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Selective opacity derived from interleaved embedded-tense projections in Hungarian

Syntactic opacity can be selective, that is, movement landing in a matrix clause-position may be only grammatical from within a subset of embedded clauses. The Williams Cycle (Williams, 2003) focuses on the structural size of the embedded clause: Larger embedded clauses are opaque to more cross-clausal movement types and lower matrix-positions are harder to land in. The properties of embedded tense also seem to vary with size. In the most basic case, finite clauses (CPs) are opaque to A-extraction as opposed to smaller, non-finite clauses (TPs). Beyond presence and absence, the embedded tense and finiteness can show various degrees dependence on the matrix tense co-varying with the clause-size (e.g. Lohninger & Wurmbrand, 2020). My paper demonstrates that since Hungarian embedded clauses selected by different matrix verbs exemplify this variability, they can provide a finer-grained illustration for the Williams Cycle.

Problem: In several languages, the event described by the embedded clause's past-tense verb can be *simultaneous* with the event described by the matrix past-tense verb (e.g. Abusch, 1997). In Hungarian, the availability of simultaneous reading depends on the matrix verb. For instance, the running event denoted by *futottál* 'you ran' can be simultaneous with *hallottam* 'I heard' in (1), as opposed to *rikoltottam* 'I shouted' which must happen after the end of running in (2):

(1) Hall-ott-am, hogy fut-ott-ál.
hear-PST-1SG that run-PST-2SG
'I heard that you {were running/ had ran}.'

(2) Az-t rikolt-ott-am, hogy fut-ott-ál.
it-ACC shout-PST-1SG that run-PST-2SG
'I shouted that you had ran.'

Clauses allowing a simultaneous interpretation under past-under-past will be called *dependent tense* contrasting with *independent tense* clauses not allowing for such interpretations. Interestingly, a constituent like *csak a városon* 'only the city' can land in the matrix Spec, FocP if the matrix verb is *hallottam* 'I heard', but it cannot if the matrix verb *rikoltottam* 'I shouted':

(3) CSAK A VÁROS-ON {hall-ott-am/ *rikoltott-am}, hogy át fut-ott-ál $_{-1}$.
only the city-SUP hear-PST-1SG shout-PST-1SG that PRT run-PST-2SG
'I {heard/*shouted} that you {were running/had ran} across ONLY THE CITY.'

An informal survey with 15 native speakers revealed a more general tendency on opacity:

(4) Long focus-extraction is impossible from independent-tense clauses.

The movement of a particle like *be* 'in' to matrix Spec, AspP is more restricted (É.Kiss, 1994):

(5) Be$_1$ akar-t-am, hogy $_{-1}$ fus-s.
in want-PST-1SG that run-2SG.SUBJ
'I wanted you to run in.'

(6) *Be$_1$ hall-ott-am, hogy $_{-1}$ fut-ott-ál.
in hear-PST-1SG that run-PST-2SG
Intended: 'I heard that you ran in.'

Although Hungarian subjunctive verb inflection shows agreement with both the subject and the object, no past-present distinction is made for subjunctives. If they are non-tensed, this holds:

(7) Long particle-extraction is impossible if the embedded verb is tensed (i.e. not subjunctive).

In sum, I pose the following questions: Why are independent-tense clauses more opaque than dependent-tense clauses as in (4)? Why are subjunctive clauses the least opaque as in (7)?

Claim: These opacity-differences fall under Williams Cycle. The A-extraction of the subject *John* is grammatical from the embedded TP in (8), but not from the embedded CP in (9):

(8) [$_{TP}$ John$_1$ seems [$_{TP}$ to $_{-1}$ run]].

(9) *[$_{TP}$ John$_1$ seems [$_{CP}$ that $_{-1}$ runs]].

Williams (2003) uses the following generalization to account for the ungrammaticality of (9):

(10) **Williams Cycle:** Extraction landing in Spec, YP is ruled out from XP if X>Y in *fseq*.

That is, since C is higher in *fseq* than TP, embedded CPs are opaque to movement to Spec, TP. Following Lohninger & Wurmbrand (2020), I assume that subjunctive clauses are syntactically smaller than tensed ones, and dependent-tense clauses are smaller than independent-tense clauses.

Connecting this to (10), the opacity-differences in (4) and (7) originate in size-differences.

Selective opacity in Hungarian: The type of the tense is not the only factor determining the opacity of embedded clauses. The relation of the embedded tense-types and clause size can be understood from another, more visible type of clause-growth: Filled embedded left-periphery positions may also block movement. For instance, a subjunctive clause can be made opaque to particle-extraction by the insertion of constituent in the embedded Spec, FocP in (11) just like it was made opaque by the switch to past tense in the embedded clause of (7) (Farkas & Sadock, 1989). Ignoring the complementizer *hogy* (cf. Koopman & Szabolcsi, 2000) and the position of the verb, the new embedded focus indicates that the clause-size has grown from AspP to FocP.

(11) [$_{AspP}$⟨ *Be⟩ akar-t-am, hogy [$_{FocP}$CSAK AZ ERDŐ-BE [$_{AspP}$fus-s ⟨be⟩]]].
. in want-PST-1SG that only the forest-IN run-2SG.SUBJ in
'I wanted you to run in ONLY INTO THE FOREST.'

Since Foc>Asp in *fseq*, the ban on the movement to matrix Spec, AspP falls under (10). Similarly, the sentential adverb *szerencsére* 'fortunately' degrades long-focus movement:

(12) [$_{FocP}$⟨*A VÁROS-ON⟩ hall-ott-am, hogy [$_{TopP}$szerencsére ⟨A VÁROS-ON⟩ fut-ott-ál át]]
the city-SUP hear-PST-1SG that fortunately the city-SUP run-PST-2SG PRT
'I heard that fortunately, you had rad across ONLY THE CITY.'

According to Egedi (2021), evaluative adverbs like *szerencsére* 'fortunately' always precede foci, and sometimes even topics. Therfore, I assume that their presence shows that we are at least dealing with a TopP, which is larger than FocP. In other words, the fact that this TopP is opaque to movement to matrix Spec, FocP can also be understood as an example for (10).

Extension to embedded tense: I propose that the opacity-contrast between (5) and (6) is parallel to (11). While subjunctive clauses are not larger than AspP, once the embedded tense is past, we are dealing with a clause larger than ApsP. This morphosyntactic and semantic switch from subjunctive can be done by a Past head merging with AspP (cf. Ramchand & Svenonius, 2014). A similar parallel can be proposed between (3) and (12): Independent-tense clauses, as opposed to dependent-tense clauses, are larger than FocP and therefore opaque to long-focus movement. The concepts of *topic time* and *topic situation* (Klein, 1994) may bring us closer to the understanding of the head responsible for the switch from dependent to independent tense. In (13), the second *was* is appropriate in past tense even if the book *is* still in Russian:

(13) There was a book on the table. It was in Russian.

According to Klein (1994), the second *was* is co-referential with the topic time of the first *was* as they are part of the same topic situation. Topic situations are locality domains; once a new topic situation is introduced, we cannot refer back to the previous one. For dependent tense, the matrix and the embedded past tense must occur in the same topic situation to be co-referential. In contrast, independent-tense clauses occur in a different topic situation than their matrix verb. For now, the head introducing a new topic situation may be identified as Top itself. New topic situations and hence TopPs are required by verbs like *rikolt* 'shout'. If independent-tense clauses are at least TopPs, they will be opaque to movement landing matrix Spec, FocP if Top>Foc.

In sum, once we assume that the heads responsible for tense are interleaved with landing sites in the *fseq* Top>Foc>Past>Asp, (5) and (4) become similar to (11-12) and can be reduced to (10).

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