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UNCAUSATIVES AND DECAUSATIVES IN SLAVIC
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1 INTRODUCTION: SLAVIC MEETS DEGREE ACHIEVEMENTS

Slavic degree achievements are often discussed through the prism of **thematic vowel contrast**:
See Medová 2013, Caha & De Clercq & Vanden Wyngaerd 2023 for Czech, Jabłońska 2007 for Polish, Arsenijević & Milosavljević 2021, Milosavljević & Arsenijević 2022, Kovačević & Milosavljević & Simonović 2024 for Serbo-Croatian (SC), Simonović & Mišmaš 2022 for Slovenian, Vyshnevska 2025 for Ukrainian, among others

(1) a. zjasn**ě**t 'to become clear'/zjasn**i**t 'to make clear'   Czech, Caha et al. 2023
    b. głup**ie**ć 'to get stupid'/głup**i**ć 'to make stupid'   Polish, Jabłońska 2007:109
    c. pʲan**e**tʲ 'to become drunk, intoxicated', pʲan**i**tʲ 'to intoxicate'   Russian
    d. otup**e**ti 'to become blunt, numb'/otup**i**ti 'to make blunt'   Serbo-Croatian
    e. rumen**e**ti 'to become yellow'/rumen**i**ti 'to make yellow'   Slovenian, Marvin 2002:100

In all deadjectival verb pairs in (1):
➢ *e*-verbs are intransitive (and unaccusative)
➢ *i*-verbs are transitive

In Ukrainian a phonological change turned the former /i/ into /ɨ/ and /e/, into /i/, but otherwise the facts are the same:

(1) e. vesel**i**ty 'to become merrier'/vesel**y**ty 'to make merrier'   Ukr., Vyshnevska 2025:174

Question: what is the derivational relation (if any), between *e*- and *i*-verbs?

Options (primarily from the non-Slavic literature):

1. Ramchand 2008:90–93, Wyngaerd & De Clercq & Caha 2022, Caha et al. 2023: the transitive is derived from the intransitive (by the addition of the agent-introducing InitP)

2. Chierchia 2004 (1989), Reinhart 1991, 2016, Levin & Rappaport Hovav 1994, 1995, etc.: the intransitive is derived from the transitive (via decausativization)

3. Harley 1995, 2008, 2012, Doron 2003a, b, Alexiadou +…: independent derivations from the same stem/root

Technical issue: the use of the notion of an "anticausative":
➢ Koontz-Garboden 2009 +: unaccusative verb derived from an underlying transitive (but not a passive, of course)
➢ **Alexiadou +: verb with CAUSE semantics and lacking an external argument**

Proposal (cf. Alexiadou & Anagnostopoulou 2004, Alexiadou 2010 for Greek, Labelle 1992, Labelle & Doron 2010, for French, see also Alexiadou & Anagnostopoulou & Schäfer 2015): **minimally two underlying structures for intransitive deadjectival degree achievements**:

➢ uncausatives: **inchoatives** (*e*-verbs) and mutatives (imperfective *nu*-verbs)
    Not all *e*- and *nu*-verbs are degree achievements! But others do not concern us here

➢ causatives (unmarked) and **decausatives** (*se*-marked intransitives): *i*-verbs
    Again, *i*-verbs are not limited to deadjectival degree achievements

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Hence we will provide evidence that deadjectival degree achievements need not be limited to only one structure

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The structure of the talk:
➢ why deadjectival *i*-verbs are not derived from their intransitive *e*-counterparts
➢ how *se*-marked intransitive counterparts of deadjectival *i*-verbs are different
➢ why deadjectival *e*-verbs are not derived from their *i*-counterparts
➢ the role of *v* in *e*- and *i*-verbs

Takeaway messages:
➢ new evidence for two different structures that one-place change-of-state verbs may have
➢ the relevance of Slavic for the discussion of telicity
➢ pathways towards the creation of deadjectival change of state

2 WHY *I*-VERBS ARE NOT CAUSATIVES OF *E*-VERBS

For Russian most of the points below were also made by Vadim Dyachkov
Starting point: *i*-verbs do not have the semantics of causativized *e*-verbs (cf. Dyachkov 2021, 2023 for Russian):

(2) a. crveneti 'to become red(der), blush', crveniti 'to color red'　　　Serbo-Croatian
　　b. crneti 'to become tanned', crniti 'to color black'
　　c. belet^j 'to turn white(r); be white', belit^j 'to whitewash, color white'　　Russian
　　d. tolstet^j 'to become fat(ter)', tolstit^j 'to make look fat(ter)'

Different processes are generally evoked by *e*- and *i*-verbs:

(3) a. Ada je crnila obrve.　　　　　　　　　　Serbo-Croatian
　　　 Ada be.3SG black-TH$_I$.PTCP.FSG eyebrows
　　　 'Ada was blackening her eyebrows.'

　　b. Ada je crnela (od sunca).
　　　 Ada be.3SG black-TH$_E$.PTCP.FSG from sun
　　　 'Ada was becoming tanned.'

　　c. *Sunce je crnilo Adu.
　　　 sun be.3SG black-TH$_I$.PTCP.NSG Ada.ACC

Serbo-Croatian *i*-verbs are typically agentive rather than merely causative (i.e., Natural Force causes are often dispreferred)
NB: *e*-verbs are non-productive in modern Serbo-Croatian, so focus on Russian, where both *e*- and *i*-verbs are

Possible objection: semantic drift
➢ plausible for Serbo-Croatian color *e*-verbs, with their very specialized meanings
➢ less so for *i*-verbs: they do not precisely mean 'make X acquire the relevant color'

In other domains, too, *i*-verbs often do not describe the same change as *e*-verbs:

(4) a. Ot tainstvennogo lekarstva on molodel/pomolodel/*omolodel.　　Russian
　　　 from mysterious medicine he Ø/PO-/O-young.TH$_E$.PAST.MSG
　　　 'He was becoming/became young(er) from the mysterious drug.'

　　b. Tainstvennoe lekarstvo molodilo/omolodilo/*pomolodilo ego.
　　　 mysterious medicine Ø/PO-/O-young.TH$_E$.PAST.MSG him
　　　 'The mysterious drug rejuvenated him.'

    c.   Korotkaja strižka molodila/*omolodila/*pomolodila ego.   imperfective only
          short   haircut Ø/PO-/O-young.TH$_E$.PAST.FSG   him
          'Short hair was making him look younger.'

Note that the perfectivizing prefixes are not the same, and this is not accidental.

2.1 Perfectivizing prefixes

The default perfectivizing prefixes are not the same for *e-* and *i-*verbs (with caveats):
Cf. Dyachkov 2021, 2023 for Russian

➢   in Russian, the preferred prefix choices for deadjectival *e*-verbs (maximally 170 in Zaliznjak) are *po-* (77), *o-/ob-* (64), *za-* (51) (with ca. 20 intersections for any two)

➢   for their *i*-counterparts (63, manual): *ob-* (24), *po-* (9–11), *za-* (4–5)

If a Russian deadjectival *i*-verb can combine with the prefix *po-* or *ob-*, its *e*-counterpart usually can too

The opposite is not true:

(5)   a.   (o/pro/*vɨ)trezvet^j 'to sober up'   Russian
       b.   otrezvit^j 'to sober up (fig.)', protrezvit^j/vytrezvit^j 'to sober up', *trezvit^j

(6)   a.   (po)redet^j 'to become sparse, rare, not dense'
       b.   proredit^j/izredit^j 'to thin out', razredit^j 'to thin out; rarefy', *redit^j

For Serbo-Croatian deadjectival *i*-verbs the most common prefix is *na-*, while for *e*-verbs it is *po-* (modulo language change):
For *i*-verbs the prefix *na-* 'on' can be taken to naturally reflect their default interpretation of surface change only; on the interpretations of the prefix *po-* 'along' see Dickey 2007 and section 6.1)

(7)   a.   Ada je   nacrnila   obrve.   Serbo-Croatian
            Ada be.3SG   NA.black-TH$_I$.PTCP.FSG   eyebrows
            'Ada (has) blackened her eyebrows.'

       b.   Ada je   pocrnela   (od   sunca).
            Ada be.3SG   PO.black-TH$_E$.PTCP.FSG   from sun
            'Ada got tanned.'

If *i*-verbs are causatives of *e*-verbs, this variation in prefix choice is unexpected

> The semantic connection between *e*-verbs and their corresponding *i*-verbs is non-transparent

The problem is, many *i*-verbs cannot be used without a prefix
➢   Most deadjectival *e*-verbs start out unprefixed (though there are exceptions)
➢   Most deadjectival *i*-verbs are ungrammatical if unprefixed
Observation also made for Russian by Dyachkov 2018:94

For Russian, computed on the basis of Zaliznjak 2010:
➢   < 9% *e*-verbs require a prefix
➢   50% of their *i*-counterparts are obligatorily prefixed (and many of those that aren't are non-causative, e.g., *grubit^j* 'to be rude to')

And a prefix can (perhaps must) add lexical semantics:

(8) a. (po)deševet^j 'to become cheaper'   Russian
     b. udeševit^j 'to make cheaper', prodeševit^j 'to make a bad bargain' ($^{??}$deševit^j)

(9) a. (po)crneti 'to get tanned'   Serbo-Croatian
     b. nacrniti 'to color black', ocrniti 'to denegrate, besmirch, defame' ($^{??}$crniti)

Vey 1952, van Schooneveld 1958, Hana Filip's work (1992–2026), Tatevosov 2014a, b, among others: prefixes have lexical import even when they are the default ones

Whatever the correct analysis is, the prefix facts do not support a derivational link between *e*- and *i*-verbs

2.2   Missing counterparts

Most *e*-verbs have no corresponding *i*-verbs (cf. Dyachkov 2018:107–108, 2023):

(10) a. (po/ob)lɨset^j 'to become bald(er)'$_{PFV/IPFV}$, *lɨsit^j Russian
     b. zaxiret^j/xiret^j 'to grow sickly, wither'$_{PFV/IPFV}$, *xirit^j
     c. ržavet^j 'to turn rusty(r)', *ržavit^j

(11) vreti 'simmer', brideti 'tingle', svrbeti 'itch', zreti 'ripen, mature',   Serbo-Croatian
     trpeti 'suffer', prdeti 'fart', žudeti 'long for'

Not all *i*-verbs have *e*-variants either, but this is not unexpected:

(12) a. bodrit^j 'to invigorate, encourage' (from bodrɨj 'cheerful, brisk'), *bodret^j Russian
     b. uglubit^j 'to make deeper'$_{PFV}$ (from glubokij 'deep'), *glubet^j/*uglubet

(13) a. bodriti 'to cheer up', *bodreti   Serbo-Croatian
     b. ljutiti 'to make angry' (from ljut 'angry'), *ljuteti
     c. produbiti 'to make deep(er)' (from dubok 'deep'), *dubeti/*produbeti

> But transitive deadjectival *i*-verbs with the semantics of degree achievements may have (non-passive, non-reflexive) *se*-marked unaccusative counterparts

2.3   Accentuation of *e*- and *i*-verbs

In both languages, *e*-verbs and *i*-verbs exhibit different accentual behavior

Russian: the deadjectival suffix *-e-* is accentually dominant (i.e., stress falls on its, irrespective of what the stem accent is), the thematic suffix *-i-* is not
⇨   cyclic derivation of an *i*-verb from an *e*-verb cannot yield this pattern

Serbo-Croatian: verbs formed with the thematic suffix *-e-* do not undergo stress retraction in the present-tense or aorist, verbs formed with the thematic suffix *-i-* do
⇔   we do not yet know enough about Serbo-Croatian stress to check whether this can follow from either direction of the derivation

3   DECAUSATIVES

Most deadjectival *i*-causatives have **explicitly marked unaccusative counterparts**, which are productive and transparent:

(14) a. Tristram je   osušio   cveće.   Serbo-Croatian
          Tristram AUX   dry.PFV.PTCP.MSG flowers.COLL.NSG
          'Tristram dried up the flowers.'

      b. Cveće   se   osušilo.
          flower.COLL.NSG SE   dry.PFV.PTCP.NSG
          'The flowers dried up'

(15) a. Incident uglubil   raskol   meždu   stranami.   Russian
          incident deepen.PFV.PAST.MSG rift.ACC between   countries
          'The incident deepened the rift between the countries.'

      b. Ètot raskol   uglubilsʲa   blagodarʲa novomu incidentu.
          this rift.NOM deepen.PFV.PAST.FSG.SE thanks.to new   incident
          'This rift deepened because of the new incident.'

The *se*-morph also marks middles, passives, reflexives, impersonals, etc.

Hence in Slavic there are two **morphologically distinct** ways of deriving deadjectival degree achievements:

There's also *nu*-verbs, aka mutatives, but these are unproductive for most Slavic languages (with the exception of Czech) and synchronically mostly non-deadjectival

   ➢ *e*-verbs, aka inchoatives
   ➢ *i*-verbs, causatives and decausatives

And there can be triplets, obviously with nuances in interpretation:

(16) a. Nož   je   o-tup-e-o   od   upotrebe.   Serbo-Croatian, inchoative
          knife is   PFX-blunt-TH$_E$-PAST.MSG from use
          'The knife got blunt from use.'

      b. Nož   se   o-tup-i-o   od   upotrebe.   decausative
          knife SE   PFX-blunt-TH$_I$-PTCP.MSG from use
          'The knife got blunt from use.'

      c. O-tup-e-l-a   sam   od   bola.   inchoative
          PFX-blunt-TH$_E$-PTCP-FSG am   from pain
          'I became numb from pain.'

      d. *O-tup-i-l-a   sam (*se) od   bola.   decausative
          PFX-blunt-TH$_I$-PTCP-FSG am   SE   from pain

Such minimal pairs are incredibly rare, because *i*-verbs generally require prefixes, which are different from those selected by *e*-verbs

If you're thinking about Greek non-active anticausatives, you are right to do so!

3.1   Modern Greek uncausatives and decausatives

Alexiadou & Anagnostopoulou 2004, Alexiadou 2010, Alexiadou & Anagnostopoulou & Schäfer 2006, 2015: three types of anticausatives in Modern Greek:

   ➢ alternating active (17): the causative and the anticausative are both marked active
       Alexiadou & Anagnostopoulou 2004: all deadjectival verbs belong to this class
   ➢ alternating non-active (18): the anticausative must be marked non-active
   ➢ varying (19): both active and non-active marking is possible

(17) a. O   Janis   adiase   ti sakula.   AA2004:122
         the John.NOM emptied.ACT the bag.ACC
         'John emptied the bag.'

     b. I   sakula   adiase.   active anticausative
         the bag.NOM   emptied.ACT
         'The bag emptied.'

(18) a. O   Janis   ekapse   ti supa.   AA2004:117
         the John.NOM burnt.ACT the soup.ACC
         'John burnt the soup.'

     b. I   supa   kaike.   non-active anticausative
         the soup.NOM burnt.NACT
         'The soup burnt.'

(19) a. O   sismos   gremise   to ktirio.   AA2004:122
         the earthquake.NOM demolished.ACT the building.ACC
         'The earthquake demolished the building.'

     b. To ktirio   gremise   apo mono tu.
         the building   collapsed.ACT by itself
         'The building collapsed by itself.'

     c. To ktirio   gremistike   apo mono tu.
         the building   collapsed.NACT by itself
         'The building collapsed by itself.'

Alexiadou et al. 2015:65: the last class is typically small and subject to individual variation

Alexiadou & Anagnostopoulou 2004: in case of optional marking (like in (19)), the use of the active entails that the change is incomplete
Alexiadou et al. 2015:88–90: This does not extend to the non-optional active

AAS (in different permutations): active and non-active anticausatives in Greek have different structures (and we will return to this)

3.2   Why *e*-verbs are not decausatives of *i*-verbs

Possibility: there can be more than one type of decausativization, with *se*-marking and with the *e*-theme suffix

Unlikely: the lack of semantic transparency for uncausative *e*-verbs in contrast to decausative *i*-verbs; prefix (non)optionality; prefix choice

Also, the unaccusativity of uncausatives and decausatives is not identical

Evidence: Serbo-Croatian prenominal past participles

Hoekstra 1984, Ackema & Schoorlemmer 1995, Aljović 2000, Marelj 2004, a.o.: prenominal past participles as an unaccusativity diagnostic:

(20) a.   the fallen guests   (unaccusative)
     b.   broken window, written book, eaten meal, etc.   (transitive)

The prenominal past participle can only track the internal argument:
- ➢ unaccusative: the prenominal past participle exists and can be used prenominally
- ➢ transitive: likewise
- ➢ unergatives do not form past participles that can be used prenominally

Serbo-Croatian: different past-participle forms for transitives and unaccusatives:
- ➢ unaccusatives: *l*-participles
- ➢ transitives: *n*-participles

(21) a.　pristig-**l**-i　　　　gosti　　　　　　　　　　　　　　(unaccusative)
　　　　　arrive-PTCP-MPL　guests
　　　　　'arrived guests'

　　　b.　razbij-**en-i**/*razbi-**l-i**　prozor　　　　　　　　　　(transitive)
　　　　　break-PTCP-MSG　　　　window
　　　　　'broken window'

Hence Serbo-Croatian tests not only for the status of the argument (internal vs. external), but also for the syntactic structure it is a part of:
- ➢ *l*-participles are for the internal arguments of one-place verbs
- ➢ *n*-participles are for the internal argument of transitive verbs

Only the *l*-participle is grammatical with the deadjectival *e*-verbs:

(22) a.　po-rumen-e-**l**-i/*porumenj-e-**n**-i obrazi
　　　　　PO-blush-TH$_E$-PTCP-MPL　　　　cheeks
　　　　　'cheeks that have blushed'

　　　b.　po-žut-e-**l**-o/*požuće-**n**-o　lišće
　　　　　PO-yellow-TH$_E$-PTCP-MPL　leaves.COLL
　　　　　'leaves that have yellowed'

This implies that deadjectival *e*-verbs are one-place unaccusatives in Serbo-Croatian

On the other hand, deadjectival *i*-verbs allow only for **n**-participles to be used prenominally:

(23) a.　na-rumenj-en-i/*na-rumen-i-l-i　obrazi
　　　　　NA-blush.TH$_I$-PTCP-MPL　　　　cheeks
　　　　　'cheeks that had been rouged'

　　　b.　na-crnj-en-e/*na-crn-e-l-e　obrve
　　　　　NA-black.TH$_I$-PTCP-FPL　eyebrows
　　　　　'eyebrows that had been painted black'

Upshot: whereas *e*-verbs pattern with 'run-of-the-mill' unaccusatives like *stići* (arrive), *i*-verbs pattern with the 'run-of-the-mill' transitive verbs like *razbiti* (break).

No comparable argument can be constructed for Russian because it has active past participles, which always track the nominative subject

Other unaccusativity tests do not distinguish derived and underived unaccusatives

Doron & Labelle 2011: for the Jewish Neo-Aramaic dialect of Urmi only uncausatives behave as unaccusative

4   INTERMEDIATE SUMMARY

Slavic provides evidence for two types of one-place change-of-state verbs:
- ➢   derived from their transitive counterparts (decausative *i*-verbs)
- ➢   not derived from transitives (uncausative *e*-verbs)

The fact that the two types choose different prefixes strongly suggests **different event types**

As does the fact that *i*-(de)causatives are preferentially prefixed, while *e*-uncausatives are not

> Uncausatives and causatives derived from the same stem are not derivationally linked, in clear contrast with causatives and decausatives

Hence, **some one-place change-of-state verbs are not derived from underlying transitives**
(contra Levin & Rappaport Hovav 1994, Chierchia 2004)
So Chierchia's observation that in some dialects/languages *die* and *grow* are SE-marked does not mean that they always are decausative

> Our observations join the growing body of literature suggesting that one-place change-of-state verbs come in more than one syntactic structure (see Alexiadou et al. 2015 for cross-linguistic coverage)

French (Labelle & Doron 2010, Doron & Labelle 2011):
- ➢   middle (SE-marked) unaccusatives are decausative
- ➢   active (unmarked) unaccusatives have a different (position of) *v*

Greek (Alexiadou 2010):
- ➢   middle (non-active) unaccusatives are decausative
- ➢   active (unmarked) unaccusatives lack Voice

The distinction between morphologically marked (*se*-marked, our *decausative*) and unmarked (our *uncausative*) one-place change-of-state verbs has been observed for many languages

> Unlike elsewhere, **in Slavic the two types of anticausatives are distinguished not only by *se*-marking but also by their thematic suffix**

And morphologically distinct anticausatives generally do not have the same semantics

Composition vs. decomposition: what does *v* combine with?

5   THE STRUCTURES OF DEADJECTIVAL DEGREE ACHIEVEMENTS

How does an adjective become a verb?
- ➢   standard view: combine an adjectival stem with a verbalizer
- ➢   modern decompositional views: verbalizers combine with complex structures

What is the internal argument of an unaccusative (the undergoer) an argument of?

> Two levels of differentiation: the structure of the VP and the presence of VoiceP

Pylkkänen 2002, 2008: the "Voice bundling" hypothesis: *v* and Voice may form or not form a single node (across languages)

Harley 2008, 2012, 2017, Alexiadou et al. 2015, etc., vs. Alexiadou et al. 2006, Alexiadou 2010: does *v* combine with a √P or a √

5.1　Against √(P)

Slavic deadjectival change-of-state verbs can be derived from clearly derived adjectives:

(24)　a.　tamn-e-ti 'darken.INF' (cf. tam-n-a 'dark.ADJ.FSG')　　　　　　Serbo-Croatian
　　　b.　is-prazn-i-ti 'PFX.empty.INF' (cf. praz-n-a 'empty.ADJ.FSG')

(25)　a.　temn-e-t^j 'darken.INF' (cf. tem-n-a 'dark.ADJ.FSG')　　　　　　Russian
　　　b.　vlažn-e-t^j 'moisten.ITR.INF' (cf. vlaž-n-a 'moist.ADJ.FSG', vlaga 'moisture')
　　　c.　u-vlažn-i-t^j 'PFX.moisten.TR.INF'

Moreover, they can be based on comparatives:

(26)　a.　xoroš-ij 'good' → **luč-š**e 'better'　　　　　　　　　　　　　　Russian
　　　b.　u-**lučš**-it^j(s^{j}a) 'to make/become better'

(27)　a.　dobar 'good' → **bol-j**i 'better.MSG'　　　　　　　　　　　　Serbo-Croatian
　　　b.　po-**bolj**-š-ati (se) 'to make/become good'

There is no evidence that the complement of *v* is bigger than a complex head (i.e., it is unlikely to be a maximal projection), but **it definitely need not be headed by a root**

> Does *v* combine with a (result) phrase or with a head?

5.2　The small-clause structure

Underlying small-clause structure (Harley 2008, 2012, 2017, maybe Alexiadou et al. 2015):
We are not clear what position for the adjectival stem Alexiadou et al. 2015 would assume. On p.50 they propose that the root is merged as a sister to the light *v*-head (introducing PROCESS; the CAUSE relation for them arises from the structure), the resulting complex head combines with an XP denoting the result state (suggested to correspond to the resultative PP). On p.99 the vP contains as a sole sub-constituent a Root/ResultP.

(28)　Hiaki (Harley 2008, 2012, 2017): *v* and Voice expressed by different morphemes:
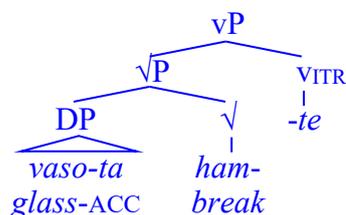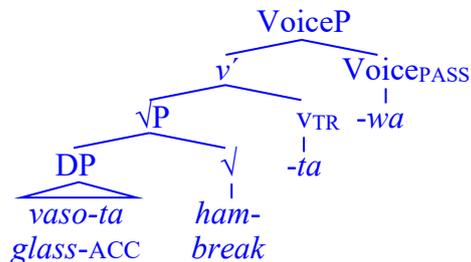
　　　a.　The glass broke.　　　　　　　　　b.　Maria broke the glass.
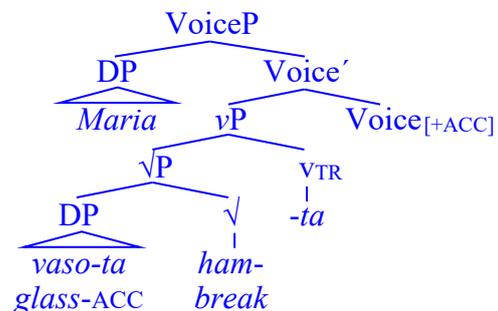
Non-active morphology is separated from the transitive *v*, as seen in the passive:

(28) c.   The glass was broken.

```
                    VoiceP
              v′           Voice_PASS
         √P        v_TR  -wa
      DP      √    -ta
    vaso-ta  ham-
    glass-ACC break
```

Two separate hypotheses, really independent of each other:
 ➢ explicit: Voice-*v* bundling
 ➢ implicit: the small-clause structure as a sister to *v*

The two structures, with and without Voice, can be present in the same language

Motivation for the underlying SC: restitutive reading of *again* and of durative adverbials:

(29) John opened the door again.   Harley 2012
 a.   Restitutive: The door had been open before, and John reopened it.
 b.   Repetitive: John had opened the door before, and he did it again.

(30) John opened the door for five minutes.   Harley 2012
 a.   Low-scope: The door spent a five-minute period being open.
 b.   High-scope: John spent a five-minute period in the act of opening the door.

The readings in (29a) and (30a) can be explained if the adverbials are adjoined to the SC

Since *v* combines with a result-state small clause, it remains unclear how this view can account for prefixation (if prefixes are fashionably viewed as introduced in the complement of the verb, as in Babko-Malaya 1999, Romanova 2004, 2006, Gehrke 2008, Ramchand 2008, Tatevosov 2015, among many others)

5.3   Direct composition

Direct composition (Alexiadou 2010:183):

(31) a.
```
          vP
    DP          v′
  the door   v      √
                    open
```
b.
```
               VoiceP
        Voice            vP
   (-ext. arg. -AG)  DP          v′
                    the door  v       √
                                      open
```
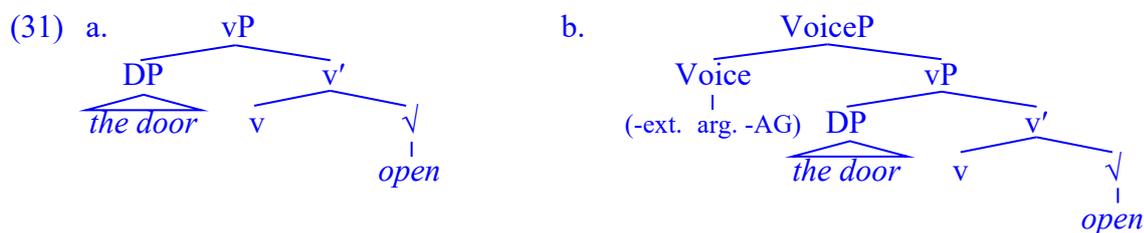
Alexiadou's crucial component: Voice as the source of the external argument or of its absence:
 ➢ Voice: the causer (agent or event) is introduced as an external argument
 ➢ lack of Voice: no causer or an internal causer

Evidence (same as here): anticausatives with Voice have non-active morphology (coincidental with reflexive or passive)

For deadjectival verbs in Slavic, Voice and *v* can be distinguished:
 ➢ those formed by the *e*-theme are unaccusative
 ➢ those formed by the *i*-theme are transitive (and form unaccusatives by combining with the *se*-morph)

The semantic import of *v* in these structures is not specified

Two options:
- ➢ *v* GO: uncausatives behave like motion verbs (gradual change)
- ➢ *v* INCREASE: Hay & Kennedy & Levin 1999, Kennedy & Levin 2008, with the A-stem supplying the scale

It is not obvious to us how lexical prefixation can be analyzed under this view, either

6 TOWARDS A PROPOSAL

Hypothesis: the structure underlying *e*-verbs is that of motion verbs rather than causatives, with the adjectival stem (i.e., the scale) supplying the path:
The notion of the semantic primitive GO introducing the THEME and the PATH comes from Jackendoff 1983, what we need to assume is that the PATH can be supplied by the adjectival scale

(32)   vP   *the pages yellowed*

    DP   v′

  the pages   v   A
                | |
               GO   *yellow*

While a motion event might have a cause, it is not coded in the structure of the verb:

(33) a.   [GO IDENT ([PAGES], [TO IDENT ([PROPERTY YELLOW])])]   J1983:195
     b.   λe . GO(e) & THEME (*the pages*, e) & PATH (scale YELLOW, e)   slightly fancier

Causatives are more likely to have the SC structure in (28)

6.1 Advantages of a GO-type *v*

Semantics: unlike BECOME and CAUSE, GO need not combine with a state of affairs/proposition (no need for a SC analysis)

Change-of-state semantics straightforwardly translates into the motion metaphor (and we have not *gone mad*)

The mutual non-entailment of *e*- and *i*-verbs is not unexpected
Note that under Harley's and Alexiadou's analyses the only difference is the presence of Voice (which might even not introduce an external argument!)

The issues of different perfectivizing prefixation can be dealt with:

  i.   preferentially unprefixed *e*-verbs: movement along a path is non-telic (as long as the goal/endpoint is not specified)

  ii.   preference for the prefix *po-* for *e*-verbs: one of the interpretations of the preposition *po-* is 'along'

  iii.   near-obligatory prefixation for *i*-verbs: the SC complement of *v* introduces the result, so the verb has to be marked as telic

Since the path and the goal can be introduced separately (modulo the Unique Path Constraint, Goldberg 1991), the non-SC analysis of *e*-verbs has a higher chance of incorporating prefixes
Though the problem resurfaces for *i*-verbs if they have the SC structure in (28)

The restitutive reading of *again* seems incompatible with the direct composition structure in (31), but in Slavic this reading is available only for perfective, i.e., prefixed verbs that have a final state

6.2 Regarding "internal causation"

Alexiadou et al. 2006: unaccusative roots (like *blossom*) are internally caused, hence also have a cause component to their meaning

Evidence: modification by PPs introducing "indirect" or "inactive" causes (Levin & Rappaport Hovav 2005:125 citing DeLancey 1984):

(34) a.   The flowers wilted from the heat.
     b.   His uncle died from/of pneumonia.

However, such PPs can also occur with unergative verbs (which Alexiadou et al. 2006 do not regard as involving causation, p.208):

(35) a.   Zeva   od   dosade.   Serbo-Croatian
           yawn.3SG from boredom
           'He is yawning from boredom.'

     b.   My plačem ot   radosti.   Russian
           we cry.1PL from joy
           'We're crying from joy.'

And there is a lot of discussion in the literature whether all *from*-PPs are the same (Horvath & Siloni 2011) and whether more than one effector can be available (Koontz-Garboden 2009)

Intermediate result: no evidence for a syntactically projected CAUSE in all unaccusatives

7 CONCLUSION AND SOME SEMANTIC CONSIDERATIONS

The minimal outcome: **two types of anticausative deadjectival degree achievements**

Two morphosyntactically distinct anticausative structures (in accordance with Alexiadou):
  ➢   uncausatives: the *e*-thematic suffix, active syntax
  ➢   decausatives: the *i*-thematic suffix, *se*-marking

They are also semantically distinct:
  ➢   uncausatives: unpredictable relation to transitive *i*-verbs
  ➢   decausatives: transparent relation to transitive *i*-verbs (modulo object choice)

Tentative conclusions:
  ➢   neither the SC syntax nor direct v+√ composition provide an account of prefixation if the adjectival stem and the prefix are taken to denote the resultant state

  ➢   the distinction between the two types of unaccusatives is irreducible to the presence (or absence) of Voice

  ➢   *e*-verbs might have the morphosyntax of GO rather than CAUSE verbs

Not discussed today, alas:
  ➢   the behavior of *e*- and *i*-verbs in Serbo-Croatian, where the distinction between the two has been being neutralized (spoiler: languages appear to resist having two ways of forming unaccusatives for the same stem)

➢ two different unaccusative verbalizers, *-e-* and *-nu-* (spoiler: can mutatives involve the SC structure in (28)? No, they cannot: they are not deadjectival synchronically)

More work to be done!

7.1 INCREASE as a primitive

Hay et al. 1999, Kennedy & Levin 2008: adjectival stems denote functions from individuals and times to degrees:

(36) $[\![$bel-$]\!] = \lambda x. \lambda t.\ white(x)(t)$

This lexical entry contributes the following:
➢ a gradable property (whiteness) measured on a **scale**
➢ a way to get a degree value for an individual at a time.

The verbalizer INCREASE $\langle\langle e, \langle t, d\rangle\rangle, \langle e, \langle d, \langle v, t\rangle\rangle\rangle\rangle$ combines with an adjectival stem, an individual and a degree (i.e., a differential) to yield a set of events:

(37) $[\![$ INCREASE $]\!]\ (\varphi)(x)(d)(e) = 1$ iff $\varphi(x)(SPO(e)) + d = \varphi(x)(EPO(e))$
where SPO (e) is the starting point of the event & EPO(e), the end point of the event

The differential can be realized as an adverbial (*whitened a bit*) or a PP (*widened by 2cm*)

This argument structure requires the direct composition structure in (31), but can be easily fixed for the SC structure in (28) by removing the entity argument slot

7.2 Backgrounded CAUSE (non-compositional)

Tatevosov 2014a: uncausatives differ from decausatives in their event structure (detectable in the imperfective):
NB: As his focus is on the contrast between unmarked and *se*-marked unaccusatives, Tatevosov is not limited to *e*-uncausatives or to stems that are fully identical segmentally, allomorphy is allowed

(38) Belʲje uže celyj čas suši-t-sʲa,   no soveršenno ne soxn-et.
      linen already whole hour dry-PRES.3SG-SE but at all   NEG dry-PRES.3SG
      'The linen has been drying for a whole hour, but it is not getting drier.'

Crucial: in the perfective, the uncausative and the decausative do entail each other

Explanation: different semantics:

(39) a. $[\![_{vP} \ldots$-*soxn*-$\ldots]\!] = \lambda e \ldots \exists e' [\ldots$ CAUSE(e)(e') $\wedge$ BECOME DRY(e) $\ldots]$ uncausative
      b. $[\![_{vP} \ldots$-*suši*-$\ldots]\!] = \lambda e \ldots \exists e'[\ldots$ CAUSE(e')(e) $\wedge$ BECOME DRY(e') $\ldots]$ decausative

The decausative is about events that cause the drying, the uncausative is about (caused) events of becoming dry

Tatevosov's intuition: the causing event may involve stages preceding the causation

But in principle the causing event may also be homomorphic with the caused event, explaining why this observation may fail to extend to other cases:
Two native speakers we asked reported the judgment below, one said it was a contradiction

(40) a. Sasha starel,   no ne   starilsʲa.
      Sasha grow.old.TH$_E$.PAST.MSG but NEG grow.old.TH$_I$.PAST.MSG
      'Sasha is growing old but doesn't seem older.'

   b.   Sasha   starils^{j}a,   no   ne   starel.
           Sasha   grow.old.TH$_I$.PAST.MSG but NEG grow.old.TH$_E$.PAST.MSG
           'Sasha is growing old but doesn't seem older.'

Tentative explanation: the two verbs, the *e*-verb *staret^j* and the *i*-verb *starit^{j}s^{j}a*, both mean 'to become older'; the interpretation 'to look older' probably results from coercion
<small>It is readily available for the perfectives *postaret^j* and *sostarit^{j}s^{j}a* when combined with *za god* 'in a year'</small>

Undesirable features:
➢   the CAUSE component in uncausatives (CAUSE introduces an external argument)
➢   identical event structure (no explanation for differences in prefixation)
➢   the degree-achievement core is regarded as non-decomposable (BECOME DRY)

Important: the analysis of the distinct perfective/imperfective entailments

7.3   Return to the Slavic prefixes

Remember, uncausative *e*-verbs are born unprefixed (hence, imperfective), while (de)causative *i*-verbs are generally prefixed (perfective)

There are counterexamples in both directions:
➢   the Russian *e*-verb *u.cel-e-t^j* 'to escape unscathed' (from *celyj* 'whole')
➢   all caritive verbs (formed from caritive *bez*-PPs with the prefix *o*-), both *e*- and *i*-
➢   many *i*-verbs (e.g., (2))

While the tendency is clear, imperfective verbs generally can be prefixed, and perfective ones can be combined with the secondary imperfective suffix

Which means that in Slavic, both types of one-place change-of-state verbs can be used to denote "complete and incomplete change"

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