Language Acquisition across Linguistic and Cognitive Systems

Edited by

Michèle Kail

Maya Hickmann
CNRS & Université Paris 8

John Benjamins Publishing Company
Amsterdam / Philadelphia

Table of contents

Lukács, Á., Pléh, Cs. & Racsmány, M. 2004. Language in Hungarian children with Williams syndrome. In *Williams Syndrome Across Languages* [Language Acquisition & Language Disorders 36], S. Bartke & J. Siegmüller (eds), 187–220. Amsterdam: John Benjamins.

Lukács, Á., Pléh, Cs. & Racsmány, M. 2007. Spatial language in Williams syndrome: Evidence for a special interaction? *Journal of Child Language* 34: 311–343.

MacWhinney, B. 1976. Hungarian research on the acquisition of morphology and syntax. *Journal of Child Language* 3: 397–410.

MacWhinney, B. 1995. *The CHILDES Project: Computational Tools for Analyzing Talk*. Hillsdale NJ: Lawrence Erlbaum Associates.

Mikes, M. 1967. Acquisition des catégories grammaticales dans le langage de l'enfant. *Enfance* 20: 289–298.

O'Hearn, K., Courtney, S., Street, W. & Landau, B. 2009. Working memory impairment in people with Williams syndrome: Effects of delay, task and stimuli. *Brain and Cognition* 69: 495–503.

Pléh, Cs. 1998. Early spatial case markers in Hungarian children. In *The Proceedings of the Twenty-Ninth Annual Child Language Research Forum*, E. V. Clark (ed.), 211–219. Chicago IL: Center for the Study of Language and Information.

Pléh, Cs., Lukács, Á. & Racsmány, M. 2002. Residual normality and the issue of language profiles in Williams syndrome. *Behavioral and Brain Sciences* 25: 766–767.

Pléh, Cs., Vinkler, Zs. & Kálmán, L. 1997. Early morphology of spatial expressions in Hungarian children: A CHILDES study. *Acta Linguistica Hungarica* 44(1–2): 249–260.

Racsmány, M., Lukács, A., Pléh, Cs. & Király, I. 2001. Some cognitive tools for word learning: The role of working memory and goal preference. *Behavioral and Brain Sciences* 24: 1115–1117.

Regier, T. & Zheng, M. 2007. Attention to endpoints: A cross-linguistic constraint on spatial meaning. *Cognitive Science* 31: 705–719.

Reiss, A. L., Eckert, M. A., Rose, F. E., Karchemskiy, A., Kesler, S., Chang, M. et al. 2004. An experiment of nature: Brain anatomy parallels cognition and behavior in Williams syndrome. *Journal of Neuroscience* 24: 5009–5015.

Sinha, Ch., Thorseng, L. A., Hayashi, M. & Plunkett, K. 1994. Comparative spatial semantics and language acquisition: Evidence from Danish, English, Japanese. *Journal of Semantics* I(I): 253–287.

Slobin, D. I. 1973. Cognitive prerequisites for the development of grammar. In *Studies of Child Language Development*, C. A. Ferguson & D. I. Slobin (eds), 175–206. New York NY: Holt.

Talmy, L. 2000. *Toward a Cognitive Semantics*. Cambridge MA: The MIT Press.

Ungerleider, L. G. & Mishkin, M. 1982. Two cortical visual systems. In *Analysis of Visual Behavior*, D. J. Ingle, M. A. Goodale & R. J. W. Mansfield (eds), 549–586. Cambridge MA: The MIT Press.

CHAPTER 9

Promoting patients in narrative discourse

A developmental perspective

Harriet Jisa,*,** Florence Chenu,* Gabriella Fekete*
and Hayat Omar*

* Laboratoire Dynamique Du Langage, CNRS UMR 5596 & Université Lyon 2, France / ** Membre Senior Institut Universitaire de France

Languages provide speakers with a number of structural options for manipulating the expression of events in narrative discourse. Underlying narrative competence is the capacity to view events as dynamic actions composed of a bundle of elements such as, agent, patient, affectedness, etc. (Hopper & Thompson 1980). This study examines the grammatical constructions used by children (5–6, 7–8 and 10–11-year-olds) and adult speakers of Amharic, English, French and Hungarian to manipulate the expression of agent and patient participants in the linguistic formulation of events. The narrative task used to elicit the data is composed of a series of pictures which recount the adventures of two principal characters (a boy and a dog) in search of their runaway frog (*Frog, Where are you?* Mayer 1969). Over the course of the story the boy and the dog encounter a host of secondary characters (a gopher, an owl, a swarm of bees and a deer) and change participant status, going from controlling agent to affected patient of a secondary character's action. Our interest lies in the structures available in the languages studied and their use by children and adults in narrative discourse. We detail how children and adult native speakers of the four languages use topicalising constructions to promote the patient participant in an event to the "starting point" (Langacker 1998) of the recounting of that event.

1.   Introduction

Narratives produced by children in monologue and in conversational interaction share most of the same linguistic resources. Producing in a monologue situation, however, requires the ability to access lexical items, to combine propositions, to monitor referential continuity and to assure overall text coherence which requires quick, automatic processing of those linguistic resources without

scaffolding from a conversational partner (Givón 1995; Levelt 1989). In addition, individual messages must be elaborated into a propositional format and transformed into linear form for articulation. The resulting propositions must then be packaged together through the use of various syntactic means available for clause-combining in a particular language.

Our developmental analysis includes four languages – Amharic, English, French and Hungarian.[1] Across these typologically different languages, we will examine the syntactic constructions used to manipulate agent and patient participants in prototypical transitive events (Slobin 1996). As many authors have pointed out, a function-blind crosslinguistic comparison is unworkable (Croft & Cruse 2004; Givón 1995; Hickmann 2003; Langacker 1998). Our analysis compares formal options – word order and voice alternations – when they serve the same discourse function – the topicalization of a patient participant in an event.

In the expression of a transitive event, the patient most often takes the direct object position, as in *John hit Peter*. Given a particular discourse context, however, a speaker may want to topicalize the patient of a transitive event, as in *Peter was hit by John*. English, as illustrated, can use a passive construction in order to topicalize a patient participant, but there are other possible constructions, e.g., focalisation constructions such as *It was Peter that John hit, (As for) Peter, John hit him* (Keenan & Dryer 2006; Klaiman 1991; Lambrecht 1994; Myhill 1997; Van Valin & LaPolla 1997). The same conceptual content of an event can be expressed by a variety of structural configurations. There is no single way to verbalize the contents of any given situation in the world – languages provide speakers with a range of structural options for describing the same scene (Berman & Slobin 1994: 516–517; Jisa, Reilly, Verheoven, Baruch & Rosado 2002; Slobin 1996, 2001). In the cross-linguistic developmental work presented here we will examine the structures used by narrators of different ages and different languages to topicalize the patient of a transitive event.

We will begin our investigation with a discussion of event construal or how a given event can be encoded from different perspectives. We will then describe a key component of event construal, the selection of a topic. We then move on to a description of the structures for topicalization of patient participants in the different languages. Subsequently we present the participants and the methodology used in our study. After the section devoted to our results we will conclude by arguing that despite different formal alternatives for topicalizing patients, the developmental trends are remarkably similar.

2.   Event construal: Topics, agency and event view

Berman and Slobin (1994) have written extensively on the dimensions relevant to capturing event construal in narrative discourse. These dimensions include selecting a topic, selecting a degree of agency and selecting an event view (Berman & Slobin 1994: 517). Topic is perhaps one of the oldest and most discussed notions in modern linguistics (cf., Lambrecht 1994 for a review). A given referent can be interpreted as the topic of a proposition if the proposition is construed as being about this referent (Lambrecht 1994: 131). Langacker (1998) shows how a "starting point" or a topic serves as the foundation or the base which guides the interpretation of the subsequent information.

In English the sentence topic is most often the grammatical subject (Givón 1995) and the grammatical subject is the first argument in the clause. The functional motivation of structures such as passives (1a), cleft constructions (1b) and dislocations (1c) is to move a non agentive participant into subject/topic position (Keenan & Dryer 2006).

(1)   a.   Paul was chased by John.
      b.   It's Paul that John chased.
      c.   (As for) Paul, John chased him.

Tomlin (1995) proposes that the pragmatic notion of clause-level topic should be understood as the linguistic reflection of a more general process of attention detection. As an event is conceptualized, one event component will be selected and serve as the foundation, or starting point, for verbal expression. Many years ago MacWhinney (1977), using a wide variety of experimental contexts (ie., elicited production, recall, problem solving, sentence verification), was able to show that English speakers use the first element in a sentence as the starting point for the organisation of the sentence as a whole. Following Gernsbacher & Hargreaves' (1992) "structure building framework", the initial sentential elements are privileged in memory and play a crucial role in the building of a coherent mental representation.

The event view dimension of event construal sets the point of view adopted by the narrator (Berman & Slobin 1994: 516). In a prototypical transitive event the agent is the participant who acts with the intention of causing a change of state in the patient (Van Valin & LaPolla 1997). These participant roles can be mapped onto constituents in various ways, depending upon the event view adopted by the narrator and the degree of agency that the narrator attributes to the agent.

A *cause view* represents an event as having an agent that causes a change of state in a patient. Such a view can be illustrated by the transitive construction, *John chased Paul*. In this case *John* is high in agency. There are, however,

constructions which can downgrade the degree of agency of *John* by demoting him to an oblique constituent, such as the agent of a passive construction, *Paul was chased by John*. *John* can be demoted to an even lower degree of agency through encoding him as an oblique source of the action, *Paul ran away from John* (Croft 1991). In this last case *John* may or may not be construed as the external cause of *Paul's* action. An agentless passive construction, *Paul was chased*, leaves an agent highly implied despite the fact that he is not explicitly mentioned.

Both the notions of topic and event view are key concepts upon which our analysis of event construal is based. We isolate the events in which the patient of an event is selected as topic and the cause view is selected as the event view.

3.   Topics in discourse development

Research in narrative development has shown that 5- and 7-year-old children rely heavily on a "thematic subject strategy" (Hickmann 2003; Karmiloff-Smith 1981, 1986), which means that they construe narrative events with the primary character as topic and subject, controlling the activity encoded by the predicate. Consider, for example, one of the episodes in the frog story in which a primary character, the dog, runs because he is being chased by a secondary character, a swarm of bees. Typical of a young narrator is to render this event using an intransitive construction, such as *the dog runs*, in which only the activity of the primary character [the dog] is mentioned. No mention is made of the bees as playing an instigating role controlling the dog's activity (Jisa & Kern 1994). With development children gain the ability to place secondary characters in subject position and to assign to a secondary character a causing or a controlling role in the actions of the primary character (Karmiloff-Smith 1981). This development could favour transitive constructions such as *the bees chased the dog*, in which the primary character is expressed as the undergoer or patient of the secondary character's action. A particularly handy solution to maintaining the primary character as topic and at the same time expressing his status as patient of the activity is a passive construction, as in *the little dog is chased by a swarm of bees*.

The acquisition of passive constructions has received considerable attention in the literature on the acquisition of grammatical competence and verb selection has been shown to be an important aspect of passive acquisition. Prototypical transitive verbs with animate agent and patient arguments, and which encode events resulting in a clear change of state are prime passive attracting predicate types (Bowerman 1982, 1983).

Other developmental studies on the passive have attempted to capture the discourse contexts in which children actually use passives (Berman 1994;

Bowerman 1982, 1983; Demuth 1989; Marchman, Bates, Burkardt & Good 1991; Slobin 1993). Marchman et al. (1991) show how discourse context is instrumental in triggering passives. After viewing a video composed of a number of scenes, children were asked to tell something about the scenes. The elicitation procedures varied: the children were asked questions which established as topic either the agent (i.e., *what did the dog do?*) or the patient (i.e., *what happened to the cat?*). The children's ability to use the passive to report on the scenes from the perspective of the patient increased with age and was directly related to the question.

Marchman et al. (1991) were also able to show that young English-speaking children (3- to 7-year-olds) used alternate structures to topicalize the patient in just those contexts where older children and adults used passive constructions. The authors argue that such use reveals sensitivity to the discourse requirements. For instance, verb selection succeeds in doing much of the work of the passive construction (e.g., *the girl got/received the flowers from the man*). Other structures include two clause constructions (e.g., *the tiger is just sitting there and the bear licks him*) and cleft constructions (e.g., *it was the tiger that the bear licked*). Part of achieving end-state adult control of the use of passives depends, then, upon building a strong association between the passive construction and the particular discourse contexts which attract it.

In our study of children and adults we adopt a cross-linguistic perspective on this issue by comparing how speakers encode events using passives and dislocations – constructions which share a common functional domain in that they can be used to assign a clausal-topic function to a non-agentive argument. In the following section brief sketches of the constructions used for topicalizing patient participants in the four languages will be presented. However, before turning to these brief sketches, two typological factors, word order and obligatory subjects, should be commented.

4.   Word order and obligatory subjects

French and English are relatively rigid SVO languages. Amharic is an SOV language. Hungarian is often considered SVO, however, word order in Hungarian is perhaps better described as Topic (focus) Verb (X) (Kiss 2003). Direct objects in English and French are indicated by word order. The two languages differ in that in French, the object clitic occurs in a preverbal position. In English when the direct object is pronominalized, it remains in post verbal position. In Amharic and Hungarian direct objects are marked with an accusative suffix. In addition, transitive verbs in Amharic take an object agreement suffix, as illustrated in (2).

Notice also that the verb in Amharic agrees in number and gender with both the subject and the object.[2]

(2) *Afinča-wi-n*   *bwačč'ər-ačči-w*
    nose-POSS.3M-ACC   scratch-PERF.3F-O.3M[3]
    'His nose, she scratched it.' (7-year-old)

In Hungarian, transitive verbs have two possible conjugations. If the third person direct object is definite, the "objective" conjugation is used; if it is indefinite (or if the verb is intransitive) the "subjective" conjugation is used (Kenesei, Vago & Fenyvesi 1998), as illustrated in (3).

(3) *A fiú meg-zavar-ja*   *a bagly-ot, aki*
    DEF boy PV-bother-PRES.3SG.OB   DEF owl-ACC   REL
    meg-zavar   *egy   méh-kas-t*
    PV-bother.PRES.3SG.SU INDEF bee-hive-ACC
    'The boy disturbs the owl who disturbs a bee-hive.' (7-year-old)

Amharic and Hungarian are non-obligatory subject languages, given that the subject is indexed on the verb, whereas English and French are obligatory subject languages, requiring a pronoun or a clitic before the verb.

5.   Constructions for topicalizing patients

Three of the four languages – Amharic, English, and French – have productive passive constructions. Amharic has a morphological passive (4a), whereas English (4b) and French (4c) have analytic periphrastic passives with an auxiliary.

(4) a. *kä-gudgwad west leJ-u   bä andit ensäsa ye-mmätt-al*
        from-hole in boy-DEF by an   animal 3M-PAS.IMPERF.hit-AUX
        'from the hole the boy is hit by an animal' (adult)
    b. *Now the boy has been picked up by some antlered beast.* (adult)
    c. *Le chien est donc poursuivi par les abeilles.* (adult)
        'The dog was thus followed by the bees.' (adult)

In Amharic the agentless passive is by far the most frequent, particularly when the agent is animate. For English and French the agent can also be left unmentioned.

---

2. Whenever possible we will use examples from the frog story texts.

3. The orthographic conventions for Amharic follow Amberber (2002). A list of abbreviations is given in Appendix 1.

English and French have additional constructions for promoting the patient to the topic position: the *get*-passive (5a) and the reflexive middle (5b) (Jones 1996). In French this construction is formed by using *se* and the causative marker, *faire*. A functionally similar construction employing the causative and the reflexive is observed in Amharic (5c). In Hungarian (5d) a similar structure employs causative morphology on the verb with the "agent" of the action being downgraded to an instrumental, indicating that the agent's action was the means by which the patient was affected.

(5) a. *The boy got chased by the owl.* (5-year-old)
    b. *Pendant que le chien se   fait   poursuivre*
        'While   DEF dog REFL.3SG CAUS.PRES.3SG pursue-INF
        par les abeilles.
        by DEF bees
        'While the dog got himself pursued by the bees.' (Adult, 20)
    c. *leJ-u   tä-s-fänTer-o*
        child-DET.M REFL.-throw-GER.3P.MS
        'The boy being/getting himself thrown.' (Mehden, 25)
    d. *A fiú meg-harap-tat-ja   magá-t   a vakond-dal*
        DEF boy PV-bite-CAUS-PRES.3sgOB REFL.3SG-ACC DEF gopher-INST
        'The boy made himself get bitten by/with the mole.' (invented example)

In these English and French examples *the boy* is construed of as being the patient, although he may have had a role in causing the mole to want to bite him. In the Hungarian example, *the boy* is construed of as the agent which has considerable control over the event. No instances of this Hungarian construction were observed in our texts.

A Hungarian construction which is subject to considerable controversy is sometimes referred to as a resultative passive. Its status as a passive construction is called into question in traditional Hungarian grammars (Tompa 1961; Rácz 1968) which view it as a participial construction involving the copula and expressing a state adverbial (Kenesei et al. 1998: 282–283). This Hungarian construction employs the copula which is marked for tense, person and number. The lexical verb is in the adverbial participial form, bearing the *-va/ve* suffix ("simple converb", Kenesei et al. 1998).

(6) *A ház   el lett   ad-va*
    DEF house PV be.PAST.3SG give-va
    'The house has been sold.'

There is an archaic passive form (*-(t)at, (t)et*), illustrated in (7) but in contemporary Hungarian this form is no longer used.

(7) A   ház   el-ad-at-ik
     DEF house PV-give-PAS-PRES.3SG
     'The house is sold.'

The four languages also use object dislocation constructions for topicalising the patient participant in an event. In dislocations, the direct object is put in initial clause position, leaving a mark at the site of extraction. The case marking on the dislocated direct object in Amharic (8a) and Hungarian (8b) remains accusative. In Amharic (8a), notice that the verb maintains the object agreement morpheme and the dislocated object is most usually followed by a topic marker, *dämmo* (Demeke & Meyer 2007). In Hungarian (8b) the verb shows the objective conjugation. In French (8c) a clitic trace (*l'*) occurs in the matrix. While such constructions do exist in English no examples were observed in the English data.

(8) a. *wesha-wa-n   dämmo neb-occ-u*
         dog-DEF.F-ACC   top   bee-DEF.PL.-DEF
         y-abbarrer-u-at-al
         3PL.M-IMPERF.pursue-3PL-O3F-AUX
         'And the dog, the bees chase her.' (7-year-old)
     b. *közben   a   kutyá-t   el-kezd-t-ék   kerget-ni*
         meanwhile DEF dog-ACC PV-start-PAST-3PL.OB pursue-INF
         a   darazs-ak
         DEF bee-PL
         'Meanwhile, the dog, the bees started to pursue him.' (adult)
     c. *euh- le garçon- l'hibou l'a   poussé contre un:- un rocher,*
         eh   DEF boy   DEF owl ACC AUX push.PP against INDEF bolder
         'eh the boy – the owl pushed him against a a bolder.' (10-year-old)

In addition to dislocations of the direct object dislocations of oblique arguments of intransitive verbs were observe in Hungarian (9a) and in French (9b).

(9) a. *és   akkor a   kutya után repül-t-ek   a   méh-ek.*
         and then DEF dog after fly-PAST-3PL DEF bees-PL
         'and then the dog the bees flew after.' (7-year-old)
     b. *Le   chien les   abeilles lui   courent après*
         DEF dog   DEF.PL bees   DAT run.3PL after
         'The dog the bees run after him.' (7-year-old)

In both of these examples the dog is construed of more as a goal rather than as a patient. We included these constructions because the principal character is placed in first position, focus of attention (MacWhinney 1977).

We want to argue that dislocation constructions give children a developmental advantage for encoding the patient of the event in comparison to passive constructions. Passive constructions change the argument structure of the clause while object dislocations do not. In addition, passive constructions call for modifications of the verb form, while object dislocations do not. In our study we attempt to show that children use object dislocations for topicalising a patient participant earlier than they use passive constructions. Thus, Amharic- and French-speaking children should use dislocation structures before using passives. Hungarian-speakers have access only to dislocation structures and they should use them before the other children use passives. English-speakers have access only to passive constructions and their use should be observed after the use of dislocation constructions in the other languages.

After examining the uses of passive and dislocation structures individually we will combine them together as a set of topicalisation structures. We again hope to show that dislocation constructions yield a developmental advantage in the sense that we are expecting Amharic, French and Hungarian children to topicalise the patient of a transitive event before English-speaking children use passive constructions. For the adult groups we are not expecting any difference between languages in the amount of topicalisation structures used.

6.   Methodology

6.1   *The Frog Story*

The narratives used for this study were elicited from 5-, 7- and 10-year-olds and adult monolingual speakers of Amharic, English, French and Hungarian, using the picture book task *Frog, where are you?* (Mayer 1969), following the procedures given in Berman and Slobin (1994). For the four languages the children were first shown all the pictures by an adult. Then a second adult comes into the room to serve as an audience for the child's narration. The adults tell the story directly to the first adult after having looked at all the pictures. All of the researchers and the adults who were the audience for the children's stories were native speakers.

The frog story is particularly useful for cross-linguistic investigations as all the narrators are charged with the task of transforming a series of pictures into a coherent story. For some episodes the pictures depict the boy and the dog as agents (the dog chases the deer, the boy finds the frogs) while others show the boy and the dog as patients of the event (the dog is chased by the bees, the boy is bitten

by a gopher). It is these last episodes – where the boy and the dog are patients of the event – that serve as the basis for our comparison of topicalisation structures across languages.

6.2   Coding

All clauses in the stories were coded as (1) INTRANSITIVE, including intransitive constructions with or without an oblique argument; (2) TRANSITIVE, including both transitive and causative constructions; (3) DISLOCATION constructions in which the patient participant is in initial position; and (4) PASSIVE, including both passives and the functionally equivalent structures in (5). The native speaker of each language coded each clause individually. The native speakers' codings were then discussed by all authors working in a group. Disagreements were debated upon until agreement. Only the last two categories of constructions – those considered as patient topicalising constructions – will be presented in this analysis. These two categories represent the cases in which the patient of the event (either the boy or the dog) is either in initial subject position or is dislocated to initial position and is construed of as the patient of the action. Table 1 presents the mean total of clauses in the stories for all the languages.

Table 1.   Number of subjects, mean number of clauses and range of clauses in the *Frog Story* narratives

		5-year-olds	7-year-olds	11-year-olds	adults
Amharic	*n*	15	15	15	15
Mean clauses per subject		49	55	64	94
Range of clauses		28–91	33–87	15–130	54–130
English	*n*	15	15	15	15
Mean clauses per subject		50	58	72	74
Range of clauses		32–74	13–123	43–98	48–123
French	*n*	20	20	20	20
Mean clauses per subject		56	57	62	80
Range of clauses		15–189	13–189	15–123	46–189
Hungarian	*n*	15	15	15	15
Mean clauses per subject		51	41	55	72
Range of clauses		28–91	13–69	23–106	19–189

7.   Results

7.1   Dislocations

Figure 1 shows the distribution of dislocation constructions across languages. No dislocations were observed in the English data. Two one-way ANOVAs reveal a significant effect for LANGUAGE (F $(3,251)$ = 59.71, p < .0001) and for AGE (F $(3,251)$ = 2.6, p = .04).

At five years of age LANGUAGE shows a significant effect (F $(3,61)$ = 12.45, p < .0001). The Amharic five-year-olds use dislocations more that the Hungarian (Fisher, p = .005) and the French (Fisher, p < .0001) five-year-olds. At seven years of age LANGUAGE continues to show a significant effect (F $(3,61)$ = 16.43, p < .0001). Fisher tests reveal that French-speakers use fewer dislocation constructions than do Amharic (p < .001) and Hungarian (p < .001) seven-year-olds. No difference is observed between Amharic and Hungarian at seven years of age. At ten years of age LANGUAGE has a significant effect (F $(3,56)$ = 27.10, p < .0001). The French ten-year-olds use fewer dislocation constructions than the Amharic (p < .0001) and the Hungarian (p = .0003) narrators. Fisher tests reveal a significant difference between the Amharic and Hungarian ten-year-olds (p = .0004), with the Amharic children using more dislocation constructions. For the adult groups LANGUAGE continues to show a significant effect (F $(3,61)$ = 19.13, p < .0001). French-speaking adults use fewer dislocations than do the Amharic-speakers (p < .0001) and the Hungarian-speakers (p < .0001). No significant difference is observed between the Amharic and Hungarian adults.
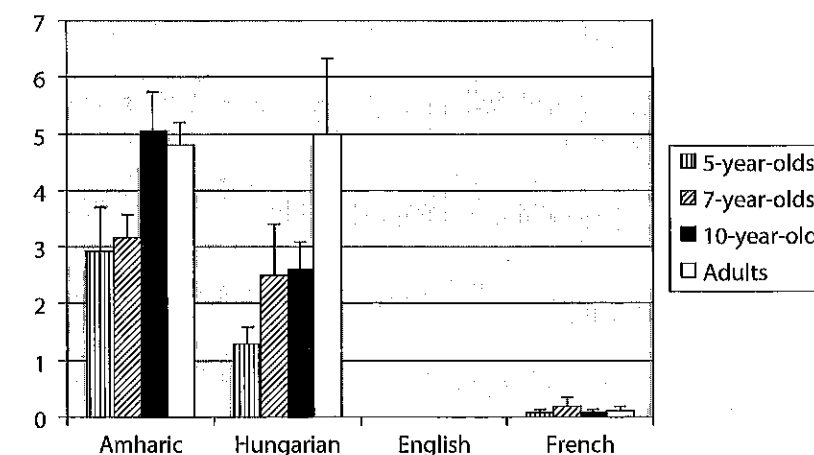

Figure 1.   Percentages of dislocation constructions in Amharic, English, French and Hungarian *Frog Stories*
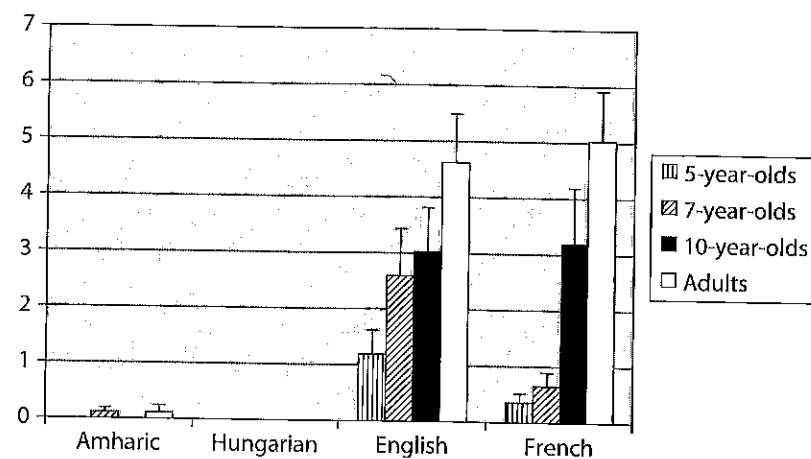
Figure 2. Percentages of passive constructions in Amharic, English, French and Hungarian *Frog Stories*

7.2   Passives

Figure 2 presents the percentage of passive constructions observed across the four languages. As expected no passive constructions were used by the Hungarian narrators. Figure 2 shows the mirror image of Figure 1, with passive constructions observed primarily in English and French. LANGUAGE is a significant factor (F (3,251) = 24.08, p < .001). Fisher tests reveal that Amharic-speakers use fewer passive constructions than do English- (p < .001) and French- (p < .001) speakers. No difference is observed between English and French.

At five years of age, LANGUAGE shows a significant effect (F (3,61) = 6.30, p = .0008). Fisher tests reveal that at five years of age English narrators used significantly more passives than do the Amharic (p = .0004) and the French (p = .005) narrators. The same pattern is observed at seven years of age: LANGUAGE shows a significant effect (F (3,61) = 8.25, p = .001) and the English narrators use passive constructions more than do the Amharic (p < .0001) and French (p = .0008) seven-year-olds. At ten years of age LANGUAGE continues to show a significant effect (F (3,56) = 7.45, p = .0003) with Amharic differing from English (p = .001) and French (p = .001). No difference is observed between English and French. The results for the adult speakers are almost identical to those obtained at ten years of age. LANGUAGE is significant (F (3,61) = 16.17, p < .0001) with the English and French adults using more passive constructions that the Amharic adults.
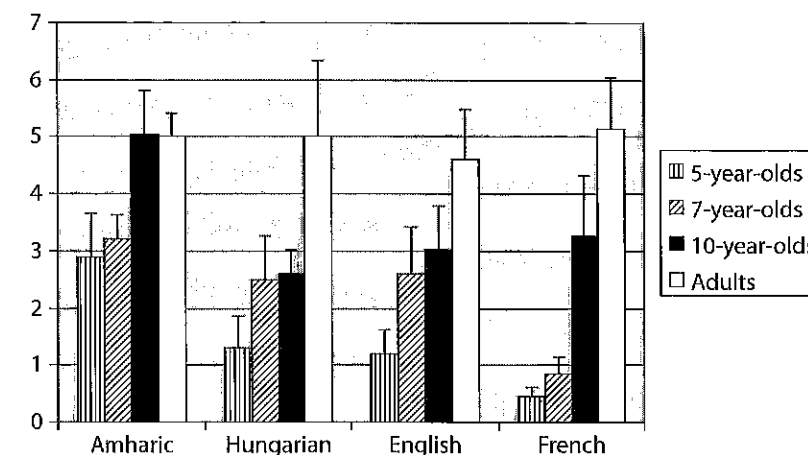

Figure 3. Percentages of topicalisation constructions in Amharic, English, French and Hungarian *Frog Stories*

7.3   Topicalisation constructions

The two forms of topicalisation structures – object dislocation and passive constructions – are combined in Figure 3. A one-way ANOVA reveals that LANGUAGE has a significant effect (F (3,251) = 3.34, p = .01) with Amharic differing significantly from English (p = .04), French (p= .002) and Hungarian (p = .03). No difference is observed between these last three languages.

At five years of age there is an overall effect of LANGUAGE (F (3,61) = 5.45, p = .002) with Amharic differing significantly to English (p = .02) and French (p = .0005), but not to Hungarian. The difference between Hungarian and French is significant (p = .005) while the differences observed between Hungarian and English are not. At seven years of age LANGUAGE continues to show a significant effect (F (3,61), p = .01) with French seven-year-olds showing fewer topicalisation constructions than do Amharic (p = .003), English (p = .02) and Hungarian (p = .02) children. At ten years of age, no overall effect of LANGUAGE is observed (F (3,56) = 2.55, p = .06). Finally, for the adult groups no significant difference is attributed to LANGUAGE.

7.4   Summary of the results

The results obtained reflect partially what was expected. The Amharic children used dislocations frequently at age five and before the use of passive constructions, which as it turns out are very infrequent even amongst the adults. Hungarian

speakers used dislocations, the only alternative available to them, before the French speakers. Somewhat disappointing is that the French-speakers used very few dislocations despite the fact that these constructions are available and relatively frequent in spoken French (Berrendonner & Reichler-Béguelin 1997; Gadet 1997). This may be a reflection of the task in that telling the frog story is close to a school situation and children may avoid using constructions that deviate from the written norms. The Hungarian and the English children began using topicalisation structures – object dislocation for Hungarian and passives for English – at roughly the same time.

Figure 3, which combines both dislocations and passives, shows clear developmental curves for all four languages. The 10-year-olds and the adult groups do not differ in the amount of topicalisation constructions used.

8.   Conclusion

In this study we attempted a cross-linguistic study of topicalisation constructions used to encode the patient of an event as the "starting point" for formulation. Our results reveal that in all four languages – Amharic, English, French and Hungarian – children begin to use these constructions in narrative discourse at 5 years of age. This finding argues for a common functional source of the use of object dislocation in Amharic and Hungarian and passives in English and French. We hope to have demonstrated that a functional approach to cross-linguistic analysis is essential for understanding how, depending on the language, children use different forms for the same function.

Direct observation of an individual's conceptualisation of an event is impossible. However, much can be learned through examination of how events are construed for formulation. Our study underscores the fact that the understanding of "thinking for speaking" (Slobin 1996) requires consideration of both commonly shared functionally driven motivations, as well as language-specific facts.

Acknowledgements

References

Amberber, M. 2002. *Verb Classes and Transitivity in Amharic*. Munich: Lincom.
Berman, R. 1994. Formal, lexical, and semantic factors in the acquisition of Hebrew resultative participles. In S. Gahl, A. Dolbey & C. Johnson (eds), *Berkeley Linguistic Society* 20: 82–92.
Berman, R. A. & Slobin, D. I. 1994. *Relating Events in Narrative: A Crosslinguistic and Developmental Study*. Hillsdale NJ: Lawrence Erlbaum Asssociates.
Berrendonner, A. & Reichler-Béguelin, M.-J. 1997. Left dislocation in French: Varieties, norm and usage. In *Taming the Vernacular: From Dialect to Written Standard Language*, J. Cheshire & D. Stein (eds), 200–217. London: Longman.
Bowerman, M. 1982. Reorganizational processes in lexical and syntactic development. In *Language Acquisition: The State of the Art*, E. Wanner & L. Gleitman (eds), 319–346. Cambridge: CUP.
Bowerman, M. 1983. Hidden meanings: The role of covert and conceptual structures in children's development of language. In *The Acquisition of Symbolic Skills*, D. R. Rogers & J. A. Sloboda (eds), 445–470. New York NY: Plenum.
Croft, W. 1991. *Syntactic Categories and Grammatical Relations*. Chicago IL: The Chicago University Press.
Croft, W. & Cruse, D. A. 2004. *Cognitive Linguistics* [Cambridge Textbooks in Linguistics]. Cambridge: CUP.
Demeke, G. A. & Meyer, R. 2007. Topics and topicalization in Amharic. *Journal of African languages and linguistics* 28: 19–36.
Demuth, K. 1989. Maturation and the acquisition of Sesotho passive. *Language* 65: 56–80.
Gadet, F. 1997. *Le français ordinaire*. Paris: Armand Colin.
Gernsbacher, M. A. & Hargreaves, D. 1992. The privilege of primacy: Experimental data and cognitive explanations. In *Pragmatics of Word Order Flexibility* [Typological Studies in Language 22], D. L. Payne (ed.), 83–116. Amsterdam: John Benjamins.
Givón, T. 1995. *Functionalism and Grammar*. Amsterdam: John Benjamins.
Hickmann, M. 2003. *Children's Discourse: Person, Space and Time Across Languages*. Cambridge: CUP.
Hopper, P. J. & Thompson, S. A. 1980. Transitivity in grammar and discourse. *Language* 56: 251–299.
Jisa, H. & Kern, S. 1994. Discourse organisation in French children's narratives. *Proceedings of the Child Language Research Forum*, 177–188. Stanford CA: CSLI Publications.
Jisa, H., Reilly, J., Verheoven, L., Baruch, E. & Rosado, E. 2002. Cross-linguistic perspectives on the use of passive constructions in written texts. *Journal of Written Language and Literacy* 5: 163–181.
Jones, M. A. 1996. *Foundations of French Syntax*. Cambridge: CUP.
Karmiloff-Smith, A. 1981. The grammatical marking of thematic structure in the development of language production. In *The Child's Construction of Language*, W. Deutsch (ed.), 121–147. New York NY: Academic Press.
Karmiloff-Smith, A. 1986. From meta-processes to conscious access: Evidence from children's metalinguistic and repair data. *Cognition* 23: 95–147.

Keenan, E. L. & Dryer, M. S. 2006. Passive in the World's Languages. In *Clause Structure, Language Typology and Syntactic Description*, 2nd edn, Vol. 1, T. Shopen (ed.), 325–361. Cambridge: CUP.

Kenesei, I., Vago, R. & Fenyvesi, A. 1998. *Hungarian* [Descriptive Grammars Series] London: Routledge.

Kiss, K. É. 2003. Argument scrambling, operator movement, and topic movement in Hungarian. In *Word Order and Scrambling*, S. Karimi (ed.), 22–43. London: Blackwell.

Klaiman, M. H. 1991. *Grammatical Voice*. Cambridge: CUP.

Lambrecht, K. 1994. *Information Structure and Sentence Form: Topic, Focus, and the Mental Representations of Discourse Referents*. Cambridge: CUP.

Langacker, R. 1998. Conceptualization, symbolization and grammar. In *The New Psychology of Language: Cognitive and Functional Approaches to Language Structure*, M. Tomasello (ed.), 1–39. Mahwah NJ: Lawrence Erlbaum Associates.

Levelt, W. J. M. 1989. *Speaking: From Intention to Articulation*. Cambridge MA: The MIT Press.

MacWhinney, B. 1977. Starting points. *Language* 53: 152–168.

Marchman, V. A., Bates, E., Burkardt, A. & Good, A. B. 1991. Functional constraints of the acquisition of the passive: Toward a model of the competence to perform. *First Language* 11: 65–92.

Mayer, M. 1969. *Frog, Where Are You?* New York NY: Penguin.

Myhill, J. 1997. Towards functional typology of agent defocusing. *Linguistics* 35: 799–844.

Rácz, E. (ed.). 1968. *A mai Magyar nvelv* (Present-day Hungarian). Budapest: Tankönyvkiadó.

Slobin, D. I. 1993. Passives and alternatives in children's narratives in English, Spanish, German, and Turkish. In *Voice: Form and Function*, B. Fox & P. J. Hopper (eds), 341–364. Amsterdam: John Benjamins.

Slobin, D. I. 1996. From 'thought and language' to 'thinking for speaking.' In *Rethinking Linguistic Relativity*, J. J. Gumperz & S. Levinson (eds), 70–86. Cambridge: CUP.

Slobin, D. I. 2001. Form-function relations: How do children find out what they are? In *Language Acquisition and Conceptual Development*, M. Bowerman & S. C. Levinson (eds), 406–449. Cambridge: CUP.

Tomlin, R. S. 1995. Focal attention, voice, and word order. In *Word Order in Discourse* [Typological Studies in Language 30], P. Downing & M. Noonan (eds), 517–554. Amsterdam: John Benjamins.

Tompa, J. (ed.). 1961. *A mai magyar nyelv rendszere* [The system of present-day Hungarian]. Budapest: Akadémiai Kiadó.

Van Valin, R. D. Jr. & LaPolla, R. J. 1997. *Syntax: Structure, Meaning and Function*. Cambridge: CUP.

Appendix 1

List of abbreviations

1	first person	M	masculine
3	third person	OB	objective conjugation
ACC	accusative	PAS	passive
AL	allative	PAST	past tense
AUX	auxiliary	PERF	perfective
CAUS	causative	PL	plural
DAT	dative	POSS	possessive
DEF	definite	PP	past participle
DIM	diminuitive	PRES	present
F	feminine	PV	preverb
GER	gerund	REFL	reflexive
IMPERF	imperfective	REL	relative
INDEF	indefinite	SG	singular
INF	infinitive	SU	subjective conjugation
INST	instrumental	TOP	topic