VERBS IN THE EARLY SPEECHES OF TWO MANIPURI-SPEAKING CHILDREN

Ahanthem Romita Devi & L. Iboyaima Singh

The paper seeks to highlight how concepts of verbs in general and motion verbs in particular unfold in two Manipuri-speaking children within the age group of 3-5 years of age. The focus is on motion or action verbs because of the prevalence of such words in child directed speech at home as well as in the school environment. Child directed speeches usually consists of action verbs mainly to get them acquainted with the world around them and to develop them as a social being. This study looks into the emergence of verbs, particularly the motion verbs, and sets a prelude to further extensive study in this area. It is also to see how far Uziel-Karl's (2001) presentation of Hebrew motion verbs works for Manipuri motion verbs.

Keywords: motion verbs, acquisition, language development, verbs, child language

1. Introduction

This study focuses on the issue of how motion verbs are acquired by Manipuri-speaking children in the age group of 3 to 5 years. In its attempt, the study has drawn its rationale from Uziel-Karl's work on Hebrew motion verbs (Uziel-Karl, 2001). The paper tries to figure out how verbs unfold in the child's lexicon and also to examine when motion verbs normally appear in the course of language acquisition. Children's acquisition of an early verb lexicon has constituted a major area of research in the last decade of the 20th century (Berman & Armon-Lotem, 1996; Bowerman, 1990; Brown, 1998; Clark, 1993; Tomasello, 1992; Ninio, 1999,). Research on this area has broadly raised many questions like: What is the makeup of children's verb lexicon? Do children acquire action- related verbs first as compared to other types of verb like process verbs, stative verbs, etc.? According to Tomasello and Merriman (2014), the toddlers actively seem to search for ways to express certain perceptual notions even if they are unable to learn the words to express concepts. They seem to express the outcome of an event first, and seem to encode the cause-and-effect outcome of the event without being able to express it properly. Eventually, they learn to perceive the intention and ways to express subjective states leading them to use change-of-state verbs and express the goals of their actions or events.

Studies in this area have also raised some other questions: How do children initially acquire general or specific verbs? What motivates a particular make up of children's early verb lexicon and to what extent is this make up shared across languages? Why do motion verbs emerge at all? Studies of child language have sought to seek answers to these questions with empirical or experimental evidences and have also tried to look into why and when motion verbs appear in child language. This study particularly seeks to examine the acquisition of motion verbs in Manipuri for a number of reasons. First, the focus on the acquisition of any type or sub type of semantically related verbs allows for a particularly reliable examination of developmental patterns. Second, examination of motion verbs would reveal how motion verbs play a major role in the acquisition of children's early verb lexicon and how children tend to start verbalizing movement and motion in space rather early in their linguistic development (Clark, 1993). Finally, the study would also show how motion verbs in acquisition comprise an important semantic domain in Manipuri. Out of these motion verbs, there is a distinctive category which exhibits distinct types of lexicalization patterns cross-linguistically (Berman & Slobin, 1994; Talmy, 1985).

2. Theoretical background

The question addressed in this work is: Are motion verbs acquired in some developmentally consistent pattern or in a varied pattern reflecting upon the role of language input available to the child? Since research in first language acquisition is primarily

concerned with investigating the emergence and nature of early child grammar, the issue of selecting an appropriate method, which might provide valid and a reliable theoretical group for the validation of the assumption, is very important. In the literature of child language, there is a traditional distinction between two types of study that might provide relevant basis for the explanation of the data: (a) experimental studies, (b) naturalistic studies. The distinction between experimental and naturalistic studies has created controversy in the literature. Proponents of naturalistic inquiry argue that experimental studies tend to be narrow in scope (e.g. they focus on the acquisition of one specific type of item or construction), and so cannot offer a broader perspective on the child's overall linguistic development. Roper (1987: 315), cited in Radford (1999: 9), argues that in experimental work, 'the data is often uninterpretable because it's too narrowly focused, and then often leads to an understatement of children's ability.'

In early years of research in first language, the most widely used methods of investigating young children's linguistic knowledge have focused on spontaneous language samples for analysis. This has been the case despite the strong criticism against it from Chomsky in 1964; this being called an insufficient input to determine the linguistic knowledge of the young language learner. The main advantage of using naturalistic speech samples is that they generally yield a large number of examples from a wide range of linguistic phenomena. This enables linguists to build up a comprehensive picture of the child's overall linguistic development at a given stage (Radford ibid: 10).

In fact, the popularity of naturalistic studies stems from the focus on language as a social behavior, and hence it must be studied in the context in which it naturally occurs. The researchers only need to create a comfortable and interesting environment and prepare to deal with the abundance of linguistic information. This convention was followed in our study. Motion verbs first acquired by the child seems to depend on the input given by the caregiver i.e. motherese. Comprehensible input plays a vital role when it comes to first language acquisition. According to Gillis and De Schutter (1986), a clear distinction between word classes is not present during the early phases of language acquisition, implying that in the speech of a one-year old, we do not find specific words belonging to noun or verb category. Children use verbs, adverbs and nouns for the same situation. During the earliest phases, predicative functions may be expressed by sound imitation or traditional onomatopoeia, which are a part of extragrammatical means. Thus, young children employ a rich and a creative means to express predication, before they can come up with the correct verb forms. These predecessors of verbs also known as non-verbs do end up serving the purpose of predicative function within a format. These non-verbs are exceptional and even absent in adult speech. Slowly, these forms give way to one-word phase where multi-functional and holophrastic protowords also serve similar function. In order to answer the question when the notion of movement or direction emerges in a child's lexicon we need to know the overall linguistic capability of the child (i.e. the predecessors). For instance, a three year old has the ability to report any incident he/she has encountered, can narrate stories, can argue and so on. On such a scale of his/her linguistic capability, it will be interesting to see where motion verbs feature. This implies that we need to look at what has gone before the acquisition of motion verbs. Based on Gillis and De Schutter's notion of predecessors, the types of predecessors that can be found in Manipuri children are:

(a) Adverbs like *aadə* meaning 'away', children usually say *aa* (meaning away) without the locative marker *–də*.

(b) Deictics or directing forms like *tu* meaning 'this' (demonstrative or pointing out to direct attention towards something).

(c) Onomatopoeia, replacing verbs or nouns. For instance, children usually use *məm-məm* for food.

(d) Fillers, reduplications and other self-invented items, which do not exist at all in Manipuri. One of the subjects, named Jully used a self-invented item *bo* whenever she wanted somebody to give her something. The term for give in Manipuri is *pibə*, which has got no linguistic similarity with *bo* of Jully's speech.

(e) Nouns are often difficult to differentiate from verbs. For example, *məm-məm* is used for both food and for the act of eating.

Slowly, children move towards the development of more morphologically complex structures giving way to the development of syntactic structures. This further enables the child to acquire complex motion verbs along with verbal inflections.

3. Methodology

The survey was done purely on observational basis following the naturalistic study method. This was done to look at the holistic linguistic capability of the subjects instead of focusing on motion verbs alone. For instance, both were very linguistically capable of producing other verb forms like eat, sleep, give, go, keep, put, play, sit, work, and so on (both transitive and intransitive verbs). They were basically asked wh-questions in addition to the forms spontaneously produced by the child in naturalistic play situations. As pointed out by Radford (ibid: 29), both semantic and categorical response to wh-questions from a semantic point of view, has the semantic property that it denotes a human being. By using such a technique we try to test whether the child is aware of the requirement for phrasal replies to wh-questions to be categorically appropriate or not.

The form of questions used for eliciting the data for different verb forms was related to the form such as 'Where do you play?' Since they allow a verbal expression as an answer to these questions, it confirms that the expression is semantically appropriate. In other words, it denotes an action and this action is morphologically marked on the verb appropriately. By using such a criterion, we may be able to determine whether the child has developed a formally distinguishable set of categories of motion verbs.

Apart from asking the subjects a few questions, they were observed while they were playing with their friends. Both of them were also put together to play football to see if they could comprehend each other's direction. A partial task-based survey was conducted in the field, however, a thorough survey was not possible because Manipur was going through a political crisis because of which curfews were imposed at the time when this study was conducted. Hence the number of subjects considered for the study was very limited as frequent home visits to collect data became an impediment. This was a major setback while conducting the study.

Apart from watching the subjects play, data was collected by asking questions to them while they were playing. For instance, when Jully was asked, "What were you doing?" in Manipuri, she would reply correctly:

Mother:

(1) nəŋ kəri sannə-i
you what play PRES
"What are you playing?"

Jully:

(2) əi thəuri coŋ-i
I rope skip PRES
"I am skipping".

Mother:

(3) nəŋ əbok-ki yum-də kəri təu-i
You grandmother home what do
GEN LOC PRES
"What do you do at grandmother's place?"

Bobby:

(4) əi iroi-i
I swim PRES
"I swim."

4. Subjects

The subjects covered in this investigation comprised two children: Jully, a 3-year old girl; and Bobby, a 5-year old boy, belonging to two different family backgrounds. Jully is a quiet girl

whereas Bobby is more active of the two. This is the reason why Bobby can be more engaged into action-packed games like cricket, football and so on. Jully is the only child in the family and lives with her parents. Bobby's family consists of his parents, and two elder brothers. It is important to describe their family backgrounds, as we will see how it affects their knowledge of motion verbs in the next section. During the observation sessions, their family members were also present. It was always difficult to keep the attention of Bobby focused whereas Jully was easy to deal with even though she was younger to Bobby. Both the children are monolingual as Jully was exposed only to Manipuri and Bobby had not yet started going to school (due to his family's financial condition). The study is based on the data collected in observations with these two subjects. The very desire to cross-check the data with other children was not feasible due to curfew-bound Imphal at the time of data collection. It would have been interesting to see what happens to children belonging to diversed localities (agricultural locality vs. trading locality) as the subjects from whom the data have been collected for work reside and belong to the same locality.

5. Observations

Initial observation was that certain motion verbs that Jully knew was not understood by Bobby. This was mainly the case because of the kind of words that were used by the family members in their respective homes. Due to this when the two of them were playing together, Jully could not follow instructions given by Bobby. This made Bobby a little uncomfortable, and the end result was to put an end to their game. They were much happier in the company of their own friends with similar family backgrounds.

6. Types of Manipuri verbs

Depending upon their nature, verbs of Manipuri can be broadly classified into four categories based on semantics. They are:

(i) action verb.

a. ca-bə
eat-INF
'to eat'

(5) əi caak ca-i
I food eat PRES
"I eat food".

b. cik-pə
bite-INF
'to bite'

(6) hui-nə tomba-bu cik-i
dog-NOM Tomba-ACC bite-PRES
"The dog bites Tomba".

One thing to be noted here is that in Manipuri the infinitival marker is –pə and its allomorphs are –pə and –bə. If the preceding sound is a voiceless one, then –pə occurs and if the preceding sound is a voiced one then –bə occurs.

(ii) process verb.

a. sat-pə
bloom-inf.mkr
'to bloom'

(7) ləi sat-li
flowers bloom-PRES
"Flowers bloom".

b. tao-bə
float-inf.mkr
'to float'

(8) u isiŋ-də tao-i
wood water-LOC float-PRES
"Wood floats on water".

(iii) stative verb.

a. phəjə-bə
nice-inf.mkr
'to be nice'

(9) tombi məsək phəjə-i
Tombi face nice-PRES
"Tombi is beautiful".

b. thi-bə
ugly-inf.mkr
'to be ugly'

(10) məhak məsək thi-i
he face ugly-PRES
"He is ugly."

It is a Tibeto-Burman language feature to treat adjectives like verbs for the simple reason that adjectives can take tense markers just like verbs. In the above sentences, the sense of the adjectives is more like someone being nice or ugly and not that someone is actually nice or ugly.

(iv) Motion verb.

a. kakhət-pə
climb up-inf.mkr
'to climb up'

(11) caoba-nə ciŋ kakhət-li
Chaoba-NOM hill climb up-PRES
"Chaoba climbs up the hill".

b. kumdhə-bə
climb down-inf.mkr
'to climb down'

(12) əŋaŋ-nə sirithak kumdhə-i
child NOM stairs climb.down-PRES
"The child climbs down the stairs".

They can also be classified based on their transitivity

(i) Intransitive:
tum-bə
Sleep-inf.mkr
'to sleep'

(13) əi tum-i
I sleep-PRES
"I sleep".

(ii) Transitive: ca-bə
eat-inf.mkr
'to eat'

(14) əi-nə sem ca-i
I NOM apple eat-PRES
"I eat apples".

(iii) Di-transitive
Pi-bə
give-inf.mkr
'to give'

(15) tomba-nə tombi-də ləi pi-i
Tomba-NOM Tombi-DAT flow.give-PRES
"Tomba gives Tombi a flower."

Out of these motion verbs, there is a distinctive category which exhibits distinct types of lexicalization patterns cross-linguistically (Berman & Slobin 1994, Slobin (in press), Talmy 1985), e.g. In Manipuri,

(16) əi mapan rom-gi yeŋ-ge
I outside toward-GEN see-FUT
"I will look outside".

(17) nəŋ mənuŋ rom -gi yeŋ -o
you Ins. toward GEN see IMPRT
"You look inside".

In the above example, we see that a genitive marker, '-gi' 'of' connects the two lexical items which denote directionality. The grammatical category of these lexical items, e.g., 'məpan', 'mənuꝑ' and 'rom' are adverbs. They, however seem to have gone through the process of lexicalization in Manipuri and thus are connected in the speech through a genitive marker, which is the nature of a nominal lexical item. Similar process happens in Hindi where two adverbials, having gone through the lexicalization process, are connected by a genitive marker, e.g.: In Hindi,

(18) me bahar-ki-taraf dekh-ta hu
I outside-GEN toward see be
"I will look outside."

(19) tum andar-ki -taraf dekh-o
you Inside-GEN toward see-IMPRT
"You look inside".

This is the reason why motion verbs serve as a particularly interesting test case for comparison of early verb acquisition across languages.

Depending upon the change of position or the state of an agent involved in action, the verbs can be differentiated into two broad groups, viz., verbs of movement and verbs of state. Motion verbs necessarily involve some noticeable movement in position or location of the agent (e.g., run, walk etc. versus wait, remain, sleep, etc.). The discrimination between these two groups can be

symbolized by a system of two features +mov "mobile" and -mov 'static'.

Verbs which denote movement are of two types: those which denote a movement in a direction and those which do not denote any direction (e.g. climb versus go). Two directions are differentiated viz., vertical and horizontal. Each direction has some dimensions – vertical has: upward and downward and horizontal has at least three: forward, backward and sideward (S. Rajendran, Ramesh C. Sharma and R.R. Thampuran 1976).

7. A Brief note on Manipuri and its motion verbs

Manipuri, locally known as Meiteilon (the Meitei + lon 'language'), is spoken basically in the state of Manipur which is in North-eastern India. Manipuri belongs to the Tibeto-Burman group of languages and is placed in the Kuki-Chin sub-group.

Manipuri shares genetic features of Tibeto-Burman features. Some genetic shared TB features include phonemic tone, SOV word order, agglutinative verb morphology and tendency to reduce disyllabic forms to monosyllabic ones. Very specifically, Manipuri has extensive verb morphology, extensive suffix with more limited prefixation. A table of some Manipuri motion verbs are given below:

Table 1: Some motion verbs in Manipuri

Vertical:		
	Upwards	Downwards
	thaŋətpə	thaŋdəbə
	'lift up'	'lift down'
	kakhətpə	kumdhəbə
	'climb up'	'climb down'
	ləŋkhətpə	ləŋthəbə
	'throw up'	'throw down'
	coŋkhətpə	coŋdhəbə
	'jump up'	'jump down'
	hougətpə	phəmdhəbə
	'rise' / 'stand up'	'sit down'
Horizontal:		
	Forward	Backward
	cət khətpə	həndhəbə
	'proceed'	'retreat'

8. Analysis of the data

Initially, children seem to rely more heavily on general than on specific motion verbs, but this tendency changes across development. Uziel-Karl (2001) argues that the make-up of children's motion verb lexicon is determined by a combination of factors (e.g., conceptual, universal, language particular, pragmatic/situational, and distributional=frequency in input) that must be considered simultaneously, rather than in competition with each other. The current proposal stands in marked contrast with previous work on acquisition of motion and space, which tended to account for this process from a single perspective. For example, early on Slobin (1985) used universal accounts of space, while Bowerman (1990) highlighted the importance of typological accounts. The multidimensional account proposed here offers a complex, yet a genuine way of looking at the development of children's early verb lexicon. It is in line with a more general view of acquisition as a process affected by a confluence of cues, and of the language learner as an active participant in this process, who is busy using and integrating different kinds of knowledge to learn more (Uziel-Karl 2001).

9. Discussion

A number of factors interact to determine the distribution of motion verbs in the lexicons across development. These include: Conceptual, universal, language particular, pragmatic / situational, and distributional factors. *Conceptual* factors relate to the way young children conceive of the world around them; *universal* factors relate to the properties of particular verb groups that make them crosslinguistically favored for early acquisition; *language particular* factors relate to typological differences between languages that lead to crosslinguistic variation in the inventory of children's early verb lexicon, e.g., the distinction between verb-framed and satellite-framed languages (Talmy, 1985); *pragmatic/situational* factors relate to the particular context or situation in which a given verb is introduced and/or used, and *distributional* factors relate to the frequency of occurrence of a particular verb in input to the child.

According to Uziel-Karl (2001), general motion verbs like 'come,' 'go' and 'move' occurred early and were frequently used for three main reasons: First, they describe activities that are directly observable, and as such are conceptually easier for young children than, say, caused motion verbs which require making inferences about causes. Secondly, these verbs have particular semantic and syntactic characteristics that make them universally favored for early acquisition Ninio 1999, Pinker 1984):

i. Their meanings are fairly nonspecific to the effect that they are determined in combination with their complement (e.g., *come home* vs. *come off*);

ii. They are polysemous (e.g., *it goes well* [it's working] vs. *he goes to school* [he attends school];

iii. They are lexically underspecified (e.g., *come off* is not a coming activity);

iv. They are syntactically multifunctional, since they can function both as auxiliaries and as main verbs (e.g., *going to eat* vs. *going home*);

v. Finally, the group of general motion verbs seems to constitute a kind of "closed class" in that it consists only of a small, limited number of verbs that cannot be added to. As a result, the children might acquire these verbs more easily than specific motion verbs that constitute a kind of "open class", imposing no limitation on the children's early lexicons.

The use of certain manner verbs like *cenbə* 'run' and *nanthəbə* 'slide', and posture verbs like *phambə* 'sit' and *leppə* 'stand' by the two subjects namely, Jully (3 years old girl) and Bobby (5 years old boy), can be accounted for pragmatically. According to Uziel-Karl (2001), these verbs constitute part of children's everyday life experience, and even as such it is reasonable to assume that they will be shared by the two subjects, and even across languages. They use other manner of motion verbs like *koibə* 'travel' or *coŋbə* 'jump' as prototypes in that early on these verbs occur in place of more specific manner of motion verbs. For example:

koibə 'travel' is used by both Jully and Bobby instead of 'go somewhere' as in the sentence given below:

(20) əikhoi yum-də cət-li
we home-LOC go-PRES
"We are going home."

'ride' as in:

(21) əikhoi səgol toŋ-i
we horse ride-PRES
"We rode the horse."

'drive' as in:

(22) əi kar thəu-i
we car drive-PRES
"I drive the car."

'fly' as in:

(23) əi thəwaimicaak-tə pai-i
I star-LOC fly-PRES
"I am flying on the star."

As prototypical manner of motion verbs, the two subjects are expected to share these verbs. The shared use of certain direction of motion verb types like *kumbə* 'to go down', *kaabə* 'to go up', *thokpə* 'to go out' can be attributed to language typology as follows (Uziel-Karl, 2001). Talmy (1985) proposed two distinct ways in which languages allocate information between the main verb and supporting elements (satellites) in a clause. A Germanic language like English uses verb particles (satellites) to specify direction of movement, e.g., walk *in*, get *down*, and as such it is characterized as a *satellite-framed* language. In contrast, a Romance language like Spanish, or a Semitic language like Hebrew, encode this information in the verb, e.g., *entrar* 'enter', *bajar* 'descend', and as such are characterized as *verb-framed* languages. Manipuri belongs to the later group, that is, a verb-framed language. In view of that Manipuri-speaking children will include direction of motion verbs like *kaabə* 'go up', *kumbə* 'go down', and *thokpə* 'go out' in their early lexicon, and that these verbs will be shared across speakers of the language (just like the case of Hebrew-speaking children, Berman & Slobin

1994, Slobin 1997). However, it is also expected that such direction of motion verbs will not occur in the early lexicons of children who speak Germanic languages like English, since they can use particles instead of full verbs to express the same notions (Clark 1993). Anecdotal data from Berman's bilingual daughter Shelli support these predictions. Berman reports that at the one word stage, Shelli used either the English particle *down* or the Hebrew verb form *laredet* 'to get down' when she wanted to get down from her high chair or out of bed.

Children tend to recognize that the grammar of their language requires morphological marking of argument structure alternations typically from around age 3, after simple clause structure is established, which explains why early motion verbs are initially so scarce in the lexicons of Jully and Bobby. Also, as noted, caused motion verbs are conceptually more difficult for children to talk about.

The subjects and their caregivers make use of similar verbs. For example, Jully uses the general motion verb *cətpə* 'go', but does not use the verb *lengbə* 'move' at all. This is because her mother uses the verb 'go' frequently and does not use the verb 'move' at all. On the other hand Bobby's mother the verb 'move' instead of the verb 'go' and indeed, the verb 'move' occurs in Bobby's lexicon. This suggests that occurrence of particular verbs in their lexicons and the frequency with which the subjects use them may be affected by their frequency in their input. The data reveal that the subjects differ from one another in the frequency with which they use particular motion verbs and in their inventory of specific motion verbs in their early lexicons. Such a hypothesis is supported by Bybee (1995); Gillis (2003); stating that input frequency becomes a very important tool to help the children acquire language at the early stages. These differences may be attributed mainly to situational and distributional factors. The data reveal that the girls and their mothers make use of similar verbs, and that when the mother uses a particular very often, her child seems to use that verb very frequently too. This suggests that the occurrence of a particular verb in the subjects' lexicons may be determined by its frequency in the input provided by their caregivers. Finally, particular situations or conversational contexts may elicit use of certain verbs in one child but not in the other. For example, Jully uses the verb *coŋbə* 'jump' only once when she tells her mother about seeing some children skipping. Similarly, she uses the verb *paibə* 'fly' only when she talks with her mother about birds. Bobby uses the verb *nanthəbəə* 'slip' only once in response to his mother's remark using that verb. Similarly, he uses the verb *iroibə* 'swim' only once – when he is asked what he did when visiting his grandmother's. Other specific verbs like *haibə* 'swing' or *ləibə* 'spin' were introduced in nursery rhymes frequently recited by one of the subjects but not the other.

10. Conclusion

According to Uziel-Karl (2001), multiple factors operate to affect the make-up of children's early verbs lexicon. Further, conceptual and universal factors also seem to account for crosslinguistic similarities in acquisition of particular motion verbs. Typological factors, often pointed out in this regard, account for the similarities between speakers of a particular language on the one hand and the crosslinguistic variation on the other. Such an observation is supported by this study. Moreover, pragmatic and distributional factors also account for the individual differences as noted between the learners. As far as the development of children's motion verb lexicon is concerned, the Manipuri data observed and examined in this study, seem to suggest that acquisition of motion verbs proceeds from semantically general to semantically more specific verbs. On the face of it, it is a very promising observation. However, to fully establish these claims, more additional research is required on topics like the effects of parental input on children's motion verb lexicon. It will also be worthwhile to examine the proposed account vis-à-vis a larger database of Manipuri-speaking children, as well as on data from typologically different languages, with experimental designs.

Thus, it is expected that, spatial reference-descriptions pertaining to location or

description of trajectories – should be fairly simple and relatively uniform across languages. After all, the basic spatial relationships (up/down, left/right, front/back, over/under, to/from, etc.) would seem to be basic to human understanding of the world, and further, children learn about spatial relationships or directionality before they begin speaking. Languages seem to employ a wide range of strategies to encode motion and spatial orientation, reflecting a variety of ways in which space is conceptualized. The expression of motion, direction, and location evidently assumes significance of viable and fruitful field of enquiry for further researchers.

References

Akhtar, Nameera, and Michael Tomasello 1997. Young children's productivity with word order and verb morphology. *Developmental Psychology* 33:952-965.

Berman, Ruth A. & Sharon Armon-Lotem 1996. How Grammatical Are Early Verbs? *Actes du Colloque International sur L'acquisition de la Syntaxe in Langue Maternelle et en Langue Etrangere*, 24-25 November, 1995, ed. C. Martinot, 17-59. Universite de France-Comete, Besancon. Paris: Les Belles Letters.

Berman, Ruth.A. & Dan Issac Slobin 1994. Relating Events in Narrative: A Cross-Linguistic Development Study. Hillsdale, NJ: Erlbaum.

Bowerman, Melissa 1990. Mapping Thematic Roles onto Syntactic Functions: Are Children Helped by Innate Linking Rules? *Linguistics*. 28: 1253-1289.

Brown, Peter 1998. Children's First Verbs in Tzeltal: Evidence for an Early Verb Category. *Linguistics*. 36: 713-753.

Bybee, Jay 1995. Regular morphology: and the lexicon. *Language and Cognitive Processes* 10: 425-455.

Clark, Eve V. 1993. The Lexicon in Acquisition. Cambridge: Cambridge University Press.

Gillis, Shane and Georges De Schutter. 1986. Transitional phenomena revisited: Insights into the nominal 'insight'. In: Bjoern Lindblom, and Rolf Zetterstroem (eds.), *Precursors of Early Speech,* 127-142. New York: Stockton Press.

Marchman, Virginia and Elisabeth Bates. 1994. Continuity in lexical and morphological development: A test of the critical mass hypothesis. *Journal of Child Language* 21: 339-366.

Ninio, Anat 1999. Pathbreaking Verbs in Syntactic Development and the Question of Prototypical Transitivity. *Journal of Child Language.* 26: 619-653.

Pinker, Steven 1984. *Language Learnability and Language Development.* Cambridge: Cambridge University Press.

Radford, Andrew 1990. Syntactic Theory and the Acquisition of English Syntax. Cambridge: Basil Blackwell.

Rajendran, Sankaravelayuthan., Sharma, Ramesh Chandra and Thampuran, R.R. 1976. A note on directional verbs of movement. *Bulletin of the Deccan College of Research Institute.* 35: 3-4.

Slobin, Dan Issac 1985. Crosslinguistic evidence of the language-making capacity. In: Dan I. Slobin (ed.), *The Crosslinguistic Study of Language Acquisition,* 1157-1256. Vol. 2. Hillsdale, New Jersey: Lawrence Erlbaum.

Slobin, Dan Issac 1997. From "Thought and Language" to "Thinking for speaking". In: John J. Gumperz, and Steven C. Levinson (eds.), *Rethinking Linguistic Relativity,* 70-96. Cambridge: Cambridge University Press.

Talmy, Leonard 1985. Lexicalization Patterns: Semantic Structure in Lexical Forms. Language Typology and Semantic Description, Vol.3, ed. T. Shopen, 36-149. Cambridge: Cambridge University Press.

Tomasello, Michael 1992. First Verbs: A Case Study of Early Lexical Development. Cambridge: Cambridge University Press.

Tomasello, Michael and William E. Merriman 2014. Introduction: Verbs are Words too, 1-18. In: "Beyond Names For Things Young children's Acquisiton of Verbs" Ed: Michael Tomasello and William E. Merriman. New York and London: Psychology Press.

Uziel-Karl, Sigal 2001. A Multidimensional Perspective on the Acquisition of Verb Argument Structure. Unpublished doctoral dissertation, Tel Aviv University.