## Can non-active morphology be a reliable indicator of external causation in anti-causative structures? Evidence from Turkish

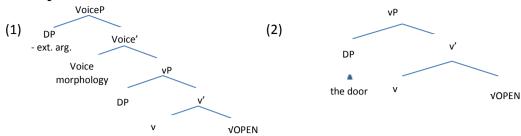
Taking non-active (NACT) morphology as a clear indication of external causation, Alexiadou (2010) defines two classes of languages exhibiting anti-causative alternation: (i) Languages which lack NACT and hence only allow cause unspecified roots to undergo alternation and (ii) Languages where all root types except agentive roots exhibit alternation with NACT marking solely external causation. In this study, we will show that Turkish constitutes a third class, where the very same root marked with NACT can also be interpreted as internally caused in addition to its external causation reading unexpectedly under Alexiadou (2010). Thus, we will show that (i) in Turkish lexical roots may have a complex event structure allowing for a double semantic categorization and hence a dual behavior in alternations and (ii) NACT morphology by itself is not a sufficient criterion to capture certain aspects of verbal meaning cross-linguistically.

Alexiadou (2010) argues that the cross-linguistic distribution of alternating vs. non-alternating verbs depends on two building blocks of anti-causatives: Properties of voice projection and the semantic properties of the lexical root. With regards to the properties of the voice projection, morphologically marked anti-causatives are expected to surface with a voice head as shown in (1). On the other hand, morphologically unmarked anti-causatives surface with the structure in (2) without the voice projection. As for the semantic properties of the lexical roots, she proposes a 4-way classification: Agentive roots, roots of internal causation, roots of external causation and cause unspecified roots as illustrated for English in (3). The chart in (4) introduces the different types of PPs which are used to determine the semantic category of a given lexical root for Turkish. Taking these two building blocks of anti-causatives into consideration, Alexiadou proposes a cross-linguistic correlation between the semantic root classes and their behavior in the alternations: Agentive roots never alternate since they imply an agentive force bringing about the change of state as in (5). In contrast, roots of internal causation and cause unspecified roots are expected to alternate and surface with the structure in (2) and be morphologically unmarked as in (6). Externally caused verbs can also be expected to participate in the alternation but are expected to surface with NACT morphology as in (7). This leads to two classes of languages: Languages like English with no morphological means to differentiate between the sources of causation where only cause unspecified roots can undergo alternation and languages like Hindi, Greek or Korean where the availability of special morphological tools allows all root types (but agentive roots) to participate in the alternation.

The starting point of my analysis is Alexiadou's assumption that NACT morphology on anti-causative roots is a reliable criterion which indicates external causation. A logical implication of this observation would be to rule out the compatibility of such verbs with an internal cause interpretation. When we closely inspect the morphosyntactic behavior of Turkish verbal roots, we see that verbs of external causation also surface with NACT morphology, as predicted by Alexiadou's account. Unexpectedly, however, they can also be compatible with by-itself phrases, hence with an internally caused interpretation as can be seen in (8). This has implications both on the morphosyntax of Turkish anti-causatives and on the anti-causatives cross-linguistically. For Turkish, the implication is that a given anti-causative verb in Turkish may be compatible with more than one syntactic derivation. Consequently, in some externally caused Turkish verbs, the verbal root seems to be merged together with the Voice head at the root level as a lexical requirement which can be represented in (2). However, the very same verbs can also be represented with the structure in (1) when they show compatibility with Causer PPs in which case the NACT morphology will occupy the Voice head. Based on this observation, I argue that Turkish constitutes yet a third class of languages, where lexical roots may have a complex event structure allowing for a double semantic categorization and hence a dual behavior in alternations.

The cross-linguistic implication of this data is that NACT morphology by itself is not a sufficient criterion to capture certain aspects of verbal meaning in world's languages as what is assumed under Alexiadou (2010).

## **Examples:**



- a. \( \squagentive \) (murder, assassinate)
  - b. \(\sqrt{internally caused (blossom, wilt)}\)
  - c. √externally caused (destroy, kill)
  - d. √cause unspecified (break, open) (Alexiadou 2010)

(4)		Causer PP	by itself PP	Agentive PP
` ,	Externally caused roots	✓	-	-
	Cause unspecified roots	✓	✓	-
	Internally caused roots	✓	✓	-
	Agentive roots	-	-	✓

(5) a. O Janis dolofonise ti Maria

The John murdered-Act the Mary-Acc

John murdered Mary

b. I Maria dolofonithike apo to Jani/\*apo to sismo

The Mary-nom murdered-**Nact** from the John/from the earthquake (Alexiadou 2010)

(6) a. I porta anikse me ton aera

The door opened-Act with the wind

"The door opened by the wind"

b. I porta anikse apo moni tis

The door opened-Act by alone-sg its

'The door opened by itself' (Alexiadou 2010)

(7) a. Janis ekapse ti supa

the John-nom burnt-Act the soup

b. I supa kaike me ti dinati fotia/\*apo to Jani

the soup burnt-**Nact** with the strong fire/from the John (Alexiadou 2010)

a. Düğmemi söktüm.

Button-poss1sg-acc remove-Act-past-1sg

'I removed my button'

b. Düğmeler terziler tarafından birer birer söküldü.

Button-pl-nom tailor-nom-pl by one by one remove-Nact-past-3sg

'The buttons were removed by the tailors one by one'

c. Düğmem kancaya takılınca söküldü.

Button-poss1sg-nom hook-dat get caught and remove-Nact-past-1sg

'My button got caught in the hook and came off'

d. Düğmem (kendi kendine) söküldü.

Button-poss1sg (by itself) remove-Nact-past-1sg

'My button came off by itself'

## **References:**

Alexiadou, Artemis. 2010. On the morpho-syntax of (anti-)causative verbs. Syntax, Lexical Semantics and Event Structure, ed. By Malka Rappaport Hovav, Edit Doron and Ivy Sichel. New York: Oxford University Press.

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