The acquisition of early verb constructions in Albanian: A first look at transitives and intransitives

Enila Cenko and Nancy Budwig
Clark University

1. Introduction

According to the usage-based approaches, language learning results from children's general cognitive abilities and the interaction between learners and their surrounding communities. A central tenet of this approach is that children experience language in the form of sentence level constructions rather than words or abstract grammatical rules (Budwig, 1995, 2001; Tomasello, 2003). Constructions are bundles of meaning that designate a basic pattern of experience, such as someone causing someone else to receive something, someone undergoing change, and so on (Goldberg, 1995; Slobin, 1985).

Most usage-based theorists agree that children acquire language in a gradual and piecemeal process, actively piecing together concrete linguistic items over time and slowly moving to more abstract, adult-like language use. Some of the extensive work on children's development of verb constructions has focused on English-speaking children and their acquisition of transitive and intransitive constructions (see Abbot-Smith, Lieven, & Tomasello, 2004; Brooks &Tomasello, 1999; Childers & Tomasello, 2001; Tomasello & Brooks, 1998). For example, in the study by Tomasello and Brooks (1998), two- and two-and-a-half-year old children learned two novel verbs for transitive actions in which an agent did something to a patient. The children then were given opportunities to use the novel verbs in the intransitive construction, which was different than the one in which the children had learned the verb. Two-year-old children almost never produced an utterance using a novel verb in anything other than the construction in which the verb had been modeled. Two-and-a-half-year-old children were somewhat productive, but still a majority of them avoided using the novel verbs in constructions that were not modeled. It has been suggested (Tomasello, 2003) that while children start using transitives and intransitives during their second year, it is not until after age 3 that they are able to generalize verbs across constructions. That is, before the age of 3, children are noted to use verbs in item-based constructions that are verb specific. For instance, a child may only use the verb "break" in transitive constructions such as (*I broke the vase*), but not in the intransitive construction (*The vase broke*). This lexically specific knowledge is closely related to caregiver input in that before the age of 3, children follow very closely the sentence formats in which they have heard each verb being used (Cameron-Faulkner, Lieven, & Tomasello, 2003; Theakston, Lieven, Pine, & Rowland, 2001). Children gradually abstract grammatical structure from a variety of concrete representations of linguistic items drawing heavily on dominant input patterns. Only after the age of 3 are they able to rely on more abstract knowledge of verb constructions.

However, crosslinguistic work suggests that languages that are rich in syntactic and morphological cues to the transitive/intransitive distinction may facilitate children's understanding of such distinction at an earlier age than that of English-speaking children (e.g., Berman, 1993; Budwig, Narasimhan, & Srivastava, 2006). This rapid development may be due to the fact that in addition to cues related to input, children may also make use of morphosyntactic information encoded in the language they hear in learning the meaning of verbs. Languages, however, differ in the richness and salience of these cues. Children learning languages other than English that draw morphological distinctions between transitive and intransitive constructions may attend to such morphological distinctions, thus making generalizations earlier than what has been reported for English-speaking children. For example, Berman (1993) conducted an elicitation study designed to examine 2-, 3-, and 8-year-old Hebrew-speaking children's ability to use an intransitively introduced novel verb in a canonical transitive construction. In Hebrew, the switch between transitive and intransitive constructions is done through *binyan* conjugation patterns, which comprise a cluster of features such as word order, marking of case, number, gender, and person and also morphological marking on the verb. Berman (1993) found that even the young children in her sample were able to successfully alternate some *binyan* patterns. Other studies on morphologically rich languages seem to indicate early acquisition of grammatical morphemes and more productive verb usage for these

children than for their English-speaking cohorts (e.g., Budwig et al. 2006, for Hindi; Choi, 1999, for Korean; Clancy, 1985, for Japanese; Slobin & Bever, 1982, for Turkish).

It is well-accepted among usage-based researchers that children move from a concrete understanding of verb constructions to more adult-like constructions. Nevertheless, very little has been said about what is happening during this movement from concrete to abstract. The developmental functionalist approach has attempted to explicate the nature of this developmental process by emphasizing that it is a flexible, gradual, and piecemeal process (Budwig, 1995; 2001; Budwig et al. 2006). Young children may be actively organizing what they take from input into something that is more systematic and productive. They may be working neither verb by verb nor at an abstract rule level, but rather at some intermediate level. According to the developmental functionalist approach, children are constantly constructing meaning clusters, which are interim solutions en route to more adult-like constructions, by linking forms with functions that meet their specific communicative needs.

Support for the idea that children could be working with interim solutions comes from both work with English-speaking children and crosslinguistic work. For example, children seem to use the canonical transitive construction to talk about an agent acting to bring about change (see Slobin, 1985). The early use of intransitive constructions has also been noted to be limited to interim solutions. For instance, work with English-(Budwig, Stein, & O'Brien, 2001), Hebrew- (Uziel-Karl and Budwig, 2003), and Hindi-speaking (Budwig et al, 2006) children suggests that patient subject intransitives are often used to mark a specific communicative perspective—one in which there is some form of goal-blocking or resistance from the environment as in "the doors won't open." Thus, early in development, children link the use of patient subject intransitive to a limited meaning cluster, and only later do they use this construction in a more general, adult-like way.

In the current study, our aim was to investigate the development of early transitive and intransitive constructions in children learning Albanian as well as the nature of the interim solutions that these children create in the transition from the very restricted use of these constructions to a more sophisticated adult-like usage. The present study is the first to examine Albanian children's development of verb constructions as part of a larger study of Albanian children's development of verb constructions (Cenko, 2007).

Albanian is a particularly interesting language to study with regard to transitive and intransitive constructions because it provides important structural contrasts to English. In Albanian, transitive and unergative intransitive constructions (both active voice) are distinguished morphologically from unaccusatives that are overtly marked as non-active voice. Let's suppose that an English-speaking child has to learn the verb "roll." This verb is used in the same form in the transitive "*The boy rolls the ball*" and unaccusative "*The ball rolls*." An Albanian-speaking child, on the other hand, has to learn the verb "rrotulloj" which means *roll* in Albanian. However, this verb changes form from the transitive (djali rrotullo-n topin 'boy-NOM roll-PRS.3S.TRANS ball-ACC') to the unaccusative construction (topi rrotullo-HE-t 'ball-NOM roll-PRS.3S.'). The verb is affixed with the marker HE to mark it as unaccusative. Also interesting is the fact that verbs used in unergative constructions (djali ecen 'boy-NOM walk-PRS. 3S-the boy walks') have the same form as verbs in transitive constructions (they don't have the HE marker). In Albanian the verbs in transitive and unergative constructions have the same form (active voice) and are morphologically distinguished from verbs in the unaccusative construction (non-active voice) (see Kallulli, 2004). Thus, it is possible that what the English-acquiring child has to learn to linguistically distinguish between two categories (the transitive and the intransitive), the Albanian child has to come to linguistically divide these notions into three categories (the transitive, unergative, and unaccusative). Albanian provides children with a different set of options than those that are available to the English- speaking child, and the study of these options can further our understanding of the process of learning verb usage early in life.

Albanian is a morphologically rich language that distinguishes between transitive and unaccusative constructions, thereby possibly facilitating a more flexible use of these constructions at an earlier age than what has been reported for English-speaking children. The present study explores the development of early transitive and intransitive constructions as related to issues of productivity and the nature of interim

solutions that Albanian acquiring children may create in the transition from item-based usage to more abstract knowledge of constructions. More specifically, this study addresses the following questions:

- How do 2- and 3- year-old Albanian-speaking children distribute the use of transitive, unergative, and unaccusative constructions and is there evidence of flexible verb usage from early on?
- Do children use transitive, unergative, and unaccusative constructions differently in terms of the semantic focus and animacy of sentence subjects?
- Do children link the use of these constructions with different pragmatic and communicative functions?

2. Method

2.1 Participants and Procedure

Sixteen monolingual, Albanian-speaking children and their caregivers participated in the study. The children were divided into two age groups, with eight 2;0-2;6 year olds (mean age 2;5) and eight 3;0-3;7 year olds (mean age 3;4). A total of 8 boys and 8 girls participated. All but two caregivers were the children's mothers; two grandmothers participated. The participants were recruited through day care centers and personal contact in a large city in Albania.

Each child was audio- and videorecorded for approximately one hour while interacting with a caregiver. The interaction took place in the child's home. During the session the child and caregiver participated in three activities: at the onset of the visit, the child and caregiver looked together at the wordless story book, *Frog, where are you?* (Mayer, 1969); then the dyad engaged in about 20 minutes of play with Playdough, followed by approximately 20 minutes of play with blocks.

3. Coding

All data were transcribed using a modified version of the CHAT system (see MacWhinney & Snow, 1985). All clauses containing verbs were isolated and further coded using a multilevel coding scheme adapted from Budwig et al. (2006) to examine the syntactic structure of clauses, verb productivity, and semantic and pragmatic functions of constructions.

3.1 Syntactic structure and verb productivity

3.1.1 *Construction type*. The clauses were coded as transitive, unergative, unaccusative, or other.[1] The clauses were coded as transitive if the infinite form of the main verb had two arguments—a subject and direct object. Verbs that took one core argument were coded as intransitive. Unergative intransitive constructions consisted of a main verb and one core argument where the main verb was in active voice. Unaccusative constructions included all clauses consisting of a main verb and a core argument with the main verb in the non-active voice.

3.2.2 *Verb use flexibility*. Children were coded based on their ability to produce all three types of constructions (transitive, unergative, and unaccusative) as well as their ability to use the same verb flexibly by alternating between transitive and unaccusative constructions using the correct morphological markings with such verbs.[2] The productivity ranking was based on a 3-point scoring system ranging from

[1] Clauses coded as 'other' included copulas and complex constructions. These constructions were omitted from further analyses.

[2] The reason why we coded verb productivity based on children's ability to alternate between transitive and unaccusative constructions is due to the fact that not all unergative intransitive verbs in Albanian have a clearly morphologically related transitive counterpart (e.g., *eci-* 'walk'). Nevertheless, almost all transitive verbs (that are in active voice) have an unaccusative counterpart, which is the corresponding non-active voice of the transitive verb (e.g., *thyej vazon-* '(I) break the pot' vs. *vazoja thyhet-* 'the pot breaks').

flexible verb use to no flexible verb use. Participants considered "flexible verb use" were those who could produce all three constructions with different verbs and who could use at least one given verb in both transitive and unaccusative constructions with the appropriate morphological marking. Participants coded as "somewhat flexible verb use" produced all three types of constructions but did not use one given verb in both transitive and unaccusative constructions. The final category of 'no flexible verb use' was assigned to participants who could not produce all three types of constructions and could not use the same verb in both transitive and unaccusative constructions.

3.2 Semantics

At this level of coding, we wanted to assess whether the children were contrasting between transitives, unergatives, and unaccusatives in terms of the animacy and semantic focus of the subject of the three types of constructions. We were particularly interested in seeing whether children made use of subject animacy and focus to create clusters of meaning linked to each construction.

3.2.1 *Animacy.* For all three constructions, the subject was coded as either: a) animate (e.g., person, human-like figurines) or b) inanimate (e.g., blocks, Playdoh).

3.2.2 *Focus.* The subject of the construction was coded as either referring to: a) self (first person singular), b) caregiver (second person singular), c) other entity (third person singular and/or plural), or d) joint entity (first person plural).

3.3 Pragmatic functions

Pragmatic coding referred to the potential relationship between the three constructions and the communicative functions they serve. We wanted to see whether the children were systematically distinguishing between transitive, unergative, and unaccusative constructions by linking each with specific pragmatic functions or whether they were linking all their utterances with a range of functions. The following coding scheme was used to categorize the communicative goal of each construction:

3.3.1 *Control acts:* Consisted of utterances that were intended to bring about a change in hearer's actions through directives or requests (e.g., child hands a figurine to the mother and says: *merre shoferin-* 'take the driver'; or the child looks at the mother, places her hand on a block saying: *ta marr?-*'should (I) take it?').

3.3.2. *Non-control acts*: Included utterances that did not attempt to bring about changes in actions, but rather were utterances about the given state of the world. Non-control acts included: a) assertions (e.g., child points at the picture book and says: *qeni po leh-*'the dog is barking'); and b) questions (e.g., the mother is working on a block tower and the child asks: *e mbarove mami?-*'did you finish (it) mom?').

Based on results from prior work with English- (Budwig et al., 2001), Hebrew- (Uziel-Karl & Budwig, 2003), and Hindi-speaking children (Budwig et al., 2006), all unergative and unaccusative constructions used in assertions were further coded as: a) explanations (neutral descriptions of properties or features of person or object- e.g., child pushes a toy car and says: *kjo ecen-* 'this drives'); b) resistance (utterances used to report resistance from the environment or instances of goal-blocking, when the child was manipulating an object to achieve something, but was unable to do so- e.g., child tries to put a block that does not fit on the tower and says: *nuk vihet-* '(it) can't be placed'); and c) norms (talk about ways in which objects belong, fit or go together- e.g., child places a block on the tower and says: *e kuqja vihet ketu-*'the red one fits here').

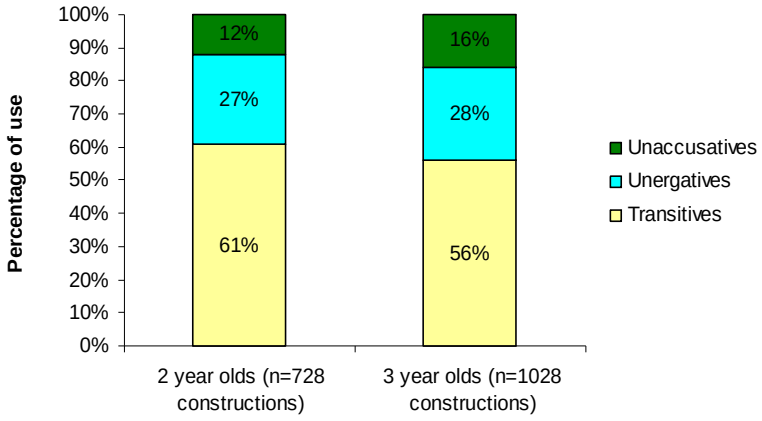
3.3.3 *Multifunction.* This category included utterances that are simultaneously assertions or questions about the state of the world and requests to perform an action. For example, the child hands a block to the mother and says: *vihet kjo?-*'does this fit?' In this instance, the child is asking a question about the properties of the block and at the same time asking the mother to place the block on the tower.

4. Results

4.1 Syntactic frames and verb use flexibility

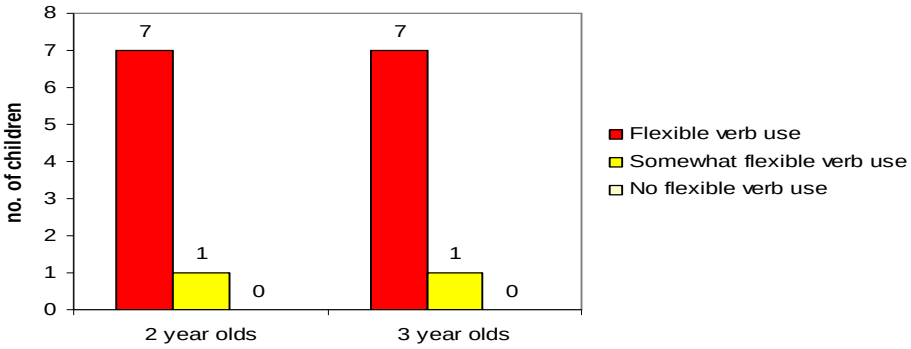
4.1.1 *Construction type.* Results reveal that all children, regardless of age, were able to produce all three kinds of constructions (transitives, unergatives, and unaccusatives) (see Figure 1). While there are more transitive constructions than unergatives or unaccusatives, children from both age groups use a substantial amount of unergatives and unaccusatives in their interactions. This suggests that the children from early on have flexibility in their ability to use all three constructions and may be using them to mark different perspectives.

Figure 1: Distribution of constructions



4.1.2 *Verb use flexibility.* A central question with children's early constructions is whether they are able to use the same verb flexibly by alternating between transitive and unaccusative constructions, and if so, whether they are able to use the correct morphological marking with these verbs. For example, if a child is using the transitive verb *prish*-'break-PRS.1S. TRANS', is she able to use this same verb in an unaccusative construction with the appropriate morphological marking to create a contrast such as *kulla prishet*-'The tower is breaking'? A lexical level analysis adapted from Budwig et al. (2006) was conducted on children's verb usage. The analysis comprised of conducting a type frequency of verbs that occurred only in transitive or unaccusative constructions and verbs that occurred in both constructions. Results from this analysis revealed that all of the children except two (one 2-year-old and one 3–year-old) were able to use at least one given verb in both the transitive and unaccusative constructions with the appropriate morphological markings (see Figure 2). The two somewhat flexible children were able to use different verbs in transitive and unaccusative constructions, but they were not able to produce both constructions with one given verb. These results suggest that the children are able to alternate between constructions and indicate some ability to use verbs productively from an early age.

Figure 2: Verb Use Flexibility



4.2. Animacy and semantic focus of subjects

This level of analysis examined the distribution of animacy and semantic focus between the transitive, unergative, and unaccusative constructions.[3] The question at hand is whether children link each of the three constructions with a semantic category such as agent, actor, or patient subjects. Results (see Table 1 and Table 2) show that children tended to use transitive constructions mainly with animate subjects referring to self or caregiver (e.g., *beje kete-* '(you) do this'). Thus, children were talking about self or caregiver performing an action on an object. This finding also suggests that the transitive construction is linked up with scenes with a focus on human agents. Unergative constructions were also used primarily with animate subjects, but the subjects referred mainly to third person entities (e.g., *bretkoca kerceu-*'the frog jumped'). Unaccusative constructions were mostly used to talk about inanimate subjects referring to third person entities (e.g., *rrota rrotullohet-*'the wheel spins'). Interestingly, both unergative and unaccusative constructions seem to be grouped together in that they are used to talk about third person entities. Nevertheless, children distinguished between unergatives and unaccusative constructions in terms of semantic function. They linked the use of unergative constructions with animate (actor) subjects, while the use of unaccusatives was reserved to talk about inanimate (patient) subjects.

Table 1: Animacy of subjects

	Animate	Inanimate
Transitive (n=1020)	97%	3%
Unergative (n=485)	68%	32%
Unaccusative (n=251)	30%	70%

[3] From this point on, we present combined results for the 2- and 3-year-olds due to the fact that the general trends held up across the two age groups and the age differences noted were only incremental in nature.

Table 2: Semantic focus of subjects

	Self	Caregiver	Other entity	Joint
Transitive (n=1020)	37%	39%	13%	11%
Unergative (n=485)	13%	17%	67%	3%
Unaccusative (n=251)	3%	5%	92%	0

From the distribution pattern of animacy and semantic focus of subjects, it appears that the children are differentiating between the three types of constructions and reserving the use of each construction to refer to a specific cluster of semantic function. We now turn to another level of analysis to examine if the difference of the three types of constructions also lies in the pragmatic function each serves.

4.3 Pragmatic functions

A third level of analysis examined the distribution of pragmatic functions across transitive, unergative, and unaccusative constructions. The results show that there was a clear distinction between the communicative goals that each of the constructions serves. As is noted in Table 3, children used transitives mostly (63%) as control acts that are attempts to bring about a change in the environment. The transitive construction was, thus, used primarily in imperative contexts where the children are asking an agent to perform an action to an object (e.g., *hap kete-*'open this') or attempting to redirect the action of an agent (e.g., *shikoje kete-*'look at this one'). In contrast, unergatives (67%) and unaccusatives (82%) were used mostly to describe the state of the world. Thus, an analysis of the pragmatic functions served by each of the two types of intransitive constructions showed that broadly, both were linked mostly with assertions and descriptions about the state of the world.

Table 3: Pragmatic functions of constructions

	Control acts	Assertions	Questions	Multifunction
Transitive (n=1020)	63%	29%	5%	3%
Unergative (n=485)	21%	67%	10%	2%
Unaccusative (n=251)	3%	82%	15%	0

Prior work by Budwig et al. (2006), Budwig et al. (2001) and Uziel-Karl and Budwig (2003) on children's use of intransitive constructions has shown that English-, Hebrew-, and Hindi-speaking children used patient subject intransitive constructions to report negative events and instances of goal-blocking. Based on such work, we wanted to see whether Albanian-speaking children distinguished between unergative constructions (actor subject) and unaccusative constructions (patient subject) in terms of pragmatic functions. We conducted a finer grain analysis of the child's use of unergative and unaccusative constructions used in assertions. We found that compared to unergative constructions (25%), children used unaccusative constructions primarily (62%) to talk about scenes involving resistance from the environment, that is, to report negative events and instances of goal-blocking (see Table 4). The following examples illustrate such use of unaccusative constructions:

Child (2;1) accidentally knocks down a block tower:
U prish
Broke- PST.3S
(it) broke down

Child (3;3) tries unsuccessfully to close a box:
Nuk mbyllet
Close –NEG.PRS.3S
(it) doesn't close.

Table 4: Pragmatic functions of unergatives and unaccusatives used in assertions

	Explanations	Resistance	Norms
Unergative (n=325)	74%	25%	1%
Unaccusative (n=206)	20%	62%	18%

The unergative constructions, on the other hand, were used primarily for making neutral assertions about the state of the world. These results suggest that Albanian-speaking children may not be using a general intransitive construction but rather may have two distinct constructions (unergative and unaccusative) that cluster around different semantic and pragmatic functions.

4.4 Summary of findings

Integration of the three levels of analyses reported above shows that Albanian-speaking children are able to alternate between the transitive, unergative, and unaccusative constructions before the age of 3. In contrast to what has been reported for English-speaking 2–year-old children, most Albanian 2-year-olds are able to use at least one verb in the transitive and the unaccusative form with the correct morphological marking, indicating flexibility in verb construction use.

Results also indicate that Albanian-speaking children systematically link the use of each of the three constructions (transitive, unergative and unaccusative) with distinct clusters of semantic and pragmatic meanings: Transitives are linked with prototypical causation scenes with focus on animate, human-like agents. Unergatives are used to talk about neutral scenes involving an animate subject performing an action. Unaccusatives involve inanimate subjects semantically affected by action and are used when talking about scenes involving resistance from the environment.

5. Discussion

The current results indicate that Albanian-speaking children are able to alternate between transitive, ergative, and unaccusative constructions regardless of age. In contrast to what has been reported for English-speaking 2-year-olds, most Albanian 2–year-olds (7 out of 8) are able to use at least one verb in the transitive and the unaccusative form with the correct morphological marking. Age is not a predictor of lack of flexible verb use, and Albanian-speaking children seem to be moving beyond item-based usage of verbs from an early age. Similar findings have been reported by other crosslinguistic studies (Berman, 1993; Budwig, et al., 2006). For example, Budwig et al. (2006), in their study of Hindi-speaking children, report that neither the 12 children (age 2;10-4;3) that they studied cross-sectionally nor the one child followed longitudinally (age 2;3-2;8) showed evidence of item-based usage of verbs. Most of the children (58%) in the cross-sectional study and the child in the longitudinal study were able to use at least one

given verb in both the transitive and intransitive frame with appropriate causative and inchoative markings.

Albanian children's flexible verb usage may be due to the fact that Albanian provides rich morphological markings on the verb that make the distinction between transitive and unaccusative constructions more salient for the child. That is, the Albanian-acquiring child may notice the morphological marking present on the unaccusative verbs and use it as an anchor to group the unaccusatives together as a distinct construction from the transitive. The English-speaking child, on the other hand, has to rely on word order to determine agent-patient syntax and subsequently distinguish between transitives and intransitives. Word order has no phonological content per se, whereas morphological markers may give children some concrete phonology that may make it easier for them to form syntactic distinctions between transitives and intransitives (see Slobin, 1982). Future work with Albanian-speaking children should examine this issue more closely by using novel verb studies and other experimental methods aimed at determining productivity.

Although Albanian-speaking children appear to be beyond item-based usage of verbs, this does not necessarily mean that their usage patterns are adult-like. These children seem to adopt interim solutions by linking each construction (transitive, unergative, and unaccusative) with different, restricted clusters of semantic and pragmatic functions that meet children's unique communicative needs and are not completely adult-like. Analyses of the children's meaning systems suggest that children link each construction (transitive, unergative, and unaccusative) with a specific meaning cluster and use each to attain different communicative needs. For instance, the transitive construction is linked with a prototypical causation scene involving self as an agent and is used mainly in control acts in an attempt to change the caregiver's actions. This finding replicates other findings with regards to use of transitive constructions by children (Budwig, 1995; Budwig et al., 2006; Slobin, 1985). However, future work that closely examines linguistic patterns in Albanian caregiver input is essential in order to shed light on children's verb construction usage pattern.

Interestingly, Albanian-speaking children do not seem to use a general intransitive construction, but they differentiate between unergative and unaccusative constructions in terms of both semantic and pragmatic functions. Although at a broader level both constructions are used in descriptions and assertions about the state of the world, unaccusatives refer to inanimate patient subjects semantically affected by the action of the verb used to talk about scenes involving resistance from the environment. It is interesting to note that children choose to use the unaccusative constructions to downplay self's agency in causing a negative event to happen. By using unaccusative constructions to justify self's actions, children are adopting an interim solution to meet their communicative needs. Unergative intransitive constructions, on the other hand, are used to express scenes that tend to be about animate subjects serving as actors carrying out the action of the verb. As such, the use of unergatives is mostly reserved for neutral descriptions of the state of the world, in contrast to unaccusatives used to report resistance from the environment and to transitives that are used as control acts. Several previous studies have also documented that even very young children adopt various perspectives with the intransitive construction (Budwig, 2001; Budwig et al. 2001, 2006; Uziel-Karl & Budwig, 2003). For example, Uziel-Karl & Budwig's (2003) longitudinal examination of two Hebrew-speaking children's use of non-agent subjects revealed that these children used non-agent subjects mostly with inanimate subjects to talk about negative happenings (e.g., *fell, broke, got stuck*). The use of unergative and unaccusative constructions to adopt different perspectives lends further support to the idea that children create interim solutions to meet their developmental and communicative needs.

Several factors can influence young children's creation of restricted form-function systems. It is possible that the patterning of these systems is initially affected by parental input. The frequency and patterns of use of the verbs in the input have been shown to play a critical role what forms are used more by the child by a number of researchers (Berman, 1993; Cameron-Faulkner et al., 2003; Lieven et al., 1997; Theakston et al. 2001). Tomasello (2003) has argued that the best predictor of how a child uses verb is how it is used in the input she hears; the more firmly its usage is entrenched, the less likely the child is to extend that verb to any novel construction with which she has not heard it used. Thus, it is

possible that the Albanian-speaking children in this study hear transitive constructions in the input mostly in contexts in which the speaker is trying to change the interlocutor's actions and therefore use this construction more frequently than any other. However, this does not imply that the children merely copy the forms they hear in input. For instance, Budwig et al. (2006) found that the Hindi-speaking children in their sample differed from their caregivers in their use of intransitives. Children's usage of intransitive constructions was not mere imitation of patterns in input; however, it resulted from the language that was directed to them and the surrounding discursive context. Children are isolating dominant patterns in the input by making use of general cognitive abilities, such as analogy and pattern finding (Karmiloff-Smith, 1979; Tomasello, 2003). Then, they are grouping together certain forms with functions in order to fulfill their communicative needs. In this way children are going beyond repeating frequent verbs from the input to creating their own interim solutions. Adults may be contributing in the creation of particular form-function systems by providing discourse pressure on their children and encouraging children to use particular types of constructions to meet specific communicative goals. To date, little systematic analysis has examined how children specifically make use of caregiver input in morphologically rich languages. This is an issue to warrant further examination.

The particular structural properties of the language being acquired may also influence the nature of the solutions children create. Typological factors may explain the differences in the kinds of meaning that children construct around transitive and intransitive constructions. In the current study, children reserve the use of unaccusative constructions to describe a negative consequence of their actions and to justify their actions by downplaying their own agency. The transitive, on the other hand, is used to direct or change actions involving self or interlocutor as an agent. In Albanian, the use of an unaccusative intransitive verb involves the verb changing from active to non-active voice and implies unintended causation (see Kallulli, 2006). The distinction between a transitive and unaccusative form marks the difference between deliberate and nondeliberate action respectively. Children acquiring Albanian may therefore become sensitive to and make these distinctions earlier in their use of constructions because Albanian language overtly marks these with morphosyntactic means. This argument supports conclusions drawn by those who study Hebrew-(see Berman, 1993; Uziel-Karl & Budwig, 2003) and Hindi-speaking children (Budwig et al., 2006).

The current study provides a first look at the development of transitive and intransitive constructions in Albanian-speaking children. The findings from this study will lay the groundwork for future studies that involve experimental novel verb training tasks, which provide an opportunity for a controlled assessment of Albanian children's productivity with verb constructions (i.e., the abstractness of their linguistic constructions). Findings on the nature of interim solutions that these children create will also contribute to the design of the *naturalistically informed* novel verb training tasks, which should take into account the language specific interim solutions that children create (see Budwig et al., 2006 for further discussion on this issue). Moreover, in order to better understand Albanian children's productivity with novel verbs and the role of caregiver input in this process, it can be quite useful to combine experimental and naturalistic methodology by studying children's and caregivers' use of familiar verbs and constructions in naturalistic settings (see Hu, Budwig, Ono, & Zhang, 2007 for an example with English-speaking children). Ultimately, findings involving Albanian-speaking children will contribute to other crosslinguistic findings that involve languages structurally different from English.

6. Acknowledgments

We are grateful to the SCLDLIPS Research Group for their valuable feedback and thoughtful comments on earlier versions of this paper and to Jodie Boduch for her careful editorial work on this manuscript. We would like to express our thanks to the children and caregivers who participated in this study and the Open Society for Albania, Soros Foundation for providing the financial support for data collection.

7. References

Abbott-Smith, K., Lieven, E., & Tomasello, M. (2004). Training 2;6-year-olds to produce the transitive construction: The role of frequency, semantic similarity and shared syntactic distribution. *Developmental Science, 7*(1), 48-55.

Berman, R. (1993). Marking of verb transitivity by Hebrew-speaking children. *Journal of Child Language, 20*(3), 641-669.

Brooks, P., & Tomasello, M. (1999). How young children constrain their argument structure constructions. *Language, 75*, 720-738.

Budwig, N. (1995). *A developmental-functionalist approach to child language*. Mahwah, NJ: Lawrence Erlbaum.

Budwig, N. (2001). Perspective, deixis, and voice: Developmental reflections. In A. Cienki, B. Luka, & M. Smith (Eds.), *Conceptual and discourse factors in linguistic structure* (pp.63-76). Stanford, CA: CSLI Publications.

Budwig, N., Narasimhan, B., & Srivastava, S. (2006). Interim solutions: A construction approach to the development of transitive and intransitive constructions in Hindi. In E. Clark & B. Kelly (Eds.), *Constructions in acquisition* (pp. 163-183). Stanford, CA: CSLI Publications.

Budwig, N., Stein, S., & O'Brien, C. (2001). Nonagent subjects in early child language: A crosslinguistic comparison. In K. Nelson, A. Aksu-Koc, & C. Johnson (Eds.), *Children's language: Interactional contributions to language development*, (pp. 49-67). Mahwah, NJ: Lawrence Erlbaum.

Cameron-Faulkner, T., Lieven, E., & Tomasello, M. (2003). A construction based analysis of child directed speech. *Cognitive Science, 27*, 843-873.

Cenko, E. (2007). Albanian children's acquisition of verb constructions: Understanding the contributions of language typology and caregiver input. *Manuscript in preparation.*

Childers, J., & Tomasello, M. (2001). The role of pronouns in young children's acquisition of the English transitive construction. *Developmental Psychology, 37*(6), 739-748.

Choi, S. (1999). Early development of verb structures and caregiver input in Korean: Two case studies. *International Journal of Bilingualism, 3*, 241-265.

Clancy, P. M. (1985). The acquisition of Japanese. In D. I. Slobin (Ed.), *The crosslinguistic study of language acquisition: Vol. II* (pp. 373-524). Hillsdale, NJ: Lawrence Erlbaum.

Goldberg, A. (1995). *Constructions: A construction grammar approach to argument structure.* Chicago: University of Chicago Press.

Hu, J., Budwig, N., Ono, K., & Zhang, H. (2007). Individual differences in preschoolers' ability to generalize unaccusative intransitive constructions in novel verb experiments: Evidence from their familiar verb usage in naturalistic play contexts. In H. Caunt-Nulton, S. Kulatilake, & I. Woo (Eds.), A *Supplement to the Proceedings of the 31st Boston University Conference on Language*. (retrievable from http://www.bu.edu/linguistics/APPLIED/BUCLD/supp31.html)

Kallulli, D. (2006). Argument demotion as feature suppression. In T. Solstad & B. Lyngfelt (Eds.), *Demoting the agent* (pp. 143-166). Amsterdam: John Benjamins.

Kallulli, D. (2004). De-agentivised causers or non-active causative predications. *Pre-conference proceedings of the workshop "Demoting the agent: Passive and other voice-related phenomena"* (pp. 59-66). University of Oslo, November 25-27.

Karmiloff-Smith, A. (1979). *A functional approach to child language.* Cambridge: Cambridge University Press.

Lieven, E., Pine, J., & Baldwin, G. (1997). Lexically-based learning and early grammatical development. *Journal of Child Language, 24*, 187-219.

MacWhinney, B., & Snow, G. (1985). The child language data exchange system. *Journal of Child Language, 12*, 271-296.

Mayer, M. (1969). *Frog, where are you?* New York: Dial Press.

Slobin, D. (1982). Universal and particular in the acquisition of language. In L. Gleitman & E. Wanner (Eds.), *Language acquisition: The state of art* (pp. 128-172). Cambridge: Cambridge University Press.

Slobin, D. (1985). Crosslinguistic evidence for the language-making capacity. In D. Slobin (Ed.), *The Crosslinguistic study of language acquisition, Vol. 2. Theoretical issues* (pp.1157-1256). Hillsdale, NJ: Erlbaum.

Slobin, D. I., & Bever, T. (1982). Children use canonical sentence schemas: A crosslinguistic study of word order and inflections. *Cognition, 12*, 229-265.

Theakston, A. L., Lieven, E. V. M., Pine, J. M., & Rowland, C. F. (2001). The role of performance limitations in the acquisition of verb-argument structure: An alternative account. *Journal of Child Language, 28*, 127-152

Tomasello, M. (2003). *Constructing a language: A usage-based theory of language acquisition.* Cambridge, MA: Harvard University Press.

Tomasello, M., & Brooks, P. J. (1998). Young children's earliest transitive and intransitive constructions. *Cognitive Linguistics, 9-4*, 379-395

Uziel-Karl, S. & Budwig, N. (2003). The development of non-agent subjects in Hebrew child language. In B. Beachley, A. Brown, & F. Conlin (Eds.). *Proceedings of the 27th Annual Boston University Conference on Language Development* (pp. 798-808). Somerville, MA: Cascadilla Press.