A MORPHO-PHONOLOGICAL APPROACH TO THE RUSSIAN DECLENSION

While traditional Russian grammars distinguish three declension classes, Corbett 1982 argues for four (henceforth encoded, after their nominative singular, as *a*-declension, *o*-declension, *C*-declension and the *ǐ*-declension, where *ǐ* is the front yer). For inanimate nouns the declension class predicts gender, as in (1), with a few exceptions.

(1) a. inanimate nouns of the C-declension are masculine
b. inanimate nouns of the *a*- and *ǐ*-declensions are feminine
c. inanimate nouns of the *o*-declension are neuter

If the declension class is merely a diacritic on the nominal stem, syncretism patterns between declension classes, indicated by shading in Table 1, can only be non-accidental if treated as Elsewhere cases. One recent alternative (Nesset 1994, Müller 2004a, b, Alexiadou and Müller 2008, Caha 2021, Privizentseva 2023) is to treat the declension class as a combination of two binary features, as in Table 2, with Caha 2021, Privizentseva 2023 identifying [±α] as [±F].

Table 1: Nominal declension classes (after Corbett 1982)

DECL / CASE	O	C	Ǐ	A
NOM	božestv-ó	stól	bol^{j}	čert-á
ACC	ACC=GEN/[+ANIM], ACC=NOM/[−ANIM]		ACC=NOM	čert-ú
GEN	božestv-á	stol-á	bol^{j}-í	čert-ɨ́
DAT	božestv-ú	stol-ú	bol^{j}-í	čert-é
LOC	božestv-é	stol-é	bol^{j}-í	čert-é
INS	božestv-óm	stol-óm	bol^{j}-ju	čert-ój(u)

Table 2: Featural decomposition of Russian declension classes: [±α][±β]

	−α	**+α**
−β	C-declension: *stol* ‘table.M’, *drózd* ‘thrush.M’	*ǐ*-declension: *l^{j}ubóv^{j}* ‘love.F’
+β	*o*-declension: *božestvó* ‘deity.N’	*a*-declension: *čertá* ‘line.F’

Two problems remain in this framework. Firstly, there is no independent motivation for [±β]. Secondly, indeclinable nouns, forming a large and open class in Russian, are neither expected nor explicable, requiring another diacritic feature, a standard treatment of this class.

Floating segments: I propose that nominal declension is determined by the final segment of the stem: a consonant for the C-declension, the floating vowels *a*, *i* and *o* (henceforth, ^{a}, ^{i} and ^{o}) for the *a*-, *ǐ*- and *o*-declensions, respectively, and any non-floating vowel for indeclinables.

Indeclinables: If non-floating stem-final vowels are incompatible with declensional suffixes (for reasons to be discussed during the talk), the difference between declinable and indeclinable nouns becomes non-diacritic and the eventual transition of some nouns (e.g., *šva* ‘schwa’) into the declinable class (as opposed to, e.g., *bra* ‘sconce’) receives a formal explanation. The fact that there are no inanimate consonant-final indeclinable nouns is also accounted for (by the fact that they are obligatorily assigned to the C-declension), as is the productivity of the indeclinable class in Russian: nothing precludes vowel-final stems. Moreover, we can now explain why the third (*ǐ*-) declension is unproductive and why there are no inanimate C-final indeclinables: a floating stem-final consonant remains an exception in Russian prohonology.

Motivation: Evidence for floating segments in Russian comes from two sources: yers and the disappearing consonants. [1] Starting with Hyman 1985: 58–59 and Rubach 1986, Slavic yers have been regarded as melodies not associated to timing slots. The expansion of this view to the nominal ^{a}, ^{i} and ^{o} will be shown to not impinge on the general account of yer vocalization, since, following Scheer 2019, no final yers will be hypothesized in the C-declension or in the genitive plural. [2] V_1/V_2N alternations in the few cases like (2) and (3), originally regarded by

Lightner 1965:59-62, 1967:1187, 1969:49-50, Kayne 1967, Melvold 1989:237, and Halle 2004 as involving the transformation of a tautosyllabic VN sequence, are given a more natural explanation by the assumption that the nasal is floating (in contrast to cases like (4)).

(2) a. *vrém^{j}a/vrémeni/vrem^{j}ón* 'time.NOM/GEN=DAT=LOC/INS'
b. *sém^{j}a/sémeni/sem^{j}án* 'seed.NOM/GEN=DAT=LOC/INS'

(3) a. *razo.mn^{j}-o-t* 'mash-PRES-3SG' pre-vocalic
b. *razm^{j}a-t^{j}* 'mash-INF' pre-consonantal
c. *razmin-at^{j}* 'mash.IMPFV.INF' after tensing, pre-vocalic

(4) *búnker* 'bunker', *régentša* 'female regent', *xánša* 'female khan'

The unification of [+F] declension classes: The hypothesis that *a*- and *ǐ*-declension stems end in the corresponding floating vowel permits dispensing with allomorphy for their case endings, as in Table 3, deriving the appropriate surface representations from phonological principles (cf. Spaelti 2004, Emonds and Spaelti 2005), achieving a diacritic-free system.

Table 3: [+F] declension classes

	CASE	UR	ǐ (=^{I})		A	
F.SG	**NOM**	Ø	bol^{j}	ǐ + Ø → [–back]	čert-á	^{a} + Ø → a
	ACC	[hi][rd]	bol^{j}	ǐ + [hi][rd] → [–back]	čert-ú	^{a} + [hi][rd] → u
	GEN	ɨ	bol^{j}-í	ǐ + ɨ → i	čert-ɨ́	^{a} + ɨ → ɨ
	DAT	i	bol^{j}-í	ǐ + ^{i} → i	čert-é	^{a} + ^{i} → e
	LOC	i	bol^{j}-í	ǐ + ^{i} → i	čert-é	^{a} + ^{i} → e
	INS	ŭju (=^{i}ju)	bol^{j}-ju	ǐ + ŭju → ju	čert-ój	^{a} + ŭju → oj(u)

Two questions remain: the non-vocalization of the final ^{i} in the *ǐ*-declension in the nominative and accusative cases, and the morphological status of the stem-final ^{a}, ^{i} and ^{o}. Starting with the latter, I propose that they realize the number node ([+singular]).

Deriving declension class from gender and the final C: I propose that the *ǐ*-declension is defined by having a floating stem-final consonant, which is realized when followed by a vowel. Firstly, the markedness of floating consonants explains why the *ǐ*-declension does not accept new roots. Secondly, Corbett's generalization (1) can now be restated (5), with the exponence of [+singular] defined by the formal gender and by phonology (with a special proviso for ≈10 nouns like (2) and for the nouns *mat^{j}* 'mother' and *dočˇ^{j}* 'daughter' that exhibit similar behavior). Thirdly, the vocabulary insertion rules in (5) also extend to other lexical categories.

(5) [SG] ↔ ^{i} / ^{C} __ [SG] ↔ ^{o} / __ [+N]
[SG] ↔ ^{a} / __ [+F] [SG] ↔ Ø otherwise

The phonology of [+F] declension classes: I propose that the realization of the floating stem-final consonant of the *ǐ*-declension precludes the vocalization of the floating ^{i}, which is realized as the [–back] feature on the preceding consonant (yielding the surface syncretism of NOM.SG and ACC.SG). As the floating ^{a} and ^{o} follow stable consonants, they are vocalized as full vowels (as predicted by Scheer's (2019) structural account of yer vocalization). Since a floating vowel is not vocalized if followed by a full vowel (GEN.SG), the SG exponent will be deleted in both declensions but will also palatalize the stem-final consonant in the *ǐ*-declension. The sequence of two floating vowels results in their coalescence (DAT/LOC.SG), and the final vowel of INS.SG is subject to apocope unless yielding a consonant cluster (as attested elsewhere in Russian, e.g., by *dals^{j}a*/*dalas^{j}* 'give.PAST.REFL.M/F'). [–F] declensions have a different set of case endings.

Finally, I will discuss a potential extension of this approach to verbal conjugation, accounting for vowel-deletion vs. glide-insertion with thematic suffixes (*-a-*/Ø vs. *-a-*/*-aj-*).