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AYLÝN C. KÜNTAY Koç University, Istanbul DAN I. SLOBIN University of California, Berkeley

# PUTTING INTERACTION BACK INTO CHILD LANGUAGE: EXAMPLES FROM TURKISH

As in the case of other non-English languages, the study of the acquisition of Turkish has mostly focused on aspects of grammatical morphology and syntax, largely neglecting the study of the effect of interactional factors on child morphosyntax. This paper reviews indications from past research that studying input and adult-child discourse can facilitate the study of the acquisition of morphosyntax in the Turkish language. It also provides some recent studies of Turkish child language on the relationship of child-directed speech to the early acquisition of morphosyntax, and on the pragmatic features of a certain kind of discourse form in child-directed speech called variation sets.

As in the case of other non-English languages, the study of the acquisition of Turkish has mostly focused on aspects of grammatical morphology and syntax reflected in the productions of native learners at different age periods. Descriptive linguists and psycholinguists have long regarded the properties of the Turkish morphological system and complex syntax interesting from a cross-linguistic point of view. These cross-linguistically interesting, even exotic, properties of the language led students of acquisition to prioritize their research focus on these aspects in this relatively recent area. Some of the well-known findings in Turkish child language involve the ease and the relative rapidity of the acquisition of case-inflectional and verbal-inflectional paradigms (Aksu-Koç & Slobin, 1985; Özcan, 1996; Topbaţ, Maviţ & Baţal, 1997), the late emergence of the use of relative clauses (Slobin, 1986), the early mastery of flexible word order (Ekmekçi, 1979), and the protracted development of the different functions of the evidential marker *-miţ* (Aksu-Koç, 1988). Focus on all of these features of Turkish child language presupposes some implicit comparison

<sup>&</sup>lt;sup>1</sup> Address for correspondence: Aylin C. Küntay, Koç University, Department of Psychology, Rumeli Feneri Yolu, Sariyer 80910, Istanbul, Turkey. E-mail: akuntay@ku.edu.tr

to the properties of the English language, either as being non-existent or exhibiting different characteristics.

It is trivially obvious that linguistic categories such as case-marking, verbal inflections, word order, and evidentiality do not present themselves transparently to the child learner of a language. Both intuitively, and theoretically from a discoursefunctional theoretical approach to language development (Budwig, 1995; Clancy, in press; DuBois, in press), all these interesting components of the grammatical code come to the young learner in the give and take of everyday life, mostly embedded in early adult-child discursive interaction. However, as in most child language research, these "real" interactive events get reduced to textual transcripts that only represent interaction "in vitro." For child language researchers, these transcripts constitute a mining source for grammatical elements that are combed through with painstaking detail and, more recently, with sophisticated concordance software. Once the forms are picked out along with the propositional content surrounding them and made available for further statistical analysis, the real-time interactions that originally mediated these forms get entirely neglected. The tendency to decontextualize textual content or linguistic forms from discursive interactions troubles the entire field of child language, but it is accentuated in the study of the acquisition of non-Indo-European languages that have more recently come to the foreground of the field (see Slobin 1985 for a lucid discussion of the rise of crosslinguistic acquisition studies). Thus, especially in fields such as Turkish child language, which is relatively recent and which involves a language with salient morphosyntactic properties, research on topics such as child-directed speech and discursive interaction remains to be developed. This paper will review indications from past research that studying input and adult-child discourse can facilitate the study of the acquisition of morphosyntax in the Turkish language. It will also provide some recent examples from Turkish child language on the relationship of childdirected speech to the early acquisition of morphosyntax, and on the pragmatic features of a certain kind of discourse form in child-directed speech.

### Lessons from past research

The first important chapter in the area of Turkish child language development was that of Aksu-Koç and Slobin (1985), providing a summary of the empirical data available at the time and a theoretical discussion of important language-specific features that pose interesting acquisition problems for the native learner. Apart from several parental diary studies conducted in the seventies, the monograph summarized the experimental studies carried out by Aksu-Koç, Slobin, and their associates, supplemented by tape-recorded naturalistic data, covering the range of 2 to 5 years. Verhoeven (1991) and Küntay and Slobin (1999) provided more recent overviews of selected research in Turkish language acquisition, the latter focusing on first-language acquisition by monolingual children while the former included discussion of the large literature on the language of bilingual Turkish children in France, Germany, the Netherlands, Denmark, and Sweden.

Aksu-Koç and Slobin (1985) have a section entitled 'Input and Adult-Child Interaction' where they briefly discuss variable word order, types of inflections, discourse scaffolding, and politeness norms in adult-child discouse. They propose that the input offers ample opportunity for the child to read off pragmatic word order rules, the discovery of inflectional paradigms, "leading the child to linguistic structures from surface cues..." (p. 868). As a clear example of discourse scaffolding, the authors mention the acquisition of causal connectives, where they emerge first as a response to adult questioning and only later in self-constructed utterances (Aksu, 1975). Norms and rules about polite forms such as the usage of second person plural and lexical markers such as *lütfen* 'please' were also found to involve explicit modeling and reinforcement on the part of adult interactants of child language learners. These empirical observations aside, both at the beginning (p. 844) and at the end of their chapter (p. 876), Aksu-Koç and Slobin (1985) identify adult input as one of the crucial gaps in studying the acquisition of Turkish.

### Variation sets

Küntay and Slobin (1995, 1996, 2001) have recently examined parental speech by two Turkish mothers directed to their daughters during the very early stages of language production. Child-directed speech in Turkish, evidently in other languages as well (Slobin, Küntay, and Hoiting, 2001), present the child with *variation sets* that are characterized by a sequence of utterances with a constant intention but varying form. Variation sets are identified by three types of phenomena: (1) lexical substitution and rephrasing, (2) addition and deletion of specific referential terms, and (3) reordering of constituents. The Turkish language presents the learner with a richly inflected language, with much variation in word order, and substantial ellipsis of nominal arguments. Consequently, in Turkish child-directed speech there are rich possibilities for ellipsis and reordering, as well as a broad range of morphological variation. As a result, we find many variation sets that keep communicative intent constant but vary morphosyntax across successive utterance in Turkish mothers' speech directed to their very young children. Examples 1 and 2 are two variation sets coming from two Turkish mothers, the former speaking to a 19-month-old girl, the latter to a 21-month-old girl:

(1)	ban-a	oda-n-dan	bi tane	
	pro.1s-dat	room-poss.2s-abl	indef1	
	bebek	getirebilirmisin?		
	doll	bring-mod-yn-2s		
	'Can you bring me a doll from your room?'			

<sup>&</sup>lt;sup>1</sup> The following abbreviations are used in glosses: abl [= ablative]; acc [= accusative]; aor [= aorist]; dat [= dative]; evid [= evidential]; gen [= genitive]; indef [= indefinite numeral]; ins [= instrumental]; loc [= locative]; mod [= modality]; neg [= negation]; opt [= optative]; pas [= passive]; poss [= possessive]; pro [= pronoun]; prog [= present progressive]; yn [= yes-no question marker]; 1s [= first-person singular]; 2s [= second-person singular]; 1pl [= first-person plural]; 3pl [= third-person plural].

getir bring 'Bring.' bebeđ-in-i getir bring doll-poss.2s-acc 'Bring your doll.' [Mine CDS :: 1;7] (2) git dök-elim artýk bu su-yu go pour-opt.1s just this water-acc 'Let's just go and pour this water.' git Go 'go' nere-ye dök? where-dat pour 'Where (should we/you) pour it?' banyo-ya götür bath-dat take 'Take (it) to the bath(tub)?' banyo-ya götür dök

bath-dat take pour 'Take (it) to the bath(tub) (and) pour.'

*kalk banyo-ya götür dök su-yu* get.up bath-dat take pour water-acc 'Get up and take (it) to the bath (tub) (and) pour the water.' [Gül CDS :: 1;9]

In studying Turkish child-directed speech, Küntay and Slobin (1996) point out that the language learner needs to pay attention to variation across successive adult utterances in extended discourse to figure out the circumstances of repositioning and morphological alternations in lexical forms. This, the authors later suggested, will allow differentiation of the lexical categories of nouns and verbs, which are subject to different patterns of agglutinated morphology, ellipsis, and reordering in variation sets (Küntay & Slobin, 2001).

In sum, in previous work in child-directed discourse, Küntay and Slobin speculated on how variation sets might trigger morphological, lexical, and syntactic advances in the child. Most of the previous research of adult recasts in child-directed speech in other languages have also dealt with adults' reformulations of the child's utterances and how these trigger morphological and syntactic advances in young children (Baker & Nelson, 1984; Farrar, 1990; Hoff-Ginsberg, 1990; Nelson, 1977; Nelson et al., 1989). Yet, the grammatical cues in variation sets are obviously provided as a result of the conglomeration of certain pragmatic intentions on the part of the speaker. The caregiver does not vary the utterance position of a constituent with the intention of modeling for the child the subtleties of Turkish word-order principles, but to render the interaction more effective. The interactive function of most variation sets seems to be to repeat the same content in order to maximize the chance of comprehension and/or compliance on the part of the hearer. Fernald (1993) finds that Japanese mothers make use of successively different terms until the child gives an overt response, in order to achieve the goal of getting the child to carry out an action. Similarly, in Turkish, in repeating the same communicative content, but by deleting some elements and reintroducing others, the speaker appears to conduct an "event analysis" for the benefit of the child. For instance, in Example 2, the mother initially provides a complex event sequence in which the child is told to go to the bathroom and pour out the water that she is currently playing with. In the second utterance of the variation set, the mother only specifies the first component of the event complex, git 'go.' This is followed by the next event segment, banyoya götür 'take (it) to the bath(tub)'. Finally the culminating subevent of pouring the water into the bathtub is mentioned in banyoya götür dök 'take (it) to the bath(tub) (and) pour'. In the final constituent of the variation set, the mother reexpands the event complex to include all the subevents - getting up, taking the water, and pouring the water - in the extent of one utterance. Such an event segmentation, where the communicative intent is divided up into its components, most likely eases the comprehension of a young child, facilitating the effectiveness of the communicative act.

Thus, cues for grammatical analysis in child-directed speech are not encountered directly by the child, but come in a discourse-mediated package. It is highly plausible that the child is primarily working on understanding the structure of interpersonal action. Simultaneously, as part and parcel of attempting to achieve social coordination, the child conducts the task of deciphering the linguistic structure.

The question, then, is whether variation sets appear in definable pragmatic contexts. To answer the question, we conducted a speech-act analysis of a third corpus of a mother's speech, directed to a child called Deniz at ages 1;3 years and 2;0. (Ketrez [1999] characterizes the former stage as a premorphological stage for Deniz, while the latter stage is when she masters the whole inflectional system for both nouns and verbs.) The primary questions of interest were: (1) In what kinds of communicative functions are variation sets used by caregivers? (2) Can we document any changes in the nature of variation sets as the child gets older and linguistically more competent?

# Communicative functions of variation sets

To begin with, it is evident that the interactional function of variation sets is to attract and hold the child's attention until some kind of desired response is producedeither an action or a verbalization. The analysis of the interactional functions of variation sets in Deniz's mother's speech indicates that three functions summarize the illocutionary forces of all the sets: (1) control-oriented variation sets that call for an

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action on the part of the child, serving a function of a control act (Ervin-Tripp, 1989), (2) ideational variation sets that merely serve the function of information provision, performing merely on the plane of ideation, and (3) information-querying variation sets that prompt the child to answer a question with information. These three types of variation sets are exemplified in (3), (4), and (5) respectively. (According to Schiffrin [1987], discourse structures involve several planes of coherence simultaneously: the level of ideas or propositional content (ideational level), the instrumental level of speech acts or conversational moves (action level), and the mechanical level of turn-taking (exchange level). Variation sets, by definition, mostly keep the exchange level constant.)

(3) Control-oriented variation set

*hayýr ayakkabý el-len-me-z* no shoe touch-pas-neg-aor 'no, shoe(s) (is/are) not touched'

*on-un-la sokak-ta gez-iyor-uz* it-gen-ins street-loc walk.around-prog-1pl 'we walk around with it on the street'

*pis o gel* dirty that come 'that's dirty, come over here' [Deniz CDS:: 1;3]

### (4) Ideational variation set

Denizbakbi(r) tanegemiresm-iyap-ýyor-umben.Denizlookindefboatpicture-possdo-prog-1sgI'Deniz, look, I am doing a drawing of a boat'

gemi:! Boat 'Boa:t' [Deniz CDS:: 1;3]

(5) Information-querying variation set

*ne var-mýţ bur(a)-da?* what exist-evid here-loc 'What is in here?'

*var mý bi(r)ţeyler?* exist yn something 'Is there anything?' [Deniz CDS:: 1;3] The following table provides (a) a breakdown of all the variation sets used by Deniz's mother when Deniz was 1;3 and then again when she was 2;0 with respect to the interactional function of variation sets, as represented in the boldfaced and centralized rows, and (b) the types of variations found in each of these types of sets, as represented in normal-font rows.

Type of Variation Set	Deniz at 1;3	Deniz at 2;0
Information-querying	43	7
Make-more-specific-question	21	4
Provide-answer	4	
Substitute-words	3	1
Reorder	5	
Change-suffix	2	1
Change-minimally	8	1
Ideational	9	6
Expand-information	2	2
Substitute-words	4	3
Reduce-information	1	1
Reduce-and-expand	1	
Reorder	1	
Control-oriented	27	20
Elaborate/Lead-around/Decompose	13	11
Provide-reason/justification	11	7
Change-suffix	1	
Reorder + change-suffix	2	
Substitute-words		1
Change-minimally		1
Mixed (Information + Control)	1	3
Total	80	36

Table 1. Interactive functions and types of variations in variation sets of Deniz's mother at 1;3 and 2;0

The following figure indicates the changes in functions of variation sets as a function of the child's age.

It seems that most variation sets perform either information querying or control acts, the ratio of the latter increasing in the later stage. In control-oriented variation sets, the mother leads the child through different components of the activity, often elaborating, adding justifications, explanations and other associated information to the central control act. In ideational and information-querying variation sets, the mother makes the information or the question more specific in successive utterances, often providing reordering of original constituents, summarized information, or answers to her own questions.



Figure 1. Change in functions of mother's variation sets according to age of child

## **Summary and conclusions**

Child language is almost always produced in reality through mediation of discursive interaction. Although extracting linguistic forms through powerful computerized searches is convenient and useful, we must not lose sight of the fact that these forms are produced to achieve effectiveness in interpersonal communication, rather than to emphasize grammatical appropriateness.

This paper proposes that studies of discursive interaction in Turkish child language are long overdue, having been pointed out as both sparsely studied and crucial from the early days of the field (Aksu-Koç and Slobin, 1985). The paper also reviews a feature of adult-child interaction in Turkish – variation sets – that display interesting morphosyntactic properties while facilitating effective interaction between the caregiver and the child. As the child develops language and cognitive skills, so does the parent change the nature of child-directed language. In the process, the child learns about the structure of the language, the semantics of words and constructions, and conversational pragmatics.

The study of variation sets is still preliminary, but it hints at the advantages of "putting interaction back into child language". We can see that word-order changes, substitution of the past tense marker with the evidential marker, use of relative clauses in segmenting events for the child, and change of verbal morphology all occur in realtime interaction with specific pragmatic intentions on the part of the speaker. As analysts, we need to "regain sight" of those intentions and their relation to morphosyntax.

# References

- Aksu, A. (1978). Development of the expression of cause-effect relations in Turkish. Papers and Reports on Child Language Development, No. 5t (Department of Linguistics, Stanford University), pp. 129-139.
- Aksu-Koç, A. A., & Slobin, D. I. (1985). Acquisition of Turkish. In Slobin, D. I. (Ed.), *The crosslinguistic study of language acquisition, Vol. 1: The data.* (pp.839-878) Hillsdale, NJ: Lawrance Erlbaum Associates.
- Aksu-Koç, A. A. (1998). *The acquisition of aspect and modality: The case of past reference in Turkish*. Cambridge, UK: Cambridge University Press.
- Baker, N.D., & Nelson, K.E. (1984). Recasting and related conversational techniques for triggering syntactic advances in young children. *First Language*, 5, 3-22.
- Budwig, N. (1995). *A developmental-functionalist approach to child language*. Mahwah, NJ: Lawrence Erlbaum.
- Clancy, P. M. (in press). The lexicon in interaction: Developmental origins of preferred argument structure. In J. Du Bois, L. Kumpf, & W. Ashby (Eds.), *Preferred* argument structure: Grammar as architecture for function. Amsterdam/Philadelphia: Benjamins.
- Du Bois, John W. (in press). Discourse and grammar. In M. Tomasello (Ed.), *The new psychology of language: Cognitive and functional approaches to language structure. Vol. 2.* Mahwah, NJ: Lawrence Erlbaum.
- Ekmekçi, Ö. (1979). Acquisition of Turkish: A longitudinal study on the early language development of a Turkish child. Unpublished doctoral dissertation, University of Texas, Austin.
- Ervin-Tripp, S. (1989). Speech acts and syntactic development: Linked or independent? *Berkeley Cognitive Science Report*, No. 61.
- Farrar, M. J. (1990). Discourse and the acquisition of grammatical morphemes. *Journal* of Child Language, 17, 607-624.
- Fernald, A. & Morikawa, H. (1993). Common themes and cultural variations in Japanese and American mothers' speech to infants. *Child Development*, 64, 637-656.
- Hoff-Ginsberg, E. (1990). Maternal speech and the child's development of syntax: a further look. *Journal of Child Language*, 17, 85-99.
- Ketrez, N. (1999). What does a child have to acquire when acquiring passive? Paper presented at the Ninth International Conference on Turkish Linguistics, Oxford, UK.
- Küntay, A., & Slobin, D. I. (1995). Nouns and verbs in Turkish child directed speech. In MacLaughlin, D. & McEwen, S. (Eds.), *Proceedings of the 19th Annual Boston University Conference on Language Development 1*. (pp.323-334) Somerville, MA: Cascadilla Press.
- Küntay, A., & Slobin, D. I. (1996). Listening to a Turkish mother: Some puzzles for acquisition. In Slobin, D.I., Gerhardt, J., Kyratzis, A., & Guo, J. (Ed.), Social interaction, social context, and language: Essays in honor of Susan Ervin-Tripp. (pp.265-286) Hillsdale, NJ: Lawrence Erlbaum.
- Küntay, A., & Slobin, D. I. (1999). The acquisition of Turkish as a native language. A research review. *Turkic Languages*, 3, 151-188.

- Küntay, A., & Slobin, D.I. (2001). Discourse behavior of lexical categories in Turkish child-directed speech: Nouns vs. Verbs. *Proceedings for the VIIIth Congress for the International Association for the Study of Child Language*, San Sebastian/Donostia, Basque Country/Spain.
- Nelson, K. E. (1977). Facilitating children's syntax acquisition. *Developmental Psychology*, 13, 101-107.
- Nelson, K. E., Heimann, M., Abuelhaija, L. A., & Wroblewski, R. (1989). Implications for language acquisition models of children's and parents' variation in imitation. In G.E. Speidel and K.E. Nelson (Eds.), *The many faces of imitation in language learning*. Berlin: Springer.
- Özcan, H. F. (1996). Is two-stage model of grammatical development universal? A study on morphological agreement in the development of L1 Turkish. Paper presented at the Seventh International Congress for the Study of Child Language, 14-19 July, Istanbul, Turkey.
- Schiffrin, D. (1987). Discourse markers. Cambridge: Cambridge University Press.
- Slobin, D. I. (1985). Why study language crosslinguistically? In D. I. Slobin (Ed.), *The crosslinguistic study of language acquisition, Vol. 1. The data* (pp. 3-24). Hillsdale, NJ: Lawrence Erlbaum.
- Slobin, D. I., Küntay, A., & Hoiting, N. (2001, April). Parental variations on a theme as a guide to language form and use. Paper presented to the Biennial Meeting of the Society for Research in Child Development, Minneapolis, MN.
- Topbaţ, S. & Maviţ, I. & Baţal, M. (1997). Acquisition of bound morphemes: Nominal case morphology in Turkish. In Ýmer, K. & Uzun, N. E. (Ed.), *Proceedings* of the VIIIth International Conference on Turkish Linguistics, 7-9 August, Ankara University, pp. 127-137.
- Verhoeven, L. (1991). Acquisition of Turkish in a monolingual and bilingual setting. In Boeschoten, H. & Verhoeven, L. (Ed.), *Turkish linguistics today* (pp.113-149). Leiden: Brill.