State and change of state in Latin: A view from the lexicon-syntax interface[*]

Abstract

This paper offers a syntactic account of Haverling's (1994ff.) descriptive insights regarding the formation of both stative verbs and *–sco* verbs expressing change in Early and Classical Latin. In particular, the formal distinction between *incorporation* and *conflation* (cfr. Haugen (2008, 2009) and Mateu (2012), i.a.) is shown to be useful when dealing with the formation of these verbs. Following Acedo-Matellán and Mateu's (2013) formal account of Talmy's (1991, 2000) typology of motion events, I also address the question of why aspectual resultative prefixation is a phenomenon that is expected to be found in a satellite-framed language like Latin (e.g., cfr. *inarescere* 'to start becoming dry') but not in verb-framed languages like Catalan or Spanish.

Keywords: state, change of state, argument structure, conflation, incorporation, lexicon-syntax interface, Talmy's typology, Latin, *-sco* verbs

1. Introduction

1

In this paper, I deal with the question on how state and change of state are expressed in Early and Classical Latin. In particular, for reasons of space, here I concentrate on providing a syntactic account of the formation of stative verbs that contain the *-ē-* suffix (e.g., see (1a)) and of unprefixed and prefixed verbs of change that involve the *-sc-* suffix (e.g., see (1b) and (1c), respectively).

(1) a. *Ager*   *aret.*   (Col. 2.8.5)

         ground.NOM.SG   be.dry.3SG

         'The ground is dry.'

     b. *Nihil   enim   lacrima   citius   arescit*   (*Rhet. Her.* 2.50)

         nothing really tear.ABL.SG   quicker dries

         'Nothing dries more quickly than a tear.'

     c. *fontes (…)   celeriter aestibus   exarescerent* (Caes. *Civ*. 3.49.4)

         spring.NOM.PL quickly heat.ABL.PL   out-dry.IMPF.SUBJ.3PL

         'The springs quickly dried up in the hot weather.'

The formation of triplets like the one exemplified in (1) is highly productive (e.g., see (2)), whereby the derivational process should not be conceived of as involving idiosyncratic structures projected by individual lexical items. As shown below, both the morphosyntactic processes and their associated semantic effects concerning event structure are quite regular.

(2)   a. *arere* 'be dry'; *arescere* 'become drier'; *exarescere* 'become dry'.

       b. *calere* 'be warm'; *calescere* 'become warmer'; *concalescere* 'become warm'.

c. *candere* 'be white'; *candescere* 'become whiter'; *excandescere* 'become white'.

d. *rubere* 'be red'; *rubescere* 'grow red'; *erubescere* 'turn red (from shame)'.

An excellent example to understand the meaning differences involved in the stative and change of state verbs that appear in (1) is the one found in the following text from Plautus, *apud* Haverling (2010: 314; ex. (59a)), which contains a stative verb (*aret* '(my hood) is dry') and predicates of change that are expressed by atelic unprefixed verbs (*arescunt* '(the clothes) are drying') and telic prefixed ones (*exarescent* '(the clothes) become totally dry').

(3)   Plaut. *Rud.*, 573-578: *da mihi vestimenti aliquid aridi / dum **arescunt** mea […] / Tegillum eccillud, mihi unum id **aret**; id si vis, dabo […] / Tu istaec mihi da-to: **exarescent** faxo.*

'Give me something to wear while my clothes *are drying* […] Look, here is my hood; that is the only thing which *is dry* that I have; if you want, I'll give it to you […] Give me those things; I shall see to it that they *get dry*' [Haverling's (2010: 314) translation].

The structure of the paper is as follows: in Section 2, I provide a brief characterization of the data, which is based on Haverling's (1994ff.) descriptively oriented works. I show that there is a great, though not exact, parallelism between Latin unprefixed –*sco* verbs and the Catalan –*ejar* verbs analyzed by Oltra-Massuet and Castroviejo (2013). In Section 3, where the theoretical framework is presented, I deal with the basic elements of a syntactic theory of argument structure like the one put forward by Hale and Keyser (1993, 2002) and revisited and

developed by Demonte (1994, 2006, 2015), Mateu (2002, 2012, 2014), Harley (2005, 2011, 2013), Marantz (2005, 2013), Acedo-Matellán (2010), and Acedo-Matellán and Mateu (2014), i.a. In Section 4, I concentrate on showing how the formal distinction between incorporation and conflation processes (cf. Hale and Keyser (2002), Haugen (2008, 2009), Mateu (2012), and Acedo-Matellán (2013), i.a.) allows us to provide an appropriate account of the formation of state and change of state verbs in Early and Classical Latin. Furthermore, following Acedo-Matellán and Mateu's (2013) formal account of Talmy's (1991, 2000) typology of motion events, I show why prefixed verbs of change of state like (1c) are expected to be found in a satellite-framed language like Latin but not in verb-framed languages like Catalan or Spanish. Finally, Section 5 concludes the paper.

2. The data: *-sco* verbs in Early and Classical Latin

As pointed out by Lehmann (1995) and Haverling (2008; 2010), i.a., two basic structures are available for the formation of state predicates in Latin: i.e., the verbal structure formed by the Indo-European suffix *-eh$_1$- (e.g., see (4)) and the copular structure with an adjective (e.g., see (5)).

(4)   *Ager*   *aret.*   (Col. 2.8.5)

        ground.NOM.SG   be.dry.3SG

        'The ground is dry.'

(5)   *Ager*   *aridus*   *erat.*   (Sal. *Iug*. 90)

        ground.NOM.SG   dry.NOM.SG   be.IMPF.IND.3SG

4

‘The ground was dry.’

It is the case that the stative suffix *-e-* in (4) disappears in Late Latin and Romance, whereby it can be said, along with Lehmann (1995: 4) and Haverling (2010: 321), that we move from a system where a state is expressed by a verbal suffix to one where it is often expressed by an adjective and the copular verb *esse* ‘be’: *aret* ‘it is dry’ > *aridus est* ‘it is dry’. Along with a decay of productivity of intransitive Latin *–e-* verbs, there is a productive way of deriving adjectives from these verbs via the suffix *–id-* (cf. Di Gennaro (2008) for further discussion).

As for the expression of change in Latin, both Lehmann (1995) and Haverling (1996ff.) claim that the affix *–sc-* adds dynamicity to the verb. The second author also emphasizes the atelicity of *–sco* verbs when they are unprefixed. For example, unprefixed verbs like *siccescere* ‘go drier’ (see (6)) are found to be compatible with the expression *duos menses* meaning ‘for two months’.

(6) *Eaque, cum erit   exstructa,   relinquatur,*
    this.and when will.be.3SG built.PP.NOM.F.SG   remain.PRES.SUBJ.PASS.3SG

    *ne minus   **duos**   **menses**   ut   **siccescat**.* (Vitr. 5.12.4)
    not less   two.ACC.PL   months.ACC.PL that dry.PRES.SUBJ.3SG

    ‘And this (block), when formed, is to be left to dry for at least two months.’

In contrast, as pointed out by Haverling (1996: 173), prefixed verbs like *exarescere* ‘become totally dry’ (lit. ‘out-dry’) are telic and are found with temporal adjuncts in ablative case, which express the amount of time in which the event is brought to its end: e.g., *diebus quin-*

decim exarescere 'become dry in 15 days' (Var. *R*. 1.32.1). Similarly, Devine and Stephens (2013: 198) conclude:

> the unprefixed form <*arescit* 'goes drier'> just denotes attainment of a scalar degree corresponding to a state that qualifies as *aret*, which is not necessearily the state of maximum possible dryness; the prefixed forms <*exaruit* 'has dried out' and *perarescat* 'dry thoroughly'> not only induce the telic reading but also serve to indicate that a point at the high end of the scale of dryness is effectively attained.

According to Haverling (1996: 174; 2010: 302-303), another difference between unprefixed and prefixed *sco*-verbs is found in temporal subordinate clauses introduced by the conjunction *dum*, which can mean 'while' in (7a) (see the relevant context in the longer example in (3) above), but 'until' in (7b). As pointed out by Haverling (1996: 174), unprefixed –*sco* verbs can be found in *dum*-clauses "which describe the background to what is going on in the main clause (…) When such a clause does not describe the background but means 'until', we find prefixed verbs".

(7) a. **dum** *mea* *(vestimenta)* *arescunt* (Plaut. *Rud*. 573)

while my.NOM.PL clothes.NOM.PL go.dry.PRES.IND.3PL

'while my clothes are drying.'

b. *nam* *iam* *aliquo* *aufugiam* *et* *me*

for now somewhere away-run.FUT.IND.1SG and me.ACC.SG

occultabo *aliquot dies,* **dum** *haec*

hide.FUT.IND.1SG some day.ACC.PL until these.NOM.PL

consilescunt *turbae* *atque* *irae*

calm.down.PRES.IND.3PL trouble.NOM.PL and ire.NOM.PL

leniunt   (Plaut. *Mil.* 582–583)

be.mitigated.PRES.IND.3PL

'I shall run away and hide somewhere, until these troubles calm down and their wrath subsides.' [Haverling's (2010: 303) translation]

In this section, which is devoted to describing the relevant data, it is also worth showing an interesting parallelism between Latin *–sco* verbs and Catalan *–ejar* verbs. The latter have been recently analyzed in an excellent work by Oltra-Massuet and Castroviejo (2013). A couple of examples (e.g., Cat. *fosquejar* 'go dark' and *groguejar* 'go yellow'), which are taken from Oltra-Massuet and Castroviejo (2013: exs. (6b) and (13)), are given in (8):

(8) a. *El dia fosqueja.*   (Catalan)

    the day goes.dark

    'The day is going dark.'

  b. *Aquesta samarreta grogueja.*

    this t-shirt   goes.yellow

    'This t-shirt is going yellow.'

Oltra-Massuet and Castroviejo (2013: 140) point out the following five properties of Catalan *–ejar* verbs: (i) they express a property that is interpreted as internally-caused; (ii) they cannot be causativized directly; (iii) they are atelic; (iv) they do not involve a final state; and (v) they are restricted to imperfective tenses. Interestingly, *all* these properties apply to Latin unprefixed *–sco* verbs as well. As noted above, unprefixed *–sco* verbs are also atelic (see (6)) and, like Catalan *–ejar* verbs, they do not involve a final state either, whereas prefixed ones are

clearly telic and do involve a final state. Moreover, *-sco* verbs express an internal process and cannot be causativized/transitivized via a null causative verb: e.g., unlike the English verb *dry*, which can have both unaccusative and transitive/causative uses, *aresco* 'become drier' / 'grow dry' cannot have a transitive/causative use (cf. *X_{subj} Y_{obj} arescit*). Indirect causation or transitivization is possible if the verb *facere* 'make' is added, which forms the compound verb *arefacio* 'make dry' (e.g., see the data in (9), which are taken from Devine and Stephens (2013: 107; ex. (18)).

(9)   a. *Murtam   nigram   **arfacito**   in umbra.*

        myrtle.ACC.SG   black.ACC.SG dry.make.FUT.IMP.2PL in shade.ABL.SG

        'Dry black myrtle in the shade'.   (Cat. *Agr*.125.1)

        b. *(Dolium   olearium   novum)   **arfacito***;

        jar.ACC.SG of.oil.ACC.SG new.ACC.SG   dry.make.FUT.IMP.2PL

        ubi   arebit...

        when be.dry.FUT.IND.3SG

        'Let the new oil jar dry. When it will be dry…'.   (Cat. *Agr*. 69.2).

Another piece of evidence that Latin unprefixed *–sco* verbs behave like Catalan *–ejar* verbs is that both are restricted to imperfective tenses. According to Haverling (1994: 48-49; 2008: 74-75), the corresponding dynamic perfect tense forms of unprefixed *–sco* verbs are prefixed in Early and Classical Latin. For example, this Latinist scholar points out that in Classical Latin prose the perfect tense that corresponds to imperfective *calesco* 'I go warmer' is not *calui*: this perfect form cannot be interpreted dynamically but only statively (i.e., 'I was

warm'). The prefixed form (e.g., *concalui* 'I became warm') is the only available form in Classical Latin prose to express dynamicity of *–sco* verbs in the perfect tense.[1]

There are still some relevant differences between Catalan *–ejar* verbs and Latin *–sco* verbs. For example, Oltra-Massuet and Castroviejo (2013: 147) point out that Catalan *–ejar* verbs "are quite marginal with *parar de* 'stop', which is expected if they are not dynamic predicates" (see (10)). In contrast, Haverling (1994: 43; 1996: 176) states that Latin unprefixed *–sco* verbs are perfectly compatible with aspectual verbs like *desino* or *desist* 'stop' (e.g., see (11)).[2]

(10) ?? *Els camps de blat   han   parat de   groguejar.*   (Catalan)

     the fields of wheat   have   stopped of   go.yellow

     'The wheat fields stopped going yellow'.

(11) *donec sal   desiverit   tabescere   biduum* (Cat. *Agr.* 88.1)

     until salt.NOM.SG stop.FUT.PERF.3SG. dissolve   two-days.ACC.SG

     'until the salt ceases to dissolve for two days'.

---

[1] However, in poetry some examples of unprefixed *–sco* verbs in perfect tense forms can be found in a dynamic function (see Haverling (2000: 209f; 2008: 75)).

[2] Haverling (1996: 1976) points out that unprefixed *–sco* verbs, compared to prefixed ones, are "a lot more common with expressions like *coepi* and *incipio* <'begin'> and it is *the rule* with expressions like *desino* or *desisto*" (emphasis mine: JM).

Furthermore, the dynamicity of Latin *–sco* verbs seems indisputable. For example, as pointed out by Haverling (2010: 290-291), verbs like *senesco* 'grow old' are found to be compatible with adverbial expressions like *sensim* 'gradually', which are not found with stative *-e-* verbs.

(12) *Ita sensim sine sensu aetas* senescit,

so gradually without sense.ABL.SG life.NOM.SG grows.old

nec subito frangitur, sed diuturnitate extinguitur

not suddenly break.PRES.IND.PASS.3SG but durability.ABL.SG extinguish-

PRES.IND.PASS.3SG

'thus old age comes upon us gradually, and we are not suddenly broken but we are destroyed over a longer period of time.' (Cic. *Cato* 38) [Haverling's (2010) translation; ex. (7b), p. 291)]

Interestingly, Oltra-Massuet and Castroviejo's (2013: 147) claim that Catalan *–ejar* verbs "are not dynamic predicates" is finally replaced by their more precise claim that these verbs are "Davidsonian states, i.e., dynamic stative verbs" (p. 148).[3] As shown below in Section 4, while Oltra-Massuet and Castroviejo (2013, 2014) posit a stative structure for Catalan *–ejar* verbs (i.e., according to them, the verbal head is stative: v$_{BE}$), I will claim that Latin *–sco* verbs like *arescere* 'become drier' or *seneseco* 'grow old' are not Davidsonian states[4] but are indefinite change of state verbs (a.k.a. "degree achievements"), whereby they have a *non-*

---

[3] See Maienborn (2007), i.a., for relevant discussion on the distinction between two types of states, Davidsonian and Kimian. While the former have some shared properties with eventive predicates, the latter do not.

[4] Notice that the fact that Latin *–sco* verbs are compatible with adverbials like *sensim* 'gradually, slowly' (cf. (ex. (12)) can be taken as evidence that these verbs do not behave like Davidsonian states, whereby they are clearly eventive.

stative structure headed by a truly dynamic unaccusative verb: v_{GO}. In contrast, v_{BE} will only be posited for clearly stative verbs like *arere* 'be dry', which are lacking in Catalan.

To conclude this descriptive section, it is worth quoting Haverling's (1996: 179) insightful conclusion regarding the behavior of *–sco* verbs in Early and Classical Latin.

> In conclusion, in the texts from the earlier periods, verbs like *aresco*, *inaresco* and *exaresco* overlap only to some degree; the unprefixed verb *aresco* means 'to grow more and more dry' and it stresses the gradual character of the development, but it does not emphasize its beginning nor its end; the prefixed verb *exaresco* means 'to turn dry, become totally dry' and it stresses the fact that the development is brought to its final conclusion; and the prefixed verb *inaresco* means 'to become dry' or 'to grow somewhat dry' or 'to grow more dry', stressing the initial phase of the development.[5]

It should be noticed that the behavior of *–sco* verbs summarized in the previous quote is the typical one of Early and Classical Latin. Interestingly, the subtle distinctions associated to their prefixal system became blurred in Late Latin (see Haverling (2003; 2008; 2010), for relevant discussion). As argued by Mateu (2015), this blurring can be claimed to have to do with the well-known typological change from a satellite-framed language like Classical Latin to verb-framed Romance (e.g., see Acedo-Matellán and Mateu (2013)). Late Latin is an intermediate stage (Stolova 2015): the resultative/path component is typically encoded in a prefix

---

[5] According to Haverling (2008: 75), both *inaresco* and *exaresco* are telic verbs: "the different prefixes indicate focus on different parts of the process or change and sometimes they indicate whether a telic action is initio-transformative <e.g., *inaresco*> or fini-transformative <e.g., *exaresco*>" (p. 75).

in Classical Latin (see Acedo-Matellán (2010)), whereas it turns out to be typically encoded in the verbal root in Late Latin. In the last stage of this language the prefix has been claimed to become a mere marker of dynamicity associated to the verb (see Haverling (2003: 123ff; 2000)), which leads to the phenomenon known as "parasynthesis". Although such a simultaneous combination of prefix and suffix is already attested in Latin, it has been shown to be more widespread in Romance languages (see Crocco-Galèas and Iacobini (1993), i.a.).

Before providing a syntactic analysis of the formation of stative verbs and change –*sco* verbs in Early and Classical Latin (see Section 4), next it will be useful to give some relevant theoretical background: Section 3 contains a brief review of the syntactic approach to argument structure I adopt in this paper.

3. The theoretical framework

I assume a syntactic theory of argument structure like the one developed by Harley (2011) and Marantz (2013) (after Hale and Keyser (1993, 2002)), whose main tenet is that argument structure configurations and argument structure alternations can be, and should be, treated entirely within the syntactic component, via the same formal operations (i.e., External Merge and Internal Merge/Move) which construct any syntactic constituent. Marantz (2013) and Mateu (2014), as proponents of a configurational approach to argument structure like that of Hale and Keyser's (1993, 2002), have pointed out the theoretical advantages of reducing all verbal argument structure types to two *basic* ones: i.e., the verbal configurations that have a "nominal" complement and the ones that have a sort of "propositional"/predicational complement, which is sometimes called *Predicative Phrase* (PredP: e.g., see Bowers (2000), among others)

or *Small Clause* (SC: e.g., see Stowell (1981) and Hoekstra (2004), among many others), whose members are characterized by the appearance of an internal predication and therefore an internal subject (e.g., the steadfastly transitive locative verbs -e.g., *shelve* and *saddle* verbs- and the alternating deadjectival causative/inchoative verbs -e.g., *clear* verbs). At first sight it seems that this syntactic theory only deals with a very small fraction of the total range of verb types. However, as pointed out by the abovementioned authors, this apparent lack of coverage should not prevent one from realizing that, at an abstract level, most of descriptive verb types can be claimed to be reduced to the two basic ones in (13): the ones that consist of verbal head (*v*) plus a nominal (*NP/DP*) complement (see (13a)) and the ones that consist of verbal head plus a predicative (e.g., *PP* or *AdjP*) complement (see (13b)). Beyond the two *basic* argument structures in (13), *additional* arguments enter the syntactic deriviation via particular functional heads like *Voice*, which introduces the external argument (e.g., cfr. Harley (2013) and Marantz (2013), i.a., after Kratzer (1996)): see (14).[6]

(13)   a. vP

v   N/DP

b.   vP

v   XP (XP = PredP/SC)

DP   X'

X   Y(P)

---
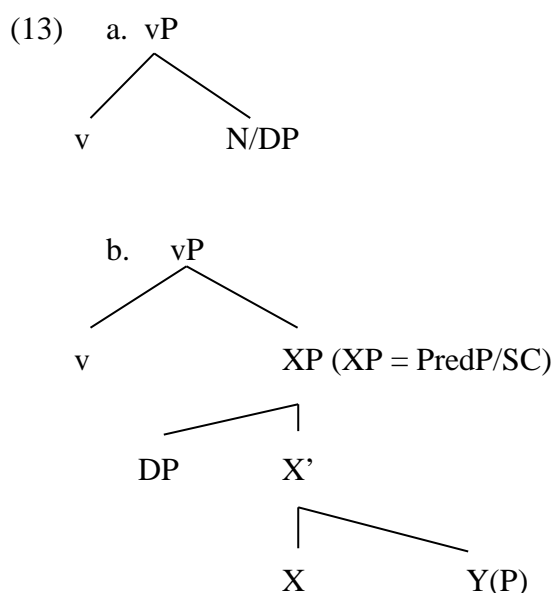
[6] Other *additional* arguments are introduced by so-called *Appl*icative heads, which are claimed to be involved in dative structures of different sorts (e.g., see Cuervo (2003), Pylkkänen (2008), and Marantz (2013), i.a).

(14)　　　　　　VoiceP

　　　　DP　　　Voice'

　　　　　　　　Voice　　　vP
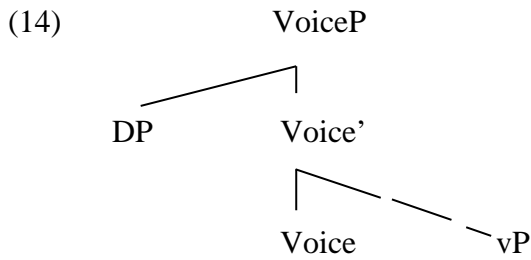
A crucial insight of Hale and Keyser's (1993, 2002) work is their claim that verbs *always* take a complement.[7] Another important claim of their configurational approach is that the structural semantics of argument structure can be claimed to be read off from syntactic structures. Four theta roles can be read off from the syntactic argument structures (cfr. Mateu (2002), Harley (2011), and Acedo-Matellán and Mateu (2014), i.a.): *Originator* is the specifier of the relevant functional projection that introduces the external argument (e.g., Voice); *Figure* is the specifier of the inner predication, headed by P or Adj; *Ground* is the complement of P, and *Incremental Theme* is the nominal complement of *v*.[8]

---

[7] An anonymous reviewer casts doubt on the status of unergative verbs (e.g., monoargumental ones like *sleep* or zero-argumental ones like *rain*) with respect to this generalization.When confronted with this reasonable objection, Hale and Keyser (1993, 2002) claim that English unergative verbs like *sleep, rain, smile, work, cry, speak, play, snore,* etc. are hidden transitives. According to them, evidence for this proposal can be found in languages like Basque (see (i)) and Jemez (see (ii)). Typically, English unergatives involve incorporated variants, whereas Basque ones involve non-incorporated (i.e., analytical) variants. Hale and Keyser's bimorphemic analysis of unergatives is supported by Jemez, where the nominal root incorporates into a visible light verb 'do'.

(i)　　　*lo egin* 'sleep do'; *euria egin* 'rain do' *barre egin* 'smile do'; *lan egin* 'work do'; *negar egin* 'cry do'; *hitz egin* 'word do'; *iolas egin* 'play do'; *zurrunga egin* 'snore do', etc. (Basque)

(ii)　　*hiil-'a* 'laugh-do'; *sae-'a* 'work-do'; *shil-'a* 'cry-do'; *se-'a* 'speech-do', etc. 　　(Jemez)

[8] The Figure, in Talmy's (2000) terms, is the entity which is located or moving with respect to some other entity, which is the Ground. In the (change of) state domain, the relation between Figure and Ground can be metaphori-

Concerning the semantic functions associated to the eventive element (i.e., v), binary (i.e., dynamic/static) values can be posited. For example, *DO* is the dynamic eventive value associated to unergative v;[9] *CAUSE* can be read off from transitive verbal configurations where v_{DO} subcategorizes for an inner predicative (SC: PP/AP) complement. Dynamic/static values can be associated to unaccusative v (GO and BE, respectively), which also selects a SC complement but lacks external argument.[10]

As pointed out by Harley (2005; 2011) and Mateu (2014), one important advantage of Hale and Keyser's program is that it sheds light on the syntactic argument structure commonalities that can be found in apparently different lexical semantic classes of verbs: for example, creation verbs (e.g., (15a)) and consumption verbs (e.g., (15b)) can be argued to be assigned the transitive structure in (13a). Since these verbs can incorporate their complement (as emphasized by Hale and Keyser (2002), all unergative structures can be reduced to the one in (13a)), it is predicted that their object can be null, as shown in (15a)-(15b). See Volpe (2004) for the claim that consumption verbs are basically unergative. In contrast, the inner subject/specifier

---

cal in terms of the predication of some property: the Figure is an entity to which some property, encoded by the Ground, is ascribed. See Demonte (1994), Mateu (2002f.), Acedo-Matellán (2010), Acedo-Matellán and Mateu (2014), and Oltra-Massuet and Castroviejo (2013, 2014), for further discussion on a localistic approach to argument structure.

[9] See Hale and Keyser (1993, 2002) for the claim that unergative verbs typically express creation or production (cfr. [$_{VoiceP}$ DP… [$_v$ V$_{DO}$ N]]). See footnote 7.

[10] Cfr. Marantz (2005: 5) for the claim that one does not have to posit "*cause*, *become* or *be* heads in the syntax (…). Under the strong constraints of the theoretical framework, whatever meanings are represented via syntactic heads and relations must be so constructed and represented, these meanings should always arise structurally".

of change of {location/state} verbs cannot be easily omitted: see (15c)-(15d). Accordingly, a crucial syntactic difference can be established between Incremental Theme (i.e., the *complement* of *v* in (13a)) and Figure (i.e., the *specifier*/subject of an inner Locative (Prep) or Property (Adj) predication in (13b)).

(15)   a.   They sang (a beautiful song/aria).

b.   Mary ate (a pizza).

c.   John shelved/saddled *({the books/the horse})

d.   The strong winds cleared *(the sky).

Assuming that all verbal heads in syntactic argument structures are underlyingly light (e.g., cfr. Hale and Keyser (1993), Mateu (2002), Acedo-Matellán (2010), den Dikken (2010), Acedo-Matellán and Mateu (2014), among others), it is indeed desirable to have a restrictive theory of how these verbs can acquire phonological content. Assuming Chomsky's (2001f.) well-known distinction between Internal Merge and External Merge, two options turn out to be available: despite claims like Haugen's (2009: 260) one quoted in (16), I argue that no primitive theoretical status should be attributed to *Incorporation* and *Conflation*, because these two operations can be argued to follow from the distinction between Internal Merge ($\rightarrow$ incorporation via Copy/Move) and External Merge ($\rightarrow$ conflation).

(16)   Haugen (2009: 260): (…) we slightly revised the operations proposed by Hale and Keyser (2002). *Incorporation* is conceived of as head-movement (as in Baker 1988; Hale and Keyser 1993), and is instantiated through the syntactic operation of Copy, whereas *Conflation* is instantiated directly through Merge (compounding). These two syntactic operations are sufficient to account for

much of the cross-linguistic variation that we have seen in N\<oun\> I\<ncorporation\> and denominal verb constructions.

Following Haugen's (2009) distinction in (16), incorporation is involved in the formation of examples like (17) and (18), since the nominal and adjectival roots can be claimed to come from the innermost complement position of the syntactic argument structure (e.g., cfr. Hale and Keyser's (2002) l(exical)-syntactic analyses in (19)):

(17)   a.   John shelved the books.

          b.   John saddled the horse.

(18)   a.   The strong winds cleared the sky.

          b.   The cook thinned the sauce.

(19)   a.   John … [V_{PUT} [the books ON SHELF]]

          b.   The strong winds … [V_{CAUSE} [the sky V_{BECOME} CLEAR]]

Similarly, when dealing with motion events and resultative constructions, Mateu (2012) claims that null light verbs can be saturated via *incorporation* (e.g., see (20a) and (20b)) or via *conflation* (e.g., see (21a) and (21b)). Incorporation is involved in (20) since the result root can be claimed to come from an inner complement/predicate position, whereas conflation is involved in (21) since the manner root is claimed to be *directly* adjoined to the null verbal head (cfr. Mateu and Rigau (2002, 2010), Harley (2005, 2011), Embick (2004), McIntyre (2004), Zubizarreta and Oh (2007), Mateu (2008, 2012), and Acedo-Matellán (2010, 2013), i.a., for further discussion on conflation structures).

(20)   a. He entered the room.   [$_{vP}$ *enter* (=[√IN-V$_{GO}$]) [$_{SC}$ he ~~IN~~ the room]]

b. He flattened the metal with a hammer. [He …[$_{vP}$ *flat-en* [$_{SC}$ the metal ~~flat~~]]]

(21)   a. He danced into the room. [$_{vP}$ [$_v$ √DANCE-V$_{GO}$] [$_{SC}$ he into the room]]

b. He hammered the metal flat. [He…[$_{vP}$ [$_v$ √HAMMER-V$_{DO}$][$_{SC}$ the metal flat]]][11]

With the previous sketchy background in mind, next I concentrate on the syntax of the Latin stative and change of state constructions presented in Section 2. Given their morphosyntactic transparency, their formation can be shown to be taken as evidence for the present syntactic approach to argument structure.

4. A syntactic analysis of state and change of state verbs in Latin

Let us start with the stative verbal argument structure of examples like (1a), repeated in (22).

(22) *Ager*   *aret.*   (Col. 2.8.5)

ground.NOM.SG   be.dry.PRES.IND.3SG

'The ground is dry.'

---

[11] The event operator corresponding to the light verb in complex resultatives is better understood as *DO* rather than as *CAUSE*. The latter could be claimed to arise *structurally* from merging v$_{DO}$ with a Small Clause Result (see also Marantz (2005) and Zubizarreta and Oh (2007), i.a., for similar remarks). See footnote 10.
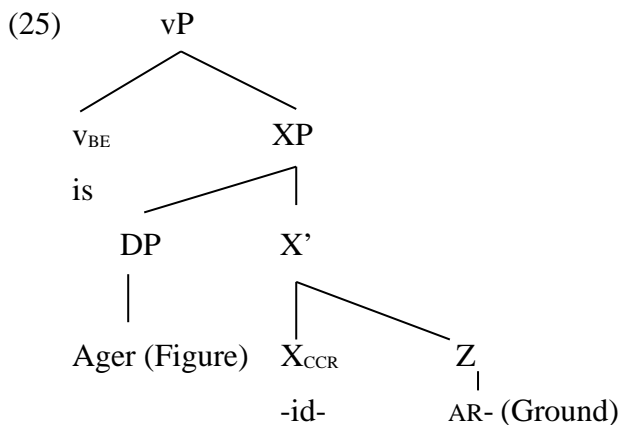
The example in (22) is analyzed in (23) and can be paraphrased as follows: 'The ground is centrally located in the property of dryness'. In (23) the root *AR-* 'dry' is incorporated into a null relational head X en route to the *v*(erbal) head expressed by the stative suffix *-e-*. The X head in (23) expresses what Hale and Keyser (1993, 2002) call a "Central Coincidence Relation" (CCR), which involves a coincidence between the center of a Figure (the DP *ager* 'the ground') and the center of a Ground (the root *AR-*, which encodes the property of dryness). Following Hale and Keyser (2002), a prepositional-like CCR can be claimed to be built upon a relational projection that associates a Figure (specifier of CCR) with a Ground (complement of CCR). The root *AR-* expresses an abstract Ground which is related to the Figure (*ager* 'the ground') via a CCR. As noted above, the complement of *v*, i.e., the XP in (23), can also be understood as a Predicative Phrase (PredP) or Small Clause (SC): initially *ager* 'the ground' is the inner subject/specifier of a non-eventive predication and then moves up to specifier of TenseP to check nominative case. The syntactic structure in (23) is not associated to any external argument whereby it is unaccusative (cfr. Hale and Keyser (2002), Mateu (2002), and Harley (2011), i.a., for some l-syntactic implementations of Perlmutter's (1978) original hypothesis of unaccusativity).

(23)
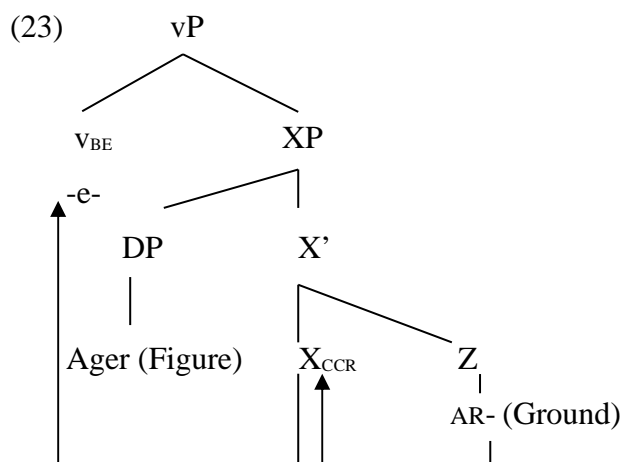
As pointed out above, two basic structures are available for the formation of state predicates in Latin: i.e., the verbal structure formed by the Indo-European suffix *-eh₁- (e.g., see (22)) and the copular structure with an Adjective (e.g., see (24)).

(24)   *Ager*   *aridus*   *erat.*   (Sal. *Iug*. 90)

        ground.NOM.SG   dry.NOM.SG   be.IMPF.IND.3SG

        'The ground was dry.'

From our present perspective, the stative constructions in (22) and (24) can both be provided with the same unaccusative argument structure. Along with some researchers (Mateu (2002), Amritavalli and Jayaseelan (2003), and Kayne (2009)) and unlike others (Baker 2003), I assume that Adjective is not a primitive category but involves an adpositional-like head (*X* in (25)) to which a Ground element (*AR*- 'dry') is incorporated.

(25)   vP
           /   \
        v_BE   XP
        is   / \
             DP   X'
              | / \
      Ager (Figure) X_CCR   Z
                    -id- |
                           AR- (Ground)

Next let us deal with the syntactic argument structure of *–sco* verbs in Latin. As noted above, the affix *–sc-* has been said to add dynamicity to the verb (e.g., see (1b), repeated in (26)), which is atelic when unprefixed.

(26)   *Nihil   enim   lacrima   citius   arescit*   (Rhet. *Her.* 2.50)

      nothing really tear.ABL.SG   quicker dries

      'Nothing dries more quickly than a tear.'

An appropriate analysis of indefinite/atelic verbs of change of state like (26) (cfr. so-called *degree achievements* in the literature: e.g., Dowty (1979), Hay et al. (1999), Fábregas (2003), Pérez Jiménez (2003), i.a.) is the one in (27), where the verb expresses process or change but no final result is achieved.
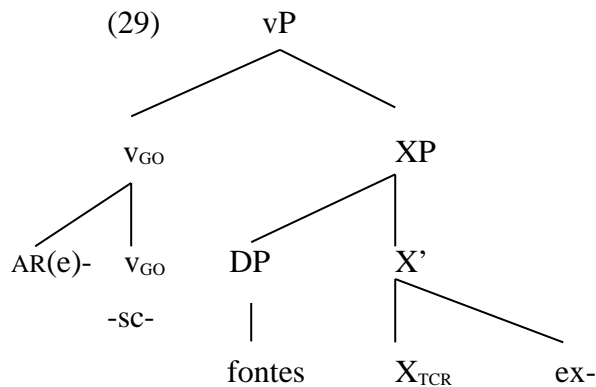
(27)
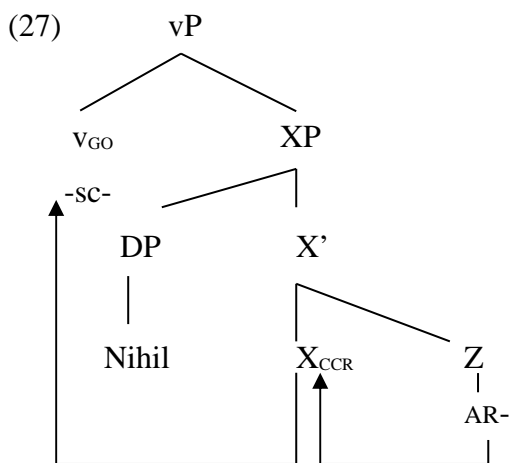
In our present Hale-and-Keyserian system, an adpositional-like projection XP that expresses a Central Coincidence Relation (CCR) seems to be more convenient for capturing the fact that atelic verbs like *arescere* in (26) lack a terminus or final result (cfr. Hale and Keyser's "Terminal Coincidence Relation" (TCR)).[12]

---

[12] My analysis of Latin unprefixed *–sco* verbs in (27) is similar to the one posited by Ramchand (2008) for those English unaccusative verbs that express a process but lack a *Result*. In contrast, my positing two different syntactic event structures (see (23) and (27): cf. v_BE and v_GO, respectively) is not compatible with Acedo-Matellán's (2010: 56/61) attempt to reduce atelic unaccusative structures to stative ones. According to this author, atelic verbs like *The soop cooled for hours* and *Dinosaurs existed* have the very same stative unaccusative argument

In contrast, prefixed verbs like *exarescere* 'to become totally dry' like the one in (1c), repeated in (28), do have a strong resultative character, whereby a final result or, to put in Hale and Keyser's (1993, 2002) terms, a Terminal Coincidence Relation (TCR), can be argued to be involved in the syntactic representation of (29). The Small Clause analysis of resultative predications has already been argued to be valid for telic prefixed verbs in Dutch, German, and Latin (e.g., see Hoekstra's so-called *Small Clause Results* (1988; 2004); cfr. also Mulder (1992); Mateu (2008); Acedo-Matellán (2010); Acedo-Matellán and Mateu (2013), i.a.). Moreover, it is worth noting that the presence of a resultative predication headed by the prefix *ex-* 'out' in (29) has an important consequence: unlike in the syntactic representations of stative and atelic change verbs (see (23) and (27), respectively), in (29) the root AR- 'dry' is not incorporated from an inner complement position (the SC predicate position is originally occupied by the resultative prefix) but is directly conflated to v: cf. the abovementioned distinction between incorporation and conflation at the end of Section 3. Both operations are involved in (29): (i) conflation of the root AR- onto the *v*(erb) and (ii) incorporation of the resultative prefix *ex-* 'out' via head-to-head movement up to *v*.

(28) *fontes (…)*   *celeriter aestibus*   *exarescerent* (Caes. *Civ*. 3.49.4)

spring.NOM.PL   quickly heat.ABL.PL   out-dry.IMPF.SUBJ.3PL

'The springs quickly dried up in the hot weather.'

---

structure. Applying such a unifying proposal to the Latin verbs under the current study would lead us to posit the very same structural meaning to truly stative verbs like (22) and atelic change verbs like (26), which goes against Haverling's (1996f) description of facts (see Section 2 above) and does not capture the relevant differences between these verbs. See also Devine and Stephens (2013: 108-109) for a formal semantic account of unprefixed – *sco* verbs, which is compatible with the unaccusative analysis in (27).

(29)

```
                    vP
                  /    \
              v_GO      XP
             /   \     /   \
        AR(e)-  v_GO  DP    X'
                 |     |    /  \
               -sc-  fontes X_TCR  ex-
```

As pointed out above, the prefix of *–sco* verbs like the one in (28) expresses an aspectual or phasal content.[13] In this sense Acedo-Matellán and Mateu (2013) show that the expression of aspect can be claimed to be sensitive to Talmy's (1991, 2000) well-known *satellite vs. verb-framed* distinction:[14] i.e., so-called "satellite-framed languages" like German, Russian, and

---

[13] Recall, for example, Haverling's (2008: 75) descriptive statement on telic verbs like *inaresco* and *exaresco*: "the different prefixes indicate focus on different parts of the process or change and sometimes they indicate whether a telic action is initio-transformative <e.g., *inaresco*> or fini-transformative <e.g., *exaresco*>".

[14] According to Talmy (1991, 2000), languages can be classified in two big typological groups depending on how they lexicalize the path of a motion event. In satellite-framed languages, this semantic component is lexicalized as a non-verbal element associated with the verb that he calls *satellite*, instantiations of which are Germanic directional particles and Latin and Slavic directional prefixes. In satellite-framed languages the verb root can lexicalize a co-event component expressing the manner in which the motion takes place, alongside motion itself (e.g., *The bottle floated into the cave*). In verb-framed languages, on the other hand, the path, together with the motion component itself, is lexicalized in the verb root and any manner co-event has to be expressed as an adjunct (e.g., Cat. *La botella va entrar a la cova flotant* 'The bottle entered the cave floating'). See Demonte (2015), Levin and Rappaport Hovav (2015), and Acedo-Matellán and Mateu (2015) for three recent overviews of the huge literature on Talmy's lexicalization patterns.

The fact that satellite-framed languages like English have complex path of motion constructions like (21a) *He danced into the room* and complex resultative constructions like (21b) *He hammered the metal flat*, but verb-framed languages like Romance do not, has been explained by their different morphophonological encodings of

Latin can express aspect in the shape of a prepositional-like satellite, whereas so-called "verb-framed languages" like Romance or Japanese can not. For example, Acedo-Matellán and Mateu (2013: 25; exs. (64)-(65)) describe the parallelism between the Latin prefix *de-* in (30a) and the Russian prefix *pere-* in (30b): both encode egressive aspect (i.e., the one that expresses the end of the event; cf. (28)).

(30)   a.   *Dum   musteus   fructus   de-fervescat.*   (Col. 9, 15)

           until   sweet.NOM.SG fruit.NOM.SG   down-boil.PRS.SBJV.3SG

           'Until the sweet fruit has stopped fermenting.'

   b.   Pivo   pere-brodilo.   (Russian)

           beer   PERE-fermented

           'The beer has finished fermenting.'

Path/Result (e.g., see Mateu and Rigau (2002) and Acedo-Matellán (2010), i.a.). In Romance languages, the obligatorily incorporating status of Path/Result saturates the phonological matrix of the verb root, whereby Manner conflation is not allowed. See also (i) for Acedo-Matellán and Real-Puigdollers' (2014: 161) elaboration of this idea based on the availability vs. non-availability of a specific functional Vocabulary Item (VI) for the functional head Path:

(i)   Acedo-Matellán and Real-Puigdollers (2014: 161): verb-framed Romance does not possess a specialised VI for the expression of the trajectory-denoting head Path, and Path can only be interpreted in this language when it is fused together with the *v* and a root is inserted therein. This brings about the consequence that only roots which fit well with the semantic import of v+Path (motion event + trajectory) can be insertable. By contrast, in satellite-framed Germanic, Path receives a VI of its own, and the verb can be lexicalised through any root (involving motion).

An anonymous reviewer wonders if there is independent evidence showing that the "verbal" root in the formation of prefixed –sco verbs (e.g., see (28) and (30a)) is conflated (i.e., directly adjoined to the verbal head) rather than incorporated from an inner Small Clause position, as in unprefixed –sco verbs: cfr. the analyses in (29) and (27), respectively. As noted above, the verb cannot acquire phonological content via incorporation in (29) since the inner complement position is already occupied by the satellite (i.e., by the resultative prefix). It is then worth noting that the evidence for this proposal runs parallel to the one that we reviewed when dealing with incorporation cases like *to enter the room dancing* vs. conflation ones like *to dance into the room*: cfr. (20a) and (21a) above. The following pair in (31a,b) should also receive a similar explanation: the incorporated root ($\sqrt{}$) in (31a) comes from the inner Small Clause predicate position, whereas the conflated root in (31b) is directly adjoined to the verb since the inner SC position is originally occupied by the resultative preverb *e(x)-* 'out'. See also Acedo-Matellán (2010) and Acedo-Matellán and Mateu (2013), for further discussion on the parallelism between Latin and English satellite-framed constructions like (32), where the root $\sqrt{COUGH}$ is also conflated with a null verb and the resultative element (cfr. the English particle *out* with the Latin prefix *e(x)-*) occupies the inner SC predicate position. Finally, see also McIntyre (2004) for a general discussion of conflation structures in event path constructions like *John danced **on*** (cfr. Cat. En *Joan **continuà** ballant* 'John kept on dancing'), which Acedo-Matellán and Mateu (2013) relate to satellite-framed cases of aspectual prefixation like (30a). As predicted by Talmy's (1991, 2000) typology, satellite-framed constructions like *John danced on*, (28), (30), (31b), and (32) are not typically found in verb-framed languages like Romance (see footnote 14).[15]

---

[15] Although the verb *e-rumpere* lit. 'out-break', i.e., 'break out' in (31b), does not exist in Catalan, one could say that Talmy's prediction is not correct in the light of examples like (i). However, it is clear that the Catalan verb

(31) a. *si quis   eorum   vincula   ruperit*   (Cic. *Catil*. 4.4.8)

if who.NOM.SG them.GEN.PL   chain.ACC.PL   break.PERF.SUBJ.3SG

'if any of them has broken the chains.'

([VoiceP someone... [vP vDO [SC the chains √BREAK]]]: 'someone broke the chains,

i.e., made [SC the chains broken]')

b. *Si erumpunt   omnia.*   (Cic. *Catil*. 1,3)

si out-break.PRES.IND.3PL   everything.NOM.NEUT.PL

'If they all burst forth into public view.'

([vP [v √BREAK-VGO] [SC everything out]]: 'everything breaks out', lit. 'every-

thing goes out in a violent manner')

(32)   *[Serpentes]   putamina   ex-tussiunt.*   (Plin. *Nat*. 10, 197)

snake.NOM.PL   shell.ACC.PL   out-cough.3PL

'The snakes cough the egg shells out.'

([VoiceP The snakes... [vP [v √COUGH-VDO] [SC the shells out]]]: 'the snakes cough

the shells out', lit. 'they make [SC the shells out] by coughing')

Furthermore, following Svenonius (2004), one could argue that aspectual prefixes like the

ones in (28) and (30) could be analyzed as expressions of an *Asp* head rather than of an in-

---

irrompre 'to break in' is a lexical vestige from Latin, like *interrompre* 'interrupt'. Unlike in Latin, no compositi-

onal meaning can be attributed to these alleged bimorphemic verbs in Catalan.

(i)   *En Joan irrompé a   l'habitació*   (Catalan)

det. Joan in-broke loc.prep the room

'Joan broke into the room'.

stantiation of an inner resultative predication (i.e., the Small Clause Result predicate), as in (29). However, as we have just seen, there is typological evidence for analyzing these aspectual prefixes as originating as heads of resultative/abstract path predication. Otherwise, it would be a mere coincidence that both types of prefixes (resultative and aspectual ones) are typically lacking in verb-framed languages. Moreover, putting this typological evidence aside, it has been argued that so-called "superlexical"/"external" prefixes (e.g., the ones encoded in Asp; see Svenonius (2004)) are in fact resultative/inner prefixes: see Arsenijevic (2006, 2007a,b) and Zaucer (2009), i.a., for detailed theoretical and empirical justification of this claim, which is compatible with Acedo-Matellán and Mateu's (2013) Talmian account of considering aspectual prefixes as involving an abstract Path.

Finally, as predicted by Talmy (1991, 2000), along the shift from satellite-framed Latin to verb-framed Romance, the typical *Result*(ative) prefixes of Classical Latin can be claimed to have been reanalyzed as markers of the *v*(erbal) head, which led to the more widespread extension of the phenomenon known as "parasynthesis" in Romance languages (cfr. Crocco-Galèas and Iacobini (1993), Haverling (2010), and Batllori (2015), i.a.). This diachronic issue falls beyond the scope of the present paper (cfr. Mateu (2015) for a preliminary formal proposal).

5. Conclusions

In this paper, I have presented a formal syntactic account of Haverling's (1994ff.) descriptive insights regarding the event structure of both stative verbs and *–sco* verbs expressing change in Early and Classical Latin. Among other things, I have paid attention to the fact that Latin

unprefixed –*sco* verbs and Catalan –*ejar* verbs (Oltra-Massuet and Castroviejo 2013) share many properties: (i) they express a property that is interpreted as internally-caused; (ii) they cannot be causativized directly; (iii) they are atelic; (iv) they do not involve a final state; and (v) they are restricted to imperfective tenses. However, I have argued that Oltra-Massuet and Castroviejo's (2013) insightful claim that Catalan –*ejar* verbs express Davidsonian/dynamic states cannot be applied to Latin –*sco* verbs. Rather the latter have been claimed to behave as indefinite change of state verbs (a.k.a. degree achievements).

As far as the syntactic formalization of the argument structure of state and change of state verbs in Early and Classical Latin, I have concentrated on the important formal distinction between incorporation and conflation, which has proved very useful in the previous literature, for example, when dealing with denominal verb formation (see Haugen (2008, 2009)) and formation of resultative constructions (see Mateu (2012)). Following this trend, I have shown that in Early and Classical Latin the formation of stative verbs and unprefixed –*sco* verbs (e.g., cf. *arere* 'be dry' and *arescere* 'grow dry' or 'become drier', respectively) involves incorporation of the root from an inner complement/predicate position, whereas the formation of prefixed –*sco* verbs (e.g., *exarescere* 'become totally dry') involves (i) conflation (i.e., direct adjunction) of the root with a null light verb and (ii) incorporation of the resultative predicate from the inner SC predicate into the upper verb due to its affixal status.

Finally, following Acedo-Matellán and Mateu's (2013) formal account of Talmy's (1991, 2000) typology of motion events, I have briefly dealt with the question of why aspectual resultative prefixation in telic verbs like *inaresco* 'start becoming dry' or *exaresco* 'become totally dry' is a phenomenon that is expected to be more typical of satellite-framed languages rather than of verb-framed ones.

References

Acedo Matellán, Víctor. 2010. *Argument Structure and the Syntax-Morphology Interface. A Case Study in Latin and other Languages*. Phd dissertation. Universitat de Barcelona, Barcelona. Downloadable at http://hdl.handle.net/10803/21788

Acedo Matellán, Víctor 2013. "Merging Roots in Bare Phrase Structure and the Conflation/Incorporation Distinction". *NELS* 42: 1-14.

Acedo Matellán, Víctor and Mateu, Jaume. 2013. "Satellite-framed Latin vs. verb-framed Romance: A syntactic approach". *Probus* 25: 227-265.

Acedo Matellán, Víctor and Mateu, Jaume. 2014. "From syntax to roots: a syntactic approach to root interpretation". In *The Syntax of Roots and the Roots of Syntax*, Artemis Alexiadou, Hagit Borer and Florian Shäfer (eds.), 14-32. Oxford and New York: Oxford University Press.

Acedo Matellán, Víctor and Mateu, Jaume 2015. **"**Parameters and argument structure I: motion predicates and resultatives". In *Contemporary Linguistic Parameters*, Antonio Fábregas, Jaume Mateu and Michael Putnam (eds.). New York: Bloomsbury.

Acedo-Matellán, Víctor and Real-Puigdollers, Cristina. 2014. "Inserting roots into (functional) nodes: categories and cross-linguistic variation". *Linguistic analysis* 39: 125-168.

Amritavalli, Raghavachari and Jayaseelan, Karattuparambil Achutan. 2003. "The genesis of syntactic categories and parametric variation". Paper presented at the *4th Asian GLOW Colloquium*, Seoul, August.

Arsenijević, Boban. 2006. *Inner aspect and telicity. The decompositional and the quantificational nature of eventualities at the syntax-semantics interface*. Phd dissertation. Universiteit Leiden, Leiden. Downloadable at http://www.lotpublications.nl/Documents/142_fulltext.pdf

Arsenijević, Boban. 2007a. "A unified analysis of two classes of Slavic verb prefixes". In *Console XIV Proceedings*, S. Blaho et al. (eds), 21-36. Leiden. Downloadable at http://www.hum2.leidenuniv.nl/pdf/lucl/sole/console14/console14-arsenijevic.pdf

Arsenijević, Boban. 2007b. "Slavic verb prefixes are resultative". *Cahiers Chronos* 17: 197-213.

Baker, Mark. 1988. *Incorporation: A theory of grammatical function changing*. Chicago: University of Chicago Press.

Baker, Mark. 2003. *Lexical categories*. Cambridge: Cambridge University Press.

Batllori, Montserrat. 2015. "La parasíntesis a la luz de los datos históricos de los verbos en a- y –esçer." Ms. Universitat de Girona. Downloadable at http://habilis.udg.edu/~info/Activitat_Docent_Recerca_Gestio/Montserrat_Batllori/Batllori_draft9CIHLE.pdf

Bowers, John. 2000. "Predication". In *The Handbook of Contemporary Syntactic Theory*, Mark Baltin and Chris Collins (eds.), 299-333. Oxford: Blackwell.

Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, MA: MIT Press.

Chomsky, Noam. 2001. "Derivation by phase". In *Ken Hale: A Life in Language* (*Current Studies in Linguistics* 36), Michael Kenstowicz (ed.), 1-52. Cambridge, MA: MIT Press.

Crocco-Galèas, Grazia and Iacobini, Claudio. 1993. "Lo sviluppo del tipo verbale parasintetico in latino: I prefissi *AD-, IN-, EX-*". *Quaderni Patavini di Lingüística* 12: 31-68.

Cuervo, Cristina. 2003. *Datives at large*, Phd dissertation, MIT. Cambridge, MA.

Demonte, Violeta. 1994. "La semántica de los verbos de cambio". In *II Encuentro de Lingüistas y Filólogos de España y México*, Alonso Alegría, Beatriz Garza and José A. Pascual (eds.), 535-563. Salamanca: Junta de Castilla y León y Universidad de Salamanca.

Demonte, Violeta. 2006. "Qué es sintáctico y qué es léxico en la interficie entre sintaxis y léxico-semántica". *Signo y Seña* 15: 17-42.

Demonte, Violeta. 2015. "Parámetros y variación en la interfaz léxico-sintaxis". In *Perspectivas de sintaxis formal*, Ángel Gallego (ed.). Madrid: Akal.

Devine, Andrew M. and Stephens, Laurence D. 2013. *Semantics for Latin. An Introduction*. Oxford and New York: Oxford University Press.

Di Gennaro, Rossana. 2008. "Gli aggettivi latini in –*idus*". *Studi e Saggi Linguistici* XLVI: 118-165.

Dowty, David. 1979. *Word Meaning and Montague Grammar*. Dordrecht: Reidel.

Dikken, Marcel den. 2010. "Directions from the GET-GO. On the syntax of manner of motion verbs in directional constructions". *Catalan Journal of Linguistics* 9: 23-53.

Embick, David. 2004. "On the structure of resultative participles in English". *Linguistic Inquiry* 35: 355-392.

Fábregas, Antonio. 2003. "Los verbos de realización gradual: estructura léxica". *Revista de la Sociedad Española de Lingüística* 32 (2): 475-506.

Hale, Kenneth L. and Keyser, Samuel Jay. 1993. "On argument structure and the lexical expression of syntactic relations". In *The view from building 20: Essays in linguistics in honor of Sylvain Bromberger*, Kenneth L. Hale and Samuel Jay Keyser (eds.), 53-109. Cambridge, MA: MIT Press.

Hale, Kenneth L. and Keyser, Samuel Jay. 2002. *Prolegomenon to a theory of argument structure*, Cambridge. MA: MIT Press.

Harley, Heidi. 2005. "How do verbs get their names? Denominal verbs, manner incorporation, and the ontology of verb roots in English". In *The syntax of aspect. Deriving thematic and aspectual interpretation*, Nomi Erteschik-Shir and Tova Rapoport (eds.), 42-64. Oxford and New York: Oxford University Press.

Harley, Heidi. 2011. "A Minimalist Approach to Argument Structure". In *The Handbook of Linguistic Minimalism*, Cedric Boeckx (ed.), 427-448. Oxford and New York: Oxford University Press.

Harley, Heidi. 2013. "External arguments and the Mirror Principle: On the distinctness of Voice and v". *Lingua* 125: 34-57.

Haugen, Jason D. 2008. *Morphology at the Interfaces*. Amsterdam and Philadelphia: John Benjamins.

Haugen, Jason D. 2009. "Hyponymous objects and Late Insertion". *Lingua* 119: 242-262.

Haverling, Gerd. 1994. "On the *sco*-suffix, on prefixes and on the development of the Latin verbal system". In *Linguistic Studies on Latin. Selected Papers from the 6th International Colloquium on Latin Linguistics (Budapest, 23-27 March 1991)*, József Herman (ed.), 41-53. Amsterdam and Philadelphia: John Benjamins.

Haverling, Gerd. 1996. "On sco-verbs, on prefixes and on semantic functions". In *Aspects of Latin. Papers from the 7th International Colloquium on Latin Linguistics*, Hannah Rosén (ed.), 169-180. Amsterdam and Philadelphia: John Benjamins.

Haverling, Gerd. 2000. *On Sco-verbs, Prefixes and Semantic Functions: A study in the development of prefixed and unprefixed verbs from Early to Late Latin* (*Studia Graeca et Latina Gothoburgensia 64*). Göteborg: Acta Universitatis Gothoburgensis.

Haverling, Gerd. 2003. "On prefixes and actionality in Classical and Late Latin". *Acta Linguistica Hungarica* 50(1-2): 113-135.

Haverling, Gerd. 2008. "On the development of actionality, tense, and viewpoint from Early to Late Latin". In *Interdependence of Diachronic and Synchronic Analyses*, Folke Josephson and Ingmar Söhrman (eds.), 73-104. Amsterdam and Philadelphia: John Benjamins.

Haverling, Gerd. 2010. "Actionality, Tense, and Viewpoint". In *Perspectives on Historical Latin Syntax* (chap. 4, vol. II), Philip Baldi and Pierluigi Cuzzolin (eds.), 277-524. Berlin: Mouton de Gruyter.

Hay, Jennifer, Kennedy, Christian and Levin, Beth. 1999. "Scalar Structure Underlies Telicity in 'Degree Achievements'." In *Proceedings of SALT IX*, T. Mathews and D. Strolovitch (eds.), 127-144. Ithaca: CLC Publications.

Hoekstra, Teun. 1988. "Small clause results". *Lingua* 74: 101-139.

Hoekstra, Teun. 2004. "Small clauses everywhere". In *Arguments and Structure*, Rint Sybesma *et al.* (eds.), 319-390. Berlin and New York: Mouton de Gruyter.

Kayne, Richard. 2009. "Antisymmetry and the lexicon". *Linguistic Variation Yearbook* 8: 1-31.

Kratzer, Angelika. 1996. "Severing the external argument from its verb". In *Phrase structure and the lexicon*, Johan Rooryck and Laurie Zaring (eds.), 109-137. Dordrecht: Kluwer.

Lehmann, Christian. 1995. "Latin predicate classes from an onomasiological point of view". In *DE VSV: Études de syntax latine offertes en hommages à Marius Lavency. Publications linguistiques de Louvain*, Dominique Longrée (ed.), 163-173. Louvain-La Neuve: Peeters.

Levin, Beth and Rappaport Hovav, Malka. 2015. "Lexicalization patterns". Ms. Stanford University and The Hebrew University of Jerusalem. Downloadable at http://web.stanford.edu/~bclevin/lexpat15.pdf

Maienborn, Claudia. 2007. "On Davidsonian and Kimian States". In *Existence: Semantics and Syntax*, Ileana Comorovski and Klaus von Heusinger (eds.), 107-130. Dordrecht: Springer.

Marantz, Alec. 2005. "Objects Out of the Lexicon! Argument Structure in the Syntax". Ms. MIT. Downloadable at http://web.mit.edu/marantz/Public/UConn/UConnHOApr05.pdf

Marantz, Alec. 2013. "Verbal argument structure: Events and participants". *Lingua* 130: 152-168.

Mateu, Jaume. 2002. *Argument structure. Relational construal at the syntax-semantics interface*. Phd thesis. Universitat Autònoma de Barcelona, Bellaterra. Downloadable at http://hdl.handle.net/10803/4828

Mateu, Jaume. 2008. "On the lexical syntax of directionality/resultativity: the case of Germanic preverbs". In *Syntax and Semantics of Spatial P*, Anna Asbury, Jakub Dotlačil, Berit Gehrke and Rick Nouwen (eds.), 221-250. Amsterdam and Philadelphia: John Benjamins.

Mateu, Jaume. 2012. "Conflation and incorporation processes in resultative constructions". In *Telicity, Change, and State. A Cross-Categorial View of Event Structure*, Violeta Demonte and Louise McNally (eds.), 252-278. Oxford and New York: Oxford University Press.

Mateu, Jaume. 2014. "Argument structure". In *The Routledge Handbook of Syntax*, Andrew Carnie, Dan Siddiqi and Yosuke Sato (eds.), 24-41. New York: Routledge.

Mateu, Jaume. 2015. "The fate of *–sco* verbs from satellite-framed Latin to verb-framed Romance". Paper presented at the workshop on *Diachrony of Satellite and Verb-Framed Languages*, Ulster University, Belfast, Oct. 16.

Mateu, Jaume and Rigau, Gemma. 2002. "A minimalist account of conflation processes: Parametric variation at the lexicon-syntax interface". In *Theoretical approaches to universals*, Artemis Alexiadou (ed.), 211-236. Amsterdam and Philadelphia: John Benjamins.

Mateu, Jaume and Rigau, Gemma. 2010. "Verb-particle constructions in Romance: a lexical-syntactic account". *Probus* 22 (*Special issue of the lexicon-syntax interface*, edited by Violeta Demonte and María Luisa Zubizarreta): 241-269.

McIntyre, Andrew. 2004. "Event paths, conflation, argument structure, and VP shells". *Linguistics* 42: 523-571.

Mulder, René H. 1992. *The Aspectual Nature of Syntactic Complementation*. Doctoral dissertation, Leiden: HIL Dissertation Series.

Oltra-Massuet, Isabel and Castroviejo, Elena. 2013. "Approaching Results in Catalan and Spanish Deadjectival Verbs". *Catalan Journal of Linguistics* 12: 131-154.

Oltra-Massuet, Isabel and Castroviejo, Elena. 2014. "A syntactic approach to the morpho-semantic variation of –*ear*". *Lingua* 151: 120-141.

Pérez Jiménez, Isabel. 2003. "Algunas consideraciones sobre los verbos inacusativos atélicos en español». *Cuadernos de Lingüística del IUOG* 10: 65-83.

Perlmutter, David. M. 1978. "Impersonal passives and the Unaccusative Hypothesis". *Berkeley Linguistics Society (BLS)* 4: 157-189. Downloadable at http://journals.linguisticsociety.org/proceedings/index.php/BLS/article/view/2198/1968

Pylkkänen, Liina. 2008. *Introducing arguments*. Cambridge, MA: MIT Press.

Ramchand, Gillian C. 2008. *Verb meaning and the lexicon. A first phase syntax*. Cambridge: Cambridge University Press.

Stolova, Natalya. 2015. *Cognitive Linguistics and Lexical Change: Motion Verbs from Latin to Romance*. Amsterdam and Philadelphia: John Benjamins.

Stowell, Timothy. 1981. *Origins of phrase structure*, Cambridge, MA: MIT dissertation.

Svenonius, Peter. 2004. "Slavic prefixes inside and outside VP". *Nordlyd* 32: 205-253.

Talmy, Leonard. 1991. "Path to realization: a typology of event conflation". *Berkeley Linguistics Society* (BLS) 17: 480-519.

Talmy, Leonard. 2000. *Toward a cognitive semantics. Typology and process in concept structuring*. Cambridge, MA: MIT Press.

Volpe, Mark. 2004. "Affected object unergatives". *Snippets* 8: 12-13.

Zaucer, Rok. 2009. *A VP-internal/Resultative Analysis of 4 "VP-External" Uses of Slavic Verbal Prefixes*. Phd dissertation. University of Ottawa, Ottawa. Downloadable at http://ling.auf.net/lingbuzz/000828

Zubizarreta, María Luisa and Oh, Eunjeong. 2007. *On the syntactic composition of manner and motion*. Cambridge, MA: MIT Press.