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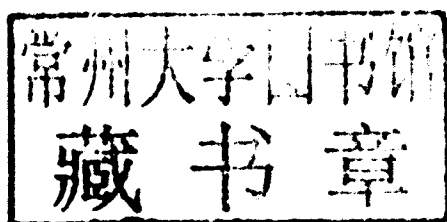
Peter Jordens

LANGUAGE ACQUISITION AND THE FUNCTIONAL CATEGORY SYSTEM

SOLA STUDIES ON LANGUAGE ACQUISITION

Peter Jordens

Language Acquisition and the Functional Category System



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To someone dear to me

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Nijmegen, 2012

Peter Jordens

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1 Introduction

1.1 Language acquisition from a functional perspective

Language acquisition is a developmental process. Research on spontaneous language acquisition both in children learning their mother tongue and in adults learning a second language has shown that language development proceeds in a stagewise manner. Hence, language development is usually studied on the basis of learner utterances that are accounted for in terms of so-called 'learner languages'. In studies on second language acquisition, learner languages are also referred to with the term 'Basic Variety' (Klein and Perdue 1992, 1997). Learner languages or Basic Varieties are language systems that are grammatically rather simple. In fact, they are lexical systems. A typical constraint of the lexical system of learners of Dutch is the principle which holds that "if there is an agent, it occurs in initial position". This semantic principle of utterance structure implies that a theme can only occur in initial position, if there is no agent to be expressed. Thus, at the lexical stage, both children learning Dutch as their mother tongue (L1) and adults learning Dutch as a second language (L2) may typically produce the utterances as in (1) and (2).

(1) child L1 Dutch

kannie bal pakke.
can-not ball get

adult L2 Dutch

die kanniet praten nederlands.
that can-not talk dutch

(2) child L1 Dutch

popje valt bijna.
doll falls nearly

adult L2 Dutch

ik woont in casablanca.
I lives in casablanca

At some point in acquisition, the lexical-semantic system develops into a target-like system. With this targetlike system, learners have reached a stage at which their language system has the morpho-syntactic features to express the functional properties of finiteness and topicality. Evidence of this is word order variation and the use of linguistic elements such as auxiliaries, tense and agreement markers and determiners. Examples are given in (3) and (4).

- | | |
|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| (3) child L1 Dutch

<i>ik heef óók appel gete.</i>
I have too apple eaten | adult L2 Dutch

<i>ik heb beetje geld sparen.</i>
I have some money saved |
| (4) child L1 Dutch

<i>die heb ik wel geplakt.</i>
that have I indeed glued | adult L2 Dutch

<i>die heb ik allemaal vergeten.</i>
that have I all forgotten |

In the present monograph, I will investigate the process of language acquisition from a functional point of view. Within this functional perspective on language acquisition, questions such as the following arise. What is the driving force behind the process that causes learners to give up a simple lexical-semantic system in favour of a functional-pragmatic one? What is the added value of linguistic features such as the morpho-syntactic properties of inflection, word order variation and definiteness? Why is it that in cases of specific language impairment, it is mainly morpho-syntactic properties of the target language that are affected? These are the leading questions of the present volume. They show the relevance of studying learner language as a language system in its own right.

In the following chapters, I will show how learner varieties develop both in child L1 and in adult L2 Dutch. At the initial stage, as pointed out before, the functional properties of the target language are absent. This means that utterance structure is determined by the lexical projection of a predicate-argument structure. A typical feature at the lexical stage is the fact that topicalization, i.e. reference to the situation that the utterance applies to, cannot be expressed with the functional means which play a role in the target system. Nevertheless, at the lexical stage, topicalization is expressed within the constraints of the relevant system with a lexical structure that is non-targetlike. Examples from child L1 learners and adult L2 learners are given in (5).

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (5) child L1 Dutch

<i>disse hoeniet meeneme.</i>
this-one must-not with-take

<i>da kanwel opzitte.</i>
there can-indeed on-sit | adult L2 Dutch

<i>die wijn magwel drinken.</i>
that wine may-indeed drink

<i>dan moet daar helemaal opruimen.</i>
then must there all up-clean |
|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|

The type of utterance in (5) has either the object or an adverbial in initial, topic position, while the agent is expressed only implicitly with the semantics of the modal head.

I will argue that, at the lexical stage, topicalization is the driving force which leads to the acquisition of a functional projection FP. F is the head of FP. It provides a position for elements carrying the functional properties of finiteness, i.e. for elements such as epistemic modals, auxiliary verbs and later in the acquisition process for (finite) lexical verbs, too. These verbal elements serve as carriers for the expression of finiteness with the morpho-syntactic properties of agreement and tense. SpecFP is the specifier of FP. The position of SpecFP is available either as a topic or as a focus position. Topicalization is expressed with the placement of a constituent in initial position in interaction with the morpho-syntax of definiteness. Focalization can be expressed with a *wh*-word in SpecFP or in case of *yes/no*-questions with SpecFP left empty.

1.2 Overview of the book

Chapter 2 provides an outline of the principles of linguistic structure building that language perception and production are based on. It discusses the basic syntactic properties of utterance structure and phrase structure, the morphological properties of word formation and the pragmatic properties of information structure. It shows how the underlying knowledge systems of linguistic structure are used in processes of language production, i.e. in lexical selection and perspective taking and in the embedding of an utterance into its situational context. Finally, it argues that the distinction between lexical and functional category systems is relevant for the process of language development. This distinction applies across the levels of utterance structure, phrase structure and word formation. It establishes the focus of the present research. Furthermore, assuming that early learner systems are lexical systems, it is stated in Chapter 2, first, that language acquisition is a process of structure building that is the result of the acquisition, integration and restructuring of lexical and functional linguistic knowledge. Second, it is claimed that it is the acquisition of the linguistic means for the embedding of an utterance into the situational context that serves as the ‘driving force’ for learners to give up a relatively simple lexical system in favour of a complex functional one. Finally, it is argued that the differences between child L1 and adult L2 learners are to be explained relative to the fact that children experience no influence from either advanced levels of cognitive and linguistic development nor from the principles of another language system.

The main characteristics of utterance structure in Dutch will be discussed in Chapter 3. First, I will present the arguments for why basic word order in Dutch is considered to be OV. On the basis of OV, word order may vary. Principles underlying word order variation determine the actual form in which utterances occur. In

order to account for the function of variation in utterance structure, I will discuss a proposal that is based on the functional principles underlying the formal properties of utterance structure. From a functional perspective, utterance structure in Dutch integrates two projections of syntactic structure: a functional projection (FP) and a lexical projection (VP). The finite verb in F serves as the head of FP. In declarative main clauses F is the second constituent position. Verbal elements in the position of 'verb-second' are carriers of the functional properties of finiteness. It is the function of finiteness to express the pragmatic function of assertion. As an assertion, a finite utterance has to be anchored with respect to both time and space. Temporal anchoring occurs morphologically with the finite verb. Spatial anchoring occurs with elements in the position of SpecFP. In the default case, the functional properties of F are carried by the auxiliary verb. The lexical verb in V is the head of VP. In absence of an auxiliary verb, it is the lexical verb that is used to express the functional properties of finiteness. Hence, variation with respect to the position of the lexical verb serves a functional purpose. Similarly, nominal constituents with an argument function or adverbials may occur in the position of SpecFP. In this position, these constituents serve as carriers of the pragmatic function of contextual embedding.

The distribution of verb forms at the initial stage of child L1 Dutch has been accounted for with different theoretical proposals. In Chapter 4, it is argued that neither the Full Competence Hypothesis as proposed in Poeppel and Wexler (1993), nor the Modal Hypothesis of Ingram and Thompson (1996), nor Clahsen's (1986) model based on the notion of 'semantic transitivity' provides an adequate account of the language system in child L1 learners of Dutch or German. That is, the language system at the initial stage is neither innately given nor the reflection of the target input. Rather, it is the result of a process of creative construction. The claim is that the utterance structure at the initial stage is based solely on lexical categories of predicate-argument structure. Absence of the functional category system explains why the morpho-syntactic properties of finiteness and verb-second are not instantiated. At the relevant stage, variation in utterance structure is accounted for by the opposition between two types of predicate-argument structure: (a) an agentive type of structure as in (1) with the predicate referring to a (causal) action or an agentive motion and an agent as the external argument and (b) a non-agentive type of structure as in (2) with the predicate referring to a state or a change of state and a theme as the external argument.

Learner language at the initial state is described in Chapter 5. Here, the spontaneous production data show that initially the learner languages of child L1 and adult L2 Dutch are indeed lexical. The utterance structure is the instantiation of a lexical projection that is used to express a 'hold-for' relation between the

predicate and the subject. As claimed before, it is either agentive (type A) or non-agentive (type B).

(6) Type A:	agent	Ctrl	action
	<i>Jaja</i>	<i>mag</i>	<i>dop opdoen.</i>
	J	may	cap on-do
		<i>gaatie</i>	<i>[sl]ape.</i>
		goes-he	sleep

(7) Type B:	theme	state
	<i>deze</i>	<i>magwel.</i>
	this-one	may-indeed
	theme	change of state
	<i>poppie</i>	<i>valt hier.</i>
	doll	falls here

As shown in (6) and (7), the difference between the two types of utterance structure lies in the presence or absence of a head position for a modal or aspectual element that is used to express 'control'. The function of control is exerted by the agent that carries out a causal action or an agentive motion. Absence of control is exerted by the theme that either occurs in a state or undergoes a change of state. Evidence of the lexical stage is the absence of the functional category system of the target language. At the relevant stage, due to the absence of the functional properties of the target language, learners do not have the linguistic means of the target system to express the pragmatic function of an utterance or the embedding of an utterance into its situational context. Thus, grammatically, the learner system at the lexical stage is as simple as can be. The utterance structure serves the default way to express an assertion. Hence, the structural properties of *wh*- and *yes/no*-questions are absent, as is the case with the structural means of the target system to express the pragmatic function of topicalization. Given that the predicate-argument structure is also used to express properties of information structure, the subject is the constituent with topic function. It establishes the relation between the utterance and the situation that it applies to. Furthermore, the predicate is the constituent that is in focus. It is used to express the information that holds for the topic.

Chapter 6 discusses the question of the 'driving forces'. Why is it that learners will give up a simple learner system in favour of a more complex targetlike

system? How does this process of language development evolve? It will be argued that with the instantiation of the functional projection of *F*, the learner system provides a syntactic position *F* for the expression of finiteness and a syntactic position *SpecFP* for elements to express the topic function. With the projection of *F*, therefore, the learner system develops the linguistic means for the embedding of an utterance into a situational context. This process allows the acquisition of *wh*- and *yes/no*-questions as well as the structural means of the target system to express topicalization. Furthermore, it causes modal predicates to serve as the head of a functional projection, while it establishes a position for the acquisition of aspectual auxiliary verbs such as *doet* (does) and *gaat* (goes) in the context of an infinitive, and of *heb*, *heeft* (have, has) and *ben*, *is* (am, is) in the context of a past participle. Finally, it provides the prerequisite for the acquisition of head movement, tense and agreement.

Research on the spontaneous production of utterances in child L1 Dutch by Gillis (2003) and child L1 German by Bittner (2003) is discussed in Section 7.1 of Chapter 7. These studies focus on the acquisition of inflectional morphology. In their study of the emergence of so-called ‘mini-paradigms’, both Gillis and Bittner distinguish between a premorphological and a protomorphological stage. They show that, initially, at the premorphological stage, “most verbs are attested in only one morphological form” (Bittner 2003: 60) and that with respect to the placement of verb forms there is a correlation between form and position. These observations are precisely as they appear from the data at the lexical stage as presented in Chapter 5. At the relevant stage, morphology does not yet play a role. Hence, verb forms are unanalysed. At the functional stage, as shown in Chapter 6, the utterance structure has both a functional position for the verb to express finiteness and a lexical position for the main verb. These verb positions are the prerequisite for head movement and with head movement the first form contrasts appear. This process is precisely what Gillis and Bittner account for with the term ‘mini-paradigms’. The emergence of these mini-paradigms is evidence of the instantiation of the morphological expression of tense and agreement.

Section 7.2 of Chapter 7 deals with the acquisition of the inflectional morphology of verb forms in L2 acquisition research. Two alternative hypotheses have been proposed: the Impaired Representation Hypothesis (IRH) and the Missing Surface Inflection Hypothesis (MSIH). The IRH suggests that, at the initial stage, L2 learners may not have access to morphology as a feature property of inflection, while they do have access to a position that makes verb movement possible. This hypothesis should account for the observation of random placement. With the MSIH, it is claimed that, at a more advanced stage, L2 learners may have access to morphology as a feature property of inflection. It is this property of inflection that should establish verb movement. However, the MSIH also claims that, at the

relevant stage, the morphology of the raised verb may remain underrepresented, i.e. it may not necessarily be realised at the surface-structure level. Thus, it is the assumption of both the IRH at the initial stage and the MSIH at a more advanced stage that inflectional morphology plays a crucial role in the acquisition of verb movement. However, in the discussion of these proposals, I will show that it does not. What is relevant is the functional position for the expression of finiteness. With the acquisition of this position, learners are able to establish the relation between the functional, head-initial position of the verb and its lexical, head-final position. This relation is the prerequisite for the acquisition of the syntactic relation referred to as verb movement. With its use in functional head position, the lexical verb serves as a carrier of the semantic properties of finiteness, i.e. finiteness as a category of information structure. As the lexical verb occurs in functional, head-initial position, learners are given the necessary condition to acquire the morphological properties of verbal inflection. Hence, it is the acquisition of finiteness as a category of information structure that leads to the acquisition of a functional position serving as the prerequisite for verb movement, whereas verb movement for its part serves as the prerequisite for the acquisition of inflectional morphology with the lexical verb.

