(Mis)matches in Sluicing Constructions in Turkish

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Background: Existing analyses in Turkish claim that wh-in-situ languages do not have bona fide sluicing constructions (SCs) as in English. ^[2, 3, 5, 6, 7,8] However, in most if not all of these analyses, sentences under investigation are reported as grammatical or ungrammatical based on informal judgments, which is potentially questionable because of the informal way of data collection.

Current study tests the acceptability of Turkish SCs in an experiment with two parameters: grammatical function of wh-remnant in sluiced clause (object/subject of embedded clause) and case marking on wh-remnant relative to case on its non-sluiced indefinite correlate. This case marking may be identical on two phrases (case on wh-remnant is identical to case on correlate), which is a *match*-condition, or they may carry different case, which is a *mismatch*-condition. Additionally, the acceptability of wh-remnants in both conditions was tested depending on whether they carry tense or not, which is possible in Turkish (see page 3 for items). [1, 6]

Despite the contradictory claims, a case mismatch between wh-remnants and correlates in SCs was expected to be acceptable. Moreover, a case match between subject wh-remnants (SRs) and correlates previously reported as ungrammatical was predicted to be acceptable.

Method: Object wh-remnants (ORs) and SRs were analyzed separately due to their different positions. In ORs (Analysis I), a three-way ANOVA was employed manipulating match type (match, match-tense, mismatch, mismatch-tense), case type (accusative, dative, ablative) and wh-type (who, what). In SRs (Analysis II), a two-way ANOVA was utilized manipulating same match type and wh-type.¹ Note that in Turkish, embedded subjects when nominalized bear only genitive, so case type was not possible here. Data was collected from 216 participants on LimeSurvey based on a 1 (unacceptable) to 5 (acceptable) scale.^[4]

Results: The main findings were as follows: In ORs, there was a main effect of match type (F_1 (2.42, 519.79) = 238.47, p < .001, η 2 = .526; F_2 (3, 36) = 96.1, p < .001, η 2 = .889), and a main effect of case type (F_1 (2, 430) = 56.79, p < .001, η 2 = .209; F_2 (2, 36) = 6.94, p = .003, η 2 = .278). There was also a significant interaction between case and match types (F_1 (4.19, 901.58) = 149.05, p < .001, η 2 = .409; F_2 (6, 36) = 21.21, p < .001, η 2 = .779). In SRs, results yielded a significant main effect of match type (F_1 (2.75, 591.14) = 128.63, p < .001, η 2 = .374; F_2 (3, 12) = 36.09, p < .001, η 2 = .900) (see Figure 1 and 2 for ratings and interactions).

Discussion: High ratings of match conditions exemplify case-connectivity, which might suggest that Turkish has English-type SCs, but interestingly accusative behaves differently in match-tense condition (unacceptable) than other two cases considering all of them marked the same grammatical function of wh-remnants (direct objects). Genitive behaves like accusative in that sense. Also, unlike what was claimed, [3] genitive on SRs seems acceptable. Since, to the best of my knowledge, there are no studies investigating possible case differences of whremnants of SCs, this finding is important for theoretical analysis of Turkish SCs and psycholinguistic investigations on connectivity effects in ellipsis in general.

¹ Parametric statistics was preferred in the analyses as there have been claims that they can be performed because of their robustness and practicality (Bross, 2019; Pell, 2005; Stevens, 1951; Sullivan & Artino Jr, 2013 among many others). Moreover, studies comparing parametric and non-parametric tests on ordinal data have shown that the differences in statistical power and error rates between them are minor and both are appropriate for Likert scales (Endresen & Janda, 2017; Winter et al., 2010).

FIGURES:

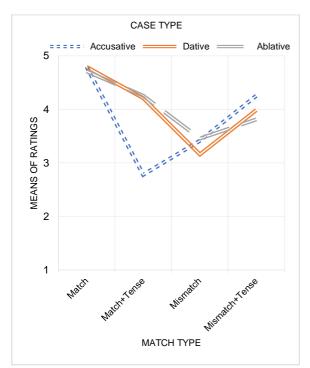


Figure 1. Interaction between Case Type and Match Type

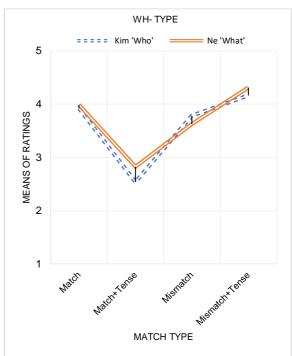


Figure 2. Interaction between Match Type and Wh-type with Subject Wh-remnant

confidence intervals of all averages are as follows (for 95% CI):

accusative

match: 4.74, 4.84; match-tense: 2.64, 2.92 mismatch: 3.26, 3.57; mismatch-tense: 4.14, 4.37 **dative**

match: 4.74, 4.84; match-tense: 4.1, 4.32 mismatch: 3, 3.31; mismatch-tense: 3.85, 4.13 ablative

match: 4.65, 4.77; match-tense: 4.14, 4.36 mismatch: 3.32, 3.59; mismatch-tense: 3.66, 4.96

confidence intervals for averages are as follows for 95% CI:

kim 'who'

match: 3.75, 4.08; match-tense: 2.36, 2.71 mismatch: 3.62, 3.94; mismatch-tense: 4.04, 4.31 **ne 'what'**

match: 3.82, 4.15; match-tense: 2.63, 3.02 mismatch: 3.47, 3.79; mismatch-tense: 4.2, 4.42

References: [1] Ince, A. 2006. Pseudo-sluicing in Turkish. [2] Ince, A. 2009. Dimensions of ellipsis: Investigations in Turkish. [3] Ince, A. 2012. Sluicing in Turkish. [4] Limesurvey GmbH. 2012. LimeSurvey: An Open-Source survey tool. [5] Palaz, B. 2018. Towards a Unified Account of Clausal Ellipsis in Turkish: A Non-Movement Analysis. [6] Palaz, B. 2019. Pseudo-sluicing in Turkish: A pro-form analysis. [7] Şener, S. 2012. Sluicing without movement. [8] Zidani-Eroğlu, L. 2019. Turkish Sluicing or Stripping? Why not both?

ITEMS*:

ANTECEDENT CLAUSE		_
(1) Fatih-Ø birin-i gör-dü-Ø ama		_
Fatih-NOM sbACC see-PAST-3SG but		
ν̃'Fatih saw someone but'		
* Fatili-Nom sbAcc see-PAST-SSG but 'Fatih saw someone but' a. kim-i hatırla-m-ıyor-um. who-ACC remember-NEG-PROG-1SG 'I don't know who.' b. *kim-i-ydi hatırla-m-ıyor-um. who-ACC-PAST remember-NEG-PROG-1SG 'lit. I don't know who.' c. kim hatırla-m-ıyor-um. who remember-NEG-PROG-1SG 'I don't know who that is.'	Match	
who-ACC remember-NEG-PROG-1SG		
∑ ″ 'I don't know who.'		_
'I don't know who.' b. *kim-i-ydi hatırla-m-ıyor-um. who-ACC-PAST remember-NEG-PROG-1SG 'lit. I don't know who.' c. kim hatırla-m-ıyor-um. who remember-NEG-PROG-1SG 'I don't know who that is.' d. kim-di hatırla-m-ıyor-um.	Match-Tense	Д
± ₹ who-ACC-PAST remember-NEG-PROG-1SG		Ξ
≥ ਹ'lit. I don't know who.'		- T
ြ c. kim hatırla-m-ıyor-um.	Mismatch	MATCH TYPE
who remember-NEG-PROG-1SG		₹
☐ ☐ 'I don't know who that is.'		_ ≥
**	Mismatch-Tense	
who-PAST remember-NEG-PROG-1SG		
'I don't know who that was.'		
ANTECEDENT CLAUSE	·	_
(2) Fatih-Ø birin-in gel-diğ-in-i söyle-di-Ø		
Fatih-NOM sbGEN come-NMLZ-POSS.3SG-ACC tell-PAST-3	SG DUT	
'Fatih said that someone came' a. kim-in hatırla-m-ıyor-um. who-GEN remember-NEG-PROG-1SG 'I don't know who.' b. *kim-in-di hatırla-m-ıyor-um. who-GEN-PAST remember-NEG-PROG-1SG 'lit. I don't know who.' c. kim hatırla-m-ıyor-um. who remember-NEG-PROG-1SG 'I don't know who.'	Matab	
a. kim-in hatırla-m-ıyor-um. who-GEN remember-NEG-PROG-1SG	Match	
₩no-gen remember-Neg-PROG-18G		
b. *kim-in-di hatırla-m-ıyor-um.	Match-Tense	-
当 の b. * kim-in-di hatırla-m-ıyor-um. > < who-GEN-PAST remember-NEG-PROG-1SG	Match-Tense	Ĺ
ilit. I don't know who.'		7
b. *kim-in-di hatırla-m-ıyor-um. who-GEN-PAST remember-NEG-PROG-1SG 'lit. I don't know who.' c. kim hatırla-m-ıyor-um. who remember-NEG-PROG-1SG 'I don't know who that is.' d. kim-di hatırla-m-ıyor-um.	Mismatch	MATCH TYPE
ਲ ਹੈ who remember-NEG-PROG-1SG	Wildinatori	\vdash
il don't know who that is.'		¥
d. kim-di hatırla-m-ıyor-um.	Mismatch-Tense	
who-past remember-neg-prog-1sg		
'I don't know who that was.'		

^{*} There are also items with the wh-word *ne* 'what' manipulated in the same pattern, but they were not shared here due to space limitation.

** The items here were presented only with the accusative case *-i* due to space limitation but manipulated by two other cases whose results were reported in the abstract and in Figure 1 (i.e., dative and ablative).