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RUSSIAN COMPLEX VERBALIZATION

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1 INTRODUCTION: "AFFIX PLEONASM"

Haspelmath 1993 (see also Lehmann 2005, Gardani 2015): "the semantically vacuous addition of a transparent affix to a word that is already characterized for the morphosyntactic property expressed by this affix" (p.297)

(1) a. kind-er-en — goed-er-en — lamm-er-en — Standard Dutch
child-AUG-PL — good-AUG-PL — lamb-AUG-PL
'children' — 'goods' — 'lambs'

b. broer-s — goed-er-e — lamm-er-s — Standard Afrikaans (Donaldson 1993:71–77)
brother-PL — good-AUG-PL — lamb-AUG-PL
'brothers' — 'goods' — 'lambs'

Booij 1977:47: the suffix *-er-* creates a stem allomorph (also used in derivation) rather than a plural:

(2) a. kinderopvang 'child care'
b. kinderschoen 'children's shoe'
c. kinderloos 'childless'

Can this analysis be extended to Russian augmented plurals (Matushansky 2025a) or to double (or triple) plurals in Afrikaans dialects?
Many thanks to Theresa Biberauer for the datapoint and the references

(3) a. broer-s-e — Kaaps Afrikaans (Hendricks 2016)
brother-PL-PL
'brothers' (cf.

b. dokter-s-e — lamm-er-s-e — Namaqualand Afrikaans (Links 1989:33)
doctor-PL-PL — lamb-AUG-PL-PL
'doctors' — 'lambs'

This talk: "verbalizer pleonasm" in standard Russian

1.1 The structure of the Russian verbal form

Russian verbs generally consist of the lexical stem, which can be simple (4a) or derived (4b), and the so-called thematic suffix:
Athematic verbs form a closed class based on mostly highly frequent ≈80 roots; they will not concern us here

(4) a. granʲ-i-tʲ [grəˈnʲitʲ] — b. gran-ič-i-tʲ [grəˈnʲit͡ɕitʲ]
facet-TH-INF — facet-NMZ/DIM-TH-INF
'to facet' — 'to border'

Neither native nor loan roots are limited to one thematic suffix:

(5) a. za-sekret-i-tʲ [zəsʲikˈrʲetʲitʲ] — b. sekret-arʲ-i-tʲ [sʲikrʲiˈtarʲitʲ]
PFX-secret-TH-INF — secret-AGT-TH-INF
'to classify (make secret)' — 'to work as a secretary'

(6) a. štop-a-tʲ [ˈʃtopətʲ] (old loan, rare) — b. klik-a-tʲ [ˈklʲikətʲ] (new loan)
darn-TH-INF — click-TH-INF
'to darn' — 'to click'

The thematic suffix *-a-*/*-i-* is unproductive (combines with a closed class of ≈80 roots):

(7) a. pís-a-tʲ [pʲiˈsatʲ] infinitive, past tense, etc.: pre-consonantal
write-TH-INF

b. píš-□-e-šʲ [ˈpʲiʃɨt] < pis-j-e-šʲ < pis-i-e-šʲ present tense, etc.: pre-vocalic
write-TH-PRES-2SG

Melvold 1989: this suffix also appears with the denominal suffix *-ow-* (surfacing as *-ov-*/*-u-*):
The underlying representation of the suffix may be far more complex but does not concern us here

(8) kritik-ov-á-tʲ [krʲitʲikʌˈvatʲ] 'to criticize' vs. kritik-ú-j-e-t [krʲitʲiˈkujit] 'criticizes'

The suffix *-ow-* is **highly productive**

1.2 Verbal derivation in *-ow-*

The suffix *-ow-* is compatible with both native and loan roots/stems and must be followed by the thematic suffix *-a-*/*-i-*:

(9) a. vek-ov-a-tʲ [vʲikʌˈvatʲ]
era/age/lifetime/century-OW-TH-INF
'to spend a lifetime'

b. pak-ov-a-tʲ [pəkʌˈvatʲ]
pack-OW-TH-INF
'to pack'

It can also be preceded by other suffixes or **suffixal complexes** (i.e., sequences of suffixes that are not necessarily justified by intermediate steps; descriptive notion only):

(10) a. car-stv-ov-a-tʲ [ˈt͡sarstvəvətʲ]
tzar-STV-OW-TH-INF
'to rule (as a tsar)'

b. mark-ir-ov-a-tʲ [mʌrˈkʲirəvətʲ]
mark-IR-OW-TH-INF
'to mark'

c. steril-iz-ov-a-tʲ [stʲirʲilʲizʌˈvatʲ]
sterile-IZ-OW-TH-INF
'to sterilize'

d. radio-fic-ir-ov-a-tʲ [ˌrədʲəfʲiˈt͡sirəvətʲ]
radio-FIC-IR-OW-TH-INF
'to supply with radio'

e. improv-iz-ir-ov-a-tʲ [imprəvʲiˈzʲirəvətʲ]
CRAN-IZ-IR-OW-TH-INF
'to improvize'

Subparts of a suffixal complex may have independent use or fail to have one (for a particular stem or in general):

(11) a. car-stv-ov-a-tʲ [ˈt͡sarstvəvətʲ]
tzar-STV-OW-TH-INF
'to rule (as a tsar)'

b. car-stv-o [ˈt͡sarstvə]
tzar-STV-SG.NOM
'tzardom, kingdom'

(12) a. bed-stv-ov-a-tʲ [ˈbʲetstvəvətʲ]
trouble-STV-OW-TH-INF
'to live in poverty'

b. ×bed-stv-o
trouble-STV-SG.NOM

Some suffixal complexes are limited to loan/native stems, others are not

The suffix ***-iz-* can be used with (10e) or without (10c) *-ir-***, but all loan suffixes require *-ow-* for verb formation
Historically (see Sokolova et al. 2025), most of *ir*-augmented complexes **arose as a result of borrowing** from German, which in turn borrowed *-ier-* from French (Wichmann & Wohlgemuth 2008, Wohlgemuth 2009, Gardani 2016)

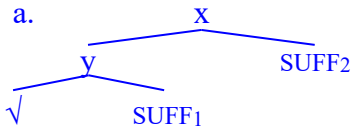
Available suffixal complexes with *-ow-* (segmental representation only):

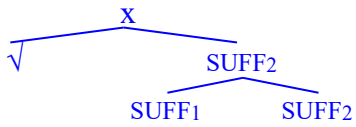
(13) a. teatral**izová**tʲ [tʲiətrəlʲizʌˈvatʲ] ‘to turn into a theater performance’
b. bolʲševiz**írova**tʲ [bəlʲjɪvʲiˈzʲirəvətʲ] ‘to bolshevize’ (cf. *bolʲševík* ‘bolshevik’)
c. jofic**írova**tʲ [jifʲiˈt͡sirəvətʲ] ‘to insert the letter *ë* ([jo]) (instead of the letter *e*) into’
d. sklad**írova**tʲ [sklʌˈdʲirəvətʲ] ‘to store’ (from *sklad* ‘warehouse’)
e. toržestv**ová**tʲ [tərʒəstvʌˈvatʲ] ‘to triumph’ (from *toržestvó* ‘triumph’)
f. smak**ová**tʲ [səmkʌˈvatʲ] ‘to relish’

Thus **up to four suffixes may be required for the formation of an inflected verb**

1.3 The micromorphology hypothesis (cf. Stump 2017a, b, 2019, 2022, 2023)

Proposal: *ow*-based verbs may involve complex suffix formation (14b):

(14) a.


b.


A complex suffix must be interpreted at LF and at PF:

- the semantic composition of a complex suffix **may require one of the constituents to be semantically vacuous** (here: the thematic suffix *-a-*/*-i-*)
- phonological composition creates a **phonological cycle**

Evidence will be provided that semantic and phonological diagnostics coincide

2 THE ACCENTUATION OF *OW*-VERBS

The accentual dominance of the suffixal complex partially depends on its subparts

2.1 Russian stress 1.01

Garde 1968a, b, 1998, Halle 1973, Zaliznjak 1985, Melvold 1989, etc.: the position of Russian lexical stress is primary determined by the underlying accentuation of various morphemes

- **Accented morphemes** carry an accent on themselves (open class)
- **Post-accenting** and **pre-accenting morphemes** set accent on the next or previous syllable correspondingly: while there are no pre-accenting roots, the class of post-accenting roots is large (Halle 1973:316 asserts that there are more than 2000 of them) but closed
- **Unaccented morphemes** have no accentual specification of their own (closed class estimated to contain more than 400 roots)

If there are no dominant suffixes:

(15) **The Basic Accentuation Principle** (Kiparsky & Halle 1977):
Assign stress to the leftmost accented vowel; if there is no accented vowel, assign stress to the initial vowel.

When two or more accents are present, the leftmost wins

The combination of two post-accenting morphemes is one exception (Melvold 1989, Garde 1998:126), the infinitive and passive past participle suffixes give rise to **another** (Matushansky 2025e)

An **accentually dominant morpheme overrides the accentual specification of its sister**:

(16) a. kólokol 'bell' → kolokolá 'bells' accented dominant masculine plural *-a*
b. učítelʲ 'teacher' → učitelʲá 'teachers'
c. dogovór 'treaty, contract' → dogovorá 'contracts'

The thematic suffix *-a-*/*-i-* is accented, but not dominant (section A.1)

2.2 Note on data sources

All counts based on Zaliznjak 2010, hesitating between the three options:

- **counting the verbs**: prefixed and unprefixed verbs with the same stem counted as separate verbs; *se*-marked and unmarked verbs not collapsed
  Problem: many doublets, since prefixation may contribute aspectual information only
- **excluding prefixed stems**: prefixation does not affect the accentual pattern (except for the accented prefix *-vi-*), so only unprefixed stems are counted
  Problems: some verbs exist in the prefixed form only (e.g., *soglasovátʲ* 'to coordinate'); prefixation may change the lexical semantics and argument structure of the verb (e.g., *slédovatʲ* 'to follow', *obslédovatʲ* 'to examine'; only the latter is transitive, the former takes a PP)
- excluding *se*-marked verbs: only unmarked unprefixed stems are counted
  Problem: some verbs exist in the *se*-marked form only (e.g., *lʲubovátʲsʲa* 'to feast one's eyes on')

All choices are problematic for one reason or another

2.3 Two patterns of *-ow-a-* verbs (1072 verbs)

The post-*ow* pattern is productive, the pre-*ow* pattern is not:

(17) a. ispovédovatʲ 'to profess; confess (tr.)' pre-*ow* (146)
b. intrigovátʲ 'to intrigue' post-*ow* (926)

The post-*ow* pattern shows that ***-ow-* can be accentually dominant**:

(18) a. čarovátʲ [t͡ɕərʌˈvatʲ] 'to bewitch' (from *čárɨ* [ˈt͡ɕarɨ] 'sorcery, charms') native
b. intrigovátʲ 'to intrigue' (from *intríga* 'intrigue') loan

There is **no accentual variability**/indeterminacy/optionality in the post-*ow* sub-class

Native and loan bases exhibit different tendencies with respect to these sub-classes

2.3.1 The dominant (post-*ow*) pattern

Loan roots strongly favor the post-*ow* stress pattern (three exceptions, see next section):

(19) a. fabrikovátʲ 'to manufacture' (from *fábrika* 'factory')
b. intrigovátʲ 'to intrigue' (from *intríga* 'intrigue')
c. arendovátʲ 'to rent, lease' (from *arénda* 'lease')

Could all these loan roots be underlyingly unaccented or forced to become so in derivation?

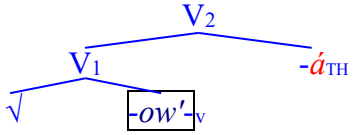
No: loan-based novel *i*-verbs do not force obligatory post-stem stress, even though the thematic suffix *-i-* is accented (examples from Nikitina 2003:282-301):

(20) a. kóks-i-t' 'to snort cocaine' (from *koks* 'cocaine')
b. komatóz-i-t' 'to understand (the situation) poorly' (cf. *komatóznyj* 'comatose')
c. kommunízd-i-t' 'to beat up; to steal' (cf. *kommunízm* 'communism')
d. kóndor-i-t' 'to visit in order to get food (tr.)' (from *kóndor* 'condor')

Hence to derive this pattern accentual dominance has to reside in the suffix *-ow-* rather than in the bases

Accentual dominance indicated by framing; the assumption that *-ow-* is post-accenting will be needed later

(21)



V_1 in (21) contains a dominant post-accenting suffix, which yields a post-accenting stem, hence stress must surface on the thematic suffix *-a-* (which also happens to be accented)

The post-*ow* pattern is attested with native bases too, shown by **accented native stems**:

(22) a. kolʲadovátʲ 'to go from house to house performing Christmas carols' (from *kolʲáda*, the corresponding Eastern-European tradition)
b. myškovátʲ 'to mouse' (from mýška 'mouse.DIM')

But with native bases ***-ow-* is not always dominant**

2.3.2 The non-dominant (pre-*ow*) pattern

Shvedova 1980:339: stem stress in verbs derived with the suffix *-ow-* is possible only for stem-stressed nouns

There are only three loan roots that appear with the pre-*ow* stress pattern:

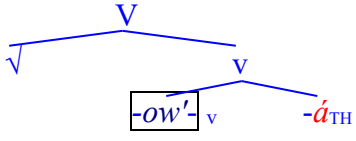
The stress shift in (23c) is unexpected, since the noun has an accented stem, but also occurs in other derivatives from this root

(23) a. komándovatʲ 'to command' (from *kománda* 'command, order; team')
b. xristósovatʲasʲa 'to kiss each other on Easter Day' (from *Xristós* 'Christ')
c. trapézovatʲ 'to have a meal (arch.)' (from *trápeza* 'meal (arch.)')

Claim: the pre-*ow* stress pattern arises from the lexical stress of the base

The accentual dominance of *-ow-* does not affect the stem, if *-ow-* is merged as a sister to the thematic suffix:

(24)



Matushansky 2025a: a complex affix forms a **phonological cycle**

In a complex suffix structure with *-a-*, *-ow-* can be dominant only within that cycle, assigning its accent to the thematic suffix

The resulting complex suffix is not expected to be accentually dominant

Thus in (24) a dominant post-accenting suffix combines with an accented suffix, which makes *v* in (24) **a non-dominant accented complex suffix**

If the lexical stem bears an accent, that accent wins:

(25) a. [[prázd -ĭn]-[ow-á]]-tʲ
idle -ADJ-OW-A-INF
'to feast' (cf. *prázdnɨj* 'idle')

b. [[žértv]-[ow-á]]-tʲ
victim-ADJ-OW-A-INF
'to sacrifice' (cf. *žértva* 'victim')

Note: post-accenting bases yield post-*ow* stress in both structures, no way to decide (except by productivity)

Open question: Why do some stems appear in the structure (21) and others, in (24)?

New issues arising from the structural solution:
- the choice of the structure by the stem
- the interpretation of *-ow-* inside a complex suffix

Reminder: no proper pre-existing hypothesis about the interpretation of *-ow-* and of its thematic suffix *-a-*/*-i-*

2.4 Nominalization

170 simple event nominals in *-kₐ-*, formed from transitive, intransitive or *se*-marked *ow*-verbs:
Of course, *-kₐ-* is a simplification, the underlying representation of the suffix is *-ŭk-* [+F], and it has many other uses

(26) a. risóvka [rʲiˈsofkə] 'posing, showing off' (from *risovátʲsʲa* 'to show off')
b. buksóvka [bukˈsofkə] 'skidding' (from *buksovátʲ* 'to skid')
c. pressóvka [prʲisˈsofkə] 'pressing' (from *pressovátʲ* 'to press')

Only verbs with post-*ow* stress (on the thematic suffix *-a-*/*-i-*) permit this formation

This is **not a restriction on the position of the stress** in the motivating verbal base:
- no verb containing the suffix *-stv-* forms these nominals in *-kₐ-* (9 verbs with stress on the thematic suffix included)
- verbs containing the suffixal complex *-ir-ow-* can form event nominals in *-kₐ-* (155 in Zaliznjak 2010) irrespective of the stress

If *-ow-* forms a constituent with the thematic suffix, as in (24), there is no constituent [√-ow] that *-kₐ-* could attach to

2.5 The interpretation of the complex suffix *-ow-a-*

A **constituent formed by two affixes will generally be morphosemantically incoherent**:
- both take arguments of some specific semantic types
- both impose semantic and lexical constraints on the output

If **the thematic suffix is semantically empty** (Anderson 1992, Aronoff 1994, Halle & Marantz 1993, Oltra Massuet 2000, Marvin 2002), the problem does not arise:
- no semantic conflict for the input: the thematic suffix "doesn't count"
- no morphosyntactic incoherence in the output: both the verbalizer and the thematic suffix yield a verb

Importantly, the suffix *-ow-* is not specified for aspect (underlyingly [α perfective])
The thematic suffix is no different in this respect from all other thematic suffixes

The combination of a structural solution with the semantic emptiness of the thematic suffix is compatible both with accentual variability and with the attested lack thereof
Accentual variability is predicted to not be correlated with a difference in meaning, which seems to be correct

2.6 Intermediate summary

Two constituent structures suggested for *-ow-*:

(27) a. dominant post-*ow* pattern b. non-dominant pre-*ow* pattern



Even though accentually dominant, **the suffix *-ow-* cannot affect the stem if merged inside a complex suffix**

The pre-*ow* stress pattern (base accent wins) is expected inside the complex suffix

Nominalization in *-k$_a$-* is only compatible with the iterative structure (27a)
The actual empirical situation is more complex, since verbs in *-ir-ow-*, however stressed, may have corresponding nominals with *-ir-ów-k$_a$-*, but this is linked to the alternative way of obtaining this phonological sequence with an intermediate adjectival step (I hope!)

On the semantic side, if the thematic suffix *-a-*/*-i-* is semantically null, then **in the case of *-ow-a-*, complex suffix formation has no effect on the interpretation**

3 Complex suffix formation with *-stv-* (363 verbs)

Two factors: semantics and prosody

Verbs in *-stv-* are **primarily intransitive** (261 out of the 284 unprefixed non-*se*-marked stems, i.e., 91.90%) and:

- for loan bases (71 stems, 100% [+M][+HUMAN]), denote a behavior characterizing the denotatum of the base stem/root (i.e., the stem without *-stv-*), sort of ACT-*be*
- for native bases, mostly denote activities (behaviors, for [+HUMAN] bases)

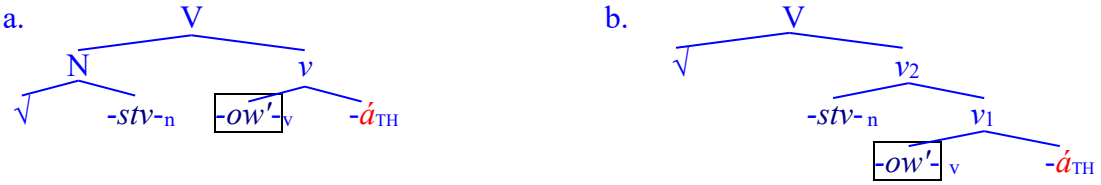
Prosodically, **this is the only type of *ow*-verbs that preserves the stress of the base** (cf. also Shvedova 1980:343)
The vowel *e* in (28a) is epenthetic, appearing after the "shibilants" (ч [t͡ɕ], ж [ʒ], ш [ʃ], щ [ɕːʲ])

(28) a. toržestvovátʲ 'to triumph' (cf. *toržestvó* 'triumph, celebration') post-*ow* (9)
b. soveršénstvovatʲ 'to perfect' (cf. *soveršénstvo* 'perfection') pre-*ow* (292)
c. svidételʲstvovatʲ 'to witness' (cf. *svidételʲstvo* 'testimony') stem (62)

Variable stress can be predicted if these verbs are derived with the **complex suffix *-ow-a-***: the accent of the base is expected to win

Given that **the complex suffix *-ow-a-* is not accentually dominant**, the position of the stress is determined by the accentuation of the stem:

(29) a. b.



The two constituent structures in in (29) **cannot be distinguished by their accentuation**

Yet they can be distinguished by their semantics (section A.2)

4 OBLIGATORY ACCENTUAL DOMINANCE: VERBS IN *-IZ-OW-A-* (121 VERB)

***-ow-* is required** (no verbs with *-ir-* without *-ow-*)**, non-native stems only** (and *-iz-* need not to have been part of the borrowing):
Many doublets with *-iz-ir-*, which generally seem more natural to me, see section 7.1.1

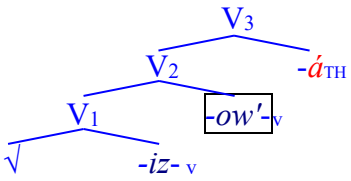
(30) a. realizovátʲ 'to realize, implement'
b. teatralizovátʲ 'to turn into a theater performance'

All **either transitive or *se*-marked** (anticausative)

All exhibit **the post-*ow* stress pattern only**

The accentual dominance of *-ow-* and iterative suffixation would correctly derive this result:
It is an open question for now whether *-iz-* is accentually dominant or not

(31)



The structure in (31) raises two questions:

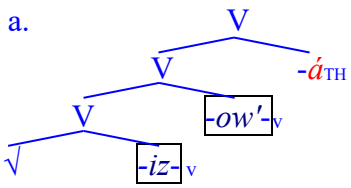
- If *ow-* is a verbalizer, what does *-iz-* do?
- Why are there **no event nominals in *-k$_a$-*, formed from *-iz-ow-*verbs** (even though the stress is post-*ow*)?

Possible responses:

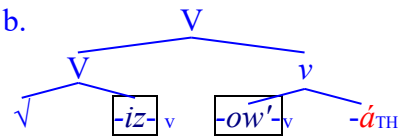
- *-iz-* contributes the change-of-state semantics (all *-iz-* verbs are telic and transitive), while *-ow-* enables the loan suffix to interact with aspect (i.e., it is not a verbalizer itself)
- blocking: *-iz-* verbs have (complex) event nominals in *-acij-*
  Tatevosov 2011: Russian event nominals (native ones) are aspectually neutral
  No reason to assume any different for non-native event nominals

These answers show that *-iz-ow-* verbs do not need to have the iterative structure in (31) if *-iz-* is accentually dominant:
Given that no derivation containing *-iz-* has stress on the stem or on *-iz-* itself, *-iz-* could be not just dominant, but also post-accenting. But given that all suffixes that can follow *-iz-* are accented (and sometimes dominant), this is unnecessary

(32) a.



b.



Assuming **iterative derivation** (32a), the dominant post-accenting suffix *-ow'-* would assign its accent to (the accented) thematic suffix *-a-*
All suffixes compatible with *iz*-verbs are themselves dominant, which means that *-iz-* can have any accentuation

However, **the complex suffix** *-ow-a-* yields the same result (32b): since *-ow'-* is dominant in its cycle, it wipes out the accent of *-a-*, but then assigns its own accent to it, yielding *-owá-* with an unaccented *iz*-stem

The post-*ow* pattern is correctly derived in both structures in (32)

The structure (32b) is structurally compatible with the suffix *-acij-* and incompatible with the event nominalizer *-ka-* (assuming the latter requires verbal stems to be specified for aspect)

5 SYSTEMATICALLY ACCENTUALLY DOMINANT SUFFIXES

Non-native stems only (one exception), stem stress is not preserved, **two accentual patterns** (just like with the bare *-ow-*):
Verbs with the accented prefix *vi-* classified with their unprefixed counterparts

(33) a. markírovatʲ 'to mark' (from *márka* 'stamp') pre-*ow* (933)
b. maskirovátʲ 'to mask' (from *máska* 'masque') post-*ow* (139)

Stress must appear **either just before or just after *-ow-***

17 verbs are claimed to vacillate between these two patterns
I would say inter-speaker rather than intra-speaker variation, for me there is no optionality

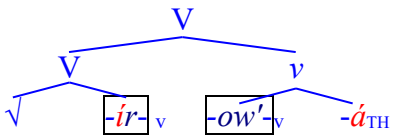
Transitive and intransitive verbs are found in either accentual pattern (not to the same extent, see section 7.1.2, but nothing drastic)

5.1 The variance with *-ir-ow-a-* (1089 verbs)

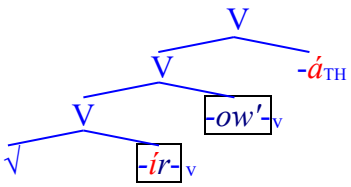
There are no *ir*-verbs with stress on the lexical stem, so **-*ir*- is accentually dominant** (and thus merged as a sister to √)

The position of the stress is accounted for by the structure of *-ow-a-*:

(34) a. stress on *-ir-* (933):



b. stress on *-a-* (139):



The pattern in (34b) arises rarer than that in (34a), suggesting that the formation of the complex suffix *-ow-a-* is now the default

Same open question: Why do some stems appear in the structure (34a) and others, in (34b)?

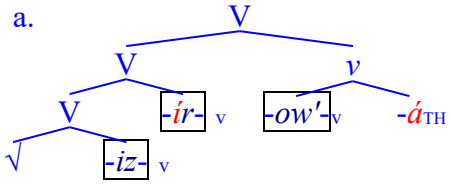
Tentative response: the bases in (34b) require *-ow-* to function as a verbalizer, and the bases in (34a) do not need this (meaning they are already verbal enough in the relevant sense)

5.2 The invariance of *-iz-ir-ow-a-* (208 verbs)

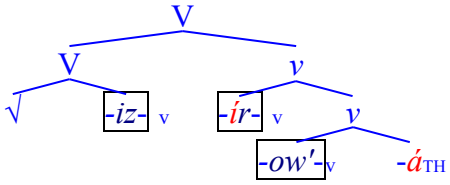
The suffix *-iz-* mostly combines with loan roots (triggering surface palatalization only: *g* → *gʲ*)
7 exceptions with native roots, as in (13b), cf. L'Hermitte 1968:78

If the accentually dominant *-iz-* is merged as the sister to the base and *-ow-a-* is a complex suffix, *-ir-* could theoretically be merged as the sister to either of these complex heads:
Verbs in *-fic-ir-ow-a-* raise the same issues and require the same analysis

(35) a.



b.



In both structures, stress is predicted to fall on *-ir-*

The theoretical preference for (35b) comes from the fact that *-ir-* is semantically empty here

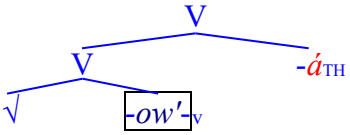
6 INTERMEDIATE CONCLUSION: THE PROSODY OF COMPLEX SUFFIXES

The suffix *-ow-* has been shown to exhibit two different behaviors:

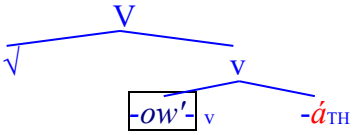
- dominant post-accenting (productive)
- non-dominant (post-accenting; hypothetically also unaccented)

The two behaviors have been linked to structural ambiguity:

(27) a. dominant post-*ow* pattern



b. non-dominant pre-*ow* pattern



The same ambiguity explains the accentual variability of *-ir-ow-a-* (34)

Other suffixal complexes exhibit no accentual ambiguity:

- *-stv-ow-á-* is non-dominant: analyzed as complex *-(stv)-ow-a-* suffix formation
- *-iz-ow-á-* is accented and dominant: analyzed as complex *-ow-a-* suffix formation
- *-iz-ír-ow-a-* is accented and dominant: analyzed as a complex *-ir-ow-a-* suffix (no special motivation over treating *-ir-* as an independent suffix, though)

The choice between the various structures may be determined by semantic considerations

7 THE SEMANTICS OF *-IR-* VS. *-IZ-* (AND *-FIC-*)

Foreshadowing: *-iz-* and *-fic-* are causative, *-ir-* seems to be semantically empty

7.1 The import of *-ir-*

It is not obvious what *-ir-* does, syntactically or semantically

Sokolova et al. 2025: *-irova-* is a "loan verb marker" (cf. Wichmann & Wohlgemuth 2008 and Wohlgemuth 2009 for the German *-ier-*)

- loan stems only (one native root (13d))
- no semantics, presumably (*-ova-* is analyzed as "simultaneously a verbalizer and a loan verb marker" (p.20)
- no decomposition
- unclear syntactic role (impossible in Distributed Morphology ("Syntax All the Way Down": what functional head(s) can be involved here?)

Empirical claim: the presence of *-ir-* does not change the semantics of the verb

Evidence:
- doublets with *-ir-*: (1) *-ir-ow-a-* vs. *-ow-a-*, (2) *-iz-ir-ow-a-* vs. *-iz-ow-a-*
- class comparison: verb profile with *-ir-ow-a-* vs. *-ow-a-*

7.1.1 *ow*-doublets and *iz*-doublets

19 *-ir-ow-a-*/*-ow-a-* verb pairs distinguished by *-ir-* (excluding their prefixed counterparts): 10 with the same meaning and 9 with distinct meanings

Meaning distinctions turn out to fall into two categories:
- stem allosemy/polysemy (e.g., (36))
- stem homonymy (e.g., (37))

Others are simply variants of each other ()

(36) a. gazovátʲ 'to step on the gaz' stem polysemy
b. gazirovátʲ 'to infuse with gaz'

(37) a. próbovatʲ 'to taste, try, try on' cf. próba 'try') stem homonymy
b. probírovatʲ 'to assay' (cf. próba 'assay, gold or silver standard, hallmark')

(38) debetovátʲ, debetírovatʲ 'to debit'

Sometimes they coincide:

(39) a. illʲuminovátʲ 'to illuminate' (with light)
b. illʲuminírovatʲ 'to illuminate (with light); color (in medieval books)'

Hence no evidence for *-ir-* contributing any meaning (unlike *-iz-*, see section 7.2)

There are **31 *-iz-ir-ow-a-*/*-iz-ow-a-* verb pairs distinguished by *-ir-*, no meaning distinctions** (though *-iz-ir-* is more modern)
I feel sometimes that there are nuances in how they are used, but they are very intangible

(40) a. legalizovátʲ/legalizírovatʲ 'to legalize'
b. mobilizovátʲ 'to mobilize' (new: mobilizírovatʲ 'to mobilize')

Since **loan event nominals in *-acij-* do not include *-ir-*** (i.e., they are identical for the two verb types), this is unsurprising

7.1.2 Productive profile comparisons

Controlling for stress, *-ow'-*, *-ír-ow-* and *-iz-ír-ow-* (all followed by the thematic suffix *-a-*/*-i-*) are productive in Modern Russian (unlike *-iz-ow-*)

Table 1: Transitivity of unprefixed *-ow-* verbs by suffixal type

	all verbs			unprefixed verbs only		
	verbs	**intransitive**	**%intr**	**verbs**	**intransitive**	**%intr**
-iz-ow-á-	121	0	0.00%	105 [85]	0	0.00%
-iz-ír-ow-a-	207	7	3.38%	201 [191]	7	3.48%
-fic-ír-ow-a-	43	0	0.00%	40 [36]	0	0.00%
-ír-ow-á-	17	1	5.88%	13	1	7.69%
-ír-ow-a-	929	146	15.72%	698 [658]	118 [114]	16.91%
-ir-ow-á-	136	6	4.41%	53	3	5.66%
-'ow-a-/-'ew-a-	151	37	24.50%	50	17	34.00%
-owá-/-ewá-	**929**	**158**	17.01%	346	76	21.97%
-'estv-ow-a-	363	309	85.12%	284	261	91.90%

The numbers in [] indicate the number of unprefixed verbs if the semantically identifiable loan prefixes *de(s)-*, *re-* and *dis-* are excluded

What do we see immediately?

- *-iz-* and *-fic-* are obligatorily transitive (causative semantics)
- *-stv-* verbs are overwhelmingly intransitive

The percentage of intransitive verbs rises if only unprefixed verbs are considered (because in these recent borrowings prefixation does not affect argument structure) and many of them do not have prefixed counterparts

What do we not see immediately?

- the productive *-ír-ow-a-* and *owá-* classes have the same transitivity profile
- and it is the same profile as verbs in *-i-* (another productive conjugation class with a lot of recent borrowings, as noted by Sokolova et al. 2025)

Table 2: Transitivity of unprefixed *-(ir)ow-* verbs compared to *-i-* verbs

	all verbs			unprefixed verbs only		
	verbs	**intransitive**	**%intr**	**verbs**	**intransitive**	**%intr**
-ír-ow-a-	933	145	15.54%	699	117	16.74%
-owá-/-ewá-	926	158	17.06%	346	75	21.68%
-i-	7274	659	9.06%	1258	270	21.46%

What do we conclude?

-ir- does not affect transitivity

7.1.3 What does *-ir-* do (very tentative!)?

Recall that *-ir-* is excluded from *-acij-* nominalizations but possible in *-ow-ka-* nominalizations
It is also retained in the productive modern Russian "single-act" *-(a)nu-* verbalizations (Sokolova 2015)

Instantaneously arising hypothesis: **nominalizations do not assign accusative** (nor project the external argument, under some assumptions)

Can -*ir*- be responsible for accusative case assignment?

If so, how come it can be absent in the 121 verbs in -*iz*-*ow*-?

Answer: it is not needed in those verbs, -*iz*- does accusative assignment on its own

And this is the argument for the structure in (35b)

7.2 The import of -*iz*- and -*fic*-

Table 1 clearly demonstrates that -*iz*- and -*fic*- contribute transitivity

Same conclusion from the 6 verb pairs distinguished by -*iz*- (-*iz*-*ir*- vs. -*ir*- doublets):

- 3 with unquestionably different meanings (no stem polysemy or homophony)
- 2 cases with stem homophony
- 1 unclear case (probably reanalyzed as stem polysemy)

Same for the 4 verbs formed from the same root by -*fic*-*ir*- vs. by other suffixes with no obvious root allosemy/polysemy/homonymy: clear meaning distinctions

Hypothesis: both suffixes have causative semantics

7.3 The import of -*ow*-

Whichever suffixes precede it, -*ow*- remains biaspectual

Intuition: loan suffixes do not have the formal [α perfective] feature, -*ow*- converts the semantic telicity of a loan stem (and its arguments) into the formal Slavic [α perfective]
Important: the addition of a prefix may fail to affect the perfectivity of an -*ow*- verb (although such cases are not the default: out of the 904 biaspectual verbs 105 are prefixed)

And this is why these verbs are biaspectual: their aspect is a semantic feature

However, -*ow*- can also function as a verbalizer (and not only when merged as a sister to √, cf. the 146 verbs in -*ow*-*a*- with the non-dominant stress pattern (section 2.3.2)

8 CONCLUSION AND REMAINING QUESTIONS

Russian verb formation provided some arguments for the existence of complex suffixes

Evidence came from the variable accentual dominance of the suffix -*ow*-, both when it is the only verbalizer and in conjunction with the loan suffix -*ir*-

Using complex suffixes permits the explanation of affix conglutination (Haspelmath 1995) in verbs derived with the suffixal complex -*stv*-*ow*-

We have also seen that the loan suffixes -*ir*- and -*iz*- do not have the same semantic import:

- -*iz*- (and -*fic*-) are causative suffixes deriving transitive change-of-state verbs
- -*ir*- does not seem to have any semantic import

8.1 Do we need complex suffixes here?

Recall, our motivation for complex suffixation has been phonological (accentual dominance)

There are **alternative takes on what makes a suffix accentually dominant**:

- Revithiadou 1999: syntactic heads are prosodically dominant
  No thematic suffix of Russian is accentually dominant. Arguable verbalizers (the onomatopoeic *-k-*, the deadjectival *-e/-*, the sound-emission *-ot-* (Bernshteyn 1974:61-62, Itkin 2007:204-205), and the semelfactive/single-act *-(a)nu-*) are, but *-ow-*, as we have seen above, need not be
- Marvin 2002: syntactic phase heads are dominant
  Same as above. A theory must be developed that would explain the variable phase status of *-ow-* in both stem-based and *ir*-based verbalizations
- Simonović & Arsenijević 2020: derivational suffixes are dominant, inflectional are not (on the basis of Serbo-Croatian)
  The examples that S&A give (the nominalizer *-ost-*, the adjectivizers *-at-* and *-en-*, which also create passive past participles, and the nominalizer *-VVje-*) are not really inflectional in any conventional sense. So the opposite might be true: the difference in behavior is due to complex suffix formation (and I argued for just this with respect to their last case, Matushansky 2025d)
- Creemers & Don & Fenger 2015, Don & Sleeman & Westveer 2015, Creemers & Don & Fenger 2018: affixes that merge with already categorized constituents are not accentually dominant
  The cases we have looked at involve a potentially categorially flexible suffix (*-ow-*) that can merge with both categorized (nominal) and arguably uncategorized (loan) stems and be accentually (non)-dominant in both environments

Is [owa] a complex suffix (*-ow-a-*) or a new simple one?

- the thematic suffix is a non-productive one
- the suffix *-ow-* does not have clear independent existence (depending on whether it is treated as identical to the adjectival *-ow-*, see Simonović & Mišmaš 2020 for Slovenian)
- in the present-tense paradigm (where [owa] is "replaced" by [uj]) this phonological string is not even clearly decomposable
- has this phonological string been reanalyzed?

Issues to address (that I am not prepared to tackle):

- What is then the status of the new suffix *-owa-*/*-uj-*? Is it a verbalizer or a thematic suffix?
- If the former, then Russian has another verb class without a thematic suffix. What does this entail?
- If the latter, does this mean that thematic suffixes are verbalizers?

There is already a lot of contention regarding Slavic thematic suffixes, and treating [owa] as a single suffix complicates things even further

My perception for now is that my proposal is heuristically the simplest one

8.2 Potential developments

The hypothesis that complex affix formation has semantic and phonological effects may help in other instances of empty morphs/augments/extenders (ask me!)

This could yield a reanalysis of multifunctionality (i.e., of "category-free suffixes"), especially if one is willing to assume null categorizing heads

APPENDICES

A.1 The thematic suffix *-a-/-i-*

Independent evidence for the thematic suffix *-a-/-i-* comes from a closed class of verbs that do not involve any overt verbalizers and whose final consonant undergoes a mutation in the present tense traditionally known as transitive softening (henceforth, TS verbs):

(41) a. maz-a-l 'smear-TH-PAST.MSG' mažet < maz-j-et 'smear-TH-PRES.3SG'
b. alk-a-l 'crave-TH-PAST.MSG' alčet < alk-j-et 'crave-TH-PRES.3SG'

This suffix is underlyingly accented, as shown by the fact that stress is never inflectional in the past tense (Matushansky 2025c)

Table 3: Accentual classes for the 1st conjugation TS suffix *-a-/-i-*

	stem accentuation	**accented** PRES-3SG	**accented** PRES-1SG	**accented** PAST-FSG	**unaccented** PAST-PL
a.	accented: *-maz-* 'smear'	*máž-e-t*	*máž-u*	*máz-a-l-a*	*máz-a-l-i*
b.	unaccented (1sg): *-vʲaz-* 'tie'	*vʲáž-e-t*	*vʲaž-ú*	*vʲaz-á-l-a*	*vʲaz-á-l-i*
c.	post-accenting: *-koleb-* 'rock'	*koléblʲ-e-t*	*koléblʲ-u*	*koleb-á-l-a*	*koleb-á-l-i*

Stress variability shows that the thematic suffix *-a-/-i-*is not dominant

Melvold 1989: the [ova]/[uj] alternation arises from the interaction between the suffix *-ow-* and the thematic suffix *-a-/-i-*:

(42) a. torg**oval**/torg**uj**et 'trade.PAST.MSG/PRES.3SG' native
b. intrig**oval**/intrig**uj**et 'intrigue.PAST.MSG/PRES.3SG' loan

The alternation follows from the hypothesis that the thematic suffix *-a-/-i-* is subject to morphologically conditioned ablaut (Matushansky 2023, 2025b) and the underlying representation of the suffix *-ow-* is underspecified permitting it to surface as [ov] before a vowel and as [u] before a consonant (Lightner 1965, Melvold 1989, Itkin 2007:147–148)

A.2 The semantics of the complex suffix *-stv-ow-a-*

Semantically, *-stv-ow-* verbs need not be derived from the corresponding *stv-* nouns

Many *stv-ow-* verbs have **no corresponding *stv-* nouns**:
Note the haplology of [st] in (43a, b), also observed in Shvedova 1980:343

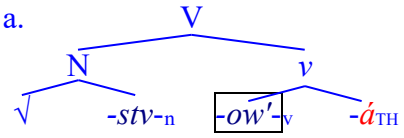
(43) a. vlástvovatʲ 'to rule' (*vlastʲ* 'power', #vlastvo)
b. učástvovatʲ 'to take part' (*častʲ* 'part', *účastʲ* 'lot, fate', *učástie* 'participation', ×*(u)častvo*)
c. sposóbstvovatʲ 'to assist, further, contribute to' (×*posobstvo*; *posobítʲ* 'to relieve', *posóbie* 'allowance', *posóbnik* 'accomplice'; *spósob* 'method' is unrelated)

For others the corresponding noun has **the wrong semantics**:

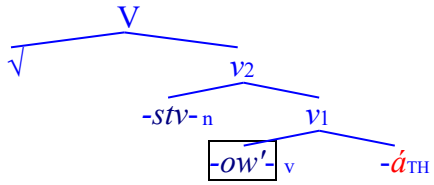
(44) a. proróčestvovatʲ 'to prophecy' (cf. *proróčestvo* 'prophecy', *prorók* 'prophet')
b. soveršénstvovatʲ 'to perfect' (cf. *soveršénstvo* 'perfection', *soveršénnyj* 'perfect')
c. suščestvovátʲ 'to exist' (cf. *suščestvó* 'creature', *súščij* 'real, existing')

Recall the two constituencies in (29):

(29) a.



b.



Remember, a **complex suffix will generally be morphosemantically incoherent**. In (29b):

- *-stv-* creates abstract nouns
- *-ow-a-* creates verbs (same as *-ow-*, since the thematic suffix is semantically null)

Semantic deletion of *-stv-* (allosemy conditioned by *-ow-a-* in the complex suffix structure) **resolves this incoherence**

The interpretation of the complex suffix requires *-stv-* to be semantically vacuous in (29b):

- (29a) is denominal and semantically linked to the corresponding *-stv-* noun
- (29b) is semantically linked to the base stem only

Complex suffixes provide a structural environment for allosemy

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