## Russian Genitive Plurals are Impostors John Frederick Bailyn (Stony Brook) and Andrew Nevins (M.I.T.)

## 1 Overview

The Vocabulary Item Concatenation (VIC) View: To a large extent, the phonological form of Russian nouns can be easily predicted for case-number combinations, purely based on (a) the phonological form of the stem<sup>1</sup> and (b) the declension class of the noun. Predicting the phonological form of a noun within the paradigm is a simple concatenation of the stem and vocabulary items realizing the case-number affixes. Examples are illustrated below for three representative case/number combinations<sup>2</sup>. An apostrophe (') after a consonant indicates palatalization.

(1)	Stem	Class	Nom. Sg	Dat Sg	Gen Sg	Instr Sg	Dat Pl
	knig <i>book</i>	Class I	kniga	knige	knigi	knigoj	knigam
	stol table	Class IIA	stol	stolu	stola	stolom	stolam
	zver' beast	Class IIA	zver'	zverju	zverja	zverem	zverjam
	nož <i>knife</i>	Class IIa	nož	nožu	noža	nožom	nožam
	okOn window	Class IIb	okno	oknu	okna	oknom	oknam
	dver' door	Class III	dver'	dveri	dveri	dver'ju	dverjam
	noč' night	Class III	noč'	noči	noči	noč'ju	nočam

It is important to notice that on the VIC view, the form of the nominative singular is distinct from the stem. The stem is a purely abstract phonological form that, for some nouns, might not ever surface, as all nouns bear a case and number specification as a result of functional structure in the extended determiner phrase. Thus, nominative singular is realized by the affix /-a/ in Class I, by /-o/ in Class IIb, and by a zero morpheme elsewhere.

Three Allomorphs of the Genitive Plural: The genitive plural is realized by either /-ov/, /-ej/, or zero. Under the VIC view, allomorphy can only result from reference to (a) the phonological form of the stem or (b) the declension class of the noun. However, the distribution of these allomorphs cannot be predicted on this information alone:

 $<sup>^{1}</sup>$ All stems end in a consonant. There are some lexical items in Russian that are the result of borrowing, e.g., *kenger'u*, which do not end in a stem. Such stems are, however, indeclinable, and hence outside of the phenomena under investigation. The *stem* of a noun is equivalent to the root plus any derivational morphology. When the noun is the result of nominalization, the stem is the nominalized root.We do not include stress here, as it does not bear on these processes.

 $<sup>^{2}</sup>$ The Class IIa/IIb distinction corresponds to a masculine/neuter distinction in the gender classification. Phonological reflexes of the distinction only occur in the nominative and accusative.

	Stem	Class	Nom. Sg	Gen Pl
	knig book	Class I	kniga	knig
	stol table	Class IIa	stol	stolov
(2)	zver' beast	Class IIa	zver'	zverej
(2)	nož <i>knife</i>	Class IIa	nož	nožej
	okn window	Class IIb	okno	okon
	dver' door	Class III	dver'	dverej
	noč' night	Class III	noč'	nočej

Class II nouns can show any of the allomorphs. Class IIa stems that end in a non-sibilant hard consonant take the /-ov/ allomorph, while class IIa stems that end in a soft or sibilant consonant take the /-ej/ allomorph. However, class I stems ending in a hard consonant do not take /-ov/. The VIC view would have to be as follows:

It would be difficult to defend the position (3) is anything but completely arbitrary. Compare now, however, a different formulation from the VIC View, and with its concomitant rules governing the distribution of allomorphy:

(4) The nominative singular is the phonological base for derivation of the genitive plural.

(5)	Structural Description	Structural Change
	BASE ends in $V_{final}$	Truncate $V_{final}$
	BASE ends in $C'_{final}$ or sibilant	Suffix /-ej/
	BASE ends in $C_{final}$	Suffix /-ov/

Notice that this analysis unifies the pairs *zver'-zverej* and *dver'-dverej* due to the phonological properties of the nominative singular, as there is no shared class information, and reference to the declension class cannot exclusively unite these two. Consider further abstract nouns with the formative /-ij-/ which bear no resemblance to each other in form, except in the genitive plural:

	Stem	Class	Nom. Sg	Gen Sg	Inst Sg	Dat Sg	Gen Pl
(6)	penij <i>singing</i>	Class IIb	penije	penija	penijem	peniju	penij
	istorij <i>history</i>	Class I	istorija	istoriji	istorijej	istroriji	istorij

These two forms share the property distinguished in (5): the base ends in a vowel.

**Discussion:** While adopting (4)-(5) provides the most straightforward description of the phonological form of the genitive plural, it does not constitute a fully explanatory account. Analyses of the form in (4)-(5) are quite prevalent in the *Output-Output Correspondence* literature, but it is incumbent to explain why these two particular morphosyntactic forms are phonologically related. Output-

Output Correspondence is often invoked to mimic cyclic derivations of morphological structure. In the case of Nom-Sg/Gen-Pl identity, however, there is no morphological structure-building, cyclic or otherwise, in which these two forms would be in a derivational relationship. We limit cases of Asymmetric O-O Correspondence to the following condition (cf. also Truckenbrodt and Butska 2003):

(7) An asymmetric O-O relation requires that one form be morphosyntactically contained in the other, in the sense that it is morphosyntactically isomorphic to a constituent within the other structure

The formulation in (7), though more precise than the featural-subset relation defined by Kager (1999), still leaves the form of Russian genitive plurals unresolved; there is no morphosyntactic containment of nominative within genitive or plural within singular. However, independent research reveals nominative to be the default case in Russian, and singular to be the default number. Our suggestion is the following:

(8) The feature plural is deleted in the environment of genitive

The evidence for plural deletion comes from the following observation:

(9) No gender distinction in the Russian plural: delete [Class] features in the environment of [plural]

The genitive plural would be a counterexample to (9), forcing a disjunctive formulation of an otherwise exceptionless generalization about markedness: gender distinctions are *neutralized* in a *marked environment*, that of the plural. We take the fact that gender distinctions persist in the genitive plural as independent evidence that [plural] is deleted in the environment of [genitive], bleeding application of (9).

The result of (8) does not guarantee forms dependent on the nominative singular. Two options remain; we outline the consequences of each. Either *absence of number* is distinct from singular, and the genitive singular endings cannot be inserted, leading to elsewhere realization by the unmarked nominative singular (with the least-specified case-feature [+subj] (Müller 2003 et. preq); or, the theme feature retains genitive plural features, and triggers a processual readjustment of the stem.