# The rise and fall of Hungarian complex tenses

Katalin É. Kiss (Linguistics Institute of the Hungarian Academy) ekiss@nytud.hu

### 1. Goal

The paper aims to reconstruct how and why complex tenses appeared in the grammar of Proto-Hungarian, and how and why they disappeared 1000 years later. The analyses of the two processes will contribute to our understanding the conditions triggering contact-induced grammatical changes.

## 2. Complex tenses in Old Hungarian

Whereas Modern Hungarian only has two tenses: Present and Past, Old Hungarian displayed a complex tense system encoding both tense and aspect, consisting of the five tenses listed under (1). In the two simple tenses, inherited from Proto-Ugric, the verb was marked for tense and agreement. In the three complex tenses, the lexical verb was marked for aspect and agreement, whereas the tense morpheme was borne by an auxiliary cognate with the copula.

(1) Simple Present:	mond-tok
	say-2pl
Simple Past:	mond-á-tok
-	say-PAST-2PL
Present Perfect:	mond-ta-tok
	say-PRF-2PL 'you have said'
Past Imperfect:	mond-tok val-a
	say-2PL be-PAST 'you were saying'
Past Perfect:	mond-ta-tok val-a
	say-PRF-2PL be-PAST 'you had said'

Since the sister languages of Hungarian (Khanty and Mansi), and most other Uralic languages, as well, only have Present & Past, traditional historical linguists (e.g., Benkő 1991-1992) assumed that the complex tenses in (1) were created in the Old Hungarian period by translators to render the variety of Latin tenses. This view is untenable not only theoretically but for empirical reasons, as well, namely:

i. Latin has no complex tenses in the active voice.

ii. The complex tenses were present in Old Hungarian prior to large scale translation from Latin, e.g.:

- (2)a. *es* odutta vola neki paradisumut hazoa (Funeral Sermon 1195) and give-PRT-3SG be-PAST him Paradise 'and had given him Paradise for his house'
  - b. *turchucat* **mige zocoztia vola** (Funeral Sermon 1195) throat-3PL-ACC PRT rive-3SG be-PAST 'it was riving their throat'

iii. The complex tenses were used not only in translations but also in private letters.

iv. They are still present in the most archaic dialects.

v. The perfect conditional, with the verb marked for perfect aspect and agreement, and the copula marked for tense, has survived in Standard Modern Hungarian, too:

(3) mond-ta-tok vol-na say-PRF-2PL be-COND 'you would have said'

## 3. The complex tenses evolved under Old Turkic influence

The evidence to be presented below suggests that the complex tense–aspect system of Old Hungarian evolved under the influence of the complex tense system of West Old Turkic, whose varieties are known as Ogur, Khazar, and Bulgarian, and whose only surviving descendant is Chuvash.

According to Erdal's Old Turkic Grammar (2004), the Old Turkic languages had complex verb forms constructed in the same way as is attested in Old Hungarian, with the lexical verb marked for aspect and agreement, and the copula marked for tense or mood, e.g:

(4) öŋdün	sözlä-	di-Ø	är-di	(Erdal 2004: 245)
earlier	say-PE	ERF-3SG	be-PAST	
'he had said (it) earlier'				
(5) <i>te-di-mi</i>	z	är-sär	(Chu	astuanift)
say-PER	F-1PL	be-CONE	)	
'we would have said (it)'				

(The morpheme *-di-* intervening between the verb stem and the agreement suffix is glossed as PAST by Erdal (2004); however, it is said to mark 'taxis', i.e., relative tense.)

Chuvash has preserved the order of morphemes illustrated in (4) and (5), but it has cliticized the tense-marked copula to the verb marked for aspect and agreement, as a result of which the agreement appears word-internally:

(6)	şyra-tt-ăm-ččĕ	<i>şyr-satt-ăm-ččĕ</i> (Chuvash Manual)
	work-DURATIVE PAST-1SG-be.PAST	work-preterit-1sg-be.past
	'I was working'	'I had worked'

The Hungarian verbal complex follows this Old Turkic/Chuvash pattern. The appearance of a contact-induced grammatical construction presupposes a bilingual environment for a significant part of the population (cf. Bowern 2008). According to historical sources, Hungarians belonged to Turkic tribal alliances between the Dneper and the Dnester in the 7-8th centuries, and at least the Hungarian tribal elite was Turkic-Hungarian bilingual. In the 9th century, when an independent Hungarian tribal alliance was formed, it also incorporated the Turkic Kabars and other Turkic fragments. The Hungarian–Khazar bilingualism of 10th century Hungarians is also reported in Constantine Porphyrogennetos' *De administrando imperio*.

### 4. How did the borrowing take place?

Uralic languages abound in various types of participles and gerunds, which can agree, and have overt subjects. Old Hungarian, too, inherited from Proto-Ugric several types of non-finite constructions, among them a (a still semi-productive) gerund derived by the suffix *-t*, which could be combined with the copula:

(7) men-t-em val-a-Ø
go-GERUND-POSS.1SG be-PAST-3SG
'my going was [took place]'
men-t-ed val-a-Ø
go-GERUND-POSS.2SG be-PAST-3SG
'your going was [took place]'

The gerund bears possessive agreement. The possessive agreement suffixes are non-distinct from verbal agreement suffixes (the singular possessive paradigm coincides with the definite verbal paradigm, whereas the plural possessive paradigm coincides with the plural indefinite verbal paradigm).

The 'agreeing gerund plus past tense copula with a zero 3rd person singular suffix' string could easily be identified by Hungarian language learners also subjected to Turkic grammar with the Turkic finite past perfect verb form. I.e., the 'gerund + finite copula' structure could be reanalyzed as an 'aspect-marked agreeing V + temporal auxiliary' complex, as follows:

(8)a. <i>men-t-em</i>	val-a-Ø	→ b.	men-t-em	val-a
go-GERUND-POSS.1SG	be-PAST-3SG		go-PERF-1SG	be-PAST

By analogical extension, the *-t-* suffix reinterpreted as the perfective marker could also be dropped, which yielded a past imperfective/past continuous paradigm:

(9)	men-t-em	val-a	$\rightarrow$	men-ek	val-a
	go-PERF-1SG	be-PAST		go-1sG	be-PAST
	'I had gone'		'I was going'		

The past tense copula could also be omitted from the structure reanalyzed as (8b), which resulted in a present perfect paradigm:

(10)	men-t-em	val-a	$\rightarrow$	men-t-em
	go-PERF-1SG	be-PAST		go-PERF-1SG
	'I had gone'			'I have gone'

Four other Finno-Ugric languages have also developed complex tenses of the same type that are attested in Old Hungarian. Observe the Udmurt and Mari minimal pairs in (11-12). The addition of a past tense copula changes the preterite lexical verb supplied with agreement into a past perfect verb form. The Komi pair of examples in (13) confronts a past imperfective and a past perfective verb form, which share the same past tense copula, and differ in that the lexical verb of the past perfect complex also bears an aspectual suffix.

(11) Udmurt:

a. *miniśkem* 'I went'

b. miniśkem val 'had gone'

(12) Mari

a. *tolänam* 'I came'

b. tolänam äl'e 'I had come'

(13) Komi

a. *muna vęli* 'I was going'

b. munęma vęli 'I had gone'

The Uralic relatives of Hungarian that have developed complex tenses (Udmurt, Mari, Komi, and Mordvin) have also been subject to profound Turkic influence; they have shared their habitat along the Volga river with the Chuvash and the Tatars since the 8th century. Interestingly, although the Udmurt/Komi/Mari/Mordvin–Turkic contacts and the Old Hungarian–Turkic contacts took place at different times and different locations, they have led to similar consequences – obviously because the conditions eliciting reanalysis (the bilingual environment, and the functional and structural similarity of the Uralic agreeing

gerund+copula construction and the Turkic finite verbal complex) were the same in both cases. We can draw the following tentative generalization:

(14) If language acquisition happens in a bilingual environment involving L1 and L2,  $XP_{L1}$  can be assigned the structure of  $XP_{L2}$  – provided  $XP_{L1}$  and  $XP_{L2}$  are close enough both functionally and structurally.

## 5. The fall of complex tenses

In 14th century Old Hungarian, the system of complex tenses still seems intact, as illustrated by the sentence in (15), involving simple past, past perfect, and past continuous:

(15) *uala nemynemew tusciabely vr* ... *ky czudakert kyket zent fferenczrewl* was some Tuscia-from lord who miracles-for which St Francis-about

*hallott-uala* ... zent ferenczet lattny es hallany ygen kyuannya-uala heard-PAST-3SG-be-PAST St Francis-ACC to.see and to.hear very.much wish-3SG-be-PAST

'there **was** some gentleman from Tuscia who, because of the miracles he **had heard** about St Francis, **was wishing** to see and hear him very much' (Jókai C. 1370/1448: 37)

16th century texts, however, display the attrition of the system of complex tenses. The -t perfectness suffix is gradually supplanting the -a/e past tense suffix. The past auxiliary is also more and more often marked by -t:

- (16)a. *Ki* hallotta volt valamikoron ezt ... who hear-T-3SG be-T ever that-ACC 'who had ever heard that...' (Döbrentei C. 1508: 5v)
  - b. Wgh mond zenth agoston ky **thaneytya volt** oteth so is.said St Augustine who teach-3SG be-T him 'It is said that it is Saint Augustine who was teaching him' (Winkler C. 1506: 107r)

The disappearance of the present perfect – past tense distinction is followed by the gradual disappearance of the complex tenses, as well.

### 6. The reason for the loss of complex tenses: the spreading of verbal particles

The disappearance of the complex tenses in the Middle Hungarian period appears to be a consequence of the spreading of the marking of telicity by verbal particles, i.e., by the replacement of viewpoint aspect marking by situation aspect marking.

In the earliest Old Hungarian documents, the occurrence of verbal particles is sporadic. Particles have a telicizing role, and they occasionally interact with the morphologically marked viewpoint aspect. E.g., they can mark telicity in imperfective habitual sentences (17), or in imperfective sentences describing abortive actions (18):

- (17) *kikèt akar-uala meg-oluala kikèt akaruala meg-uèruala who-PL-ACC wants-be-PST PRT-kills-be-PST who-PL-ACC wants-be-PST PRT-beats-be-PST 'whom he would he slew; whom he would he put down' (Vienna C. 1416/1450: 143)*
- (18) *meg-foguan m̄g foit'aala otet monduan Ad meg miuèl tartozol* PRT-grabbing PRT throttles-be-PST him saying give-IMP-2SG back what-INS owe-2SG 'having grabbed, he was throttling him, saying, Pay me that thou owest.'

(Munich C. 1416/1466: 24va)

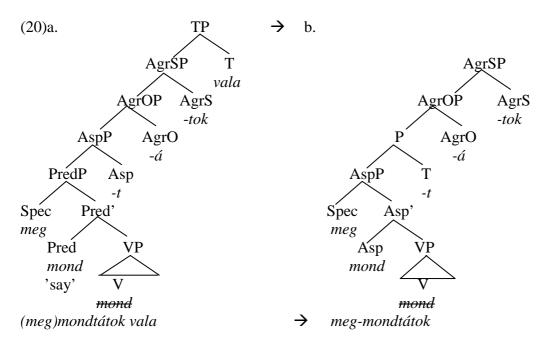
In the Old Hungarian period, we attest the gradual spreading of verbal particles to all telic contexts; by the 16th century, practically every accomplishment and achievement verb develops a verbal particle, as a result of which particleless bare verbs are reinterpreted as atelic. Kiefer (2010) attributes this process to Slavic influence. The bilingual environment that such a change presupposes is likely to have existed, as the Hungarian tribes settling in the Carpathian basin in 896 found a Slavic population there, which they absorbed – presumably through a phase of Hungarian-Slavic bilingualism.

The Slavic substrate language contained minimal pairs of the following type:

(19)	PRT+V ←-	→ V	
	[+ telic]	[-telic]	
e.g. Russian:	pro-chitat'	chitat'	'to read'
	po-est'	est'	'to eat'

In accordance with the generalization in (14), Hungarian–Slavic bilingual speakers must have assigned the features [+telic] / [-telic] to the Hungarian PRT+V / V minimal pairs, as well. E.g., after the emergence of *meg-jön* 'PRT-come', the verb *jön* 'come' assumed a purely atelic reading.

In structural terms, the PredP projection subsuming the Old Hungarian VP, harboring the verbal particle in its specifier, came to be reanalyzed as an aspectual projection, and the Old Hungarian AspP harboring the *-t* suffix came to be reanalyzed as a TP, which made the Old Hungarian TP projection superfluous, and led to its disappearance:



This structural change in the 16th century encoded the replacement of grammaticalized viewpoint aspect marking by grammaticalized situation aspect marking.

#### 7. Conclusion

Both the emergence of complex tenses in Proto-Hungarian, and their disappearance a thousand years later appears to have been triggered by language contacts. Both changes can be linked to bilingual environments. The changes affected constructions which had structurally and functionally close counterparts in the contact languages – which confirms the generalization that in bilingual situations, structurally and functionally close constructions are susceptible to contact-induced reanalysis.

### **References**:

Benkő, Loránd (1991-92) *A magyar nyelv történeti nyelvtana*. Budapest, Akadémiai. Bowern, Claire (2008) Syntactic change and syntactic borrowing in Generative Grammar, in:

G. Ferraresi & M. Goldbach, *Principles of Syntactic Reconstruction*. Benjamins, 187-216. Chuastuanift,

http://vatec2.fkidg1.unifrankfurt.de/vatecasp/Chuastuanift\_%28Berlin%29.htm#134309 Chuvash Manual http://en.chuvash.org/e/43687576617368206d616e75616c Erdal, Marcel (2004) *A Grammar of Old Turkic*. Leiden, Brill.

Kiefer, F. (2010): Areal-typological aspects of word-formation, in: F. Rainer et al. (eds.), *Variation and Change in Morphology*. Benjamins, 129–148.

Meillet, Antoine. 1934. Le slave commun. Paris: Institut d'études slaves.