

**Surface Phonotactics in Morphology:  
Ongoing Change in the Belarusian Noun Declension\***

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There is ongoing language change in the Genitive plural of Belarusian nouns where the Declension Ia masculine suffix /-ow/ is being extended to other declension classes. The focus here is on the neuter and feminine noun classes where the original Gen pl suffix /-Ø/ is now being replaced by /-ow/. The progress of this change appears to be guided primarily by phonotactics. First, I show that the /-ow/ is favored in nouns with stem-final consonant clusters in both the Ib neuter and the II feminine declensions. Second, I demonstrate that these phontactic conditions also hold in the a-stem masculine and common gender nouns. This conditioning environment appears to be a new development in Belarusian. I then look at a subgroup of neuter and feminine nouns where both allomorphs continue to be acceptable. Finally, I provide some explanations for why it is the /ow/ and not the other available suffix /-ej/ which is being extended and for why it is the unstressed variant with vowel neutralization [-aw] that is generalized and not the stressed version [-ow]. This preliminary study compares the Gen pl forms for a representative set of nouns from Biryła and Shuba (1985), the 1987

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Academy dictionary and the 2008 grammatical dictionary of nouns; a complete statistical analysis remains for future work.

## 1 Introduction

Standard Belarusian is currently experiencing language change in the Genitive plural case of nouns. The primary suffix in Declension Ia masculine nouns after any type of stem-final consonant is /-ow/, pronounced [-ów] under stress and [-aw] when not stressed, and it is now being actively extended to all other declension classes, as shown in (1).

### (1) Belarusian Gen pl allomorphy (Biryła and Shuba 1985:86-97)

#### Declension Ia masculine nouns

All stem types: /-ow/ (brat-ów 'brother', matór-aw 'motor',  
naz-ów 'knife', vúŋn<sup>1</sup>-aw 'pupil')

#### Declension Ib neuter nouns

All stem types: /-Ø/ (balót-Ø 'swamp', vójsk-Ø 'army')  
All stem types: /-ow/ (pał<sup>1</sup>-ów 'field', ŧórl-aw 'throat')

#### Declension II a-stem feminine nouns

All stem types: /-Ø/ (nóŧ-Ø 'leg', l<sup>1</sup>in<sup>1</sup>ij-Ø 'line')  
All stem types: /-ow/ (dól<sup>1</sup>-aw 'lot', mał<sup>1</sup>ítv-aw 'prayer')

#### Declension III i-stem feminines (palatalized C<sup>1</sup> and shibilant stems)

All stem types: /-ej/ (ŧus<sup>1</sup>-éj 'goose', naŋ<sup>1</sup>-éj 'night')  
Some stems: /-ow/ (réŋ<sup>1</sup>-aw 'thing')

Given that the plural subparadigm in Belarusian has one suffix exponent per case except in the Genitive, it is not surprising that change is taking place in the Genitive plural. But the nature of this change is unusual in that in Declension II feminine nouns, the /-ow/ is being extended under phonotactic conditions that are not active elsewhere in the nominal paradigm and that do not appear to be a generalization over the lexicon of masculine Ia nouns where the suffix originates. And in a subset of Ib neuter and II feminine nouns with a vowel-zero alternation in the stem, allomorphy in the Genitive plural appears to be stable and accepted as the norm.

## 2 Declension Ib Neuter Nouns

The spread of the overt /-ow/ allomorph is particularly common in neuter and feminine nouns which historically had no overt inflectional exponent in the Genitive plural. Its spread within Declension I itself from Ia masculines to Ib neuters is almost complete with only a few nouns retaining their original /-Ø/ allomorph, but even these often have variants with /-ow/ [-aw], e.g., [bul<sup>1</sup>basxóv<sup>1</sup>iʃʃa] 'potato cellar', with Gen pl [bul<sup>1</sup>basxóv<sup>1</sup>iʃʃ ~ bul<sup>1</sup>basxóv<sup>1</sup>iʃʃaw], and many others (2). (Citations throughout are from Biryła and Shuba 1985, *Sloŭnik belaruskaj movy: Arfaŭrafija, arfaepija, aktsentuatsyja, slovazmjanenne* 1987, and the *Hramatychny sloŭnik nazoŭnika* 2008. No date is given when all three sources agree.) The focus here is on the progress of the change over a relatively short period of time by comparing the Gen pl forms in the three sources. The clear general trend is for an increase in the acceptability of /-ow/ over time.

Because the spread of /-ow/ is almost always realized in its unstressed variant [-aw], the suffix is given as [-aw] below. Compare the occurrence of [-aw] with different types of noun stems, those with final consonant clusters in (2a), geminates in (2b), and those with only one stem-final consonant in (2c). What we see is that the [-aw] is now the preferred Gen pl allomorph for stems with final consonant clusters of any type while stems that end in a single consonant show the change in progress with both /-Ø/ and [-aw].

### (2) Spread of [-aw] within Declension I to Ib neuter nouns

#### a. CC-stems

<i>Nom sg</i>	<i>Gen pl</i>	
vójsk-a	vójsk (1985), vójsk~vójsk-aw (2008)	army
yn <sup>1</sup> azd-ó	yn <sup>1</sup> óst~yn <sup>1</sup> ózd-aw (1985, 1987) yn <sup>1</sup> ózd-aw (2008)	nest
m <sup>1</sup> ésts-a	m <sup>1</sup> ésts ~ m <sup>1</sup> ésts-aw (1985), m <sup>1</sup> ésts-aw (2008)	place
sérts-a	sérts-aw	heart
sóns-a	sóns-aw	sun
ʃakárstv-a	ʃakárstv-aw	drug
ʃústr-a	ʃústr-aw	mirror
rabr-ó	rébr-aw	rib
fútr-a	fútr-aw	fur

sts <sup>j</sup> abl-ó	sts <sup>j</sup> óbl-aw	stem
z <sup>j</sup> arn-ó	z <sup>j</sup> órn-aw	grain
jarm-ó	járm-aw	yoke

b. Geminate stems

v <sup>j</sup> as <sup>j</sup> él <sup>j</sup> l <sup>j</sup> -e	v <sup>j</sup> as <sup>j</sup> él <sup>j</sup> l <sup>j</sup> -aw	wedding
s <sup>j</sup> n <sup>j</sup> adán <sup>j</sup> n <sup>j</sup> -e	s <sup>j</sup> n <sup>j</sup> adán <sup>j</sup> n <sup>j</sup> -aw	breakfast
abl <sup>j</sup> í <sup>j</sup> ŋ <sup>j</sup> -a	abl <sup>j</sup> í <sup>j</sup> ŋ <sup>j</sup> -aw	face
bayás <sup>j</sup> ts <sup>j</sup> -e	bayás <sup>j</sup> ts <sup>j</sup> -aw	wealth
plás <sup>j</sup> ts <sup>j</sup> -e	plás <sup>j</sup> ts <sup>j</sup> -aw	dress
ru <sup>j</sup> z <sup>j</sup> -ó	rú <sup>j</sup> z <sup>j</sup> -aw	rifle
pitán <sup>j</sup> n <sup>j</sup> -e	pitán <sup>j</sup> n <sup>j</sup> -aw	question
uzví <sup>j</sup> ŋ <sup>j</sup> -a	uzví <sup>j</sup> ŋ <sup>j</sup> -aw	elevation
val <sup>j</sup> l <sup>j</sup> -ó	vól <sup>j</sup> l <sup>j</sup> -aw	craw
s <sup>j</sup> v <sup>j</sup> ítán <sup>j</sup> n <sup>j</sup> -e	s <sup>j</sup> v <sup>j</sup> ítán <sup>j</sup> n <sup>j</sup> -aw	dawn
stayó <sup>j</sup> dz <sup>j</sup> -e	stayó <sup>j</sup> dz <sup>j</sup> -aw	century

c. C-stems

<i>Nom sg</i>	<i>Gen pl</i>	
rэфat-a	rafót (1985), rafót ~ rafót-aw (2008)	sieve
v <sup>j</sup> erats <sup>j</sup> an-ó	v <sup>j</sup> erats <sup>j</sup> ón (1985), v <sup>j</sup> erats <sup>j</sup> ón ~ v <sup>j</sup> erats <sup>j</sup> ón-aw (2008)	spindle
karít-a	karít (1985), karít ~ karít-aw (2008)	trough
zabrál-a	zabrál (1985), zabrál ~ zabrál-aw (2008)	visor
kal <sup>j</sup> én-a	kal <sup>j</sup> én <sup>j</sup> ~ kal <sup>j</sup> én <sup>j</sup> -aw (2008)	knee
pav <sup>j</sup> ék-a	pav <sup>j</sup> ék (1985), pav <sup>j</sup> ék-aw (2008)	eyelid
bl <sup>j</sup> úd-a	bl <sup>j</sup> út (1985), bl <sup>j</sup> út ~ bl <sup>j</sup> úd-aw (2008)	dish
v <sup>j</sup> ék-a	v <sup>j</sup> ék (1985), v <sup>j</sup> ék-aw (2008)	lid
dz <sup>j</sup> ív-a	dz <sup>j</sup> íw (1985, 1987), dz <sup>j</sup> ív-aw (2008)	miracle
v <sup>j</sup> ín-ó	v <sup>j</sup> ín (1985), v <sup>j</sup> ín ~ v <sup>j</sup> ín-aw (2008)	wine
s <sup>j</sup> ít-a	s <sup>j</sup> ít (1985), s <sup>j</sup> ít-aw (2008)	sieve
vóz <sup>j</sup> er-a	az <sup>j</sup> ór (1985), az <sup>j</sup> ór ~ az <sup>j</sup> ór-aw (2008)	lake
zub <sup>j</sup> íl-a	zub <sup>j</sup> íl (1985), zub <sup>j</sup> íl ~ zub <sup>j</sup> íl-aw (2008)	chisel
kadz <sup>j</sup> íl-a	kadz <sup>j</sup> íl (1985), kadz <sup>j</sup> íl ~ kadz <sup>j</sup> íl-aw (2008)	censer
pam <sup>j</sup> al-ó	pam <sup>j</sup> ól (1985), pam <sup>j</sup> ól-aw (2008)	mop
dz <sup>j</sup> ív-a	dz <sup>j</sup> íw ~ dz <sup>j</sup> ív-aw (1985), dz <sup>j</sup> ív-aw (2008)	marvel
bl <sup>j</sup> erv <sup>j</sup> an-ó	bl <sup>j</sup> arv <sup>j</sup> ón-aw	log

As we see in (2), there is sensitivity to phonotactics in that the [aw] allomorph is the only acceptable one in stems with final clusters or geminates, though it is also spreading to nouns with a single stem-final consonant where there is a clear preference for [-aw] in the later source.<sup>1</sup> Given that neuter nouns belong to the same declension class as masculine nouns and thus share oblique case suffixes in the singular as well as the plural, it is not unexpected that the shift to [-aw] be fairly rapid in Declension Ib neuters because it would be strongly supported by uniform exponence within Declension I itself.

### 3 Declension II Feminine Nouns

The process is fairly advanced in Declension Ib neuters where nouns, including those ending in a single consonant, show an increased use of the [-aw] over the /-Ø/ allomorph. But in Declension II feminine nouns, the spread of [-aw] seems to be slower and we get more insight into the actual mechanism of this morphological change. Belarusian grammars (e.g., Kryvitski et al. 1973: 84-85; Burlyka 1979:75; Lukashanets 2007:151; Bazylenska et al. 1957:46; Biryła & Shuba 1985: 90-92) observe that the spread of [-aw] in feminine nouns is particularly favored when stems end in a consonant cluster. But I would argue that it is more than just the presence of a cluster. What we see is that the progress of this change has to a large extent been guided by the specific nature of the stem-final cluster. Nouns with stem-final consonant clusters of equal or rising sonority sequences (obstruent - obstruent, geminates, or obstruent followed by a sonorant) overwhelmingly favor the [-aw] allomorph, as shown in (3). In general, [-aw] appears to be the only option for most of these nouns, and by 2008 even those that had earlier permitted the /-Ø/ allomorph, such as *spazma* 'spasm' or *kljaksá* 'blot', now do not.

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<sup>1</sup> The process has not reached all nouns, e.g., [jájka] 'egg', [jájek]; [slóva] 'word', [slów]; [balóta] 'swamp, mud', [balót], [s'áló] 'village', [s'ól], and identical stem-final conditions show different suffixes in the Genitive plural: [vújka] 'ear, dim.', [vújak]; [brújka] 'belly', [brújkaw]. It is likely that frequently used forms may be lexicalized. The Gen pl suffix appears as [-ow] in the few neuter nouns where stress falls on the suffix in the plural, e.g., *pólja* 'field' [pa'łów], *ačkó* 'point in game', [aʃ'ków], *právo* 'law' [práv~pravów], and in two nonsyllabic stems, *dno* 'bottom' [dnów] and *švo* 'seam' [ʃvów], but there may be a stress shift and a variant with [-aw], as in [brívów ~ bróvaw] 'eyebrows', [az'artsów ~ az'értsaw] 'lakes, dim'.

(3) Spread of [-aw] to Declension II feminine nouns: CC-stems

a. CC-stems

<i>Nom sg</i>	<i>Gen pl</i>	
prízb-a	prízb-aw	mound of earth
próz <sup>1</sup> b-a	próz <sup>1</sup> b-aw	request
mífts-a	mífts-aw	muscle
k <sup>1</sup> átv-a	k <sup>1</sup> átv-aw	oath
l <sup>1</sup> íftv-a	l <sup>1</sup> íftv-aw	plank
mal <sup>1</sup> ítv-a	mal <sup>1</sup> ítv-aw	prayer
jázv-a	jázv-aw	ulcer
krókv-a	krókv-aw	rafter
bítv-a	bítv-aw	battle
padéfv-a	padéfv-aw	shoe sole
l <sup>1</sup> ídzb-a	l <sup>1</sup> ídzb-aw	number
xarúyv-a	xarúyv-aw	church banner
búks-a	búks ~ búks-aw	axle box
kúks-a	kúks ~ kúks-aw (1985,1987), kúks-aw (2008)	stump
kl <sup>1</sup> áks-a	kl <sup>1</sup> áks ~ kl <sup>1</sup> áks-aw (1985,1987), kl <sup>1</sup> áks-aw (2008)	blot

b. Geminate stems (CC and RR)

<i>Nom sg</i>	<i>Gen pl</i>	
vánn-a	vánn-aw	bath tub
k <sup>1</sup> é <sup>1</sup> l <sup>1</sup> -a	k <sup>1</sup> é <sup>1</sup> l <sup>1</sup> -aw	cell
ilyún <sup>1</sup> n <sup>1</sup> -a	ilyún <sup>1</sup> n <sup>1</sup> -aw	liar
prá <sup>1</sup> l <sup>1</sup> -a	prá <sup>1</sup> l <sup>1</sup> -aw	washwoman
b <sup>1</sup> ayún <sup>1</sup> n <sup>1</sup> -a	b <sup>1</sup> ayún <sup>1</sup> n <sup>1</sup> -aw	runner
tkál <sup>1</sup> l <sup>1</sup> -a	tkál <sup>1</sup> l <sup>1</sup> -aw	weaver
sváts <sup>1</sup> ts <sup>1</sup> -a	sváts <sup>1</sup> ts <sup>1</sup> -aw	mother of son/daughter -in-law

c. CR-stems

<i>Nom sg</i>	<i>Gen pl</i>	
skóbl <sup>1</sup> -a	skóbl <sup>1</sup> -aw	shaving knife
vídm-a	vídm-aw	dune

pav <sup>j</sup> érxn <sup>i</sup> -a	pav <sup>j</sup> érxn <sup>i</sup> -aw	surface
v <sup>j</sup> édz <sup>i</sup> m-a	v <sup>j</sup> édz <sup>i</sup> m-aw	witch
pásm-a	pásm-aw	lock (hair)
kówdr-a	kówdr-aw	blanket
báyn-a	báyn-aw	marsh
l <sup>j</sup> ústr-a	l <sup>j</sup> ústr-aw	chandelier
bútl <sup>j</sup> -a	bútl <sup>j</sup> -aw	big bottle, drum
šábl <sup>j</sup> -a	šábl <sup>j</sup> -aw	sword
vídr-a	vídr-aw	otter
spázm-a	spázm~spázm-aw (1987), spázm-aw (2008)	spasm

In feminine nouns with stem-final clusters of falling sonority, either sonorant (R) plus obstruent (C), fricative (S) plus /t/, or a sequence of liquid/glide (R) followed by a nasal, it looks like the change is still in progress and both allomorphs, [-aw] and /-Ø/ are used, though some have now advanced to only [-aw] (4).

(4) Variation between /-Ø/ and [-aw]: -RC, -ST, -RN stems:

<i>Nom sg</i>	<i>Gen pl</i>	
v <sup>j</sup> eránd-a	v <sup>j</sup> eránt ~ v <sup>j</sup> eránd-aw	veranda
kamánd-a	kamánt ~ kamánd-aw	command
l <sup>j</sup> ey <sup>j</sup> énd-a	l <sup>j</sup> ey <sup>j</sup> ént ~ l <sup>j</sup> ey <sup>j</sup> énd-aw	legend
ard-á	órt ~ órd-aw	horde
dél <sup>t</sup> -a	dél <sup>t</sup> ~ dél <sup>t</sup> -aw	delta
strél <sup>j</sup> b-a	strél <sup>j</sup> p ~ strél <sup>j</sup> b-aw	rifle
plómb-a	plómp ~ plómb-aw	filling
v <sup>j</sup> arb-á	v <sup>j</sup> érp ~ v <sup>j</sup> érb-aw	willow
tórb-a	tórp ~ tórb-aw	bag
l <sup>j</sup> ámp-a	l <sup>j</sup> ámp ~ l <sup>j</sup> ámp-aw	lamp
kašary-á	kašérx ~ kašéry-aw	poker
skáry-a	skárx~ skáry-aw	complaint
árf-a	árf ~ árf-aw (1985), árf-aw(1987)	harp
n <sup>j</sup> ímf-a	n <sup>j</sup> ímf ~ n <sup>j</sup> ímf-aw	nymph
fl <sup>j</sup> éjt-a	fl <sup>j</sup> éjt ~ fl <sup>j</sup> éjt-aw	flute

málp-a	málp (1985), málp ~ málp-aw(2008)	monkey
fáld-a	fált (1985), fált ~ fáld-aw (2008)	pleat
v <sup>l</sup> arst-á	v <sup>l</sup> orst ~ v <sup>l</sup> orst-aw	verst
xúst-a	xúst ~ xúst-aw	large scarf
n <sup>l</sup> av <sup>l</sup> ést-a	n <sup>l</sup> av <sup>l</sup> ést ~ n <sup>l</sup> av <sup>l</sup> ést-aw	bride, fiancée
múft-a	múft ~ múft-aw	fur muff
kóft-a	kóft ~ kóft-aw	woman's jacket
búxt-a	búxt ~ búxt-aw	bay (in coast)
šáxt-a	šáxt ~ šáxt-aw	mine shaft
pláxt-a	pláxt ~ pláxt-aw	type of skirt
nórm-a	nórm ~ nórm-aw	norm
fórm-a	fórm ~ fórm-aw	form
pál <sup>l</sup> m-a	pál <sup>l</sup> m ~ pál <sup>l</sup> m-aw (1985), pál <sup>l</sup> m-aw (2008)	palm
s <sup>l</sup> érm-a	s <sup>l</sup> érm ~ s <sup>l</sup> érm-aw	chamois
vajn-á	vójn ~ vójn-aw (1985), vójn-aw (2008)	war
tájn-a	tájn ~ tájn-aw	secret
plاتفórm-a	plاتفórm ~ plاتفórm-aw	platform
f <sup>l</sup> érm-a	f <sup>l</sup> érm ~ f <sup>l</sup> érm-aw	farm
kav <sup>l</sup> érm-a	kav <sup>l</sup> érm ~ kav <sup>l</sup> érm-aw	cavity
katakómb-a	katakómb-aw	catacomb
turm-á	túrm-aw	prison
ájv-a	ájv-aw	quince
spál <sup>l</sup> n <sup>l</sup> -a	spál <sup>l</sup> n <sup>l</sup> -aw	bedroom
γul <sup>l</sup> n <sup>l</sup> -á	γul <sup>l</sup> n <sup>l</sup> -aw	game

The nouns in (3) and (4) contrast with those in (5) below whose stems end in a single consonant. The latter generally do not have accepted Gen plurals with [-aw], though this allomorph is beginning to make inroads here as well.<sup>2</sup>

<sup>2</sup> A few other stems with palatalized or palatal single consonants take [-aw]: [réja] 'marine yard', [réj~réjaw]; [ról<sup>l</sup>a] 'role', [ról<sup>l</sup>aw]; [pál<sup>l</sup>a] 'pile', [pál<sup>l</sup>aw]; [l<sup>l</sup>éja] 'lei', [l<sup>l</sup>éjaw]; [tsal<sup>l</sup>a] 'inch', [tsal<sup>l</sup>aw]; [p<sup>l</sup>ádž<sup>l</sup>a] 'span', [p<sup>l</sup>ádž<sup>l</sup>aw], [šál<sup>l</sup>a] 'scale pan', [šál<sup>l</sup>aw] (Biryla and Shuba 1985:91), and these sometimes have variants with /-ej/. A few with /j/ admit variants: [kal<sup>l</sup>ajá] 'rut, track', [kal<sup>l</sup>éj ~ kal<sup>l</sup>éjaw]; [šija] 'neck', [šij ~ šijaw]; also [vadá] 'water', [vót~vódaw]. Kryvitski et al. (1973:85) tolerate more variation and also list variants for 'school' [škól] ~ [škólaw], 'peasant house' [xát] ~ [xátaw], 'wave' [xvál<sup>l</sup>] ~ [xvál<sup>l</sup>aw].



(5) Resistance to the spread of [-aw]: C-stems

<i>Nom sg</i>	<i>Gen pl</i>	
ʃkól-a	ʃkól	school
bʲaróz-a	bʲarós	birch
palíts-a	palíts	shelf
rak-á	rék	river
blix-á	blóx	flea
straf-á	stróf	verse
as-á	vós	wasp
lʲítar-a	lʲítar	letter (alphabet)
zón-a	zón	zone
padzʲéj-a	padzʲéj	event
idéj-a	idéj	idea
mʲinút-a	mʲinút	minute
láp-a	láp	paw
prémʲij-a	prémʲij	premium, bonus
kópʲij-a	kópʲij	copy
pártij-a	pártij	party
ʒalav-á	ʒalów	head
xát-a	xát	cottage
praʲésʲij-a	praʲésʲij	profession
kúlʲ-a	kúlʲ	bullet
dát-a	dát	date
daróɣ-a	daróx	road
nʲív-a	nʲív	cornfield
dalʲín-a	dalʲín	valley
ɣrúʃ-a	ɣrúʃ	pear
pʲʃal-á	pʲʃól	bee
vúlʲits-a	vúlʲits	street
sʲistém-a	sʲistém	system
ɣazʲét-a	ɣazʲét	newspaper
katastróf-a	katastróf	catastrophe

The progress of the [-aw] spread is not as complete in Declension II as it appears to be in the neuters of Declension Ib for there is not the same morphological pressure of uniform exponence within the paradigm.

Although there is some individual variation and lexical differences within Declension II feminine nouns, we can see that overall the progress of this change in Declension II appears to be guided by surface phonotactics, and specifically, by the nature of sonority sequencing in the stem-final consonant cluster. The phonotactic conditions favoring an overt suffix in Declension II feminine nouns may be represented in terms of a cluster preference hierarchy: CC, CR > RC, ST, RN > C stems.

#### 4 Mixed Declension a-Type Masculine and Common Gender Nouns

Whether this sonority sequencing condition eventually comes to be reinterpreted as a simpler "stem-final consonant cluster vs. no stem-final cluster" condition remains to be seen. There has been some move in this direction in the minor class of masculine and common gender a-stem nouns: the distribution of [-aw] and /-Ø/ is now generally determined on the basis of a "consonant cluster vs. no cluster" environment and nouns with stem-final clusters prefer [-aw] (6a), those with single consonants take the /-Ø/ (6b), and some nouns have variants (6c) (Lukashanets 2007:155, 158).

##### (6) Allomorphy in masculine and common gender a-type nouns

###### a. CC-Stems: Gen pl with [-aw]

<i>Nom sg</i>	<i>Gen pl</i>	
báts <sup>j</sup> k-a	báts <sup>j</sup> k-aw	father
ɕ <sup>j</sup> áts <sup>j</sup> k-a	ɕ <sup>j</sup> áts <sup>j</sup> k-aw	uncle
júnɣ-a	júnɣ-aw	ship's boy
stárast-a	stárast-aw	village elder
májstr-a	májstr-aw	master
vinaxóts-a	vinaxóts-aw	discoverer
ts <sup>j</sup> úts <sup>j</sup> k-a	ts <sup>j</sup> úts <sup>j</sup> k-aw	dog, coll.
ts <sup>j</sup> és <sup>j</sup> l <sup>j</sup> -a	ts <sup>j</sup> és <sup>j</sup> l <sup>j</sup> -aw	carpenter
pramówts-a	pramówts-aw	orator
ríkʃ-a	ríkʃ ~ ríkʃ-aw	rickshaw
sudʒ <sup>j</sup> ɕ <sup>j</sup> -á	súɕ <sup>j</sup> ɕ <sup>j</sup> -aw	judge
pláks-a	pláks-aw	crybaby

múrz-a	múrz-aw	slovenly person
znáwts-a	znáwts-aw	expert
skup <sup>1</sup> and-á	skup <sup>1</sup> énd-aw	cheapskate

b. C-Stems: Gen pl with /-Ø/

<i>Nom sg</i>	<i>Gen pl</i>	
muŕŕin-a	muŕŕin -Ø	man
starŕin-á	starŕin-Ø	sergeant
starŕin <sup>1</sup> -á	starŕin <sup>1</sup> -Ø	chairman
sabák-a	sabák-Ø	dog
s <sup>1</sup> irat-á	s <sup>1</sup> irót-Ø	orphan
v <sup>1</sup> atrúy-a	v <sup>1</sup> atrúx-Ø	strong wind
vajavód-a	vajavót-Ø	voivode
vaják-a	vaják-Ø	warrior
tup <sup>1</sup> íts-a	tup <sup>1</sup> íts-Ø	dolt, blockhead
ts <sup>1</sup> ixón <sup>1</sup> -a	ts <sup>1</sup> ixón <sup>1</sup> -Ø	mEEK person
kaprizúl <sup>1</sup> -a	kaprizúl <sup>1</sup> -Ø	capricious person
tul <sup>1</sup> áy-a	tul <sup>1</sup> áx-Ø	wanderer
zadavák-a	zadavák-Ø	arrogant person
pustam <sup>1</sup> él <sup>1</sup> -a	pustam <sup>1</sup> él <sup>1</sup> -Ø	windbag
sarv <sup>1</sup> iyalav-á	sarv <sup>1</sup> iyalów-Ø	daredevil
sknár-a	sknár-Ø	miser, skinflint

c. Variation between /-Ø/ and [-aw]

<i>Nom sg</i>	<i>Gen pl</i>	
xlapŕŕin-a	xlapŕŕin-Ø ~ xlapŕŕin-aw	boy
sluy-á	slúx-Ø (1985, 1987), slúy-aw (L. 2007)	servant
kal <sup>1</sup> éy-a	kal <sup>1</sup> éx-Ø ~ kal <sup>1</sup> éy-aw (1987), kal <sup>1</sup> éx-Ø (2008)	colleague
ŕistanóf-a	ŕistanóf-aw (1987), ŕistanóf-Ø (1985, 2008)	mail man
prajdóx-a	prajdóx-Ø ~ prajdóx-aw (1987), prajdóx-Ø (2008)	old fox (person)

What is unusual about this morphological change in Belarusian is that it is sensitive to surface phonotactics rather than to the morphosyntactic

features of gender or declension class, or some other morpho-phonological property. This point is even better made by those common gender nouns above that have different syntactic and semantic gender. For example, the word *pláksa* 'crybaby' may refer to a male crybaby or a female crybaby. When it refers to a male crybaby, it takes Declension Ia suffixes in the Dat sg, Prep sg, Instr sg and when it refers to a female crybaby, the word takes Declension II suffixes in the singular. Because the two referents actually have different inflectional paradigms in the singular, gender as a cue to declension class is obviously relevant. Yet this class of nouns tends to follow phonotactics rather than gender or class in the choice of the Gen pl suffix. They do not have the expected corresponding Gen pl suffix of Declension Ia [-aw] when referring to males and that of Declension II /-Ø/ when referring to females. Instead, the choice of [-aw] vs. /-Ø/ appears to be determined primarily by phonotactics (Lukashanets 2007:155-157).

## 5 Phonotactic Conditioning Is a New Development

The striking thing about the generalization of the [-aw] suffix in Standard Belarusian today is that its phonotactic conditioning environment appears to be a new development. Originally the spread of the /-ow/ suffix was based on gender: it spread from the masculine short ŭ-declension first to masculine nouns of Declension Ia, then to masculine a-stem nouns, and finally to Declension II a-stem feminines. Belarusian documents of the 15th -17th century show instances of morphological /-ow/ extension to stems of all types in Declension II. When the suffix was stressed, it was pronounced [-ów], even in feminine nouns such as *baba* 'old woman' with the Gen pl form [bab-ów] (Karskii 1911/1957:168-169). Compare the Old Belarusian citations from the 15th to the 17th centuries to Standard Belarusian forms today in (7).

(7) Old Belarusian compared to Standard Belarusian today

Old Belarusian	Standard Belarusian	
<i>a-stem masculine nouns</i>		
muzík-aw	muzík-aw	musician
starast-ów	stárast-aw	elder

sudz <sup>j</sup> dz <sup>j</sup> -ów ~ súdz <sup>j</sup> dz <sup>j</sup> -aw	súdz <sup>j</sup> dz <sup>j</sup> -aw	judge
starʃin-aw	starʃin	sargeant
sluy-ów	slúx ~ slúy-aw	servant

*a-stem feminine nouns*

s <sup>j</sup> óstr-aw	s <sup>j</sup> as <sup>j</sup> ts <sup>j</sup> ór ~ s <sup>j</sup> óstr-aw	sister
lisíts-aw	lisíts	vixen
kós-aw	kós	plait
líp-aw	líp	linden tree
s <sup>j</sup> l <sup>j</sup> óz-aw	s <sup>j</sup> l <sup>j</sup> ós	tear
sarók-aw	sarók	magpie
varón-aw	varón	crow
maladz <sup>j</sup> íts-aw	maladz <sup>j</sup> íts	young woman
mátufk-aw	mátufak	priest's wife
karówk-aw	karóvak	cow, dim.
múx-aw	múx	fly
bab-ów	báp	old woman
kn <sup>j</sup> íy-aw	kn <sup>j</sup> ix	book, tome

Note that some of these nouns have lost the overt /-ow/ suffix and have reverted back to the /-Ø/ allomorph. Although it is difficult to generalize on the basis of the attested forms cited in Karskij (1911/1957), it is clear that syllable phonotactics are more central to the progress of the change today, in spite of the fact that syllable structure phonotactics do not play a role in Belarusian declensional allomorphy elsewhere. The phonotactic environment seems to be a question of well-formedness of the output form in terms of syllable structure. There does not appear to be an obvious pattern in the original distribution of /-ow/ ([-ow], [-aw]) within Declension Ia nouns themselves—all of which take /-ow/ regardless of their stem structure—from which the cluster sonority pattern could have been generalized, but this remains to be confirmed by lexical statistics.

## 6 Nouns with a Vowel-Zero Alternation (yer) in the Stem

We have seen that in some neuter (2c) and feminine (4) nouns both Gen pl allomorphs are in use. This was taken to represent a transitional stage in the change from /-Ø/ to [-aw] allomorphy either because the 1985

source listed only the /-Ø/ allomorph while the later source gave both options, as in (2c), or because variation was being supplanted by a preference for [-aw] in some nouns within the group, as in (4). Yet it is interesting that there is a subset of Ib neuter and II feminine nouns whose stems end in a consonant cluster of rising sonority and which, by virtue of this phonotactic condition, could be expected to have now become fully [-aw] preferring types, but they are not. Nouns in this subset are distinguished by their consistent preference for having both Gen pl allomorphs available.

What distinguishes this group from the other neuter and feminine nouns is that they all permit a vowel-zero alternation in the stem. These are often referred to as yer stems and they are given in (8). The vowel in parentheses within the stem is the inserted vowel (yer) which appears only before the Gen pl /-Ø/ and in no other case form.

(8) Yer-stems: Gen pl forms with /-Ø/ and [-aw]

a. Declension Ia neuter nouns

<i>Nom sg</i>	<i>Gen pl</i>	
krésl-a	krés <sup>j</sup> (e)l-Ø ~ krésl-aw	armchair
valakn-ó	valók(a)n-Ø ~ valókn-aw (1985), valókn-aw (2008)	fiber
p <sup>j</sup> is <sup>j</sup> m-ó	p <sup>j</sup> is <sup>j</sup> (e)m-Ø ~ p <sup>j</sup> is <sup>j</sup> m-aw	letter
v <sup>j</sup> asl-ó	v <sup>j</sup> ós <sup>j</sup> (e)l-Ø ~ v <sup>j</sup> ósl-aw	oar
palatn-ó	palóts <sup>j</sup> (e)n-Ø ~ palótn-aw ~ palats <sup>j</sup> (ó)n-Ø (2008)	cloth
másl-a	más <sup>j</sup> (e)l-Ø ~ másl-aw	butter
b <sup>j</sup> adr-ó	b <sup>j</sup> ódz <sup>j</sup> (e)r-Ø ~ b <sup>j</sup> ódr-aw	hip
akn-ó	vók(a)n-Ø ~ vókn-aw	window
v <sup>j</sup> adr-ó	v <sup>j</sup> ódz <sup>j</sup> (e)r-Ø ~ v <sup>j</sup> ódr-aw	bucket
rúsl-a	rús <sup>j</sup> (e)l-Ø ~ rúsl-aw	channel

b. Declension II feminine nouns

<i>Nom sg</i>	<i>Gen pl</i>	
kúxn <sup>j</sup> -a	kúx(a)n <sup>j</sup> -Ø ~ kúxn <sup>j</sup> -aw	kitchen
ʃáréʃn <sup>j</sup> -a	ʃáréʃ(a)n <sup>j</sup> -Ø ~ ʃáréʃn <sup>j</sup> -aw	cherry
p <sup>j</sup> és <sup>j</sup> n <sup>j</sup> -a	p <sup>j</sup> és <sup>j</sup> (e)n <sup>j</sup> -Ø ~ p <sup>j</sup> és <sup>j</sup> n <sup>j</sup> -aw	song
sasn-á	sós <sup>j</sup> (e)n-Ø ~ sósn-aw	pine
ʃábl <sup>j</sup> -a	ʃáb <sup>j</sup> (e)l <sup>j</sup> -Ø ~ ʃábl <sup>j</sup> -aw	sword

króp <sup>j</sup> -a	króp <sup>j</sup> (e)l <sup>j</sup> -Ø ~ króp <sup>j</sup> -aw	drop
barazn-á	baraz <sup>j</sup> (ó)n-Ø ~ barózn-aw	furrow
z'am <sup>j</sup> -á	z'am <sup>j</sup> (é)l <sup>j</sup> -Ø ~ z'éml <sup>j</sup> -aw	earth, soil
váfl <sup>j</sup> -a	váf <sup>j</sup> (e)l <sup>j</sup> -Ø ~ váfl <sup>j</sup> -aw	wafer, waffle
s <sup>j</sup> astr-á	s <sup>j</sup> asts <sup>j</sup> (ó)r-Ø ~ s <sup>j</sup> óstr-aw	sister
v <sup>j</sup> asn-á	v <sup>j</sup> ós <sup>j</sup> (e)n-Ø ~ v <sup>j</sup> ósn-aw	spring
s <sup>j</sup> amj-á	s <sup>j</sup> am <sup>j</sup> (é)j-Ø ~ s <sup>j</sup> ém <sup>j</sup> -aw	family
aylób <sup>j</sup> -a	aylab <sup>j</sup> (é)l <sup>j</sup> -Ø ~ aylóbl <sup>j</sup> -aw	shaft
yrébl <sup>j</sup> -a	yréb <sup>j</sup> (e)l <sup>j</sup> -Ø ~ yrébl <sup>j</sup> -aw	dam, dike
yríwn <sup>j</sup> -a	yrív <sup>j</sup> (e)n <sup>j</sup> -Ø ~ yríwn <sup>j</sup> -aw	old monetary unit
vazówn <sup>j</sup> -a	vazóv <sup>j</sup> (e)n <sup>j</sup> -Ø ~ vazówn <sup>j</sup> -aw	cart shed
v <sup>j</sup> ífn <sup>j</sup> -a	v <sup>j</sup> íj(a)n <sup>j</sup> -Ø ~ v <sup>j</sup> ífn <sup>j</sup> -aw	sour cherry
tamózn <sup>j</sup> -a	tamóz(a)n <sup>j</sup> -Ø ~ tamózn <sup>j</sup> -aw	customs house
yub'érn <sup>j</sup> -a	yub'ér(a)n <sup>j</sup> -Ø ~ yub'érn <sup>j</sup> -aw	province
takárn <sup>j</sup> -a	takár(a)n <sup>j</sup> -Ø ~ takárn <sup>j</sup> -aw	lathe shop
awtjárn <sup>j</sup> -a	awtjár(a)n <sup>j</sup> -Ø ~ awtjárn <sup>j</sup> -aw	sheepfold
tsístérn <sup>j</sup> -a	tsístérn-Ø ~ tsístér(a)n-Ø ~ tsístérn-aw	cistern
l <sup>j</sup> adówn <sup>j</sup> -a	l <sup>j</sup> adówn <sup>j</sup> -Ø ~ l <sup>j</sup> adówn <sup>j</sup> -aw (1985), l <sup>j</sup> adóv <sup>j</sup> (e)n <sup>j</sup> -Ø ~ l <sup>j</sup> adówn <sup>j</sup> -aw (1987)	ice house
rózg-a	rózak~rózg-aw (1987), rózg-aw (2008)	birch rod

If surface phonotactics is guiding the progress of the change in feminine nouns, then we might expect nouns which potentially have access to different types of stems to show different types of behavior. The nouns discussed in sections 2 through 4 above have one stem throughout the paradigm. For example, [kowdra] 'blanket' has the stem [kowdr-] throughout its inflectional paradigm with Nom sg [kowdr-a], Gen sg [kowdr-i], Gen pl [kowdr-aw]. But the yer stem Declension Ib neuter and Declension II feminine nouns have a vowel inserted into the stem when the Gen pl allomorph /-Ø/ is used: [kresl-a] 'chair' has the Gen pl form of [kresel]. Thus there are two possible output stems for this type of noun: [kresl-] and [kresel-] and there may be two ways to process them in the Genitive plural.

If speakers take the noun stem as it appears throughout most of the paradigm (which can also be argued to be the underlying stem) as the starting point for allomorph selection, then most of these yer nouns have stem-final consonant clusters with rising sonority sequences (CVCR-).

We might expect these yer stem nouns to share the behavior of their declension class with Declension Ib neuter nouns favoring the [-aw] in general and Declension II feminine yer nouns favoring the [-aw] because of stem-final sonority sequencing. In both declension classes, the [-aw] is fully expected.

If, on the other hand, speakers take the Gen pl output form as the starting point for deciding whether to adopt /-ow/ [-aw], then there is no stem-final cluster: the inserted vowel is now part of the Genitive plural stem (CVC(V)R-) and this alternating vowel (yer) in the Genitive plural stem eliminates what would be a relevant phonotactic condition for allomorph selection. So we might expect these nouns to behave somewhat differently from the other members in their declension class in that there is much less pressure for the adoption of the overt [-aw].

In other words, yer nouns offer the option of accessing either stem in the formation of the Genitive plural. If the paradigmatic or underlying stem is the basis for allomorph selection, then [-aw] is predicted. If the Genitive plural wordform is the starting point, then there is no compelling reason to choose the syllabic allomorph and /-Ø/ remains. The prediction is that both allomorphs should be acceptable because either option, the use of the syllabic Gen pl allomorph or the insertion of a yer vowel into the stem, is equally good in resolving what would otherwise be a complex syllable coda with rising sonority. This is exactly what we find both in neuter nouns (8a) as well as in Declension II feminine nouns (8b).

A related set of yer nouns with stems in -k- shows the opposite behavior. Here the only option is the /-Ø/ Gen pl allomorph (9).

(9) Declension II feminine yer stems in -k-

<i>Nom sg</i>	<i>Gen pl</i>	
búl <sup>h</sup> k-a	búl(a)k-Ø	roll
butél <sup>h</sup> k-a	butél(e)k-Ø	bottle
dúm <sup>h</sup> k-a	dúm(a)k-Ø	thought
zav <sup>h</sup> ásk-a	zav <sup>h</sup> áz(a)k-Ø	plot, action
kásk-a	káz(a)k Ø	fairy tale
kn <sup>h</sup> íj <sup>h</sup> k-a	kn <sup>h</sup> íz(a)k-Ø	book
líj <sup>h</sup> k-a	líj(a)k-Ø	spoon



zór(k)-a	zór(a)k-Ø	star
xúst(k)-a	xúst(a)k-Ø	scarf
kúrt(k)-a	kúrt(a)k-Ø	jacket
mátk(a)-a	mát(a)k-Ø	womb
ŷáp(k)-a	ŷáp(a)k -Ø	cap, hat
báj(k)-a	báj(e)k-Ø	fable
av <sup>l</sup> éŷ(k)-a	av <sup>l</sup> éŷ(a)k-Ø	lamb
saróŷ(k)-a	saróŷ(a)k-Ø	shirt
ð <sup>l</sup> éwk(a)-a	ð <sup>l</sup> év(a)k-Ø	girl
padúŷ(k)-a	padúŷ(a)k-Ø	pillow

Note that for the most part the stems in this noun set have stem-final clusters of falling sonority, though there are some with clusters of equal sonority, so the data are consistent with the phonotactic explanation: stem-final RC and some CC sequences are not as likely to favor the overt allomorph as are the CR and a few CC sequences in (8) above.<sup>3</sup>

In general, one would expect that [-aw] would be the preferred allomorph in yer stems, especially because the vowel that is inserted in the stem may be a stressed [o], an unstressed [a], a stressed [e] or an unstressed [e]. Although these variants are to a certain extent predictable outcomes of paradigmatic stress patterns and vowel neutralization after shibilants or of vowel fronting after paired palatalized consonants, there may be some degree of uncertainty about what to do in the Genitive plural. This uncertainty is reflected in attested variants: sometimes no vowel is inserted, as in the word for 'cistern' or 'ice house' in (8b) above, or there are several possibilities, as in the treatment of 'cloth' (palóts<sup>l</sup>en ~ palótnaw ~ palats<sup>l</sup>ón). One advantage of using the syllabic suffix is that it eliminates a decision about which yer vowel, if any, should appear in the stem.<sup>4</sup>

<sup>3</sup> But it is also possible, and probably more likely, that the exceptional behavior in the subset of -k- stem nouns in (9) is due to stress, as I show in Bethin (2016 ms).

<sup>4</sup> Because vowel insertion takes place only before the /-Ø/, the other advantage is that the use of [-aw] eliminates the vowel alternation within the stem, contributing to paradigm uniformity, though this does not seem to be a motivating factor as much as one would expect.

## 7 A Note on Declension III Feminine Nouns

We saw in (1) above that the /-ow/ suffix is also being generalized to Declension III feminine nouns in the form of [-aw] where it replaces an original overt suffix /-ej/ in some nouns (Lukashanets 2007:161), shown in (10), though the /-ej/ suffix still has robust representation in this declension class.<sup>5</sup>

### (10) Spread of [-aw] in Declension III nouns

<i>Nom sg</i>	<i>Gen pl</i>	
dalón <sup>1</sup>	dalón <sup>1</sup> -ej ~ dalón <sup>1</sup> -aw	palm of hand
k <sup>1</sup> ifén <sup>1</sup>	k <sup>1</sup> ifén <sup>1</sup> -ej ~ k <sup>1</sup> ifén <sup>1</sup> -aw	pocket
γávan <sup>1</sup>	γávan <sup>1</sup> -ej ~ γávan <sup>1</sup> -aw	harbor
karus <sup>1</sup> él <sup>1</sup>	karus <sup>1</sup> él <sup>1</sup> -ej ~ karus <sup>1</sup> él <sup>1</sup> -aw	carousel
v <sup>1</sup> ér <sup>1</sup> f	v <sup>1</sup> ér <sup>1</sup> f-ej ~ v <sup>1</sup> ér <sup>1</sup> f-aw	shipyard
k <sup>1</sup> is <sup>1</sup> ts <sup>1</sup>	k <sup>1</sup> is <sup>1</sup> ts <sup>1</sup> -ej (1985), k <sup>1</sup> is <sup>1</sup> ts <sup>1</sup> -ej ~ k <sup>1</sup> is <sup>1</sup> ts <sup>1</sup> -aw	hand
páp <sup>1</sup> erts <sup>1</sup>	páp <sup>1</sup> erts <sup>1</sup> -ej (1985), páp <sup>1</sup> erts <sup>1</sup> -ej ~ páp <sup>1</sup> erts <sup>1</sup> -aw (2008)	church porch
rét <sup>1</sup> f	rét <sup>1</sup> f-aw	thing
γaz <sup>1</sup> él <sup>1</sup>	γaz <sup>1</sup> él <sup>1</sup> -ej ~ γaz <sup>1</sup> él <sup>1</sup> -aw	gazelle
abrót <sup>1</sup> s <sup>1</sup>	abrót <sup>1</sup> s <sup>1</sup> -ej ~ abrót <sup>1</sup> s <sup>1</sup> -aw	bridle
γrán <sup>1</sup>	γrán <sup>1</sup> -ej ~ γrán <sup>1</sup> -aw	facet
šf <sup>1</sup> ólaf <sup>1</sup>	šf <sup>1</sup> ólaf <sup>1</sup> -aw	alkali
madél <sup>1</sup>	madél <sup>1</sup> -ej ~ madél <sup>1</sup> -aw	model
rís <sup>1</sup>	rís <sup>1</sup> -ej ~ rís <sup>1</sup> -aw	lynx
šf <sup>1</sup> vért <sup>1</sup> s <sup>1</sup>	šf <sup>1</sup> vért <sup>1</sup> s <sup>1</sup> -ej ~ šf <sup>1</sup> vért <sup>1</sup> s <sup>1</sup> -aw	quarter
v <sup>1</sup> ijalan <sup>1</sup> šf <sup>1</sup> él <sup>1</sup>	v <sup>1</sup> ijalan <sup>1</sup> šf <sup>1</sup> él <sup>1</sup> -ej ~ v <sup>1</sup> ijalan <sup>1</sup> šf <sup>1</sup> él <sup>1</sup> -aw	violincello
fl <sup>1</sup> éf	fl <sup>1</sup> éf-aw	flash, fleche
may <sup>1</sup> istrál <sup>1</sup>	may <sup>1</sup> istrál <sup>1</sup> -ej ~ may <sup>1</sup> istrál <sup>1</sup> -aw	magistral

<sup>5</sup> The large group of derived nouns suffixed in /-asts<sup>1</sup>/ may retain the /-ej/ allomorph: [krépas<sup>1</sup>ts<sup>1</sup>ej] 'fortress', [rádas<sup>1</sup>ts<sup>1</sup>ej] 'joy, happiness' (but see Kryvitski et al. 1973:84 and Mayo 1976:25 where [rádas<sup>1</sup>ts<sup>1</sup>aw] is given), [kaštównas<sup>1</sup>ts<sup>1</sup>ej] 'expense, cost', [apóv<sup>1</sup>es<sup>1</sup>ts<sup>1</sup>ej] 'story', though many of these nouns now also have variants with [-aw]: [may<sup>1</sup>šimas<sup>1</sup>ts<sup>1</sup>] 'possibility', [may<sup>1</sup>šimas<sup>1</sup>ts<sup>1</sup>ej~may<sup>1</sup>šimas<sup>1</sup>ts<sup>1</sup>aw]; [uraš<sup>1</sup>istas<sup>1</sup>ts<sup>1</sup>] 'solemnity', [uraš<sup>1</sup>istas<sup>1</sup>ts<sup>1</sup>ej] (2008)~[uraš<sup>1</sup>istas<sup>1</sup>ts<sup>1</sup>aw] (Lukashanets 2007); [jákas<sup>1</sup>ts<sup>1</sup>] 'quality', [jákas<sup>1</sup>ts<sup>1</sup>ej~jákas<sup>1</sup>ts<sup>1</sup>aw], [apóv<sup>1</sup>es<sup>1</sup>ts<sup>1</sup>aw] (Mayo 1976:25).

It is interesting that the phonotactic conditions observed on the spread of [-aw] in a-stem feminines (Declension II above) do not play so much of a role in Declension III. They seem to be more active in nouns where the [-aw] is replacing the /-Ø/ allomorph and do not hold to the same extent for Declension III nouns where the Gen pl suffix [-ej] is being replaced by [-aw]. There are at least two possible explanations: either 1) the spread of [-aw] in Declension III is nearing completion just as it is in Declension Ib neuter nouns, or 2) speakers are operating with the Gen pl form itself in deciding what to do. In other words, it may not be so much a question of *stem-final* phonotactics as a question of *word-final* phonotactics. When the Gen pl wordform ends in a cluster because the Gen pl allomorph is /-Ø/, then the nature of the cluster may have an effect on the likelihood of taking on an overt syllabic allomorph [-aw]. But if there already is an overt suffix in the Genitive plural and it is a question of replacing one overt syllabic suffix, [-ej], with another, [-aw], and the syllable structure of the output wordform is not affected, then the presence vs. absence of a stem-final cluster is less relevant to the change. If this is indeed the case, then it would lend support to the suggestion that yer nouns, too, may be processed on the surface as words (where the insertion of a vowel eliminates a cluster) and not only as paradigmatic stems (with clusters). And it raises the question of where morphological analogy takes place, at the stem level within the paradigm or at the word level of the Gen pl form itself, but this remains for future work.

## **8 Why /-ow/ spreads**

There are two overt suffix allomorphs available in the Genitive plural of East Slavic languages: some version of /-ov/ (Russian /-ov/, Belarusian /-ow/ and Ukrainian /-iw/) and /-ej/. In Russian, the /-ej/ allomorph has been generalized to Declension Ia masculine and Declension II feminine nouns that end in a palatalized or shibilant consonant, sometimes replacing /-ov/ (Zalizniak 1967, 1977), so its distribution is controlled by the palatalized/shibilant property of the stem-final consonant. Belarusian morphology also shows sensitivity to palatalized/shibilant vs. non-palatalized stem-final consonants in selecting the appropriate case allomorph in the singular of all declension classes (Biryla and Shuba 1985; Lukashanets 2007; Mayo 1976, 1993).

So why is it the /-ow/ suffix and not the /-ej/ suffix that is being generalized in Belarusian?

Part of the explanation lies in distribution: The /-ow/ allomorph occurs in almost all Declension I masculine nouns, a very large noun class. Compare 10,304 masculine nouns, 7,970 feminine nouns, 4,642 neuters and 3,170 Declension III feminines (Biryla and Shuba 1985:387). The /-ej/ allomorph has a much more restricted distribution, being in effect limited to Declension III and to a few stems that end in a palatalized or shibilant consonant in other declensions. The other factor is that the /-ej/ allomorph is consistently associated with the palatalized or shibilant stems that constitute Declension III so the extension of /-ej/ would normally require palatalization of a paired stem-final hard consonant before the front vowel. In many nouns, this would produce a new palatalized vs. non-palatalized consonant alternation in the stem only in the Gen pl form, a major complication.

Why is it specifically the unstressed variant [-aw] with vowel neutralization that is generalized? The predominant pattern of stress in Declension Ib neuter noun and in Declension II feminine noun paradigms is to have stress fixed on the stem throughout the entire paradigm (this includes about 10,750 nouns, per Biryla and Shuba 1985:387); the second most common pattern is to have stress on the suffix in the singular but stress retracted onto the stem in the plural (approx. 260 nouns). When nouns in these declension classes take on the /-ow/ suffix, the pronunciation of the allomorph is automatically the unstressed neutralized [-aw].<sup>6</sup> The vast majority of Belarusian nouns in all declension classes are stressed on the stem and as a result all of the plural inflectional suffixes, including the Gen pl, are predominantly unstressed.

Furthermore, given that vowel neutralization in Belarusian is of the *full or strong akan'ne/jakanne* type (Iankoŭski 1976:28; Vyhonnaia 1991:133-139; Dubina 2012: 155-10, and others), whereby the unstressed non-high vowels /e/, /o/, and /a/, are all pronounced as [a] after any type of consonant (palatalized, non-palatalized, shibilant, velar, etc.), the vowel /a/ is found after any type of consonant. So the unstressed [-aw] is particularly favored because it does not impose any conditions on the preceding stem-final consonant.

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<sup>6</sup> See also Biryla 1986, Loban 1957, and Dubina 2012 for data and analysis of stress in Belarusian.

In terms of the plural subparadigm itself where all oblique case exponents have the vowel /a/ as part of the suffix allomorph, as shown in (11), the neutralized [a] in the unstressed Gen pl [-aw] fits the pattern very well.

(11) Belarusian noun plural subparadigm for major noun classes

Nom	-i
Acc	Nom or Gen
Gen	-aw (also /-ow/, /-ej/, /-Ø/ under stress)
Dat	-am
Pep	-ax
Instr	-am'i

Finally, because the neutralization of unstressed non-high vowels is actually spelled in Standard Belarusian, the orthography also contributes to the salience and independence of the unstressed [-aw] exponent.<sup>7</sup>

I would argue that it is the [-aw] pronunciation of the unstressed Gen pl allomorph /-ow/ which is the primary factor in facilitating the spread of the /-ow/ [-aw] allomorph to the other noun declension classes (Bethin 2016 ms). In fact, there is evidence to suggest that Belarusian speakers have reanalyzed [-aw] as an independent lexical allomorph, /-aw/, and there are now four Gen pl allomorphs available: /-ow/, /-Ø/, /-ej/ and the /-aw/. For this type of reanalysis to take place, speakers must have access to the output of vowel neutralization in morphology. This suggests that the morphological change in the Gen pl case of Standard Belarusian appears to be taking place on the surface, both in paying attention to surface well-formedness conditions on syllable structure and in specifically preferring the outcome of vowel neutralization, the unstressed allomorph [-aw]. Unlike in Russian where allomorph selection must take place before vowel reduction (Pertsova 2015), in Belarusian, vowel neutralization actually contributes to morphological change because it is specifically the unstressed variant [-aw] that is so

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<sup>7</sup> In Belarusian, consonant palatalization is represented by the vowel letter symbols and a suffix such as /-ow/ may be spelled four different ways: when stressed after non-palatalized consonants as "oŭ", when stressed after palatalized consonants and /j/ as "eŭ", when unstressed after non-palatalized consonants as "aŭ", and when unstressed after palatalized consonants and /j/ as "jaŭ".

avored and which spreads so readily beyond Declension Ia to other declension classes. The nature of this morphological change in Belarusian raises questions about possible triggers of morphological change, the nature of potential morphological bases (stems vs. words), the representation of Belarusian noun plural allomorphy in general, and the nature of phonology-morphology interactions, but this remains for future work.

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