

1. Abstract

The Kazakh (Kipchak, Turkic) tense-aspect-modality (henceforth: TAM) system features a wealth of grammatical expressions, including c. 25 auxiliary verb constructions (AVCs). Recent fieldwork has shown that certain AVCs in nonfinite clauses have special, previously undescribed properties. This paper proposes an HPSG analysis of three AVCs in three nonfinite clause types, and raises questions of compositionality. For this fairly complicated set of data, I propose a relatively simple analysis based on alternations, formalized in Online-Type Construction (Koenig, 1999; Koenig & Jurafsky, 1994).

2. Data

AVCs in Kazakh can be schematized as follows:

$V_{\text{lexical}}\text{-Converb.A/B} + V_{\text{auxiliary}}\text{-Inflection}$

2.1 The perfect and prospective aspect markers

- *-GAn* (perfective) and *-(y)AtIn* (prospective) mark verbs in nonfinite clauses
- They can be used as both attributivizers and nominalizers
 - Attributivizers are distributed as adjectives and function as if they were relative clauses (see example 1)
 - Nominalizers are distributed as NPs and function as if they were complementizers. They are always possessed, which indicates the subject (i.e. agreement), and they are frequently case-marked

(1) burınnan	Almatı-da	oqı-p	žür-gen
earlier	Almaty-LOC	study-CVB.B	AUX(IPFV 'walk')-GAN.ATTR
bala-lar	qol-ı-n	köter-sin	
child-PL	hand-3-ACC	raise-IMP.3	

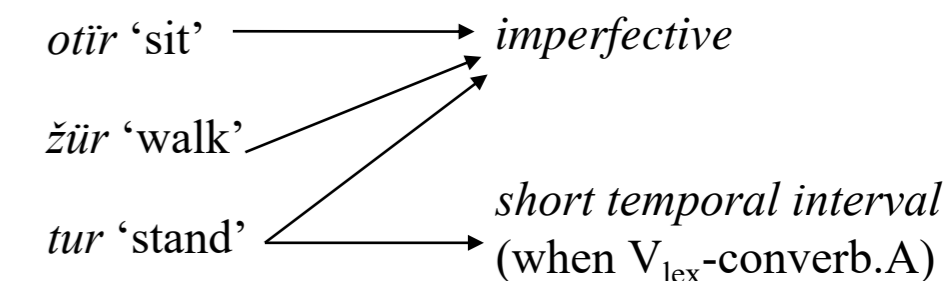
'Those children *who were studying* in Almaty before should raise their hands!'

Find all the relevant examples in the [abstract](#) on the conference website.

References

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2.3 The auxiliary verbs

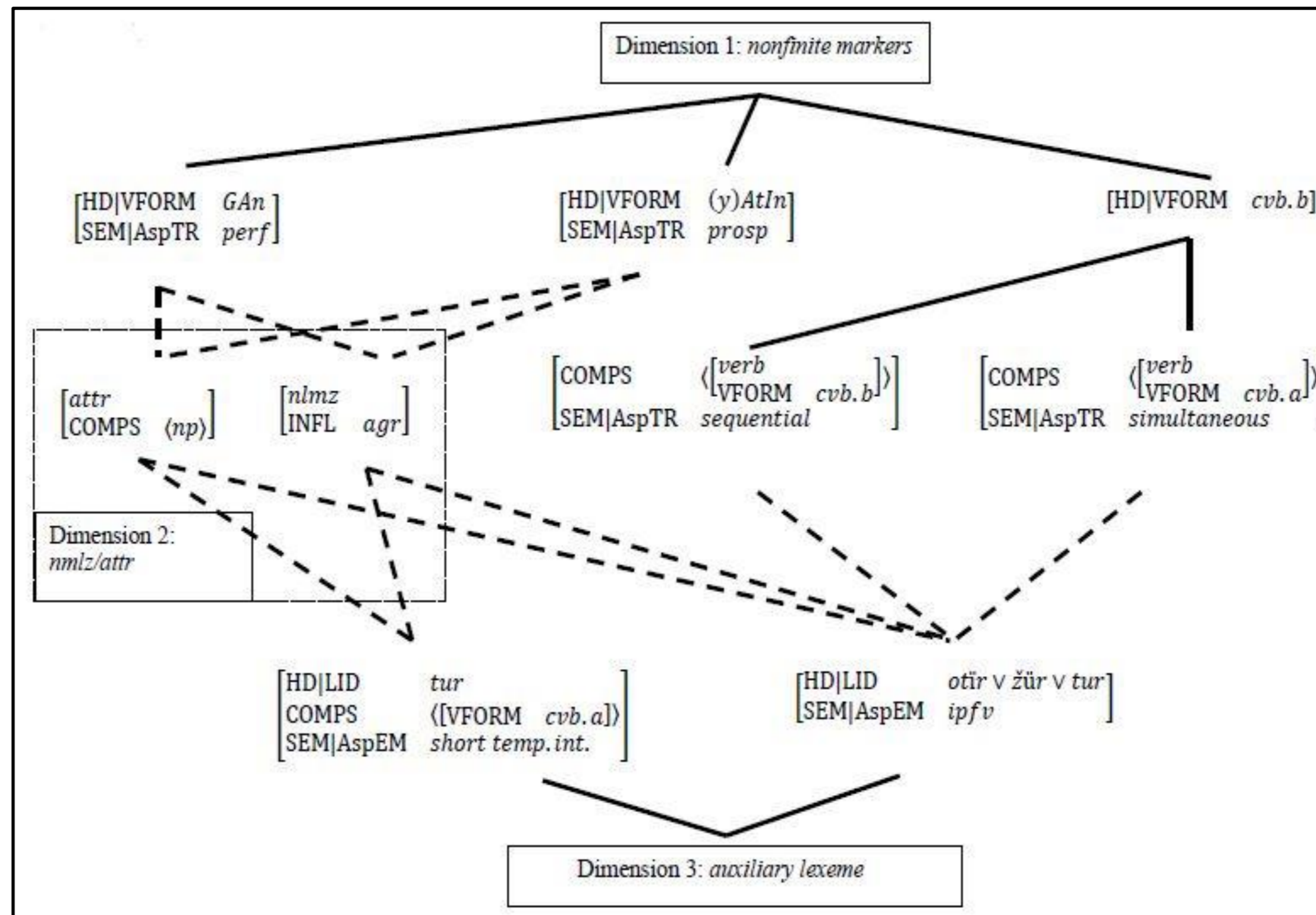


3. Analysis

The analysis is based on systematic alternations, formalized in Koenig's Online-Type Construction (see e.g. Ackerman & Bonami, 2017; Bonami & Crysmann, 2016). I assume three interacting dimensions:

- *Dimension 1* encodes the restrictions of the nonfinite clause types (2.1-2.2), including the aspectual alternation of AVCs subordinated by converb B (2.2).
- *Dimension 2* represents the attributivizer-nominalizer alternation in a purely syntactic fashion (2.1)
- *Dimension 3* comprises lexical rules of the auxiliaries (2.3)

In order to account for the inheritance of aspect categories, and in line with cross-linguistic studies of aspect (e.g. Laca 2006), I assume a *higher aspect* (Time-relational, AspTR) and a *lower aspect* (Event modification, AspEM). Solid lines represent normal, monotonic inheritance, while dashed lines represent free alternation.



2.2 Aspectual alternation when the AVC is marked with converb B

• Converb B functions both as a marker of the lexical verb in AVCs, and as a subordinator, marking a nonfinite clause. When Converb B subordinates an AVC with these three auxiliaries, the form of the lexical verb determines the simultaneous (~unbounded) or sequential (~bounded) reading of the entire AVC:

- $V_{\text{lexical}}\text{-Converb.A} + V_{\text{auxiliary}}\text{-Converb.B} \rightarrow [AspTR \text{ } simultaneous]$
- $V_{\text{lexical}}\text{-Converb.B} + V_{\text{auxiliary}}\text{-Converb.B} \rightarrow [AspTR \text{ } sequential]$