

Asymmetries in the First-Language Acquisition of Subject and Non-Subject Head-Final Relative Clauses in Turkish

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This study examines the acquisition pattern of head-final relative clauses (RCs) in Turkish using an elicited production experimental technique. A large body of work on the acquisition of head-initial relative clauses have found that children perform better with subject-gapped relatives (SGRs) than with object-gapped relatives (OGRs) (Zukowski, 2001 (*English*); Diessel & Tomasello, 2005 (*English, German*); Tjung, 2005 (*Indonesian*)). However, the source of this asymmetry is unclear in languages with head initial RCs. In such languages (like English), the head and the gap are both linearly and structurally closer in SGRs than they are in OGRs. The structure of head-final relatives in Turkish can differentiate between the linear and structural distance hypotheses. In SGRs the head and gap are structurally closer to each other than the head and the gap in OGRs. In terms of linear distance, however, OGs are closer to the head than SGs (of transitive clauses). Thus, Turkish provides a clear test case for these competing hypotheses. If linear distance is critical, Turkish children should find SGRs more difficult, while if structural distance is critical, they should find OGRs more difficult.

Since naturalistic data provides very few cases of this construction in Turkish (as discussed in Slobin, 1986) we conducted an elicited production experiment with 20 Turkish children (mean age=4;5) and 10 adult controls. The design is a 2 x 3 within subject design, intended to examine the effect of the gap position (subject-gap vs. object-gap) and the effect of embedding (free-standing, left-branching, center-embedded RCs).

The six test conditions are given in (3)-(5). The task is to prompt the participants to produce RCs by asking them to describe the changes in the pictures presented to them. The pictures and the questions were carefully designed to elicit RCs with the intended gap position and the type of embedding (see Zukowski, 2001; Hsu, 2006; Hsu, Hermon and Zukowski, 2006).

Our results show that children perform better with SGRs than with OGRs for head-final RCs in Turkish: (i) Children produced more correct RC responses in the subject-gap condition, across all three types of embedding conditions; (ii) Children produced more RC-related ungrammatical responses in the object-gap condition; (iii) Children avoided using RC structure more often in the object-gap condition.

This finding in Turkish not only argues against linear-distance-based hypotheses but also provides crucial evidence to support a structural-distance-based account for the subject-object asymmetry in children's acquisition of relative clauses. Similar results have recently been reported for Chinese (another head final RC languages in Hsu, 2006; and HHZ, 2006). We therefore argue that that the source of the asymmetry in both head initial and head final RC languages is due to the structural distance hypothesis (O'Grady, 2000; Hawkins, 1999). The asymmetry in children's acquisition of RCs in Turkish then follows from processing difficulties due to the increase in structural domain size for computing the filler-gap relation with object gaps, and not from the linear distance between the filler and the gap.

Moreover, since the preference for SGRs in Turkish child language mirrors the preferences found in English, Indonesian and Chinese (all languages in which subject and object gapped RCs do not differ in morphological complexity), we can also argue against a proposal (cf. Slobin, 1986) which ties the asymmetry directly to the complex morphology of OG relative clauses. Our explanation then supports the analysis for these suffixes in Kornfilt (2004, 2006) which views the indicative marker in SGRs as no less complex than the marker in OGRs (since *-DIK*, the general indicative nominalizer, is found with any kind of indicative embedding, including RCs, but gets converted to *-(y)An*, when the abstract complementizer agrees with the subject "gap"). SGRs are therefore as complex as OGR suffixes, placing the blame for the greater difficulty with OGRs on greater structural distance rather than morphological complexity.

EXAMPLES:

(1)Free standing

a. Subj-gapped RC:

Resim yap -an kız
 Painting make-indic.NOM girl
 ‘the girl who is drawing a picture’

b. Obj-gapped RC

kız-in yakala-dıĝ -1 kedi
 girl-GEN catch – indic.NOM -3sg cat
 ‘the cat that the girl is catching’

(2) Left-branching RC (modifying matrix subject)**a. Subj-gapped RC:**

Resim yap -an kız kırmızı ol -du
 Painting make- indic.NOM girl red become-PST
 ‘the girl who is drawing a picture turned red’

b. Obj-gapped RC:

kız-in yakala-dıĝ -1 kedi kırmızı ol -du
 girl-GEN catch – indic.NOM -3sg cat red become-PST
 ‘the cat that the girl is catching turned red’

(3) Center-Embedded RC (modifying matrix object)**a. Subj-gapped RC:**

Fare resim yap -an kız-a bak-ıyor
 Mouse painting make- indic.NOM girl-DAT look-PROG
 ‘The mouse is looking at the girl who is drawing a picture’

b. Obj-gapped

Fare kız-in yakala-dıĝ -1 kedi-(y)-e bak-ıyor
 mouse girl-GEN catch – indic.NOM -3sg cat -DAT look-PROG
 ‘The mouse is looking at the cat that the girl is catching’

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