On the feminine singular declension of the Russian demonstrative

Pavel Caha & Lucie Taraldsen Medová
Masaryk University, Brno
pavel.caha@phil.muni.cz; 119624@muni.cz

Introduction. The paper proposes a Nanosyntactic analysis of the Russian demonstrative declension. We focus here on the feminine form, but the account can be extended to the masculine/neuter. The fact that we consider most curious is depicted in (1)-(2). What we see here that Russian demonstratives sometimes inflect exactly like nouns (see the nominative in (1)), but other time they don't (see the genitive in (2)).

(1)	ét-**a**	žen-**a**	(2)	ét-**oj**	žen-**y**
	the-fem.nom	woman-fem.nom		that-fem.gen	woman-fem.gen

The identity of the endings in (1) suggests that the features doubled by agreement are the same features that we find on the noun. However, this is not the case in (2). This talk argues that we can maintain the idea that the features doubled on the demonstrative are the same features as on the noun, even when they are not expressed the same. Specifically, the different endings in (2) are to be analysed as allomorphy.

Our implementation relies on Nanosyntax (Starke 2018), where allomorphy may arise due to different roots spell out different number of features (Caha at al. 2019). The idea is that if we need to spell out the features ABC, and the root spells out A, the ending spells out BC. If the root spells out AB, the ending only spells out C. Therefore, even though both forms spell out ABC as a whole, the endings may differ.

The data pose a challenge to this view. In (1), the demonstrative and the noun have the same ending, so they must spell out the same number of features. But in (2), the endings are different, so the roots must spell out different sets of features. In order to resolve this, we use the proposal made in Blix (2021), where roots may differ not only in the amount of features they spell out, but also in the structure of the features.

Structuring the paradigm. The set of facts we aim to derive is summarised in the table below. The feminine demonstrative paradigm is on the very right. The instrumental has an archaic form with a final *u* (in brackets, Timberlake 2004:118). We analyse the paradigms as if *u* was always present, but deleted due to apocope.

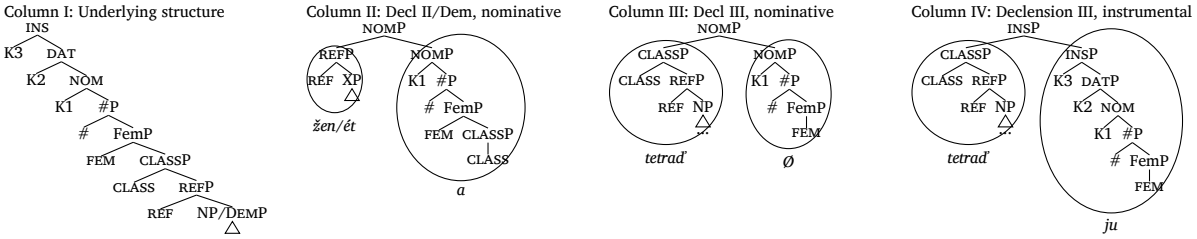
	woman DECL II	this FEM.SG	notebook DECL III	this NEUT.SG	Panova FEM.SG	this FEM.SG
NOM	žen-a	ét-a	tetráď-Ø	**ét-o**	Panov-**a**	ét-**a**
ACC	žen-u	ét-u	tetráď-Ø	**ét-o**	Panov-**u**	ét-**u**
GEN	žen-y	**ét-o**-j	tetráď-i	**ét-o**-go	Panov-**oj**	ét-**oj**
LOC	žen-e	**ét-o**-j	tetráď-i	**ét-o**-m	Panov-**oj**	ét-**oj**
DAT	žen-e	**ét-o**-j	tetráď-i	**ét-o**-mu	Panov-**oj**	ét-**oj**
INS	žen-o-j(u)	**ét-o**-j(u)	tetráď-ju	ét-im	Panov-**oj(u)**	ét-**oj(u)**

Our goal (recall) is an analysis where the demonstrative has the same ϕ-features as all other feminine nouns. This is supported by the fact that feminine proper names like *Panova* (in the pre-last column) inflect exactly like demonstratives. This confirms that there is no inherent difference between demonstratives and nouns in terms of ϕ, and that the difference in (2) should be relegated to the realm of allomorphy.

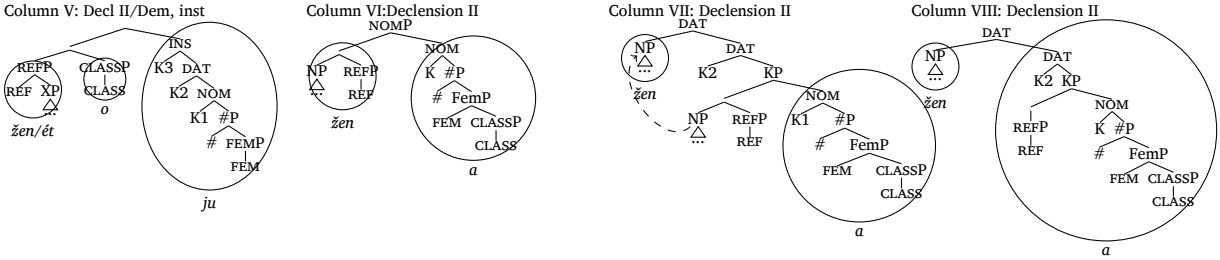
It is relevant that in NOM, ACC, INS, the DEM has the same endings as DECL II *žen-a* 'woman,' see the dark shading in the two paradigms on the left. In GEN, LOC, DAT, the endings are different. In these latter cells, the demonstrative decomposes into an invariant *ét-o*, in bold, corresponding to the NOM of the neuter paradigm. The invariant form is followed by *-j*, which can be identified as a postvocalic realisation of

the Declension III endings *-i* (in red). A bi-morphemic ending is also identified in INS, where the invariant base is followed by *-j(u)* (in blue), also a DECL III ending. (In DECL III, apocope of the final *u* is impossible, since the stem is C-final.)

Analysis. The underlying structure we assume is given in Column I. At the bottom, there is either an NP or DemP. Above it, there are ϕ features; we use those proposed in Harley and Ritter (2002) but structured in a binary tree (Caha 2021). The REF feature stands for referential expressions. Above REF, there are two class features (CLASS, FEM) and the singular # feature. On top of ϕ, there are case features. Following Caha (2009), we assume that cases stand in a containment relation. We depict only NOM, DAT and INS, since these are most relevant for the analysis.



We assume that the roots of both DEM and DECL II noun *žen-a* 'woman' spell out REFP. The ending(s) must spell out the remaining features. Assuming the spellout algorithm of Starke (2018), this leads to the movement of the root in NOM above these features, see Column II. Decl III nouns spell out CLASSP, and the ending again spells out the remaining features, see Column III. Crucially, these are different features than in Decl II, so the ending is different. Column IV shows the structure of the INS in Decl III.



Supposing that *-ju* is the only ending able to spell out INS, the DEM and the DECL II noun *žen-a* must use *-ju* in the INS. This leads to the following issue: neither the root or the ending spell out CLASS. Therefore, *-o* appears to spell out CLASS, see Column V. (*-o* is specified as [NOM[#[CLASS]]], and it 'shrinks' due to the Superset Principle.)

The biggest challenge for the analysis is to model the difference in the DAT between the DEM and the DECL II noun. Our proposal is that the DEM has again a structure like the one in Column V: the only way to spell out DAT on DEM is to use the DECL III ending *-i*, which leads to the appearance of *-o*, yielding *ét-o-j* (not shown).

The analysis of *žen-a* is based on the proposal that even though it spells out REFP (like DEM), it is lexically associated to a more complex structure (as in Blix 2021): the NP first moves across REF, and only then is REFP spelled out by *žen-*; see the *žen-* circle in Column VI. Using an idea currently explored by M. Starke, we propose that when the DAT feature is merged to the structure (Column VII), this leads to subextraction of the NP, stranding REF (see Column VII). The stranded REF is spelled out by the dative ending *-e*. This step of subextraction is unavailable for the DEM, since it has different structure, which makes this step unavailable. Since subextraction is unavailable, the DEM has to fall back on a different structure (like the one in Column V).

Summary. The current paper captures an intricate set of morphological relations between the demonstrative and the nominal declension endings, arguing that

the demonstrative is composed of different bits and pieces of the nominal declension. The analysis is formalized within Nanosyntax, relying on a new proposal by M. Starke concerning subextraction as a new option in the Spellout Algorithm of Starke (2018).

References. Blix 2021. Phrasal spellout. *Glossa*. Caha et al. 2019. The structure of the comparative. *Studia Linguistica.* Caha 2021. Modelling declensions. *Acta Linguistica Academica*. Harley & Ritter 2002. Person and number in pronouns. *Language*. Starke 2018. Complex left branches. In *Exploring Nanosyntax.* Timberlake 2004. *A grammar of Russian.*