

Two word order variations in Old and Middle Hungarian and how they are related

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Aims

- ▶ Examine two word order variations in Old and Middle Hungarian
 - ▶ negation
 - ▶ infinitive-selecting (modal) verbs/auxiliaries
- ▶ both of those show some remnant OV-properties: preverbal constituents where we do not find them now
- ▶ the word order properties of one case might help us understand the other

Claims

- ▶ Negated sentences preserve an OV structure long after the Proto-Hungarian OV > VO change.
- ▶ The PredP that hosts Verb Modifiers (VMs) in its Spec emerged during Proto-Hungarian through the reanalysis of a preverbal argument position is the locus of complex predicate formation with the verb, which is general with particles
- ▶ Word order properties of negative sentences containing infinitive selecting verbs show that we are at a crossroad of changes in Old and Middle Hungarian
 - ▶ stable variation and later change in negative sentences
 - ▶ movement of all types of VMs into Spec, PredP becoming obligatory
 - ▶ grammaticalization of quasi-auxiliaries

Outline

Neutral and non-neutral sentences now and historically

Auxiliaries and verb clusters

Auxiliaries and word order diachronically

Analysis of variation

Conclusions and outlook

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Neutral and non-neutral

Modern Hungarian:

- ▶ Neutral sentences – have level prosody; main stress on the finite verb or preverbal constituent
- ▶ Non-neutral sentences – involve structural focus, *wh*-question, or negation; have corrective stress, with emphasis preverbally and diminished stress on verb and (part of the) postverbal field

Kálmán (1985a,b), Kálmán et al. (1986), É. Kiss (1994, 2002) etc.

Verb Modifiers (VM) show up in different positions in the two types.

Verb modifiers

Predicative elements (syntactically or semantically):
verbal particles, non-verbal primary and secondary predicates,
bare NP internal arguments, infinitival complements

in neutral sentences:

- ▶ they occupy the immediately preverbal position, which has been suggested to be Spec,VP, Spec,AspP, Spec,PredP (É. Kiss 2006), Spec,TP (e.g. Surányi 2009 via PredP)
- ▶ they form a complex predicate with the verb - we adopt É. Kiss' (2006) and Surányi's (2009) proposals

- (1) János el ment.
John away go.PST.3SG
'John left.'

Verb Modifiers

In non-neutral sentences:

- ▶ the verb undergoes movement to a higher functional position (NegP or FocP; Brody 1990, 1995)
- ▶ the verb modifier is stranded postverbally

(2) János NEM ment el.
John not go.PST.3SG away
'John didn't leave.'

(3) János TEGNAP ment el.
John yesterday go.PST.3SG away
'John left yesterday.'

(4) János MIKOR ment el?
John when go.PST.3SG away
'When did John leave?'

Neutral order diachronically

- ▶ the preverbal position is filled more and more frequently
- ▶ verbal particles are the most consistent VMs in Old Hungarian: there are fewer particles in general and used less frequently, but when they are there, they are preverbal neutrally
- ▶ the other VM-types show word order variation to a large extent (Hegedűs 2015, 2018)

Non-neutral sentences diachronically

- ▶ sentences with structural focus:
→ almost invariably with FOC - V - VM pattern

(5) hog čac te lelkedet zabadeitod meg
 that only you soul.POSS.ACC free.2SG PRT
 ‘that you will only free your soul’ (Vienna C. 1/58)

- ▶ *wh*-questions:
→ almost invariably with WH - V - VM pattern

(6) miért hać el minket
 why leave.2SG away we.ACC
 ‘Why are you leaving us?’ (Kazinczy C. 8v)

Non-neutral sentences diachronically cont.

- ▶ Negative sentences:
→ two coexisting patterns

- ▶ VM - NEG - V

(7) kiktol meg nem zabadul
who.PL.ABL PRT NEG free.3SG
'of whom he will not break free' (Bod C. 2r)

- ▶ NEG - V - VM

(8) hog' nem vezte el ez velagot
that NEG destroy.3SG away this world.ACC
'that he will not destroy this world' (Bod C. 2v)

The VM - NEG - V pattern

- ▶ assumed to be the conservative variant (Ob-Ugric parallels)
- ▶ the majority of sources feature this pattern in above 80% of negative sentences until the beginning of the 19th century
- ▶ in certain grammatical contexts this seems to be the highly preferred variant: *until*-clauses, *if*-clauses
- ▶ after the 19th-century change, its use is restricted: occurs in certain subordinate clauses (e.g. with *until*, *unless*), but losing out even there; it is also emphatic negation in main clauses

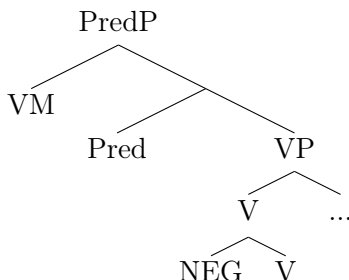
The NEG - V - VM pattern

- ▶ the innovative pattern that emerged during Proto-Hungarian
- ▶ this is the marginal variant, occurs below 20% in the majority of sources though exceptional source types use it more frequently
- ▶ after the 19th century, this is the unmarked negative construction – a structural instantiation of Jespersen's cycle?

Two structures: the conservative one

- ▶ structural analysis: NEG adjoined to V, a remnant OV-property (adopted from É. Kiss 2014)

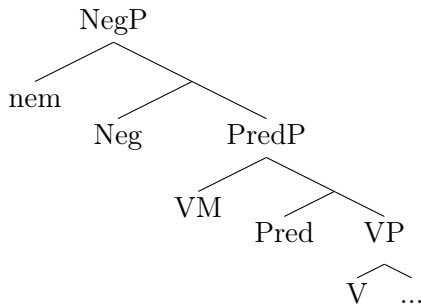
(9)



Two structures: the innovative one

- ▶ reanalysis from conservative to innovative pattern:
 - ▶ step 1: the verb and the adjoined negative particle (optionally) move to the head of NegP
 - ▶ step 2: the negative particle is Merged in Spec,NegP, and there is verb movement to the head of NegP

(10) innovative structure



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Verb clusters in Modern Hungarian: the verbs

- ▶ some verbs taking infinitival complements occur in "restructuring" constructions (e.g. Wurmbrand 2004), the verbs form a cluster (a.k.a. clause union, verbal complex)
- ▶ *fog* 'will', *szokott* 'do habitually', *talál* 'happen to', *akar* 'want', *kell* 'must, need', *szeretne* 'would like' etc.
- ▶ these verbs have sometimes been taken to be auxiliaries (Kálmán et al. 1986, Koopman & Szabolcsi 2000), although not all of them are fully auxiliary-like (Kenesei 2001 argues that only three of them are actually auxiliaries based on morphosyntactic evidence)
- ▶ the infinitival complement may be inflected if the auxiliary does not agree with its subject

Verb clusters in Modern Hungarian: the verbs

- ▶ they share the property of avoiding the main stress of the clause, i.e., they need something else to carry the stress (which has been taken to their most important property sometimes, e.g. Szendrői 2004, although it might just be a symptom of their functional nature)
- ▶ in neutral sentences, either their infinitival complement or its VM moves to the VM position of the finite verb
- ▶ if there is focus (including *wh*-questions) or negation (i.e., in non-neutral sentences), there is no VM-movement (no restructuring; É. Kiss 2004)

Verb clusters in Modern Hungarian: word order

- ▶ The finite verb is preceded by a VM in neutral sentences:

(11) János ki akar menni.
John out want.3SG go.INF
'John wants to go out.'

(12) János menni akar.
János go.INF want.3SG
'John wants to go.'

- ▶ but not in non-neutral sentences

(13) János NEM akar (ki) menni.
John not want.3SG out go.INF
'John doesn't want to go (out).'

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Auxiliaries and modal verbs

- ▶ the grammaticalization of the future auxiliary and of the various modal verbs is in progress in Old and Middle Hungarian
- ▶ we examined the patterns with the three most frequent verbs
- ▶ the verbs we looked at in detail can bare the main stress of the neutral clause more readily than now

Old Hungarian Corpus

- ▶ 2.2 million tokens
- ▶ all Old Hungarian (896–1526) texts digitized
- ▶ only a small portion of it is annotated so far
- ▶ <http://omagyarkorpusz.nytud.hu/en-intro.html>, Simon (2014)

Historical Informal Corpus of Hungarian

- ▶ approx. 850,000 tokens
- ▶ late Old Hungarian and Middle Hungarian (1526–1772) texts
- ▶ fully morphologically annotated
- ▶ <http://tmk.nytud.hu/>, Novák et al. (2017)

fog 'will'

- ▶ it is the future auxiliary
- ▶ the lexical source verb means 'grasp, hold' and is still used
- ▶ its grammaticalization went through an intermediate inchoative stage ('begin')
- ▶ morphosyntactic properties today:
 - ▶ ϕ agreement, but no past tense, no conditional, no infinitival form
 - ▶ its complement clause cannot contain inflected infinitive
 - ▶ can only carry prosodic prominence contrastively or in verum focus (verb focus, according to Kenesei)
- ▶ morphosyntactic properties in Old and Middle Hungarian
 - ▶ ϕ agreement, past tense and conditional optionally
 - ▶ rarely takes inflected infinitive
 - ▶ can be in main stress position in neutral sentences

kell ‘must, need’

- ▶ it is a deontic and epistemic modal verb (passes some test for aux)
- ▶ morphosyntactic properties today:
 - ▶ no ϕ agreement, but past tense, conditional and infinitival forms, passive form
 - ▶ its complement clause can be inflected and noninflected infinitive
 - ▶ can only carry prosodic stress contrastively or in verum focus
- ▶ morphosyntactic properties in Old and Middle Hungarian
 - ▶ no ϕ agreement, but past tense, conditional and infinitival forms
 - ▶ inflected and noninflected infinitival complements
 - ▶ can be in main stress position in neutral sentences

akar ‘want’

- ▶ it shows signs of grammaticalization into some kind of future marker, attested examples with non-volitional animate and non-animate subjects, but it is very far from real grammaticalization
- ▶ it behaves like an auxiliary mostly with respect to its prosodic properties (stress avoiding)
- ▶ morphosyntactic properties today:
 - ▶ ϕ agreement, full tense and mood morphology
 - ▶ its complement clause cannot contain inflected infinitive
 - ▶ can only carry prosodic stress contrastively or in verum focus
- ▶ morphosyntactic properties in Old and Middle Hungarian
 - ▶ ϕ agreement, full tense and mood morphology
 - ▶ may take an inflected infinitive (not rare in earlier texts)
 - ▶ can be in main stress position in neutral sentences

Word order patterns in negative sentences with auxiliaries

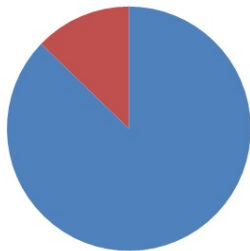
Infinitives without a verb modifier

- ▶ INF - NEG - AUX
- ▶ NEG - AUX - INF

Infinitives with a verb modifier

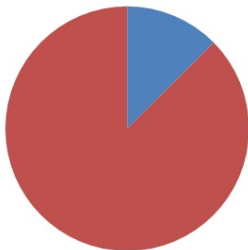
- ▶ VM - NEG - AUX - INF
- ▶ VM-INF - NEG - AUX
- ▶ NEG - AUX - VM-INF
- ▶ NEG - AUX - INF - VM

NEG with PRT vs NEG with INF



■ VM - NEG - INF
■ NEG - V - INF

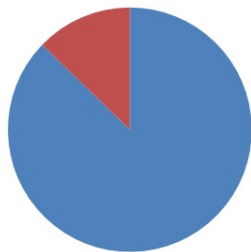
N = 1815



■ INF - NEG - AUX
■ NEG - AUX - V

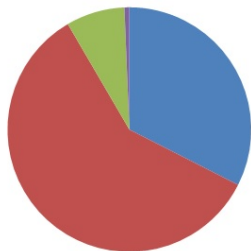
N = 525

NEG with PRT vs NEG with PRT climbing from INF



■ VM - NEG - INF
■ NEG - V - INF

N = 1815



■ VM - NEG - AUX - INF
■ NEG - AUX - VM - INF
■ VM - INF - NEG - AUX
■ NEG - AUX - INF - VM

N = 308

A detour: Auxiliaries in assertive sentences

Claim: these verbs were not necessarily restructuring verbs in earlier periods (we will return to their AUX status later)
they occurred in positions where they must have had main stress
they could be separated by multiple constituents from the following infinitive (still possible to an extent)

- ▶ sentence-initial position with an infinitival complement

(14) (es migh Isten eltet) akarok kegyelmednek
and while God live.CAUS.3SG want.1SG you.DAT
mindenkor szeretettel szolgálnom.
always love.INS serve.INF.1SG
'(and as long as God keeps me alive,) I want to serve
you with love' (1654: Zrínyi)

- ▶ sentence-initial position with finite complement clause

(15) Akarnám ha a választ
want.COND.1SG if the answer.ACC
meg-mutatná
PRT-show.COND.DEF.3SG
'I would want him to show the answer' (Károlyi 1706)

NB. Today this type includes a pronominal element in front of the auxiliary:

(16) Mari azt akarja, hogy menjünk.
Mary that.ACC want.DEF.3SG that go.SUBJ.1PL
'Mary wants us to go.'

A detour: Auxiliaries in assertive sentences

- ▶ after Topic, which does not bear the main (sentential) stress

(17) kegd Akarna en tǔlem Ertenjǔ
you want.COND.3SG I abl.1SG understand.INF
'you would like to learn from me' (Svetk. 1568)

some further observations:

1. judging main stress position of the finite verb (auxiliary) can be difficult, but there is c. 10% of it with *akar* and *fog*, and much less - approx. 3% with *kell*
2. the use of inflected infinitives is observable with all three verbs, but with *akar* and *fog*, the use of the inflected form is restricted (i) socially and (ii) positionally
it occurs almost exclusively in patterns where the INF follows the AUX

NEG - AUX - (VM)-INF

- (18) de én nem akarom tudni
but I not want.DEF.1SG know.INF
'but i do not want to know'
- (19) nem akarta ki mondani ezen dolgot
not want.PST.DEF.3SG out say.INF this thing.ACC
'(s)he did not want to say this thing' (1653: Bosz. 457)

- ▶ the most frequent pattern(s)
- ▶ both innovative (with respect to NEG) and conservative (non-restructuring V)
- ▶ NEG+V in NegP (and stranded VM) and/or non-restructuring V (movement of VM only to the VM position preceding INF) both result in this order, which may result in its higher frequency

(VM-)INF - NEG - AUX

(21) hogy ne nyelveljenek, hogy [szolgálni] nem akarok.
that no babble that serve.INF not want.1SG
'so that they would not babble that I don't want to serve'
(1708: Bark. 190)

(22) ha megh nem fizeti a bor árát, a
if PRT not pay.DEF.3SG the wine price.POSS.ACC the
Záloghját [el adni] fogja
pawn.POSS.3SG.ACC away give.INF will.DEF.3SG
'If she does not pay the price of the wine, he will sell her
pawn'

- ▶ Is it possibly topicalization (or other left peripheral constituent)?
- ▶ we find bare nouns and particles that cannot be discourse topics, cannot even be contrasted often, parts of idioms
- ▶ these are (complex) VMs

NEG - AUX - INF - VM

- (23) nem akart maradni az udvaron
not want.PST.3SG stay.INF the yard.SUP
'it did not want to stay in the yard' (1743: Bosz. 420.)
- (24) nem kellene ezt veszteni el
not need.COND this.ACC lose.INF away
'one should not ruin this one' (Tel. 1595)

- ▶ the most infrequent
- ▶ is there no VM movement at all? (already very rare with particles in earlier texts, Hegedűs 2015)
- ▶ this is the most conservative word order

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Sources of variation

- ▶ Empirically: negation, VM, auxiliary
- ▶ Structurally: NegP, PredP, TP(?)
- ▶ The Borer-Chomsky Conjecture: "All parameters of variation are attributable to differences in the features of particular items (e.g., the functional heads) in the lexicon." (Baker 2008)
- ▶ the different syntactic changes that are going on, where the features of the functional heads above are changing, seem to culminate some time in the 19th c.

The variation: competing structures in NEG

- ▶ There are two derivations for negative sentences
- ▶ The innovative one derives NEG - V - VM, the conservative one derives VM - NEG - V
- ▶ The variation is seemingly stable up to the beginning of the 19th c.
- ▶ With the general movement into NegP, *nem* 'not' gets reanalyzed as Spec,NegP; V movement into Neg becomes obligatory

- VM - NEG - AUX - INF order is predicted to disappear, since this can only be derived with head-adjoined negation
- (VM-)INF - NEG - AUX order also disappears (i) either for the same reason w.r.t negation and with the added change that VMs cannot be complex, or (ii) it becomes obsolete similarly to other OV-patterns
- ▶ In the middle of the 19th c. the innovative pattern becomes the standard; the conservative pattern remains as a relic in some subordinate constructions and gets used as a pragmatically marked variant in negative (main) clauses (Gugán 2018)

The variation: generalized PredP

- ▶ VM-movement into Spec,PredP (based on Koster 1994 for Dutch; É. Kiss 2006) derives complex predicates in overt syntax in neutral sentences
- ▶ This predicate movement was not fully generalized yet in Old and Middle Hungarian (Hegedűs 2015, 2018).
- ▶ Particle movement is the most general, other VMs follow suit in time
- ▶ Negation is the only context where VMs precede the (negated) verb, they are postverbal with focus and *wh*-movement, which target functional projections from early on

The variation: auxiliaries

- ▶ Some infinitive selecting verbs have been becoming more auxiliary-like. The change may proceed from regular subordination > restructuring > monoclausal
- ▶ At the end of the change AUX is Merged in a functional head: Mod/T (similar to Dutch auxiliaries by IJbema 2002)
- ▶ Restructuring infinitives have been assigned structures of various sizes (Wurmbrand 2004, É. Kiss 2004 - VPs, Hinterhölzl 2006, Szécsényi 2009 – larger structures, CPs, etc.)
- ▶ For Hungarian, most of those who claim the auxiliary-status of stress-avoiding verbs (Kálmán *et al.* 1989, Kenesei 2001) do not consider their structure to be monoclausal, even for those that are generally accepted to be auxiliaries from a morphosyntactic point of view

- ▶ Den Dikken (2017) proposes that *kell* 'need' is an auxiliary in T in at least a subset of its uses
- ▶ What we see in the texts we examined from the 16th-18th c. is that they are less auxiliary-like than today
- ▶ This fact also boosted the frequency of the NEG-initial structure, which later became the only option in level prosody sentences: if there is less restructuring, there is less PRT/VM-climbing, since the VM can also just move up to the preverbal position of its selecting verb (the infinitive)

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We have

- ▶ looked at word order variation with respect to negation and VMs in late Old Hungarian and Middle Hungarian
- ▶ found that modal verbs/auxiliaries of the restructuring type also take part in word order variation
- ▶ claimed the variation observed can be attributed to changing properties of NegP, PredP, TP
- ▶ claimed that these individual variations all conspire when it comes to the peculiar word order of negative sentences

Outlook

There are various open issues:

- ▶ the reanalysis of the conservative negation pattern as it becomes a pragmatically marked strategy in main clauses
- ▶ when the full generalization of VM movement happens
- ▶ look into the beginning of the grammaticalization of auxiliaries in Old Hungarian and also examine how it proceeds in early Modern Hungarian (from 1772)
- ▶ look into the change in distribution of inflected infinitives with restructuring verbs
- ▶ one possible outcome may be that these changes culminate at around the same time

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