

Low (in)transitivity: evidence from Kipsigis

Introduction. Recent syntactic approaches to the causative alternation (e.g. *The cup broke* vs. *Sue broke the cup*) treat it as a Voice alternation: the causative and anticausative variants have the same vP (event) layer, but differ in the presence vs. absence of an external argument-introducing Voice head (e.g. Marantz 2013, Alexiadou et al. 2015, Wood 2015, Kastner 2020). In this family of approaches, transitivity alternations cross-linguistically arise from the alternation of different Voice heads (Alexiadou et al. 2015 a.o.). In this talk, I present novel data from Kipsigis (Nilotic, Kenya; VSO) which show that for many verbs it is the verbalizing head little v , and not Voice, that regulates transitivity alternations; thus, not all transitivity alternations can be explained by variation in Voice. Data come from original fieldwork with 9 native speakers.

The causative alternation in Kipsigis. All verbs in Kipsigis belong to one of two conjugation classes, Class I and Class II (Toweett 1979). The two classes differ in: the vowel length of the subject prefix, the form of the imperfective suffix, and the tones of the verbal stem. Most verbs are arbitrarily assigned to one of the two classes (irrespective of transitivity). Verbs participating in the causative alternation, however, productively alternate between the two classes: the anticausative variant is in Class I (1) and the causative is in Class II (2). Class II has a prefix and also causes lengthening of the vowel of the verb if it is short (long vowels remain long) (1)-(2). Thus, Class II is the morphologically marked form (hence, Class I is not glossed).

- (1) $k\grave{a}-\emptyset$ -sáp Tjé:bê:t.
 PST-3-heal Chebet.NOM
 ‘Chebet healed.’
- (2) $k\grave{a}-\emptyset$ -í-sâ:p Tjé:bê:t Kìbê:t.
 PST-3-CL2-heal Chebet.NOM Kibet
 ‘Chebet healed Kibet.’

Other verbs additionally take the causative suffix *-si* in Class II, as shown in (3)-(4).

- (3) $K\grave{a}-\emptyset$ -ɲét Kìbê:t.
 PST-3-tire Kibet.NOM
 ‘Kibeet got tired.’
- (4) $K\grave{a}-\emptyset$ -í-ɲè:t-sì kà:sì:t Kìbê:t.
 PST-3-CL2-tire-CAUS work.NOM Kibet
 ‘Work got Kibeet tired.’

Even though most verbs form marked causatives, some (including high frequency *ja:t* ‘open’ and *kɛr* ‘close’) form marked anticausatives, (5)-(6): both the causative and anticausative variant have Class I morphology, but the latter also has the suffix *-ak*, otherwise used in the language to form middles (Toweett 1979, Rottland 1982).

- (5) $K\grave{a}-\emptyset$ -sìrɪŋ-ák ɪŋgórâ:k.
 PST-3-wrinkle-MID clothes.NOM
 ‘The clothes wrinkled.’
- (6) $K\grave{a}-\emptyset$ -sírɪŋ Tjé:bê:t ɪŋgòrà:k.
 PST-3-wrinkle Chebet.NOM clothes
 ‘Chebet wrinkled the clothes.’

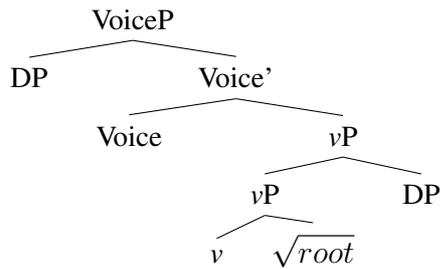
The following table summarizes the major morphological patterns of the causative alternation in Kipsigis (there are minor patterns not shown, e.g. two verbs alternate via tonal changes only).

(7) **Morphological marking patterns** (Tr= transitive, Intr = intransitive)

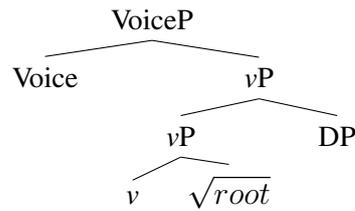
Class I + <i>ak</i>	Class I	Class II	Class II + <i>si</i>	Some examples
Intr	Tr			(5)-(6), <i>arv:ŋ</i> ‘to fold’, <i>ɲem</i> ‘to destroy’
	Intr	Tr		(1)-(2), <i>na:m</i> ‘to start’, <i>tʃɔ:t</i> ‘to melt’
	Intr		Tr	(3)-(4), <i>jɛ</i> ‘to break’, <i>nɔn</i> ‘to rot’

Theoretical background: I adopt the assumptions of Distributed Morphology (Halle & Marantz 1993). Within DM, there is work that postulates different verbalizing heads $v_{\text{CAUSE}}/v_{\text{BECOME}}$ corresponding to causative and anticausative forms respectively (Folli & Harley 2007, Harley 2017 a.o.), while a different line of approach suggests that different flavors of little v are not needed; causative semantics is read off the structural configuration (Wood & Marantz 2017 a.o.). Causative and anticausative variants are the same at the vP level, and only differ in the type of Voice head that they merge with. (8)-(9) show simplified structures for causatives and anticausatives in such a framework, where Voice in (8) is transitive and requires a specifier (external argument), while (9) is intransitive and does not project a specifier.

(8) Causative variant:



(9) Anticausative variant:



Analysis. Verbs that are causative in (unmarked) Class I and form their anticausative with *-ak* are easily accounted for in (9), assuming that *-ak* spells out intransitive Voice (which is supported by the use of the suffix as a middle). The causative suffix *-si* can also be analyzed as the exponent of transitive Voice in (8). As for causative Class II morphology, there are two ways of analyzing it in this framework: it spells out either the transitive Voice head or little *v* in the context of Voice in (8). I argue that it spells out little *v*, but data from nominalizations show that it cannot be a Voice-conditioned allomorph of *v*. First, ‘Class II morphology’ is an umbrella term for all morphophonological effects associated with this conjugation class; class features are usually on little *v* in DM. Class II is determined by individual roots and it causes vowel lengthening of the root; given standard assumptions about locality, this is straightforwardly explained if Class II is on little *v*. Second, Class II co-occurs with *-si* in the causative for a set of verbs (3)-(4); if this reflects two heads in the syntax, it follows that Class II spells out *v* and *-si* spells out Voice. Turning to the data from nominalizations, complex event nominals (CENs) derived from verbs that form causatives with Class II maintain the morphological distinction between the causative and anticausative reading, shown in (10)-(11), the CENs of (1)-(2); we see a prefix and a long vowel for Class II in both the verb (2) and the noun (11).

(10) sap-e:t-à:p Kibê:t.
heal-N-POSS Kibet

‘Kibeet’s healing (on his own) (antic.)’

(11) ka:sa:p-e:t-à:p Kibê:t.
CL2-heal-N-POSS Kibet

‘Kibet’s healing (by someone) (caus.)’

Three observations show that Voice is absent in Kipsigis CENs: (i) for verbs like (3)-(4), *-si* is ungrammatical in CENs, and only Class II morphology survives (data not shown here), (ii) the external argument cannot be expressed overtly in (11) or (12), (iii) CENs from verbs with marked anticausatives (5)-(6) do not morphologically distinguish between the causative and anticausative in CENs: both the prefix *ka:-* and the suffix *-ak* are ungrammatical in (12) and the CEN is ambiguous between the two readings. Absence of transitive Voice in CENs is also consistent with theories that argue that little *n* never embeds transitive Voice (Alexiadou 2001, 2017, Wood 2020 a.o.). Since Voice is absent from CENs in Kipsigis, Class II morphology in CENs like (11) cannot be conditioned by Voice. Further evidence for the claim that the nominal prefix *ka:-* in (11) is independent of Voice comes from the fact that it is obligatory for all nouns (even if they are not CEN) derived from Class II verbs (even if they are non-alternating), shown in the noun in (13) derived from the transitive non-alternating Class II verb *ka:t* ‘greet’.

(12) ~~*(ka:-)siriŋ-(*ák)-e:t-à:p~~ íŋgðràî:k
CL2-wrinkle-MID-N-POSS clothes

‘the wrinkling of the clothes (on their own/by someone)’

(13) ~~*(ka:-)kat-e:t~~ hello.
CL2-greet-N hello

‘Hello is a greeting.’

Conclusion. While (8)-(9) can account for verbs that form marked anticausatives with *-ak*, marked causatives resist such an analysis: Class II morphology spells out little *v*, but it is not a Voice-conditioned allomorph of *v*. These facts are instead consistent with an analysis postulating flavors of little *v* (Folli & Harley 2007 a.o.), where Class II spells out v_{CAUSE} . Kipsigis, thus, shows that cross-linguistic variation in the morphology of the causative alternation cannot be explained by variation in Voice heads only; little *v* regulates the alternation in some languages.