

## ALLOSEMY AND SEMANTIC DELETION IN COMPLEX AFFIXES

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### 1 INTRODUCTION: COMPLEX AFFIXES

A notion taken for granted in traditional grammars but absent from realizational approaches to morphology (i.e., Distributed Morphology and Nanosyntax)

In English, it often happens in non-native vocabulary:

- |     |    |   |                      |
|-----|----|---|----------------------|
| (1) | a. | abolish → abolition, absorb → absorption                              | suffix <i>-tion-</i> |
|     | b. | truncate + tion → truncation  | or <i>-[t]ion-</i> ? |
|     | c. | explain → *explaintion, ✓ <b>explanation</b> , cf. <b>explanatory</b> | phonology?           |
|     | d. | expect → *expectation, ✓ <b>expectation</b> , cf. protect/protection  |                      |

The insertion of *-a[t]-* does not seem to be straightforwardly phonologically motivated and is not limited to one suffix:

- |     |    |  |                    |
|-----|----|--|--------------------|
| (2) | a. | event → eventive, expense → expensive, immerse → immersive                                     | suffix <i>-iv-</i> |
|     | b. | provoke → <b>provocative</b> , <b>provocation</b> ; form → <b>formative</b> , <b>formation</b> |                    |

Stump 2019: the English suffix *-at(e)-* has a dual status: as a verbalizer (*saliva/salivate*) and as a creator of a T-stem used in further derivation (*form/\*formate*)

Stump 2019: historical basis: some verbs were based on the Latin past participle, nominalizations and adjectives might have been borrowed directly

And sometimes *-a[t]-* is not enough:

- |     |    |  |  |
|-----|----|--|--|
| (3) | a. | classify → <b>classification</b> , <b>classificatory</b> | suffixal complex <i>-ic-at-[t]ion-</i> |
|     | b. | simplify, gamify, spotify...                             |  |

What is *-ic-* doing here?

And is it the same *-ic-* as in (4)?

- |     |    |   |
|-----|----|---|
| (4) | a. | history + ic → historic (important in history), + al → historical (related to history)                |
|     | b. | electr- + ic → electric (uses electricity), +al → electrical (related to electricity)                 |
|     | c. | meter + ic → metric (using meters as base), metrical (related to poetic meter; involving measurement) |
|     | d. | nonsense → *nonsensic, ✓ <b>nonsensical</b>   |
|     | e. | whimsy → whimsical, type → typical  |

Traditional approach: these are complex affixes, *-ation-*, *-ical-*, *-ication-*...

**“Micromorphology”** (term from Stump 2019; formalizations in Bochner 1993, Soukka 2000, Luís and Spencer 2005, Stump 2017a, b): **affixes may combine without a stem**

Stump 2017a, b, 2019, 2022b: two (Vocabulary Insertion<sup>(DM)</sup>) rules may conflate

The outcome of conflation may differ from successive affixation, e.g.,:

- derivatives in *-ian-* may be nouns or adjectives; derivatives in *-ic-ian-* can only be [+human] nouns
- derivatives in *-ist-ic-* may not relate to derivatives in *-ist-*
- derivatives in *-ic-al-* contain stems that neither *-ic-* nor *-al-* alone can combine with

No implementations in Distributed Morphology

Am I just translating Stump’s theory into DM? No

DM allows us to determine and/or implement:

- semantic effects of complex affixation: semantic deletion, allosemy and its sources
- conditions on complex affixation (Stump's T-stem): subcategorization, blocking, feature clashes

Like rule conflation, addresses potentiation (Aronoff 1976), counter-potentiation (Stump 2022b) and **affix conglutination** (Haspelmath 1995; the fact that the inner affix is semantically null)

Roadmap:

- Russian complex affix *-telj-ĭn-*: evidence for complex affix formation
- semantic deletion in complex affixes
- further (cross-linguistic) evidence for complex affix formation

The questions of why and how will only be touched upon

## 2 THE SECRET AGENT IN *-TELJ-ĬN-*

Similar to *-ist-ic-* in *capitalistic*: non-agentive despite an agentive suffix

For the range of possible meanings see Itkin and Leont'eva 2019 (in Russian)

### 2.1 Dramatis personae: *-telj-* and *-ĭn-*

**Adjectivizing suffix *-ĭn-*** (surface [en]/[n]): “pure categorizer”, no discernable lexical meaning beyond adjective formation:

- (5) a. *pilj* ‘dust’ (6) a. *komp'úter* ‘computer’  
 b. *pilj-ĭn-ij* ‘dusty.MSG’ b. *komp'úter-ĭn-ij* ‘computer-ADJ-MSG’

**Non-deverbal**, productive, strongly disprefers [+human] bases (Bobkova 2022)

Vinogradov 1952:346 treats this as a restriction on animates, but notes a few exceptions, such as *konnij* ‘horsed’ or *ribnij* ‘fish’. On the use of *-ĭn-* with verbal bases see section 6.1

“Pure categorizer” means the outcome is a “property linked to N”:

- (7) a. *programmĭj* ‘programmatic, program’  
 b. *kultúrĭj* ‘cultural, cultured, cultivated’  
 c. *vernĭj* ‘faithful’ (from *vera* ‘faith, belief’)

- (8)  $[-\text{ĭn-}] = \lambda x_k . \lambda P . P \text{ has something to do with } x_k$

**Agentive suffix *-telj-***: strictly deverbal, strictly obeys the External Argument Generalization of Levin and Rappaport Hovav 1988 and Rappaport Hovav and Levin 1992:

- (9) a. *l'ubí-tj* ‘love-INF’ (10) a. *vikl'učá-tj* ‘turn off.IMPV-INF’  
 b. *l'ubí-telj* ‘an amateur’ b. *vikl'učá-telj* ‘a light switch’

In productive uses can be restated as “one who Vs”, ambiguous between actor and instrument interpretation; this ambiguity seems to be systematic across languages (Rainer 2015):

- (11)  $[-\text{telj-}] = \lambda P . \iota x_k . \text{Gen}(e') . [P(x)(e')]$  after Olsen 2019 for *-er*

An agentive noun can serve as a basis for an apparently transparent adjective-formation:

- (12) a. *muči-tj* → b. *muči-telj* → c. *muči-telj-n-ij*  
 torture-INF → torture-AGT → torture-AGT-ADJ-MSG  
*to torture* → *tormentor* → *poignant, agonizing*

Impressionistically, most *-telʹn-* adjectives are agentive

## 2.2 Affix telescoping and conglutination

The interpretation of a sequence of suffixes need not be compositional

**Affix telescoping** (Haspelmath 1995): semantically transparent derivation with a missing step:

- (13) a. *opravda-tʹ*  
 acquit-INF  
 to acquit      →      b. *\*opravda-telʹ*  
 acquit-AGT      →      c. *opravda-telʹ-n-ij*  
 acquit-AGT-ADJ-MSG  
*acquitting*

Most agentive *-telʹn-* adjectives lack a corresponding noun

Sometimes the noun is present but cannot be the base for the adjective:

- (14) a. *izbiráti* ‘to elect’ → *izbirátelʹ* ‘elector, voter’  
 b. *izbirátelʹnij* ‘electoral, election (attr.), voting’ ≈ ‘related to voting/election’  
 c. *izbiratelʹnij učastok* ‘polling station’  
 d. *izbiratelʹnij bʹulletenʹ* ‘voting form’  
 (15) a. *predoxraníti* ‘to protect, preserve’ → *predoxranitelʹ* ‘electrical fuse, safety device’  
 b. *predoxranitelʹnij* ‘preservative, preventive, protective’  
 c. *predoxranitelʹnie meri* ‘precautions, precautionary measures’

And the resulting *-telʹn-* adjective does not have to include an agentive component:

- (16) a. *razdražáti* ‘to irritate (IMPF)’ → *razdražitelʹ* ‘irritant’ (from the perfective stem)  
*razdražitelʹnij* ‘irritable’  
 b. *nosíti* ‘to carry, wear, bear’ → *nositelʹ* ‘carrier’ (rocket carrier, information bearer)  
*nositelʹnij* ‘wearable, transportable’

**The adjective is semantically linked to the verb rather than to the intermediate noun:**

- (17)  $[[\sqrt{-X_{TEL}-Y_{IN}}] = [[Y_{IN}]]([\sqrt{ }]]$  affix conglutination

The phenomenon of semantically vacuous intermediate suffixes is very widespread

**Affix conglutination** (Haspelmath 1995): “affix reanalysis in which an inner affix and an outer affix are combined [...] Semantically, the new conglutinated affix is not different from the original outer affix”

Terminology: Stump 2022b calls the cases where the historical change is complete (only the complex is productive, and its former parts are not) **affix telescoping**; Haspelmath 1995 reserves this term for cases where the inner affix is semantically null

In affix conglutination the intermediate affix is semantically vacuous

Traditional Russian grammars, Agapova 1974 via Zvezdova and Gou 2013; Haspelmath 1995, citing Kiparsky 1975; Itkin and Leont'eva 2019: new simplex suffix *-telʹn-*:

- (18) a. *osnováti* ‘to found’ → *osnovátelʹ* ‘founder’ → *osnovátelʹnij* ‘substantial’  
 b. *starátsʹja* ‘to try hard’ → *starátelʹ* ‘prospector’ → *starátelʹn-ij* ‘assiduous’

But is it truly reanalyzed as a single morpheme?

### 2.3 Complex affix formation or reanalysis?

Stump 2022b: the suffixes *-let* and *-ling* have been reanalyzed:

- (19) a. booklet, droplet, eyelet, leaflet, piglet, rootlet, streamlet, wavelet -let-  
 b. kernel, nozzle, puddle, scrapple -l-  
 c. Janet, midget, packet, turret -et-
- (20) a. duckling, gosling, hatchling, nestling, sapling, seedling, weakling, yearling -ling-  
 b. fairing ‘present from a fair’, golding ‘gold coin’,  
 lording ‘term of address for a lord’, sweeting ‘sweet apple; sweetheart’ -ing-

Neither the inner nor the outer suffixes are productive

Haspelmath 1995, Grestenberger and Kastner 2022: Modern Greek verbalizer *-ev-*, originally derived from the combination of the agentive suffix *-eu-* and the verbalizer *\*-je/o-*

Conversely, in *-ic-al-*, *-ic-ian-*, *-ist-ic-*, or the Russian *-telj-ŭn-* or *-ik-ŭsk-* (surface *-ič-esk-* (33)), both pieces are fully productive

### 2.4 Where is the agentivity?

Puzzle: the loss of agentivity at the intermediate step appears to be conditioned by both the root and the adjectivizing suffix, other environments retain agentivity:

- (21) a. predstaviti ‘imagine; present.PFV.INF’  
 predstavljati ‘imagine; present; represent.IMP.FV.INF’  
 b. predstavitelj ‘representative’, predstaviteljica ‘representative.F’  
 c. predstavitelj ‘representative; **impressive, dignified**’  
 d. predstaviteljstvo ‘representation’

The loss of agentivity at the intermediate step **is not obligatory**

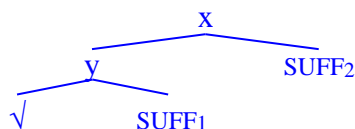
Paykin 2003:181 after Markov 1984: instrument-denoting *-telj-* nouns may combine with the suffix *-ščik-* to yield corresponding agents (e.g., *osvetitelj* ‘lighting appliance, or person in charge of lighting effects’ → *osvetiteljščik* ‘person in charge of lighting effects’). Is this another case of *-telj-* bleaching?

The semantically vacuous affix is systematically the inner one (more cases to follow)

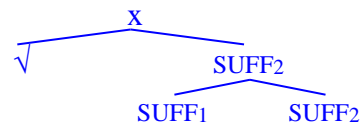
## 3 COMPLEX AFFIX FORMATION

Proposal: two potential structures for a sequence of suffixes:

- (22) a. **iterative suffixation**



- b. **complex suffix**



The two adjectival interpretations in (21c) correspond to the two structures, respectively:

- (23) a. [[predstavi-telj]- nij] ‘representative’  
 present AGT ADJ  
 b. [predstavi-[telj-nij]] ‘impressive, dignified’

Complex affix formation is not excluded by DM (it is even expected, if it's "Syntax All The Way Down")

However, **this constituency imposes constraints on the interpretation**

### 3.1 Reasons for complex affix creation

Section 5: complex affix creation usually seems result-oriented (e.g., phonotactics, c-selection, blocking, adaptation of non-native vocabulary...)

Most Russian verbs contain a thematic suffix: a vocalic suffix merged between the verbal stem and the tense-agreement inflection

The **adjectivizing suffix -*ĭn*- cannot combine with thematic verbal stems** (section 6.1)

Hence a complex suffix is created (cf. Stump's and Haspelmath's *counterpotentiation*)  
Why via *-telj-*? Most likely, due to calques from Greek (section 6.2)

### 3.2 Semantic clash in a complex suffix

The **agentive suffix -*telj-*** is deverbal and creates agentive nouns

The adjectivizing suffix *-ĭn-* is strictly denominal (most likely not for semantic reasons but who knows)

The constituent formed by the two suffixes is redundant and incoherent:

- redundancy: *-ĭn-* is a pure categorizer returning the property of being related to the base stem (*-telj-* is far more specific, returning the kind characterized as the external argument of the base event)
- incoherence: *-telj-* returns a kind, *-ĭn-*, a property

In the general case, **one suffix in a complex suffix structure must be semantically null**

Two options: actual deletion (a process) or inserting a null alloseme (i.e., semantic allomorph, cf. Marantz 2013, Wood 2015)

My preference is for the former: (a) deletion is a process attested on the PF side; (b) the distribution of semantically null affixes seems to be predictable; (c) the null alloseme would also have to have come from somewhere, (d) too many other suffixes would have to have a null alloseme

Empirically, it is always the inner suffix that is semantically null

Since *-ĭn-* is a pure categorizer, *-telj-ĭn-* will also be one, no motivation for semantic constraints on the base

But the c-selectional conditions of *-telj-* remain: the complex suffix is purely deverbal

Two possible ways of semantic composition in a branching structure (Heim and Kratzer 1998):

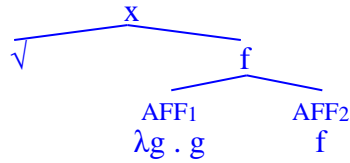
- function application: one of the nodes applies to the other
- predicate modification: the two nodes form a conjunction

Inheritance of the c-selectional properties of the inner affix (AFF1) is unclear

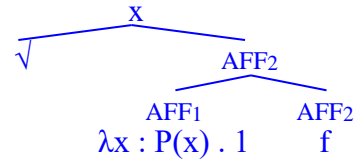
If AFF1 has a presupposition P, only one of the structures allows us to preserve it

Combined with semantic deletion:

(24) a. **function application**



b. **predicate modification**



If the restrictions on the base of AFF<sub>1</sub> are encoded as presuppositions, they cannot be projected in (24a); c-selection must be assumed (and some conditions on its inheritance)

In (24b) only the presuppositions remain, selection can be semantic

No evidence for choosing on the basis of *-teli-ḥn-*

But complex suffix formation may also give rise to novel meanings

#### 4 INTERMEDIATE SUMMARY

The agentive semantics of the suffix *-teli-* can be lost in adjectival derivation (Haspelmath's affix conglutination, which is a type of Stump's rule conflation)

This loss is not obligatory, there exist doublets, as in (21c):

Though such doublets can always be attributed to polysemy, either of the base stem or of the derivate

- (25) a. *predstavitel'niĭ* 'representative'  
 b. *predstavitel'niĭ* 'impressive, dignified'

Proposal: formation of a complex suffix and obligatory semantic deletion inside it

Agentive and non-agentive readings of *-teli-ḥn-* adjectives correspond to different structures

Semantic deletion may correspond to

- (a) replacement with an identity function, retention of c-selectional properties
- (b) replacement with a constant and retention of presuppositions

The latter option can also be implemented as copying of the scope of the  $\lambda$ -operator of AFF<sub>2</sub> to AFF<sub>1</sub> with retention of the restriction of AFF<sub>1</sub> but copying is known to be computationally suspicious

No basis for deciding between these options

Additional benefits: **counterpotentiation** (Haspelmath 1995, Stump 2022a, b):

- (26) a. *cyclic, historic*  
 b. \**whimsic, nonsensic*  
 c. *whimsical, nonsensical*

In the suffixal complex *-teli-ḥn-* the inner suffix (*-teli-*) overcomes the selectional restrictions of the suffix *-ḥn-*

#### 5 OTHER INSTANCES OF COMPLEX SUFFIXATION

##### 5.1 Hebrew complex adjective formation and the loss of animacy

Laks 2024 (citing Bolozky 2023): systematic existence of an *-ani-* variant for adjectives derived with the suffix *-an-*:

- (27) a. kapdan, kapdani ‘meticulous’  
 b. mahapexan, mahapexani ‘revolutionary’

The suffix *-an-* is ambiguous (like the English *-ian-*), deriving both nouns and adjectives:

- (28) a. saxyan ‘swimmer’ c. kabcan ‘beggar’  
 b. saxkan ‘actor’ d. yevuan ‘importer’

Nouns in *-an-* can be further suffixed with the default adjectivizing suffix *-i-* yielding ‘typical of, related to, etc.’ interpretation (e.g., *saxkani* ‘actor-like, actor-related’)

A few *-ani-* adjectives have no *-an-* counterpart (Laks lists *racxani*/\**racxan* ‘murderous, cruel’)

The *-an-/ani-* doublets differ in animacy: *-an-* adjectives can only apply to animate nouns

Proposal: this is complex suffixation with semantic deletion of the inner agentive suffix *-an-*:

- (29) a. **adjective in *-an-*** b. **doublet in *-ani-*** c. **denominal adjective in *-i-***
- 

If the suffix *-an-* is specified to derive animates (adjectives or nouns) semantically, semantic deletion will remove this

The nominalizing agentive *-an-* derives agents and instruments (e.g., *mazgan* ‘air-conditioner’), yet, as discussed by Laks 2015, *-an-*instruments are being “phased out”

Hence no doublets, just parallel derivation, with occasional gaps (*racxani*/\**racxan* ‘murderous, cruel’, and the opposite: *aclan*/\**aclani* ‘lazy’), just like *whimsical*)

Laks 2024: “the addition of the suffix *-i* is motivated by the desire to reduce polycategoriality in the language”, i.e., to distinguish adjectives from agent nouns

Once again, result-orientation (lookahead)

## 5.2 Russian complex adjective formation and the loss of agentivity

Systematic semantic deletion of the [+human] nominalizer in adjective formation

Haspelmath 1995 following Kiparsky 1975:267-268: the complex suffixes *-česk-* and *-čestv-*:

- (30) a. tvor<sup>ec</sup> ‘a creator’ → tvor<sup>českij</sup> ‘creative’, tvor<sup>čestvo</sup> ‘creation’  
 b. peresel<sup>enec</sup> ‘migrant, settler’ → peresel<sup>enčeskij</sup> ‘migrational’  
 c. jazikov<sup>éd</sup> ‘a linguist’ → jazikov<sup>édčeskij</sup> ‘linguistic’  
 d. stud<sup>ént</sup> ‘a student’ → stud<sup>énčeskij</sup> ‘student’, stud<sup>énčestvo</sup> ‘students as a class, the time of being a student’

The nominalizing suffix *-č-* (surface [ec]/[c]) is productive, as are the suffixes *-isk-* (surface [esk]/[sk]) and *-stv-* (surface [estv]/[stv])

The non-productive agent ([+human]) suffix *-ar-/ar<sup>i</sup>-* might be an exception to the inability of the suffix *-in-* to combine with animate nouns:

The final palatalized consonant of the nouns in (31) is depalatalized before [n]

- (31) a. pek<sup>ár</sup> ‘a baker’ → pek<sup>árnij</sup> ‘baking (attr.)’ (cf. pek<sup>ú</sup> ‘bake.PRES.1SG’)  
 b. kust<sup>ár</sup> ‘handicraftsman’ → kust<sup>árnij</sup> ‘handicraft (attr.)’



The meaning is ‘related to/characteristic of the profession(al)’ (*pekárniĭ* is linked to bakers and bakery (*pekárniĭa*, *-ĭni-* is a non-productive location suffix), not to the baking process itself)

The non-native nominalizer *-ik-* becomes semantically null in a complex suffix *-ičesk-*:

Surface [ičesk] with corresponding nouns in *-nik-* and *-ščik-* has different prosodic properties

- (32) a. *alkogólĭk* ‘an alcoholic’ → *alkogolíčeskij* ‘alcoholism-related’ parallel derivation  
*alkogólĭ* ‘alcohol’ → *alkogólĭniĭ* ‘alcoholic’
- b. *xímĭk* ‘chemist’ → *ximíčeskij* ‘chemical’ glide insertion in the abstract noun  
*xími[j]-a* ‘chemistry’
- c. *nevrótĭk* ‘a neurotic’ → *nevrotíčeskij* ‘neurotic(al)’ stem allomorphy  
*nevrós* ‘neurosis’
- d. *fízĭk* ‘physicist’ → *fizíčeskij* ‘physical’ likely reanalysis with the root *-fiz-*  
*fízĭka* ‘physics’

And the corresponding human nouns may even be null-derived:

- (33) a. *kardiológ/\*kardiologik* ‘cardiologist’ → *kardiologíčeskij* ‘cardiological’  
*kardiológĭ[j]-a/\*kardiologika* ‘cardiology’
- b. *xirúrg/\*xirurgik* ‘surgeon’ → *xirurgíčeskij* ‘surgical’  
*xirurgĭ[j]-a/\*xirurgika* ‘surgery’

English creates *-ist-* adjectives by conversion (and no one wonders about the loss of agentivity), Russian uses the suffix *-ĭsk-* (surface [esk]/[sk]):

- (34) a. *kommúnĭst* ‘a communist’ → *kommunistíčeskij* ‘communist (attr.)’  
b. *artĭst* ‘an artist, performer’ → *artistíčeskij* ‘artistic’ cranberry root

The adjectives *communist* and *capitalist* are not derived from the corresponding human nouns

### 5.3 Agency in feminitives

The nominalizing suffix *-nik-* is historically a complex suffix (the adjectivizing suffix *-ĭn-* + the diminutive/nominalizing suffix *-ĭk-*, yer vocalization is phonologically driven)

The suffixal complex *-nic-* is its feminine variant:

- (35) a. *animéšnik/animéšnica* ‘animé lover.M/F’  
b. *otstupít’sja* ‘to renounce’ → *otstúpĭnik/otstúpĭnica* ‘renegade’

The suffixal complex *-nic-* also forms feminitives for *-telĭ-* nouns:

- (36) *učítelĭ/učítelĭnica* ‘a teacher’, *vodítelĭ/vodítelĭnica* ‘a driver’, *voítelĭ/voítelĭnica* ‘a warrior’, *rodítelĭ/rodítelĭnica* ‘a parent’

There cannot be two agentive suffixes in these feminitives!

If *-nic-* still contains the adjectival *-ĭn-*, complex affix formation is the only possible analysis (too complex to spell out even in a few minutes)

Evidence for decomposing: the feminine suffixes *-ščic-* and *-ic-* (counterparts to the masculine suffixes *-ščik-* and *-ĭc-*)



## 5.4 Augmented feminines and ambiguity avoidance

**Ambiguity avoidance** may drive complex affix formation in feminines:

- (37) a. *grek/grečanka* ‘a Greek’ (cf. *grečka* ‘buckwheat’) -ian-ŭk-  
 b. *slugá/sluzánka* ‘servant’ (cf. *služka* ‘lay brother’) -ian-ŭk-  
 c. *górec/goránka* ‘mountain-dweller’ (cf. *gorka* ‘mountain.DIM’) -ŭc-/-ian-ŭk-

Other cases cannot be so explained:

- (38) a. *c’órt/certóvka* ‘devil’, *plut/plutóvka* ‘rogue’ -ov-ŭk-  
 b. *geógraf/geografíčka* ‘geography teacher’ -ik-ŭk-

But here an augment is also used in derivation

## 5.5 Augmented plurals

The plural nominative *-a-* is **both accented and dominant with non-neuter nouns** (Coats 1976, Zaliznjak 1985, Alderete 1999:166, Timberlake 2004:136, Munteanu 2021, Iordanidi 2020):

- (39) a. *proféssor* ‘professor.NOM’  
*proféssora* ‘professor.GEN’  
 b. *professorá* ‘professor.PL.NOM’  
*professorámi* ‘professor.PL.INS’

There exist no non-neuter *a*-plurals that have stress on the stem

Two exceptions: the “baby-diminutive” suffix *-ŭnŭk-* (surface [ionok]/[ionk]), suppletive plural form *-ŭnt-* [iat], see Gouskova and Bobaljik 2022, and **augmented plurals in -ŭj-**:

- (40) a. *brat/brátja* ‘brother.SG/PL’ masculine, stem-final stress  
 b. *kn’az/kn’azjá* ‘prince.SG/PL’ masculine, inflectional stress  
 c. *déveri/deverjá* ‘husband’s brother.SG/PL’ masculine, inflectional stress  
 d. *kólos/kolósja* ‘ear (of a cereal).SG/PL’ masculine, stem-final stress  
 e. *dérevo/derévja* ‘tree.SG/PL’ neuter, stem-final stress  
 f. *kriló/krílja* ‘wing.SG/PL’ neuter, stem-final stress

Matushansky 2024: these roots are **underlyingly specified as singular**, the augment is needed to enable morphological pluralization

As the suffix *-ŭj-* is neuter, it cannot combine with [+human] roots → complex affix formation

Evidence: different stress patterns for human and inanimate nouns

## 5.6 Russian verbalization: loanword stems and ACT-be

Affix pleonasm (Gardani 2015) in loanword integration: with loanword roots the suffix *-ow-* is often preceded by the sequences *-iz-*, *-ir-*, and *-iz-ir-*:

- (41) a. *kompil-ir-ov-a-tj* ‘to compile’  
 b. *social-iz-ir-ov-a-tj* ‘to socialize’  
 c. *real-iz-ov-a-tj* ‘to realize’

Extremely productive with loan stems

These loan suffixes cannot function as verbalizers (unlike in Serbo-Croatian (Simonović 2015))

The suffixal complex *-n-ik-e[jj]-* (surfacing as *-niča[jj]-*):

(42) a.	báb -n -ič-[aj] -e t woman-ADJ -N - VBLZ -PRES 3SG <i>womanize.PRES.3SG</i>	b.	bab -n -ik woman -ADJ -NMLZ <i>womanizer</i>
(43) a.	nérv -n -ič -[aj] -e t nerve-ADJ -NMLZ -VBLZ -PRES 3SG <i>be nervous.PRES.3SG</i>	b.	nérv -n -aj a nerve -ADJ -LF FSG <i>nervous</i>
(44) a.	jábéd -n -ič -[aj] -e t sneak-ADJ -NMLZ -VBLZ -PRES 3SG <i>carry tales.PRES.3SG</i>	b.	jabed-a sneak-NOM <i>a sneak, a telltale</i>

Also subject to “agent incorporation” (see Grestenberger and Kastner 2022 for references and discussion): their interpretation does not involve the agent even when they look like they might be denominal (42)

## 5.7 “Interfixes” and T-stems

Plénat and Roché 2004, Plénat 2005: diminutive “interfixes” in French:

- (45) a. tarte ‘cake’ → *tartelette* ‘tartlet’ (cf. boule ‘ball’ → *boulette* ‘meatball, pellet’)  
b. nappe ‘tablecloth’ → *napperon* ‘doily’ (cf. blouse ‘blouse’ → *blouson* ‘jacket’)  
c. brique ‘brick’ → *briquetier* ‘bricklayer’ (cf. pot ‘pot’ → *potier* ‘potter’)

Plénat and Roché 2004: three apparent options:

- augmented suffixes (e.g., *-elette-*)
- unattested intermediate stems (e.g., *\*tartelle*)
- semantically neutral interfixes

Driving force: **phonological constraints** (result-oriented, lookahead)

NB: all these “interfixes” have a separate life as diminutives or nominalizers

Roché 2002 (for Occitan): “postponed suffixation” with a semantically neutral suffix

- (46) a. *clau* ‘key’ → *claveta* ‘little key; bushing key, dowel...’  
b. *clavetièra* ‘keyhole’

Despite the presence of the diminutive suffix, (46b) is semantically linked to the root only (cf. Haspelmath 1995 for the French *-erie-*)

No special reason for reanalysis

Stump 2019: the English suffix *-at(e)-* has a dual status: as a verbalizer (*saliva/salivate*) and as a former of a T-stem used in further derivation:

- (47) a. provoke → **provocative**, **provocation**  
b. form → **formative**, **formation**  
c. explain → **explanation**, **explanatory**  
d. probe → **probation**

Hypothesis: maybe it’s the suffix observable in *celibate*, *reprobate*, *apostate*...

## 6 THE RHYME AND REASON OF *-TELJ-ĬN-*

Driving force: c-selection

## 6.1 On the c-selectional properties of the suffix *-ĭn-*

The suffix *-ĭn-* can combine with verbs:

Vinogradov 1952:346-347: there exist a few deverbal *-ĭn-* adjectives (*béřežnĭj* ‘careful’ (*beréčĭ* ‘to protect’), *prijátĭnĭj* ‘pleasant’ (*prijátĭ* ‘to accept (arch.)’), *grebnóĭ* ‘rowing’ (*grestĭ* ‘to row’), etc.)

Thus empirically, **the adjectivizing suffix *-ĭn-* cannot combine with thematic verbal stems**

Hypothesis: this is not a hard-wired restriction, either semantic or syntactic, this is blocking

The **passive past participle suffix *-en-*** is historically identical to *-ĭn-* (and might still be *-ĭn-* in the underlying representation) but never surfaces as such (its vowel never alternates, it is either zero or [e]):

- (48) a.    čit-   a-   n-   a   ← čit-a-ĭn/ĕn-a + hiatus resolution?  
          read TH PPP FSG
- b.    kup   l-   ĕn-   a   ← kup-i-ĕn-a + glide formation  
          buy   TH   PPP FSG

If an adjective was formed with the suffix *-ĭn-* from a thematic verb, this adjective would be indistinguishable from a passive past participle

Hence **complex affix formation caused by blocking**

## 6.2 A brief history of *-telĭ-ĭn-*

Agapova 1974 via Zvezdova and Gou 2013, Itkin and Leont'eva 2019: adjectives without the intermediate noun already by the 11<sup>th</sup> century:

Demidov and Kamchatnov 2020: the existence of *-telĭ-ĭn-* adverbs without corresponding adjectives suggests that short forms with the gerundive meaning should be regarded as primary

- (49) a.    volitelĭnĭj ‘by choice’ (11<sup>th</sup> c., \*volitelĭ)  
       b.    vozveščatelĭnĭj ‘demanding, announcing’ (16<sup>th</sup> c., \*vozveščatelĭ)

Agapova 1974 via Zvezdova and Gou 2013: derivation from the verbal stem in the 11<sup>th</sup>-14<sup>th</sup> c.

Non-agentive use in the 19<sup>th</sup> century:

- (50) stojal,    ožidaja    s    zamirajuščim    serdcem    postupi-telĭ-n-ogo    ĕkzamena  
       stood    awaiting    with    sinking    heart    admit-TEL-ADJ-SG.GEN    exam  
       stood waiting for admittance exam with a sinking heart (Aleksy Pisemsky, 1858)

Zvezdova and Gou 2013: these adjectives are derived directly from the verbal stem

Lopatin and Uluxanov 2016:653-657: at least six allosemes, including “intended for V”, “the object of V”, and “the state of V”, direct derivation from the verbal stem

Important: **the suffix *-telĭ-* remained agentive throughout**

Both *-telĭ-* and *-ĭn-* remain productive, and are recognizable as parts of *-telĭ-ĭn-*

## 7 CONCLUSION AND FURTHER QUESTIONS

The DM approach to complex affix formation predicts the semantic inertness of the inner affix  
 The fact that it is the inner one is probably extralinguistic, it’s historical

Complex affixes are useful for:

- **affix conglutination** (Haspelmath 1995): systematic optional semantic deletion of one suffix in the context of another  
  
semantic deletion would be obligatory in such a structure due to type clashes and incoherence; surface ambiguity can be explained by the simultaneous availability of two structures
- **semantic enrichment and new suffix formation**: in function of the retention of the presuppositions of the inner suffix

Complex affixes *per se* are expected to happen, the novelty is in the semantic deletion

Complex affix formation can be driven by ambiguity avoidance (e.g., in feminines), selectional restrictions, vocabulary enrichment, etc.

This is a clear lookahead (result-orientation), but I don't see how it can be avoided

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