Marked and unmarked anticausatives do not differ in meaning:
a French case study

Fabienne Martin & Florian Schäfer
Universität Stuttgart
fabienne.martin@ling.uni-stuttgart.de/florian@ifla.uni-stuttgart.de

1. Introduction

Verbs undergoing the causative/anticausative alternation divide into two morphological and three distributional classes in French (as in many other Romance and Germanic languages):

With verbs of class A, the anticausative (AC) is morphologically unmarked (∅-ACs):

(1)  a. Le poulet cuit
     The chicken ∅ is cooking
    b. ??Le poulet se cuit
       the chicken SE is cooking

With verbs of class B, the AC is marked with the reflexive clitic se (se-ACs):

(2)  a. *L'image agrandit
     The picture ∅ is widening
    b. L'image s'agrandit
       the picture SE is widening

ACs of class C allow both markings (∅/se-ACs):

(3)  a. Le vase casse
     The vase ∅ is breaking
    b. Le vase se casse
       The vase SE is breaking

Several authors have proposed that the presence vs. absence of the reflexive clitic goes along with differences in meaning (we concentrate here on claims by Labelle 1992, Doron & Labelle 2010, Labelle & Doron 2010):

"... there are semantic contrasts between the intransitive construction (3a) and the reflexive construction (3b)." (Labelle 1992: 376).
"the active anticausative derivation [∅-ACs] asserts the autonomy of the process" while "the middle anticausative derivation [se-ACs] focuses on the attainment of a result state for the verb’s argument" (Labelle & Doron 2010:304).

Two semantic claims:

**Claim 1:** se-ACs express externally caused events while ∅-ACs express internally caused events.

**Claim 2:** se-ACs focus on the achievement of a result state while ∅-ACs focus on a process.

To derive these alleged differences in meaning, fundamentally different syntactic structures have been proposed for se-ACs and ∅-ACs:

- Labelle 1992 argues that se-ACs are unaccusative while ∅-ACs are unergative.
- Doron & Labelle 2010/Labelle & Doron 2011 (henceforth DL) propose that se-ACs and ∅-ACs are both unaccusative but differ substantially in their event decomposition and the position where the lexical root is merged in the structure.

We show that most of the meaning differences proposed to hold between se-ACs and ∅-ACs are either not existent or idiosyncratic/verb-specific. They cannot be generalized to the presence/absence of morphological marking.

This makes a structural explanation of these meaning differences unfeasible: the presence vs. absence of se cannot be associated with syntactic differences driving meaning differences.

To the extent that meaning aspects can be robustly associated with either marked or unmarked ACs, this holds only for verbs of class C (optional marking; cf. also Legendre & Smolensky 2009).

We derive these within a pragmatic account: With verbs of class C (i.e. if a choice is possible), a pragmatic reasoning on the possible interpretations of the string [DP se V] (AC or also semantically reflexive) leads the speaker to prefer one version over the other.

Note that we do not deny any syntactic differences between ∅-ACs and se-ACs: The presence of se suggests a syntactic extra-layer on top of vP, a middle or expletive Voice (Doron 2003, Alexiadou et al. 2006, Schäfer 2008). The presence of this expletive Voice projection triggers syntactic differences (e.g. auxiliary selection) but does not add any semantics.
Similarly, semantically reflexive verbs and reflexively marked anticausatives differ syntactically, but this difference is not visible at the surface:

I. Causative:  
   a. \[\text{VoiceP} \text{DP}_{\text{nom}} \text{Voice}_{\text{active}} [\text{VP} \text{v} [\text{resultP} \text{DP}_{\text{acc}} \text{result}]]\]  
   b. \(\lambda x \lambda y \lambda e (\text{agent/causer}(e, y) & \text{CAUSE}(e, s) & \text{theme}(s, y))\)  
   c. \(\text{DP}_{\text{NOM}}\text{verb}\ \text{DP}_{\text{ACC}}\)

II. \(\emptyset\)-ACs:  
   a. \[\text{VP} \text{v} [\text{resultP} \text{DP}_{\text{nom}} \text{result}]\]  
   b. \(\lambda y \lambda e (\text{CAUSE}(e, s) & \text{theme}(s, y))\)  
   c. \(\text{DP}_{\text{NOM}}\text{verb}\)

III. se-ACs:  
   a. \[\text{VoiceP se Voiceexpletive} [\text{VP} \text{v} [\text{resultP} \text{DP}_{\text{nom}} \text{result}]\]]  
   b. \(\lambda y \lambda e (\text{CAUSE}(e, s) & \text{theme}(s, y))\)  
   c. \(\text{DP}_{\text{NOM}}\text{se-verb}\)

IV. Reflexive:  
   a. \[\text{VoiceP} \text{DP}_{\text{nom}} \text{Voice}_{\text{active}} [\text{VP} \text{v} [\text{resultP} \text{se} \text{result}]\]]  
   b. \(\lambda x \lambda y \lambda e (\text{agent/causer}(e, y) & \text{CAUSE}(e, s) & \text{theme}(s, y) & (x=y))\)  
   c. \(\text{DP}_{\text{NOM}}\text{se-verb}\)

2. Alleged meaning difference 1: external vs. internal causation

Claim 1:  
\(\emptyset\)-ACs express internally caused events while se-ACs express external caused events. Only in the former case the sole DP is assigned some responsibility for the coming about of the event.

2.1 Background on internal/external causation

The distinction between internal and external causation goes back to Levin & Rappaport Hovav (1995) (who build on Smith 1970) to answer the following question:

When does an intransitive verb have a transitive, causative counterpart?

externally caused verbs: describe eventualities that are under control of some external cause that brings such an eventuality about (break, open)

internally caused verbs: describe eventualities where some property inherent to the argument is ‘responsible’ for bringing about the eventuality (run, glow, blossom)

The only test for internal vs. external causation is the (non-)existence of a causative counterpart:

(4)  
   a. The door opened  
   b. John opened the door
class A: cuire - *se cuire  •  class B: *agrandir - s'agrandir  •  class C: casser - se casser

(5)  
   a. The flower blossomed  
      (internally caused)  
   b. *The gardener/*The sun blossomed the flower

**Internal/external causation is not about verbs, but about verb+DP combinations** (e.g. Levin & Rappaport Hovav 1995, Alexiadou et al. 2006):

(6)  
   a. John changed the temperature  
      (externally caused)  
   b. The temperature changed

(7)  
   a. The weather changed  
      (internally caused)  
   b. *John changed the weather

2.2 Discussion of the arguments for claim 1 (internal vs. external causation)

A number of authors have argued that **when a verb is attested in both constructions (class C)**, the change of state (COS) is presented as **internally caused when expressed by ∅-ACs** and as **externally caused when expressed by se-ACs (Claim 1, Rothemberg 1974, Bernard 1971, Burston 1979, Labelle 1992, DL 2010):**

(8)  
   a. Il vit le mouchoir *(se) rougir  
      (externally caused)  
   b. Jeanne (*se) rougit  
      (internally caused)

**Problem 1.** If the presence/absence of morphology has semantic effects in class C, **the relevant semantic properties should also hold in class A and class B**, respectively. (This prediction holds at least in frameworks where the different morphology is directly correlated with different syntactic structures which, in turn, are correlated with different event semantics, e.g. Labelle 1992, Labelle & Doron 2010, Doron & Labelle 2011; it does not hold in the system proposed by Legendre & Smolensky 2009.)

However, as noted by Rothemberg 1974 herself and later emphasized by Zribi-Hertz 1987, **there is no systematic correlation between the presence/absence of the reflexive morphology and the type of causation** (i.e. internal vs. external) expressed.

A. Verbs of class B can express internally caused events:

(9)  
   a. L'univers s'agrandit  
      *The universe SE is getting bigger*  
   b. Le temps s'améliore  
      *The weather SE is getting better*
B. Verbs of class A can express externally caused events:

(10) a. Le bâtiment explose
     *The building is exploding*

b. Le poulet cuit
     *The chicken is cooking*

Problem 2. Only verbs of class C (incl. rougir) with animate subjects are problematic as se-AC, and they are problematic actually irrespectively of the type of causation involved (12a-d would be internally caused, but 12e would be clearly externally caused). A related observation was already made by Zribi-Hertz (1987), although she does not relate it to the difference between animate vs. inanimate subjects.

(11) a. Il vit le mouchoir se rougir
     *He saw the handkerchief SE redden*

b. #Jeanne se rougit
     *Jeanne SE reddened/blushed*

(12) a. #Pierre s’est vieilli
     *Pierre SE grew older*

b. #Pierre s’est maigri
     *Pierre SE thinned*

c. #Marie s’est pâlie
     *Marie SE turned pale*

d. #Marie s’est beaucoup vieillie à cause de ce travail épuisant (id.:39)
     *Marie SE aged a lot because of this exhausting work.*

e. #Les gens se rougissent sous l’effet de ces lunettes (Zribi-Hertz 1987:45)
     *People SE redden under the effect of these glasses*

Non-human DPs are generally o.k. in the se-variant of class C verbs irrespectively of internal/external causation (the examples in (13) are mostly taken from the Internet):

(13) a. Ses yeux se sont rougis à l’annonce de la victoire
     *Her eyes SE are reddened at the announcement of the victory*

b. Le vin est un produit qui vit, [...] se vieillit
     *The wine is a product that lives, SE ages*

c. La laine est ressortie de la casserole vert foncé mais s’est pâlie.
     *The wool came out dark green from the pot but SE turned pale.*

d. Le métal s’est rougi sous l’effet de la chaleur. (Zribi-Hertz 1987:45)
     *The metal SE reddened under the effect of the warmth.*

d. [Il] lance une campagne montrant une jeune femme qui fume (trop) tranquillement une cigarette, et à mesure de ses bouffées, sa peau se vieillit.
     *[he] launches a spot showing a young girl which is smoking a cigarette (too) quietly, and with her puffs, her skin SE is aging.*

5
(14a, b) show that the COS in (13a, b) is conceived as internally caused, since the verb+object combinations at hand do not transitivize.

Nevertheless, the reflexive construal is totally acceptable, in contrary to the claim that *se* is used only for externally caused eventualities.

(14) a. *L'annonce de la victoire a rougi ses yeux
   The announcement of victory has reddened her eyes
b. *Le producteur/stockage a vieilli le vin
   The producer/storing aged the wine

**By contrast, verbs of class B (e.g. *s'amaigrir*) have the AC-reading with *se* even with animate subjects (cp. 15 with 12b).**

(15) Marie s'est amaigrie/??a amaigr

Marie SE is a-thinned/∅ a-thinned

**Problem 3. When the COS is externally caused, the ∅-AC of class C verbs is not systematically ungrammatical, contra claim1.** For us, (8a) repeated below is perfect without *se*, and we find examples such as in (16) on the web:

(8) a.' Il vit le mouchoir rougir (pace Labelle 1992)

*He saw the handkerchief* ∅ redden

(16) a. [Son] cou a rougi au soleil

*Her neck* ∅ reddened from the sun
b. La peinture a noirci sous l’effet de la fumée des bougies.

*The painting* ∅ blackened under the effect of the candles’ smoke

**Problem 4. Descriptions in traditional grammars convey exactly the opposite intuition:** *se*-ACs are said to underline some responsibility of the subject for the COS to evolve (authors cited by Zribi-Hertz 1987:24)

The reflexive clitic marks “la participation du sujet au procès” [the participation of the subject to the process], Vendryes 1948.

Il “met en relief l’activité personnelle du sujet”, marque “un intérêt particulier de ce sujet dans l’action” [it focuses on the personal activity of the subject, marks a particular interest of this subject in this action], Grevisse 1969.

It indicates that the subject “a contribué pour une part si minime soit-elle à l’action subie” [contributed even for a very minimal part to the endured action], Gougenheim 1939.
We backed up this intuition with a small experiment: 8 native speakers were asked to pick among the se-AC and ∅-AC of the two verbs of class C the one which attributes more responsibility/agentivity to the (inanimate) subject and they all chose the se-AC:

(17) a. La rose a flétri
   The rose ∅ faded
   b. La rose s'est flétri
   The rose SE faded

(18) a. Le métal a rouillé
   The metal ∅ rusted
   b. Le métal s'est rouillé
   The metal SE rusted

Note: These verbs can, in principle, be used transitively with a causer subject (so they are really anticausatives, not unergatives or pure unaccusatives):

(19) a. Le gel a flétri les rameaux
   The frost faded the branches
   b. L’humidité a rouillé le métal
   The humidity rusted the metal

Problem 5: Further examples provided by Labelle 1992 to suggest an internal/external causation contrast as in (20) are without any difference in grammaticality for us.

(20) a. Après l'extraction du nerf, les dents noircissent.
   b. *Après l'extraction du nerf, les dents se noircissent. (good for us)
   After the extraction of the nerve, the teeth blacken.
   c. Les murs près de la cheminée se noircissent.
   d. ?Les murs près de la cheminée noircissent. (good for us)
   The walls near the chimney are becoming black.

Other examples where Labelle 1992 identifies a meaning difference compare bare verbs with a prefixed counterpart. We think that the slight meaning differences in (21-22) result from meaning differences between grandir/agrandir (the latter restricted to spatial/physical contexts), not from the class A vs. class B membership of the two verbs.

(21) a. Les entreprises grandissent.
   b. Les entreprises s'agrandissent.
   The companies are getting bigger.

(22) a. La plage d'ombre a grandi.
   b. La plage d'ombre s'est agrandie.
   The shadow spot got bigger.
Interim Conclusion:

- The claim that se-ACs are externally caused while ∅-ACs are internally caused cannot be upheld as it meets numerous counterexamples, cf. also Zribi-Hertz 1987.

- The only data point that holds is that class C verbs (optional verbs) show up only as ∅-ACs if their DP is +human. However, this holds even if the verb expresses an externally caused event.

- If asked, speakers ascribe more responsibility for the COS to the DP in the se-variant than in the ∅-variant (§ below 1a, b).

2.3 An alternative explanation: A pragmatic account

There remain two robust differences between se-ACs and ∅-ACs, but they emerge only with ACs of class C:

**Difference A:** Human DPs are out in se-ACs.

**Difference B:** If forced to choose the structure that ascribes more responsibility to the DP, speakers prefer the se-variant over the ∅-variant.

2.3.1 Explaining difference A

**Observation 1:** Reflexively marked strings are ambiguous between a number of semantic argument structures:

i) semantically reflexive verb

ii) anticausative

iii) reflexive passive, generic middle
Concentrating on the first two readings, a reflexively marked string could origin either from structure III or structure IV:

I. Causative:  
   a. \([\text{VoiceP } \text{DP}_{\text{nom}} \text{Voice}_{\text{active}} [\text{VP } [\text{resultP } \text{DP}_{\text{acc}} \text{result}]]]\) 
   b. \(\lambda x \lambda y \lambda e \text{ (agent/causer(e, y) & CAUSE(e, s) & theme(s, y))}\) 
   c. \(\text{DP}_{\text{NOM}} \text{verb } \text{DP}_{\text{ACC}}\)

II. \(\emptyset\)-ACs:  
   a. \([\text{VP } [\text{resultP } \text{DP}_{\text{nom}} \text{result}]]\) 
   b. \(\lambda y \lambda e \text{ (CAUSE(e, s) & theme(s, y))}\) 
   c. \(\text{DP}_{\text{NOM}} \text{verb}\)

III. se-ACs:  
   a. \([\text{VoiceP } \text{se } \text{Voice}_{\text{expletive}} [\text{VP } [\text{resultP } \text{DP}_{\text{nom}} \text{result}]]]\) 
   b. \(\lambda y \lambda e \text{ (CAUSE(e, s) & theme(s, y))}\) 
   c. \(\text{DP}_{\text{NOM}} \text{se-verb}\)

IV. Reflexive:  
   a. \([\text{VoiceP } \text{DP}_{\text{nom}} \text{Voice}_{\text{active}} [\text{VP } [\text{resultP } \text{se } \text{result}]]]\) 
   b. \(\lambda x \lambda y \lambda e \text{ (agent/causer(e, y) & CAUSE(e, s) & theme(s, y) & } (x=y))\) 
   c. \(\text{DP}_{\text{NOM}} \text{se-verb}\)

--> The structures III and IV differ syntactically and semantically.  
--> The structures III and IV do not differ in their morpho-phonology (i.e. surface string).

**Observation 2:** For some interpretations the morphological form is fixed by the grammar (i.e. lexicon or syntax), for others there is optionality.

a) Reflexive semantics have to be expressed with the syntax in IV.

b) Some anticausative verbs (class A) are lexically restricted to enter structure II.

--> With these verbs, an ambiguity between a reflexive and an anticausative interpretation will never arise.

c) Some anticausative verbs (class B) are lexically restricted to enter structure III.

--> These anticausative verbs are at the surface ambiguous as their surface could also be the result from the reflexive structure in IV.  
--> Grammar does not make disambiguation available.

d) Some anticausatives (class C) are compatible with both, structure II or structure III.

--> Structure II does not lead to ambiguity (only anticausative).

--> Structure III leads to an ambiguity of the surface string (anticausative or reflexive).  
--> Grammar makes disambiguation available.
Observation 3: The referential DP in anticausatives is typically non-human while the referential DP of reflexive verbs is typically +human.

--> Structure III leads to a salient ambiguity only if the DP is +human.

Gricean maxim: Avoid ambiguity (if possible)! (Grice 1967/1989)

- If the full DP has proto-agent properties (+human) the [∅-ACs] is preferred over the [se-ACs] to avoid that the hearer arrives wrongly at a reflexive interpretation.
- We do not find a similar effect in class B because the verbs of class B lexically enforce the presence of se.
- The effect can be characterized as 'unambiguous encoding' due to 'emerging of the unmarked' (cf. Gärtner 2004 for very similar effects and their derivation in OT).

Related competition effects have been observed to hold between reflexives and se-passives (Zribi-Hertz 1982:361): “The passive is ok with an animate subject only if there is no ambiguity with the reflexive reading”.

2.3.2 Explaining difference B

(i) Responsible arguments are agents or causers.

(ii) Agents/Causers map to the external argument position.

(iii) se-ACs are formally ambiguous between an anticausative and a reflexive structure.

(iv) ∅-ACs are not ambiguous

(v) only reflexive structures involve an external argument position which could host a responsible DP (agent/causers)

--> Only the se-ACs string is compatible with an alternative derivation where the DP could be an external argument, i.e. responsible.

2.4 Further arguments for claim 1

Labelle 1992 and DL 2010 provide further arguments for claim 1 (external vs. internal causation) which we discuss and reject below.
## 2.4.1 mettre à

As a further argument for Claim 1, Labelle 1992 and DL 2010 present the fact that se-ACs (both from class B and C) are excluded from the construction mettre x à P, cf. (24), observation originally due to Zribi-Hertz 1987.

(23) Le sucre (se) caramélise
   The sugar (SE) is caramelizing

(24) Il a mis le sucre à (*se) caraméliser
   He has put the sugar to (SE) caramelize

DL claim that this construction describes "the fact of creating the appropriate conditions for an autonomous [i.e. internally caused] process to take place." Given Claim 1, se-ACs are predicted to be excluded from the structure, because they denote externally caused (i.e. non-autonomous) events.

**Problems:** This argumentation misses several empirical facts, which make the above semantic characterization unfeasible:

1. Transitive verbs (not expressing a COS or expressing an agentive COS) enter the structure (25a). The embedded processes are clearly not autonomous, as they do not form anticausatives (25b).

(25) a. Il a mis le pantalon à laver
   *He put the trousers to wash

   b. *Le pantalon a lavé
   *The trousers washed

(26) Il a mis le pantalon à raccourcir
   *He put the trousers to shorten

2. Clearly internally caused COS verbs are sometimes out (29a). (Note that one can imagine ‘appropriate conditions for flowers to blossom’.)

(27) a. *Il a mis les roses à fleurir/ le pain à pourrir
   *He put the roses to blossom/ the bread to rot

   b. Il a mis la pâte à lever
   *He put the dough to rise

3. Verbs of class B can enter the construction if the reflexive is dropped:

(28) a. Il a mis le fichier à convertir
   *He put the file to convert
class A: cuire - *se cuire  •  class B: *agrandir - s’agrandir  •  class C: casser - se casser

b. Le fichier *(se) convertit
   The file (SE) is converting

→ While there are clearly lexical-semantic restrictions on the verbs that can be embedded under ‘mettre à’ (cf. 28), they are neither captured by the distinction between internal vs. external causation nor by the morphology an AC takes.

2.4.2 The distribution of de-PPs

Zribi-Hertz 1987 observes after Boons et al. 1976 that certain verbs of class C can only form se-ACs in presence of a certain PP:

(29)  a. Le ballon gonfle (*de gaz carbonique)
   The ball ∅ is inflating (with carbon dioxide)
   b. Le ballon se gonfle (de gaz carbonique)
   The ball SE is inflating (with carbon dioxide)

Labelle compares (29) where the ∅-version of optional verbs reject a de-PP with cases where it accepts it, cf. (30) below

(30) Marie a rougi de honte
   Marie ∅ blushed from shame

Labelle sees the paradigm illustrated in (29a, b) as a further confirmation of Claim 1:

(i) ∅-ACs denote autonomous processes (Claim 1)
(ii) Given Claim 1, the subject of ∅-ACs must be conceived as the main Actor (the Responsible entity) of the event e.
(iii) Distinction between Causing entity and Responsible entity: the de-PP is acceptable in ∅-ACs as soon as the entity it denotes is a mere Cause of e, but does not have the responsibility in e.
(iv) the de-PP expresses a mere Cause in (30), but the responsible entity in (29a), hence the contrast.

Problems:
(i) No clear ground for the distinction between causing and responsible entities
(ii) The unmarked form of gonfler intransitive is acceptable with avec-PPs, whose argument plays the very same role in the event as the problematic de-PP, cf. (31)-(33) from the Internet

(31) Il a gonflé avec de l’Hélium!
   It ∅ inflated with helium
(32) Le [volcan] Tharsis a gonflé avec du magma au cours des premiers milliards d’années de la planète
The volcano Tharsis inflated with magma in the first billions of years of the planet

(33) L’oeil […] a gonflé avec du sang qui est entré dedans
The eye inflated with blood which entered in it

--> Note that we cannot think of these avec-phrases as instruments controlled by the responsible subject of a O-ACs, as se-ACs license avec-phrases too.

--> Whatever is the constraint explaining the ban on de-PPs with these O-ACs, it cannot be due to the fact that the denoted entity is conceived as responsible of the event, since the licensed avec-PP has exactly the same thematic role.

Note that enfler, another translation of inflate, does not take a de-PP, even with the reflexive morphology:

(34) Le ballon (s’)enflé (*de gaz carbonique)
The balloon (SE) inflated with carbon dioxide.

And we find verbs of class A selecting de-PPs (in free alternation with avec-PPs):

(35) Ça embaume de fleurs sauvages
It is smelling of wild flowers
Il a embaumé l’atmosphère de fleurs sauvages
He perfumed the atmosphere with wild flowers

(36) Ce midi tomates à la provençale, ça embaumait avec l’origan de Crête rapporté par fiston
For lunch, tomatoes à la provençale, it smelled with the oregano from Crete brought by little son

Conclusions: We are not sure whether the (non-)availability of de-phrases is totally idiosyncratic (verb specific) or whether there are generalizations to be made. In any case, we cannot see that the explanation building on the contrast ‘responsible entity’ vs. ‘causer’ can account for the empirical picture.
3. Alleged meaning difference 2: Aspectual differences

Claim 2: $\emptyset$-ACs and $se$-ACs have also been claimed to show aspectual differences in that $\emptyset$-ACs focus on the process, whereas $se$-ACs focus on the final state of the COS.

LD explain these alleged aspectual contrasts through a difference in the syntactic structure of each form (a more detailed discussion of their structures will follow below):

In the $\emptyset$-AC, the two verbal projections $v$ and $V$ are present; $v$ introduces an activity subevent, and $V$ a change leading to a state. The verbal root merges with $v$, hence the focus on the process.

In the $se$-AC, only $V$ is present and thus no process subevent is introduced; the verbal root therefore has to merge with $V$, hence the focus on the result state.

One immediate problem: There is no indication/empirical argument that the two ACs differ in event complexity (e.g. the number of readings with adverbs like ‘again’ seems to be identical). In fact, traditional event decomposition tests, like the interpretation of negation or adverbials like almost and again, force to conclude that the two constructions have the same event decomposition (we illustrate this for class C, but the point holds for class A and class B, too):

(37) a. La branche a failli casser.
   *The branch almost broke*
   (i) counterfactual reading
   (ii) scalar reading

   b. La branche a failli $se$ casser
   *The branch almost SE broke*
   (i) counterfactual reading
   (ii) scalar reading

(38) a. La soupe a re-refroidi.
   The soup has again cooled down
   (i) repetitive reading (two cooling down events)
   (ii) restitutive reading (two states of being cool)

   b. La soupe $s’est$ re-refroidie
   (i) repetitive reading
   (ii) restitutive reading
This analysis raises two further sets of problems:

- the empirical arguments in favour of C2 are not convincing, even within ACs of class C, cf. 3.1-3.4 (cf. Legendre & Smolensky (2009) who argue for an aspectual difference between marked and unmarked AC only within class C)

- it raises theoretical difficulties, cf. 3.5

3.1 The distribution of in and for adverbials

**Argument 1.** (Labelle 1992:398) *for*-phrases are claimed to be acceptable only with $\emptyset$-ACs (39a). Since *se*-ACs focus on the result state, they are more natural with *in*-adverbials, (39b).

\(39\)

\(\begin{align*}
\text{(39a)} & \quad \text{Le ciment a/*s'est durci pendant 3 heures} \\
& \quad \text{(Labelle 1992:398)} \\
& \quad \text{The cement $\emptyset$/SE hardened for 3 hours}
\end{align*}\)

\(\begin{align*}
\text{(39b)} & \quad \text{Le ciment a/s'est durci en 3 heures (ibid.)} \\
& \quad \text{The cement $\emptyset$/SE hardened in 3 hours}
\end{align*}\)

**Problem 1:** The empirical claim illustrated in (39a) does not hold. For us (39a) is acceptable with both ACs and further examples where the reflexive variant of class C verbs combines with *for*-adverbials can be found in corpora, cf. e.g. (40a-e).

\(40\)

\(\begin{align*}
\text{(40a)} & \quad \text{Le temps s'est radouci pendant 3 ou 4 jours} \\
& \quad \text{The weather softened for 3 or 4 days}
\end{align*}\)

\(\begin{align*}
\text{(40b)} & \quad \text{J'ai eu le ventre qui s'est durci pendant quelques secondes mais rien de douloureux} \\
& \quad \text{My belly $\emptyset$/SE hardened for some seconds but nothing painful}
\end{align*}\)

\(\begin{align*}
\text{(40c)} & \quad \text{un carnet d' adresses qui s'est épaissi pendant trente-cinq ans est précieux} \\
& \quad \text{An address book that $\emptyset$/SE thickened for thirty five years is very useful}
\end{align*}\)

\(\begin{align*}
\text{(40d)} & \quad \text{L'afflux d’émigrants s’est ralenti pendant quarante ans} \\
& \quad \text{The immigrants flood $\emptyset$/SE got slower for forty years}
\end{align*}\)

\(\begin{align*}
\text{(40e)} & \quad \text{Tel petit in-18, in-12, ou même in-32, qui s'est noirci pendant vingt années à l'étalage d'un bouquiniste, sur le quai Voltaire ou sur le pont de la Cité, renferme daus ses maigres flancs trois ou quatre pages échappées aux recherches des plus infatigables bibliophiles.} \\
& \quad \text{Such small in-18, in-12, or even in-32, which $\emptyset$/SE blackened for twenty years in the window of a second-hand bookseller, encloses in its thin sides three or four pages having escaped the hunting of the most tireless book lovers}
\end{align*}\)

**Problem 2:** The alleged contrast in (39a,b) does also not manifest itself in class A or class B. We find $\emptyset$-ACs of class A licensing *in*-adverbials as well as *se*-ACs of class B licensing *for*-adverbials.
class A: cuire - *se cuire
class B: *agrandir - s'agrandir
class C: casser - se casser

(41) a. Le T-Shirt a séché en deux minutes
    The T-Shirt dried in two minutes
b. Son état s'est amélioré pendant plusieurs mois, les médecins s'occupant de lui parlant de véritables miracles
    His state got better for several months, the doctors taking care of him were speaking of true miracles

Argument 2. (Labelle 1992) Verbs of class A, which normally enter the unmarked construction only, sometimes can form se-ACs (that is shift to class C), but only in perfective sentences and in presence of in-adverbials, so that the focus is put on the result.

→ the perfective morphology and the in-adverbial are claimed to have a licensing role on the use of the se-construction (all judgments taken from Labelle 1992).

(42) a. Le poulet s’est cuit en très exactement 30 minutes (Zribi-Hertz 1986:344)
    The chicken cooked in exactly 30 minutes
b. *Le poulet se cuisait. (OK as passive)
c. *Le poulet s’est cuit pendant trois heures.

Problem 1. According to our intuition, cuire is not shifted to class C in these examples --- with the reflexive, it strongly tends to be interpreted as a passive. One piece of evidence for this is provided by the interpretation of tout seul ‘by itself’, which gets with se cuire the reading it gets with se-passives:

(43) a. La branche s’est cassée toute seule.
    The branch broke by itself
Reading (i): no entity caused the breaking of the branch (anticausative)
Reading (ii): it was very easy to break the branch (passive)
b. Le poulet s’est cuit tout seul
    The chicken cooked by itself
#Reading (i): no entity caused the cooking of the chicken (anticausative)
Reading (ii): it was very easy to cook the chicken (passive)

As a further argument, causer-PPs are acceptable with the unmarked version but are quite degraded under the se-marking; this follows if se-passives have an agentivity restriction on the implicit argument.

(44) a. L’œuf a cuit sous l’effet de la chaleur
    The egg cooked under the effect of the warmth
b. ??L’œuf s’est cuit sous l’effet de la chaleur (cf. also Kupferman 2009)
    The egg cooked under the effect of the warmth
3.2 The argument of muer

The second argument in favour of C2 bears on the verb muer, which, so the claim, forms a se-AC only in presence of a resultative en-PP (45a), while it is claimed to form a ∅-AC only without it (45b).

DL argue that since the se-AC focuses on a result state, an explicit description of this state is needed in (45a), and since the ∅-AC focuses on the process, the state is de-emphasized. This is supposed to make an explicit state description impossible.

(45) a. L'oiseau s'est mué *(en un monstre à trois têtes)
   The bird SE moulted (in a monster with three heads)

b. L'oiseau a mué (*en un monstre à trois têtes)
   The bird ∅ has moulted (in a monster with three heads)

Problems

We do not think that the paradigm of muer supports Claim 2.

Objection: We do not agree with the judgment in (45b); cf. also the attested following examples.

(46) a. Jadis réputé pour sa formule café et dessert, le [restaurant] Lézard a mué en un hybride
   Formely known for his cafe and dessert formula, he restaurant Lézard ∅ changed in a hybrid

b. Il a mué en un bon groupe de rock
   It ∅ changed in a good rockband

c. La voix a mué en un croassement démoniaque
   The voice ∅ changed in a demonic cawing

Alternative analysis: While muer with en-PP is an AC (of class C) (for speakers rejecting (45b) of class A), muer is an unergative if it appears without en-PP (cf. also Zribi-Hertz 1987). In support, note the following facts:

(i) only muer en can be transitivized:

(47) a. Pierre a mué sa voix *(en un croassement démoniaque)
   Pierre changed his voice in a demonic cawing

   The virus moulted the bird.

c. Le virus a mué l’oiseau en un monstre à trois têtes. (ibid.)
   The virus transformed the bird in a monster with three heads.
(ii) only *muer en allows an adjectival passive:

(48) a. * L’oiseau est mué (Zribi-Hertz 1987:42)
   The bird is moulted

   b. L’oiseau est mué en un monstre à trois têtes (ibid.)
   The bird is transformed in a monster with three heads

(iii) *muer with or without en-PP is lexicalized differently in other languages (e.g. transform into vs. molt (*into)) and the same meaning difference holds in French examples in (45a, b).

3.3 The argument of the restriction on metaphorical uses

Lagane 1967 and Ruwet 1972 observed that sometimes, with verbs of class C, the se-AC is blocked when the verb is used in a metaphorical way:

(49) a. La sauce s’épaissit.
   The sauce is thickening up

   b. La nuit *(s’)épaissit.
   The night is deepening

(50) a. La plante (se) tasse
   The plant is packing down

   b. Le problème *(se) tasse.
   The problem is packing down

(51) a. La sauce (se) réduit.
   The sauce is reducing

   b. Le problème *(se) réduit.
   The problem is reducing

Labelle 1992:393 proposes to see in these facts another confirmation of Claim 2: the metaphorical transfer does not operate on the process, but only on the state. That is, under the figurative reading, the abstract entity is not “presented as undergoing a physical process of [...] thickening up; they are rather presented as being in a state which [...] can be described as [...] more thick”.

Apart from the fact that it is not clear at all why metaphorical uses should involve a focus on the result state, we do not think that there is a true generalization here. With other verbs, the metaphorical use enters the unmarked construction:

(52) a. Le progrès ralentit.
   The progress is getting slower

1 Labelle (1992) gives further examples where we don’t agree with her judgments.
Secondly, in some cases, the zero-AC is marked on the literal use:

(53) a. ?Mon livre épaissit
   *My book is thickening
   
   b. ?Mes fichiers épaississent
       *My files are thickening

### 3.4 Theoretical problems of DL 2010

In order to capture the alleged meaning differences between $\emptyset$-ACs and *se*-ACs (focus on a process vs. focus on a result), DL propose two different structures.

The main idea is that the verbal root can, in principle, merge in two positions, either under the V-head introducing a (change-of-)state or under the v-head introducing a process.

In the former case, the structure will focus on the result state/change, in the latter case it will focus on the process.

With *se*- and $\emptyset$-ACs, however, the position where the root merges is fixed and, therefore, we get different foci.

**Three structural layers:**

i) VP expresses a change-of-state

ii) vP introduces a dynamic (or activity) subevent and assigns the Agent role to its specifier

iii) Voice determines whether v's argument is merged in the derivation: in active Voice it may be, in non-active/middle it is not (*se* is the realization of non-active/middle voice, i.e. “*se* blocks the merge of an external argument”).

   iv) a root can, in principle, merge in v or in V.

**A: transitive, causative verbs:**

\[
\begin{align*}
(54) \quad & [TP \, T \, [vP \, v \, [Voice_{active} \, [VP \, V]]]]
\end{align*}
\]

**Comment:** the root merges either in v or V (it can freely do so as both subevents are lexicalized by a DP merged in the specifier of the respective verbal layers.)
Question: why is Voice below vP? This is not only unorthodox but it is also unclear how Voice could influence the properties of a projection that c-commands it.

**RES-ACs:**

\[(\text{VoiceP} \text{ Voice}_{\text{active}} [\text{VP} V])\]

“A -Active Voice head blocks the merge of an external argument. In addition v is not merged and therefore no agent role is assigned.” (L&D 2010)

**Comment:** As there is no v-head in the structure, the root merges with V. Therefore the sentence focuses on the attainment of a result state.

**Question:** why do we need Voice blocking the external argument if, to start with, there is no v introducing an external argument. (Note that there are pure unaccusatives which are arguably made just by a VP (arrive, die, internally caused verbs like decay, …)

**Proc-AC:**

\[(vP v [\text{VoiceP} \text{ Voice}_{\text{active}} [\text{VP} V]])\]

“with a restricted number of verbs, v may merge without requiring an external argument in its specifier. This is possible because v introduces a dynamic event ... without an addition participant” (L&D 2010)

“some roots allow a dynamic subevent without an additional participant. In that case, v does not assign the Agent role. Because there is a dynamic subevent but no external argument, the verb's argument is interpreted as undergoing the process autonomously” (D&L 2011)

**Comment:** The root must merge high to lexicalize v while V is lexicalized by the theme DP. Therefore, the verb focuses on the process subevent.

**Question:** What are the relevant verbs/roots where v can merge without requiring an external argument?

As far as we can see it they stipulate it for those roots that enter the formation of Proc-AC.

If v does not introduce an external argument, why is Voice present in this structure?

**Overall questions about the above structures:**

1. There is **no independent evidence that v is present or absent in the two types of ACs.** (see the discussion of 37/38 above)

2. If the root can merge in v-process, the nature of **deadjectival verbs** (in the class of Proc-ACs) is blurred. Furthermore, if the root merges in v it is unclear where a
3. Main Problem: **The structures are unrestricted.** More concretely, nothing in the system prohibits other combinations of Voice(-active), v and V as the following ones below:

(57) \[ [\text{VP} \ v \ [\text{VP} \ V]] \]

Comment: if v does not assign an agent role, no Voice is necessary to prohibit merge of an external argument. The root should merge high and the structure should focus on process.

(58) \[ [\text{VoiceP} \ \text{Voice}_{\text{-active}} \ [\text{VP} \ V]] \]

Comment: We have seen above that Voice(-active) combines with VP. But since V does not introduce an Agent role, there is no reason why this Voice must be -active (compare also to 71). Here the root should merge low and the **structure should focus on the result although se is absent.**

(59) \[ [\text{VP} \ V ] \]

Since V cannot assign an agent role, Voice is not necessary. The root merges low and the **structure should focus on the result although se is absent.** (Note that pure unaccusatives like *die, arrive, decay* arguably have such a structure).

(60) \[ [\text{VP} \ v \ [\text{VoiceP} \ \text{Voice}_{\text{-active}}[\text{VP} \ V]]] \]

Irrespectively of whether v has an agent role to assign or not, the presence of -active Voice (se!) should prohibit the insertion of such an argument. The root must merge high to lexicalize v. Therefore **the structure should focus on the process although se is present.**

Note: the absence of this last structure is a clear stipulation because in the active and in the passive this is exactly where Voice should occur under the system of DL. Furthermore, this is the only structure where middle Voice could do a real job, i.e. prohibit that v introduces an external argument.
4. Conclusions

- We argued that French $\varnothing$-ACs and se-ACs do not show systematic meaning differences wrt focusing on subevents and internal vs. external causation.

- Therefore, the presence vs. absence of se should not be associated with fundamentally different syntactic structures predicting such semantic differences.

- Remaining meaning differences are either restricted to class C verbs and follow from pragmatic considerations or are idiosyncratic to individual verbs.

5. References


