

Structural Variation in Turkish Complex Predicates

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1. Introduction

Turkish complex predicates (CPrs) composed of a non-verbal element (NVE) and the verb *etmek* form a large number of verbs with various argument structures. In the present study, we look at transitive and apparently intransitive CPrs formed with *etmek* and provide evidence that there are at least two distinct structures underlying each type. Transitive CPrs comprise two structures, one in which the NVE denotes the result state of the theme and as such heads a small clause (Type I), and one in which the NVE is an eventive nominal (Type II). Apparently intransitive CPrs are similarly made up of two distinct structures: one in which the preverbal bare noun has no status as an argument (Type III), and one in which it is the non-case-marked direct object of *etmek* in its use as a heavy rather than as a light verb (Type IV).

We expand on Folli, Harley & Karimi's (2005) analysis of Persian CPrs, extending it to Turkish. The analysis is formulated within the framework of Distributed Morphology (DM). In DM, morphemes—more properly termed “Vocabulary Items” (VI)—realize terminal syntactic nodes. Furthermore, a VI may be *underspecified*—i.e., it need not be fully specified for all of the features of a node in order to realize it. The primary requirement is that the morpheme not have any features incompatible with the node. Herein, it is argued that *etmek* (more properly just *et-*) is a verbalizer with no other featural content. It is the complement of *etmek* that determines the structure of the CPr. The advantage of this approach is that a single vocabulary item can be employed to realize a wide range of structures.

2. Transitive CPrs

Despite superficial similarities, transitive CPrs with *etmek* fall into (at least) two distinct classes, herein designated Type I and Type II. Type I CPrs are transitive. The internal argument is the theme of a change of state, and the external argument is the cause of the change.

- (1) *Mehmet* *Berna-yı* *rahatsız* *et-ti.*
Mehmet Berna-ACC uncomfortable do-PST
'Mehmet disturbed Berna.'

The syntactic category of the non-verbal element ranges over bare nouns, case-marked nouns, and adjectives. The intransitive version of Type I CPrs is formed by changing the LV from *etmek* to *olmak* 'become.'

- (2) *Berna rahatsız ol-du.*
 Berna uncomfortable become-PST
 ‘Berna was disturbed.’

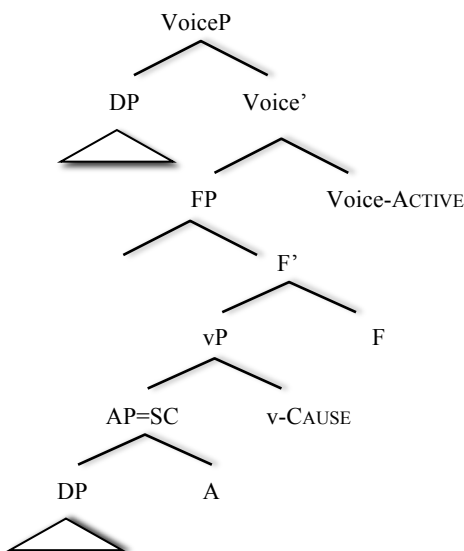
This is the same pattern found in transitive Persian CPRs. The LV *kardan* ‘do’ is used in the transitive CPR, and *šodan* ‘become’ with the intransitive.

- (3) *Ali Farnâz-o nârâhat kard.*
 Ali Farnaz-ACC uncomfortable did
 ‘Ali disturbed Farnaz.’

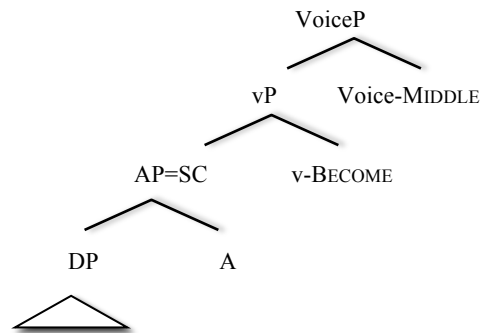
- (4) *Farnâz nârâhat šod.*
 Farnaz uncomfortable became
 ‘Farnaz was disturbed.’

Folli, Harley & Karimi (2005) (henceforth FHK) show that the complement of such CPRs in Persian is an Adjective Phrase (AP) or Predicate Phrase (PredP), which forms a small clause (SC) with the internal argument, and cite this as overt evidence of the structure argued for in Hale & Keyser (1993). The same analysis holds for the Turkish equivalents.

- (5) a. Transitive CPR structure



- b. Intransitive CPR structure



In Turkish, the nodes v-CAUSE and v-BECOME are realized by *etmek* and *olmak*, respectively, and in Persian by *kardan* and *šodan*. Note that, in FHK, the external argument is introduced in the specifier of vCAUSEP. Herein we follow Pylkkänen (2008) in including a higher Voice projection (distinct from little v). Active Voice, which selects for vCAUSE,

has an external argument in its specifier. Either way, the LV (little *v*) is responsible for the presence or absence of an external argument, whether directly (as in FHK), or indirectly via selection (in a Pykkänen-style approach). Nothing herein hinges on the particulars of the mechanism for introducing the external argument (though see Key 2013 for further motivation for VoiceP).

Type II CPrs are also transitive. However, the internal argument does not undergo a change of state, but is the theme of an action.

- (6) *Mehmet Berna-yı davet et-ti.*
 Mehmet Berna-ACC inviting do-PST
 ‘Mehmet invited Berna.’

Superficially, these look like transitive Type I CPrs. There are, however, important differences. First, the NV element in Type II does not show the same range of variation as that of Type I. It is always an eventive nominal. Second, Turkish Type II CPrs (unlike Type I) cannot be made intransitive by alternating the LV.

- (7) **Berna davet ol-du.*
 Berna inviting become-PST
 Intended: ‘Berna was invited.’

This is surprising. If the LV *etmek* is responsible for the presence of an external argument, and hence the transitivity of the verb, as it is in Type I, then replacing it with *olmak* should result in an intransitive verb. This is highlighted by the fact that in Persian, replacing *kardan* with *šodan* achieves this.

- (8) *Farnâz da'vat šod.*
 Farnaz inviting became
 ‘Farnaz was invited.’

We are left with the fact that Type II CPrs do not allow transitivity alternation via LV alternation, unlike Type I. If the LV determines transitivity in Type I (and in all Persian CPrs), then it would appear not to in Type II. We hypothesize that in Type II, transitivity is determined by the non-verbal element rather than the LV. It can take an accusative argument on its own, even in the absence of an LV.

- (9) *Kılıçdaroğlu, Auster'i davet için düğmeye bas-tı*
 Kılıçdaroğlu Auster-ACC inviting for button-DAT press-PST
 ‘Kılıçdaroğlu pressed the button to invite Auster.’

- (10) *Hasta-yı ziyaret nasıl ol-ur?*
 patient-ACC visiting how be-AOR
 ‘How is visiting patients to be?’

Thus, the non-verbal element of Type II CPRs is the case-assigning noun (CAN) discussed in Keskin (2005). They contrast with the NV element of Type I CPRs, which cannot assign accusative case.

- (11) **Ali Berna-yı rahatsız için uğraş-tı.*
 Ali Berna-ACC uncomfortable for strive-PST
 Intended: ‘Ali strove to disturb Berna.’

In this way, too, Type II CPRs differ from their apparent Persian equivalents. In Persian, the nominal that appears as an NV element, whether eventive or non-eventive, can never check accusative case in the absence of the LV.

- (12) **Farnâz-o da'vat xub mi-sh-e*
 Farnaz-ACC inviting good DUR-become-3SG
 Intended: ‘Visiting Farnaz would be good.’

Thus far the generalization holds: If a transitive CPR cannot be made intransitive by alternating the LV, then the non-verbal element can take an accusative argument with no LV (Type II). If LV alternation results in a transitivity alternation, the non-verbal element cannot take an accusative argument in the absence of the agentive LV.

In Type II, the LV is not responsible for the presence of an external argument, or for the transitivity of the CPR. It serves no function other than to turn the nominal into a verb, and is otherwise featurally “empty.” It will realize a verbal terminal node if and only if there is no vocabulary item that is more highly specified for that node.

Turkish eventive nominals differ from their Persian counterparts. The key to the structure of Type II CPRs, then, lies in the structure of the nominal itself. It can take an accusative object on its own. This is problematic on standard assumptions about structural case (Chomsky 2001), as Kornfilt (2003) and Keskin (2005) show that accusative case in Turkish is structural, and that it contrasts with inherent cases such as dative. Broadly speaking, there are two possibilities for the nominal. It must either include an accusative-assigning projection within its structure, or be selectable by an accusative-assigning projection. Within DM, the first possibility is ruled out by the fact that these CPRs are passivizable.

- (13) *Berna davet ed-il-di.*
 Berna inviting do-PASS-PST
 ‘Berna was invited.’

On the assumption that higher structures cannot suppress lower structures, the passive construction cannot contain an accusative-assigning head within it. We are therefore left with the second option: the highest projection of the nominal is selectable by Voice-ACTIVE and/or an accusative-assigning head. We propose that the Turkish nominals realize the fused terminal nodes $\sqrt{\text{n.v}}$.

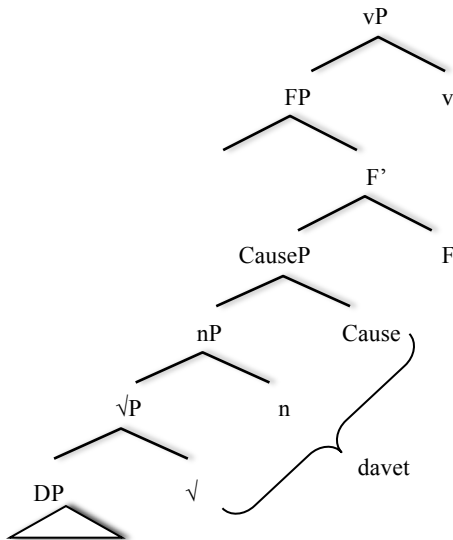
- (14) $[\sqrt{\text{v}}] [\text{n}] [\text{v CAUSE}] \rightarrow [\sqrt{\text{n v CAUSE}}]$

This complex head is subjected to a filter, $*[n\ v]$, which prevents the nominalizing head n and the verbalizing head v from occurring on the same node. This in turn triggers impoverishment and deletion of the $[v]$ feature.

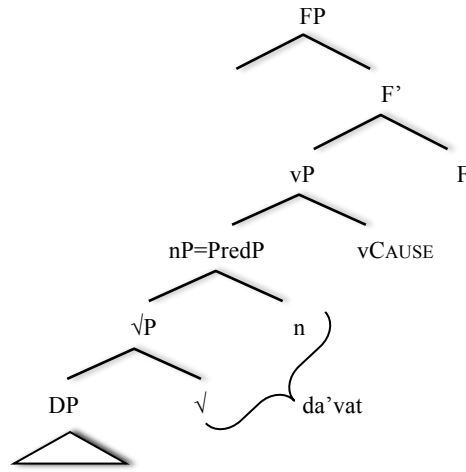
(15) $[\sqrt{n\ v\ CAUSE}] \rightarrow [\sqrt{n\ CAUSE}]$

The resulting feature bundle is what is realized by the eventive nominal Vocabulary Item.

(16) a. Turkish:



a. Persian:



The Turkish nominal can be selected for directly by FP, and thus have an accusative object regardless of whether or not the light verb is present. In these CPrs, the light verb is devoid of ‘flavor’ (CAUSE, BECOME, DO) and is simply a verbalizer.

There are a number of CPrs that exhibit characteristics of both Types I and II: They have intransitive alternants in *olmak*, but the nominal can independently take an accusative argument.

- (17) a. *Mehmet Berna-yı ikna et-ti.*
 Mehmet Berna-ACC convincing do-PST
 ‘Mehmet convinced Berna.’
- b. *Berna ikna ol-du.*
 Berna convincing become-PST
 ‘Berna became convinced.’
- c. *Mehmet Berna-yı ikna için uğraş-tı.*
 Mehmet Berna-ACC convincing for strive-PST
 ‘Mehmet strove to convince Berna.’

These facts are easily accommodated in a realizational framework such as DM. A vocabulary item such as *ikna* can realize the head of a small clause Predicate Phrase, or of an eventive Noun Phrase. These items, like *etmek*, are underspecified, and hence a surface string such as *ikna etmek* is ambiguous between two realizational structures. In a Type I CPr, a cross-over nominal such as *ikna* realizes the PredP, while *etmek* realizes v-CAUSE, and in a Type II CPr, a cross-over nominal realizes nP-CAUSE, and *etmek* realizes v.

It must be acknowledged, however, that the existence of a cross-over class weakens the value of the LV transitive alternation as a diagnostic of structure. Akkuş (2013) brings up further issues with this. In the end, the alternation may not be a sound diagnostic. Nevertheless, there is still reason to suppose that CPrs composed with case-licensing eventive nouns do not share the small clause structure of other transitive CPrs.

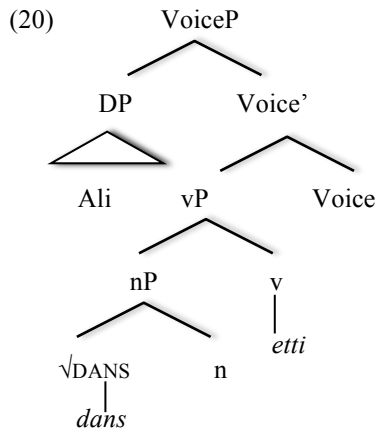
3. Unergative CPrs

Unergative CPrs with *etmek* also fall into two distinct structures: a light verb with a nominal NV element (Type III), and a heavy verb with a non-specific (Categorical) direct object. Type III includes a wide range of unergative predicates, exemplified by *dans etmek* ‘to dance’ and *intihar etmek* ‘to commit suicide.’

- (18) *Ahmet dans et-ti.*
 Ahmet dance do-PST
 ‘Ahmet danced.’

- (19) *Marilyn Monroe intihar et-ti.*
 M.M. suicidedo-PST
 ‘Marilyn Monroe committed suicide.’

In a Hale & Keyser-style approach, an unergative verb is derived from a nominal complement to the LV head-moving into a null LV position. In FHK, Persian unergative CPrs are argued to represent the same structure minus the head movement, and with an overt LV.



Since the complement is an NV element rather than the object complement of a heavy verb, it should not show properties of a direct object. NV elements cannot be direct objects. (See Aydemir 2004 for several tests that show the difference, such as modification and ellipsis). Hence they cannot take accusative marking. The nominal in Type III CPrs can never be definite, and cannot be accusative-marked.

- (21) **Ahmet bu dans-ı et-ti.*
 Ahmet this dance-ACC do-PST
 Intended: ‘Ahmet did this dance.’
- (22) **Marilyn Monroe böyle bir intihar-ı et-ti.*
 M.M. this.way a suicide-ACC do-PST
 Intended: ‘Marylin Monroe committed such a suicide.’

Another test for objecthood comes from the causative construction. The case of the causee in Turkish depends on whether or not the verb has a direct object (regardless of whether it is accusative-marked). If the base verb has no object, the causee is in the accusative case, and if the base verb has an object, the causee is in the dative case.

- (23) a. *Ahmet çalış-tı.*
 Ahmet work-PST
 ‘Ahmet worked.’
- b. *Hoca Ahmet-i/*Ahmet-e çalış-tır-di.*
 Teacher Ahmet-ACC/ Ahmet-DAT work-CAUS-PST
 ‘The teacher made Ahmet work.’
- (24) a. *Selin bir kitap oku-du.*
 Selin a book read-PST
 ‘Selin read a book.’
- b. *Hoca Selin-e/*Selin-i bir kitap oku-t-tu.*
 Teacher Selin-DAT/ Selin-ACC a book read-CAUS-PST
 ‘The teacher made Selin read a book.’

Under causativization, the causee of Type III CPrs is accusative, indicating that the verb does not have a syntactic object.

- (25) *Selin Ahmet-i/*Ahmet-e dans et-tir-di.*
 Selin Ahmet-ACC/Ahmet-DAT dance do-CAUS-PST
 ‘Selin made Ahmet dance.’
- (26) *Kennedy Marilyn Monroe-yu/*Monroe-ya intihar et-tir-di.*
 K. M.M-ACC/ M-DAT suicide do-CAUS-PST
 ‘Kennedy made Marilyn Monroe commit suicide.’

Furthermore, the NV element cannot be modified by a number phrase.

- (27) **Ahmet iki tane dans et-ti.*
 Ahmet two CLAS dance do-PST
 Intended: ‘Ahmet did two dances.’

Unergative CPRs of Type IV are superficially similar to Type III, but they differ in several key respects. They are semantically restricted to speech acts, such as *dua etmek* ‘to pray’, *iltifat etmek* ‘to compliment’, *hakaret etmek* ‘to insult’, etc. The nominal can be definite and accusative-marked.

- (28) *Anne-m şu dua-yı et-ti.*
 Mother-1SG.POSS this prayer-ACC do-PST
 ‘My mother said this prayer.’

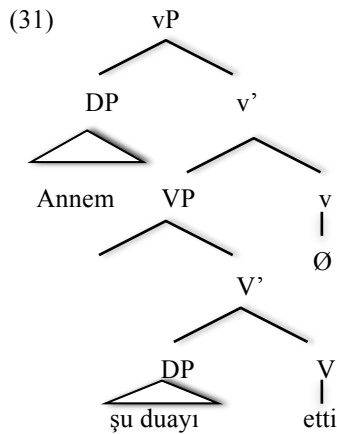
The causee is in the dative case.

- (29) *Babam anne-m-e dua et-tir-di.*
 father-1SG.POSS mother-1SG.POSS-DAT prayer do-CAUS-PST
 ‘My father made my mother say a prayer.’

In addition, the NV element can be modified by a number phrase.

- (30) *Anne-m iki tane dua et-ti.*
 mother-1SG.POSS two CLAS prayer do-PST
 ‘My mother said two prayers.’

These facts point to the following conclusions: The nominal is a direct object. The verb is a heavy verb that means approximately ‘to say.’



Öztürk (2003) makes a case that preverbal bare nouns composing with *etmek* are of the category NP, and that they are of the same type as preverbal bare noun ‘objects’ with heavy verbs, which both she and Aydemir (2004) argue are not syntactic arguments. Our intent here is not to present a fundamental challenge to these analyses, but merely to point out that there is more structural variation in CPRs than has previously been appreciated. At the very least, a distinction must be made between CPRs in which the NVE does not behave like a bare noun occurring before a heavy verb (Type III) and those in which it does (Type IV).

4. Conclusions

We have extended the FHK’s (2005) analysis of Persian CPRs to Turkish CPRs with *etmek* and have shown that they have at least four types depending on the complements they take. We have also shown that a realizational approach to Turkish CPRs can account for the variations without positing homophonous Vocabulary Items.

References

- Akkuş, F. 2013. ‘Light verb constructions in Turkish: A case for DP predication and blocking.’ Paper presented at WAFL 9.
- Aydemir, Y. 2004. Are Turkish preverbal bare nouns syntactic arguments? *Linguistic Inquiry*, Vol. 35/3, 465-474.
- Chomsky, N. 2000. Minimalist inquiries. In R. Martin, D. Michaels, and J. Uriagereka, (eds.) *Step by step: essays on Minimalist syntax in honor of Howard Lasnik*. The MIT Press, Cambridge, MA.
- Embick, D. & Marantz, A. 2008. Architecture and blocking. *Linguistic Inquiry*, Vol. 39/1, 1-53.
- Folli, R., Harley, H. & Karimi, S. 2005. Determinants of event type in Persian complex predicates. *Lingua* 115/10, 1365-1401.
- Hale, K., & S. Keyser, J. 1993. On argument structure and the lexical expression of syntactic relations. In K. Hale and S. J. Keyser, (eds.) *The view from building 20: essays in linguistics in honor of Sylvain Bromberger*. Cambridge, Mass.: MIT Press, 51-109.
- Keskin, C. 2005. Case licensing nouns in Turkish. *Utrecht Institute of Linguistics Yearbook*.
- Kornfilt, J. 2003. Scrambling, subscrambling, and case in Turkish. In S. Karimi (ed). *Word order and scrambling*. Blackwell Publishing, Malden, MA.
- Öztürk, B. 2004. ‘Complex predicates in Turkish. *Harvard Working Papers in Linguistics*
- Pylkkänen, L. 2008. *Introducing arguments*. MIT Press, Cambridge, MA.

Appendix: CPR Types

Type I		hall-etmek	‘to solve’
mutlu etmek	‘to make happy’	icat etmek	‘to invent’
razi etmek	‘to convince’	israf etmek	‘to waste’
tahrik etmek	‘to arouse’	kabul etmek	‘to accept’
tatmin etmek	‘to satisfy’	kahr-et	‘to damn’
		kayb-etmek	‘to lose’

kayd-etmek	‘to record’
meşgul etmek	‘to occupy’
rahatsız etmek	‘to bother’
sünnet etmek	‘to circumcise’
tamir etmek	‘to repair’
tedavi etmek	‘to treat’
teslim etmek	‘to surrender’
var etmek	‘to bring into existence’
yok etmek	‘to cause to cease existence’
taburcu etmek	‘to discharge (from hospital)’
yasak etmek	‘to prohibit’
yerle bir etmek	‘to destroy/level’

Type II

davet etmek	‘to invite’
defn-etmek	‘to bury’
protesto etmek	‘to protest’
ziyaret etmek	‘to visit’
seyr-etmek	‘to watch’
terk etmek	‘to abandon’
rica etmek	‘to request’
izah etmek	‘to explain’
keşf-etmek	‘to discover’
tebrik etmek	‘to congratulate’

tehdit etmek	‘to threaten’
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Type I/II cross-over

tahrik etmek	‘to arouse/provoke’
ikna etmek	‘to persuade’
teşvik etmek	‘to encourage’
tespit etmek	‘to determine’

Type III

tereddüt etmek	‘to hesitate’
seyahat etmek	‘to travel’
acele etmek	‘to hurry’
intihar etmek	‘to commit suicide’
dans etmek	‘to dance’
küfr-etmek	‘to swear’

Type IV

dua etmek	‘to pray’
hakaret etmek	‘to insult’
iltifat etmek	‘to compliment’
tövbe etmek	‘to swear off of’
itiraz etmek	‘to object to’
şikayet etmek	‘to complain’
söz etmek	‘to mention’