       doesⱼ   DP      I'
                               |      /  \
                           Maryₖ  I      VP
                                  |     /  \
                                 tⱼ'   DP     V'
                                      |      /  \
                                     tₖ    V      DP
                                           |      |
                                         want     tᵢ
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Now, if it is right that functional categories serve the role of functionally projecting a lexical category system into a corresponding functional categorial supersystem as X-bar theory predicts, then it is clear that in principle children cannot acquire functional categories until they have acquired the corresponding lexical categories. Therefore, the fact that lexical categories are acquired before their functional counterparts (rather than the other way round) may be determined by deep-seated properties of UG.[14]

In addition to the teleological explanation, there is another argument which shows that properties of UG might play a role in determining why lexical categories are acquired before functional ones. Atkinson (1982: 18) proposes that if 'all the world languages possess X_1, but only some of them possess X_2, then the child must learn first exactly what is common to all languages'.[15] Such a proposal has everything to do with the parametric theory of language acquisition. According to Chomsky (1991), there is no significant parametric variation between languages in respect of their lexical category systems,

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14) Similarly, Abney (1987) and Grimshaw (1991) argue that functional categories serve to expand and thus presuppose the prior existence of lexical projections.

15) Atkinson (1982) refers to this as a 'language-internal' explanation.

but there is very significant parametric variation between languages in respect their functional category systems:16)

> ··· substantive elements (verbs, nouns, and so on) are drawn from an invariant universal vocabulary, then only functional elements will be parameterized.
>
> <div align="right">(Chomsky, 1991: 419)</div>

What this statement means is that syntactic variation within languages will be limited to functional category systems, so that it is only the properties of functional systems which have to be learned. From the perspective of the parametric theory of language acquisition, it is natural that lexical categories are acquired prior to functional ones because functional elements require accumulation of sufficient linguistic experience to enable the relevant parameters to be set at the appropriate values.

In conclusion, children's delayed acquisition of functional categories have something to do with some kind of maturity. But it is hard to believe it is the cognitive maturity as Borer and Wexler (1987) argue since, as Atkinson (1982: 205) says, attempts to explain aspects of linguistic development in terms of cognitive development are unclear (at least) at present. Rather, if language development is related to some kind of maturity (or growth), it is the growth in the language system itself. In this respect, generative grammar offers us a particularly insightful perspective on the nature of early child grammars. Within this framework, characteristics of early child speech which might otherwise seem to be unconnected (e.g. the delayed acquisition of D-system, I-system, and C-system), turn out to be intricately interconnected, and reducible to a single postulate: namely, that early child grammars are purely 'lexical-thematic' systems.

IV. Educational Implications on Second Language Acquisition

The phenomenon of the delayed acquisition of functional categories in the early stages is also found in the case of second language acquisition. The study of Vainikka and Young-Scholten

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16) Similar arguments are presented in Borer (1983) and Fukui (1988).

(1991, 1992) clearly shows that adult learners of a second (or foreign) language in the early stages go through three distinct stages (which are given below) with respect to the development of sentence structures:

(18) *The 1st Stage (VP-Stage)*
    a. There is no V-raising.
    b. Subjects are optional.
    c. There is no agreement paradigm.
    d. There are no embedded clauses with overt complementizers.

(19) *The 2nd stage (IP-stage)*
    a. V-raising is optional.
    b. Agreement suffixes are used, but they are rarely used correctly.
    c. A subject is obligatorily used in a finite clause.
    d. Modal auxiliaries are used.
    e. There are neither *wh*-questions nor embedded clauses.

(20) The 3rd stage (AGRP-stage):
    a. The perfect agreement paradigm is used.
    b. Some evidence for a CP projection (e.g. *wh*-questions, Yes/ No-questions) begins to appear.

The observation of Vainikka and Young-Scholten (1991, 1992) makes it possible to extend our suggestion that children's grammar is purely lexical-thematic in the early stages in the case of second language acquisition. The characteristics of the first stage (VP-stage) depicted in (18) reveal that the learner's grammar in this stage is purely lexical-thematic. There is no further projection expanding VP in this stage, and so V-raising cannot take place since there is no landing site like I and C. An overt subject is required by I to satisfy the Extended Projection Principle. Thus, even though we assume the VP-Internal Subject Hypothesis, subjects can be optional since theta theory does not require an overt subject. Moreover, agreement paradigms and overt complementizers can never appear within VP-projections since they are typical functional heads. The characteristics of the second (IP-stage) and the third (AGRP-stage) stage depicted

in (19-20) clearly show that second language learners in these two stages begin to acquire functional categories.

In conclusion, sentence structure development is correlated with the delayed acquisition of functional categories. This finding is harmonious with our argument of section II: the delayed acquisition of functional categories may be determined by deep-seated properties of UG. Language learners (L1 or L2) acquire first those aspects of language rooted in universal principles (because these are innately given and require no prior experience) and parameterized aspects of language later (because these require accumulation of sufficient linguistic experience to enable the relevant parameters to be set at the appropriate values). If parametric variations are confined to functional categories as Fukui (1988) and Chomsky (1991) argue, the delayed acquisition of functional categories is naturally explained under the parametric theory of language acquisition.

In this connection, the finding of this section can have many educational implications on the area of second language acquisition. If the phenomenon of the delayed acquisition of functional categories also takes place in second language acquisition, then deep-seated properties of UG are also operative in second language acquisition. It will be an additional support for the advocates of the assumption that UG also plays an important role in second language acquisition.

From the practical point of view, the finding of this section can be crucially exploited in making a more plausible curriculum for second language learning. For instance, it may be reasonable to introduce VP-related constructions prior to IP or CP-related constructions in the English curriculum for the students who learn English for the first time since such arrangement of learning content will reflect natural language development in the early stages. In this connection, Lee (1996: 96) has pointed out that CP-related constructions like *wh*-questions and Yes/ No-questions are wrongly introduced before VP-related constructions like imperative sentences in the present first year of middle school English textbooks for Korean students:

(21) The Order of Introducing VP, IP, and CP-related Constructions in the Present Middle School English Textbooks for Korean Students of the First Year

Curric-ulum	Structure Textbook	VP-Related	IP-Related		CP-Related	
		Imperative	Modal Con-struction	Negative Sentence with *do-* Support	Y/N-Question	*Wh-*Question
4th	A	5	3	4	1	2
5th	B	3	4	5	1	2
	C	4	5	3	1	2
	D	4	5	3	1	2
	E	5	4	3	1	2
	F	3	5	4	2	1
6th	G	3	5	4	2	1
	H	4	5	3	2	1
	I	3	4	5	1	2
	J	4	5	3	2	1
	K	1	4	5	2	3
	L	3	5	4	2	1
	M	4	5	3	2	1
	N	4	5	3	1	2

Here, I suggest that purely lexical-thematic structures like imperative sentences should precede full functional configurations like modal sentences or questions in the English curriculum for the students who learn English for the first time. Since imperative sentences (e.g. *Get up early.*) may not contain any functional categories, our parametric theory of language acquisition naturally expects that they are more readily accessible in the early stages.[17]

V. Conclusion

We have now reached a point in our understanding of the process of language acquisition. The phenomenon of the delayed

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17) For more discussion, see Lee (1996).

acquisition of functional categories is not applicable just to first language acquisition, but also to second language acquisition as well. This phenomenon does not accidentally take place. It is governed by deep-seated properties of UG. In this respect, the delayed acquisition of functional categories suggests the maturity (or expansion) of the language system itself. The core reason of this phenomenon lies in the parametric variation which is confined to functional categories. Parameter (re)setting requires accumulation of sufficient linguistic experience to enable the relevant parameters to be set at the appropriate values. From the pedagogical point of view, this finding can be reflected on the formation of English curricula for language learners in the early stages.

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