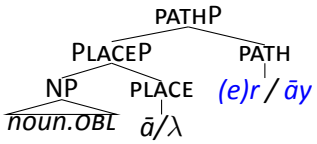
A Nanosyntactic Analysis of Spatial Cases in Tsez. *Pavel Caha, Masaryk University*

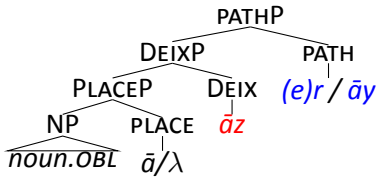
Introduction. Comrie and Polinsky (1998, C&P) provide a seminal discussion of spatial cases in Tsez. C&P show that if cases in Tsez are decomposed into morphemes, the 100+ different case forms can be reduced to a couple of markers and productive rules of their combination. This paper follows the spirit of C&P, but argues for an even more fine-grained decomposition, whereby C&P's single 'series marker' is split into a sequence of an AxPart marker (Svenonius 2006) followed by a Place marker. This leads to a more elegant proposal that provides an insight into the phenomenon of P-drop and the functioning of the syntax-morphology interface.

C&P's analysis is based on the idea in (1), according to which spatial cases in Tsez decompose into an orientation/series marker (Place in (1)) and an optional Path (also Van Riemsdijk 1990, Koopman 2010, Svenonius 2010). This template correctly generates the essive, allative and ablative in Table I, assuming three phonological rules. (i) In the essive, where only Place appears, some word-final vowels (~~in gray~~) drop. (They surface when not final.) (ii) In the allative, when *-r* follows a consonant, an epenthetic *-e* appears. (iii) In the ablative, vowels are ~~deleted~~ before the source marker *-āy*. (Many cases with similar structure are left out for simplicity.)

(1)



(2)



Tsez proximal cases (fragment)

Table I	ESSIVE	ALLATIVE	ABLATIVE
IN	ā	ā- r	~~ā~~-āy
AMONG	λ	λ-er	λ-āy
ON (HORIZONTAL)	ƛ'~~o~~	ƛ'o- r	ƛ'~~o~~-āy

Distal cases

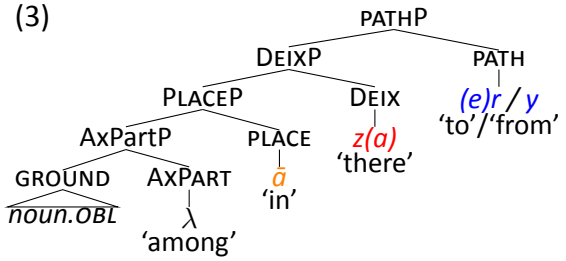
Table II	ESSIVE	ALLATIVE	ABLATIVE
IN	~~ā~~-āz	~~ā~~-āz-a-r	~~ā~~-āz-ay
AMONG	λ-āz	λ-āz-a-r	λ-āz-ay
ON (HORIZONTAL)	ƛ'~~o~~-āz	ƛ'~~o~~-āz-a-r	ƛ'~~o~~-āz-ay

C&P's analysis of **the distal cases** is based on the template in (2), where the distal *-āz* appears in between Place and Path. This proposal correctly derives the essive in Table II, where *-āz* triggers the deletion of the preceding vowel. However, the analysis has two problems. (i) In the allative, an unexpected ***-a*** appears: recall that the expected epenthetic vowel is *-e*. (ii) In the ablative, the expected source marker -āy unexpectedly shortens to -ay. C&P account for this by an additional phonological rule shortening -āy to -ay when there is an *ā* in the preceding syllable. However, they note that this rule cannot apply across the board, since when the ablative -āy follows a root that contains an ā, shortening fails, as in ƛ'ʔā-ƛ'-*āy* 'off the roof.'

To remove these problems, my **new analysis** proposes that the two unexpected *a*s are actually a part of the distal marker, which I propose to be *z(a)* (rather than *-āz*). This gives us the analysis of the distal forms as shown in Table III. Focussing first on the IN series, the analysis correctly handles the essive (-ā-**z**~~a~~), with the final *a* dropping word-finally. Crucially, the appearance of *a* in the allative -ā-**za**-r is no longer problematic because *a* is not considered epenthetic, but a part of the distal marker. Now moving to the ablative of the IN series, the idea of a distal za leads to an analysis where C&P's non-decomposable *āy* actually has two pieces, *ā* 'in' and *y* 'from,' yielding a parallel analysis of the allative -ā-**za**-r and the ablative -ā-**za**-y, thereby eliminating the need for a morphophonologically triggered shortening rule.

Table III	essive	allative	ablative
IN	-ā	-ā -r	-ā -y
IN (DIST)	-ā-**z**~~a~~	-ā-**za**-r	-ā-**za**-y
AMONG (DIST)	-λ-ā-**z**~~a~~	-λ-ā-**za**-r	-λ-ā-**za**-y
ON (DIST)	-ƛ~~o~~-ā-**z**~~a~~	-ƛ~~o~~-ā-**za**-r	-ƛ~~o~~-ā-**za**-y

(3)



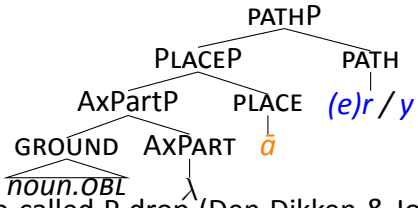
Note now that in the other distal forms, the full marker of the distal IN series is found after the series markers, suggesting that *-ā* 'in' stacks on top of the other orientation markers. This is captured using the template (3), where the more semantically heavy orientation markers are hosted by the AxPart head (Svenonius 2006), and only the IN marker *-ā* is located under Place. **Summarizing**, the analysis in (3) explains all the distal forms without the need to assume any irregular phonological processes. **In addition**, we obtain a linguistically insightful analysis, revealing an even more fine-grained internal structure of Tsez locatives, which, interestingly, represent a mirror-image order of English locatives like *from (there) in front (of the house)*.

P-drop. Recall now that the proximal differs from the distal by the absence of Deix. Removing Deix from (3) yields (4), which predicts that the proximal forms only differ from the distal ones by the absence of *z(a)*. This is correct for the IN series in Table III, and also for the ablatives in Table IV. However, for the essives and allatives, the tree (4) wrongly predicts that they contain the Place marker *-ā*, marked cyan in Table IV. The correct forms lack the cyan *ā*, recall Table I.

Predicted proximal forms

Table IV	essive	allative	ablative
AMONG	*-λ-ā	*-λ-ā-r	-λ-ā-y
ON	*-ƛo-ā	*-ƛo-ā-r	-ƛo-ā-y

(4)

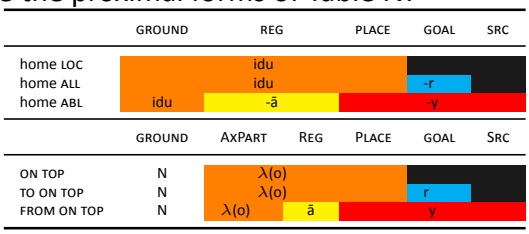


The absence of the cyan *-ā*'s is an instance of the so-called P-drop (Den Dikken & Ioannidou 2006, Collins 2007). P-drop refers to a situation where some (inherently locative) nouns lack locative markers, obligatory for other nouns. In Tsez, regular nouns must have the Place marker ā to be read as locatives, see (5). However, nouns like 'home' lack it, so *idu* in (6a,b) means both '(the) home' and 'at home.' The marker ā- is also missing in the allative (*idu-r* 'to home') but must be present in the ablative, *id-ā-y* 'from home.' In sum, special nouns like 'home' lack the expected -ā in the locative and allative, just like the proximal forms of Table IV.

(5) a. šahar city
b. šahary-ā in the city
c. šahary-ā-r to the city
d. šahary-ā-y from the city

(6) a. idu home
b. idu-ā at home
c. idu-ā-r to home
d. idu-ā-y from home

(7) [Src [Goal [Place [Reg [AxPart [DP]]]]]]



The talk provides an analysis of P-drop (and the overall Tsez system) in terms of **phrasal lexicalisation** (Neeleman & Szendöi 2007, Starke 2009). Using this idea, inherently locative nouns (and AxParts) have a special lexical entry that allows them, in the locative and the allative, to lexicalise the projection(s) that must be lexicalised by ā with regular nouns. The specific analysis is based on the functional sequence in (7), where AxPart is optional, REG is a head that maps an object (or its Part) on a set of points (its eigenspace), Place is a function that picks a location relative to the eigenspace, Goal constructs a Goal Path and Src reverses the goal Path, as in Pantcheva (2012). The lexicalisations for the noun *idu* 'home' and for the AxPart λ(o) 'on top' are provided in the table on the right. The talk shows in detail how these lexicalisations are derived using the lexicalisation algorithm described in De Clercq et al. (2024), and the type of lexical items utilised in Blix (2022). A comparison is made with approaches based on terminal lexicalisation of the sort: lexicalise Place by Ø when there is an AxPart to the left and nothing **or** allative to the right. An argument is made in favour of phrasal lexicalisation based on the disjunctive nature of such a rule.

Blix 2022: Interface Legibility. *Glossa*. **Collins 2007**. Home sweet home. **C&P**: The great Daghestanian case hoax. **De Clercq et al. 2024**: *lingbuzz/007744*. **Ioannidou & Dikken 2009.** P-drop, D-drop, D-spread. **Neeleman & Szendröi 2007.** Radical pro-drop. **Pantcheva 2012**. Decomposing Path. **Starke 2009**. Nanosyntax. **Svenonius 2006**: The emergence of AxParts. **Svenonius 2010**: Spatial P in English.