

**EMBEDDED ROOT PHENOMENA IN TURKISH: A PARATACTIC ANALYSIS OF *ki*-CLAUSES**

This paper proposes a unified treatment for Turkish embedded clauses headed by the complementizer *ki*. Such embedded *ki*-clauses are generally thought of as just another, albeit extraordinary, case of subordination. However, arguments are provided that *ki*-clauses are an instance of parataxis, and seemingly puzzling syntactic/semantic properties of such clauses are explained by virtue of this paratactic analysis. A crosslinguistic comparison is made to show that this phenomenon is not exclusive to Turkish.

**I. Background:** The most common embedded-clause pattern in Turkish is the “native” nominalized subordinate clause (1). Such a clause is case-marked, has a genitive subject, nominal agreement, and—in its default position—precedes the matrix verb (i.e., the matrix clause conforms to the regular Turkish SOV pattern). However, Turkish also has the embedded clause headed by *ki* (2), often referred to as an instance of a non-native (Indo-European) pattern. A *ki*-clause lacks case-marking, exhibits a nominative subject, contains a finite verbal form, and necessarily occurs to the right of the matrix verb (i.e., the matrix clause exhibits SVO order, not found elsewhere in Turkish). Essentially, the *ki*-clause resembles the Turkish matrix clause (3), and thus exhibits root properties:

- (1) Hakan-Ø [Ahmet-in okul-a git-tiğ-in]-i san-ıyor-Ø  
Hakan-NOM Ahmet-GEN school-DAT go-DIK-3POSS]-ACC believe-PROG-3SG  
'Hakan believes that Ahmet went to School.' *Standard Subordinate Clause*
- (2) Hakan-Ø san-ıyor-Ø [*ki* Ahmet-Ø okul-a git-ti-Ø]  
Hakan-NOM believe-PROG-3SG *ki* Ahmet-NOM school-DAT go-PAST-3SG  
'Hakan believes that Ahmet went to School.' *Ki-clause*
- (3) Ahmet-Ø okul-a git-ti-Ø.  
Ahmet-NOM school-DAT go-PAST-3SG  
'Ahmet went to School.' *Matrix Clause*

The element *ki*, known to be borrowed from Persian, has predominantly been analyzed as a complementizer that heads subordinate clauses (Kornfilt 1997, 2005; Göksel and Kerslake 2005). Importantly, this subordination analysis of the *ki*-clause attributes its unusual surface properties to foreign origin (i.e., their “Indo-Europeanness”), but apart from this, treats it in essentially the same way as any other subordinate clause. However, a closer look at the syntax/semantics/pragmatics interface of *ki*-clauses reveals that many of their properties cannot be accounted for by the subordination analysis.

**II. Properties of *ki*-Clauses:** *Ki*-clauses exhibit features and restrictions that are not typical of standard subordination in Turkish (or elsewhere). Most importantly, the *ki*-clause must be asserted. Consequently, the main clause predicate that combines with a *ki*-clause must be *assertive*, as in (4a). Non-assertive predicates, including inherently negative verbs and negated verbs, cannot take a *ki*-clause (4b-d). Questioning a *ki*-clause or questions inside the *ki*-clause are also ruled out (4e):

- (4) a. Anla-dı-m [*ki* hiçbir şey değış-me-yecek-Ø].  
realize-PST-1SG *ki* nothing change-NEG-FUT-3SG  
'I realized that nothing will change.' *Assertive*
- b. \*(Çok) Şaşır-dı-m [*ki* Ahmet gel-di-Ø].  
(very) be.surprised-PST-1SG *ki* Ahmet come-PST-3SG  
Intended: 'I am/got (very) surprised that Ahmet came.' *Non-assertive (true factive)*
- c. \*Mümkün *ki* Ahmet gel-ecek-Ø.  
possible *ki* Ahmet come-FUT-3SG.  
Intended: 'It's possible that Ahmet will come.' *Non-assertive (non-presuppositional)*
- d. \*Başbakan inkar et-ti-Ø/ anla-ya-ma-dı-Ø *ki* kitap yasakla-n-dı-Ø.  
Prime minister deny do-PST-3SG/ realize-ABIL-NEG-PST-3SG *ki* book forbid-PASS-PST-3SG  
Intended: 'The prime minister denied/ didn't realize that the book was forbidden.' *Negation*
- e. \*San-ıyor-sun [*ki* Ahmet kim-i öp-tü-Ø]?  
Hear-PST-2SG *ki* Ahmet who-ACC kiss-PST-3SG  
Intended reading: 'Whom did you believe that Ahmet kissed?' *Question*

Next, *ki*-clauses cannot be topicalized (5a); they have a fixed position, unlike subordinate clauses (5b):

- (5) a. \*[*Ki* Ahmet Londra-ya uç-tu-Ø] ben-Ø bil-iyor-du-m.  
 [*Ki* Ahmet Londra-DAT fly-PST-3SG] I-NOM know-PROG-PST-1SG  
 Intended: ‘That Ahmet flew to London I knew.’ *Topicalized ki-clause*
- b. [Ahmet-in Londra-ya uç-tuğ-un]-u ben-Ø bil-iyor-du-m.  
 [Ahmet-GEN Londra-DAT fly-DIK-3SG]-ACC I-Nom know-PROG-PST-1SG  
 ‘That Ahmet flew to London I knew.’ *Topicalized Subordinate Clause*

Furthermore, a quantifier in the matrix clause cannot bind a pronoun inside the *ki*-clause:

- (6) \*Herkes<sub>i</sub> dedi *ki* [o/Ø<sub>i</sub> geç gel-ecek-Ø]  
 Everyone<sub>i</sub> said *ki* [s/he/pro<sub>i</sub> late come-FUT-3SG]  
 Intended: ‘Everyone<sub>i</sub> said that he<sub>i</sub> will come late.’

In addition, Turkish *ki*-clauses are limited to one per matrix clause:

- (7) \*Duydum [*ki* [Ayşe İstanbul-a gitmiş]] (ve) [*ki* [Ahmet İzmir-e uçmuş]].  
 I.heard *ki* Ayşe İstanbul-DAT went and *ki* Ahmet İzmir-DAT flew  
 Intended: ‘I heard that Ayşe went to İstanbul and that Ahmet flew to İzmir.’

In sum, these (and several other) properties of *ki*-clauses are not expected under a subordination analysis. A closer look at the properties of *ki*-clauses reveals their systemic nature, and not merely an accidental sum of peculiarities pertaining to foreign origin.

**III. Analysis:** The analysis presented in this paper thus departs from the subordination analysis.

Moreover, a coordination analysis is ruled out as well, since it makes, among others, two incorrect predictions: first, that a *ki*-clause is iterative (a counterexample for this is 7, where at most one *ki*-clause per matrix clause is permitted); and second, that the order of conjuncts can be changed (ex. 8b is a counterexample; recall also ex. 5, where the *ki*-clause necessarily has to follow its matrix predicate):

- (8) a. [<sub>A</sub> Anla-dı-m] *ki* [<sub>B</sub> hiçbir şey değış-me-yecek-Ø]. *A ki B*  
 realize-PST-1SG nothing change-NEG-FUT-3SG  
 ‘I realized nothing will change.’
- b. \* [<sub>B</sub> Hiçbir şey değış-me-yecek-Ø] *ki* [<sub>A</sub> anla-dı-m]. *\*B ki A*

Instead, it is argued that *ki*-clauses are paratactically connected to their matrix clauses. On the semantic side of the proposal, it is argued that *ki*-clauses have an independent *assertoric* illocutionary force, and as such *ki* has the function of conjoining two independent speech acts (two root CPs). It is shown that various semantic/ pragmatic restrictions regarding *ki*-clauses follow from this property. Syntactically, *ki* itself is analyzed to be a connector of category  $C^0$  (being thus more restrictive than other coordinating conjuncts, such as *and*), and hence the clause it heads can only adjoin to another CP (and not just any other XP), thus, explaining the ungrammaticality of (7). To account for the relation that a *ki*-clause has with a position inside the matrix clause and the fact that the matrix verb that takes a *ki*-clause must have an object, Uriagereka and Torrego’s (2002) derivational analysis of parataxis is adopted. It is further shown that the set of properties of Turkish *ki*-clause is not an isolated, unusual phenomenon. We see that many of the properties of *ki*-clauses are observed in languages as diverse as Frisian (embedded V2 clauses with a complementizer) and Korean (embedded root clauses). A brief comparison will also be made with Hindi *ki*.

**IV. Selected References:** De Haan, G. J. (2001). More is going on upstairs than downstairs: embedded root phenomena in West Frisian. *The Journal of Comparative Germanic Linguistics*, 4 (1), 3-38. Diesing, M. (1992). *Indefinites*. MIT Press. Dwivedi, V. D. (1994). *Syntactic dependencies and relative phrases in Hindi*. Ph.D. diss., UMass Amherst. Göksel, A., & Kerslake, C. (2005). *Turkish: A comprehensive grammar*. Routledge. Hoeksema, J., & Napoli, D. N. (1993). Paratactic and subordinative so. *Journal of Linguistics*, 29 (2), 291-314. Hooper, J. B., & Thompson, A. (1973). On the applicability of root transformation. *Linguistic Inquiry*, 4(4), 465-497. Kornfilt, J. (1997). *Turkish*. Routledge. Kornfilt, J. (2005b). Asymmetries between pre-verbal and post-verbal scrambling in Turkish. In J. Sabel & M. Saito (Eds.), *The Free Word Order Phenomenon: Its Syntactic Sources and Diversity* (pp. 163-179). Mouton de Gruyter. Uriagereka, J., & Torrego, E. (2002). Parataxis. In J. Uriagereka (Ed.), *Derivations: Exploring the dynamics of syntax* (pp. 253-265). London: Routledge. Yoon, S. (2011). *‘Not’ in the mood: The syntax, semantics, and pragmatics of evaluative negation*. Ph.D. diss., University of Chicago.