

## PAST PARTICIPLE AGREEMENT IN MAJORCAN CATALAN: THE RELEVANCE OF INNER ASPECT\*

Sebastià Salvà

*Centre de Lingüística Teòrica (CLT)*  
*Universitat Autònoma de Barcelona (UAB)*

**ABSTRACT.** This paper aims to explain, from a theoretical point of view, the behaviour of past participle agreement with the object *in situ* (PPA<sub>OIS</sub>) in Majorcan Catalan. It is possible in perfect telic dynamic events, but not in Kimian and Davidsonian states, nor in some atelic dynamic constructions (like those ones with NP objects bounded by a D or Q), although it is perfectly grammatical with bare plurals and with bare mass nouns. In order for PPA<sub>OIS</sub> to be possible, it is proposed that a specific functional head (Asp, that is to say: Proc<sub>[uq][uφ]</sub>), related to so-called *inner aspect*, must be present in the event structure. Asp establishes a double *Agree* relation with the object, in order to get its quantisation and [uφ] features valued. The possibility is also explored that the [q] feature of Asp be interpretable. If Asp is not present in the structure, the impossibility of PPA<sub>OIS</sub> follows. Moreover, PPA<sub>OIS</sub> will be only materialised if a *pro* object co-referent with the full NP object moves through a LowTop position —similar to the Agr<sub>O</sub> projection proposed by Kayne (1989).

**Keywords:** past participle agreement; (direct) object *in situ*; inner aspect; (a)telicity; stativity; quantisation; low topic.

**RESUMEN:** Este artículo pretende explicar, desde un punto de vista teórico, el comportamiento de la concordancia del participio pasado con el objeto *in situ* (CPP<sub>OIS</sub>) en el catalán de Mallorca. Es posible en eventos dinámicos télicos perfectos, pero no en situaciones estativas, tanto kimianas como davidsonianas, y tampoco en algunas construcciones dinámicas atélicas (como aquellas cuyo objeto es un SN delimitado por un D o Q), aunque es perfectamente gramatical con plurales y nombres de masa escuetos. Se propone que, para que la CPP<sub>OIS</sub> sea posible, en la estructura eventiva debe estar presente un núcleo funcional específico (Asp, esto es: Proc<sub>[uq][uφ]</sub>), relacionado con el llamado *aspecto interno*. Asp establece una doble relación de *Concordad* con el objeto, con el fin de que se le evalúen sus rasgos de cuantización y [uφ]. Asimismo, se explora la posibilidad de que el rasgo [q] de Asp sea interpretable. Si Asp no se encuentra presente en la estructura, la CPP<sub>OIS</sub> deviene imposible. Además, la CPP<sub>OIS</sub> solamente se materializará si un objeto *pro* coreferente con el SN pleno se desplaza pasando a través de una posición de TópBajo —similar a la proyección Conc<sub>O</sub> propuesta por Kayne (1989)—.

**Palabras clave:** concordancia del participio pasado; objeto (directo) *in situ*; aspecto interno; (a)telicidad; estatividad; cuantización; tópico bajo.

---

\* I would like to thank two anonymous reviewers and the CLT members from the UAB for their useful advice (especially, A. Bartra, O. Borik, M. T. Espinal, A. Gavarró, J. Mateu, C. Picallo, G. Rigau, J. Solà i Pujols and X. Villalba), and also T. Martí, M. Nofre and J. Rosselló (UB), J. Guiscafrè (UIB) and A. Fábregas (U. i Tromsø). This research was supported by grants from the Spanish Ministerio de Economía y Competitividad (FFI2014-56968-C4-1-P) and the Generalitat de Catalunya (2014 SGR 1013, and FI-DGR 2016, 2017).

### 1. Introduction

Majorcan Catalan is one of the Romance varieties most prone to past participle agreement (from now on, PPA) in compound tenses. According to Rosselló (2002: 1932-1933), PPA is possible especially with (feminine) 3rd person accusative clitics (1), partitive *ne/en/n'* included (2), but also with 1st and 2nd person accusative clitics (3), and in cases of *wh*-movement — here, we can add contrastive focus too— (4), and when the internal argument is promoted to grammatical subject (passive, unaccusative and reflexive constructions) (5):

- (1) a. L' he {vista/\*vist}.  
*CL.ACC.3FEM.SG have.I seen.{FEM.SG/MAS.SG}*  
 'I have seen {her/it}'  
 b. Les he {vistes/?vist}.  
*CL.ACC.3FEM.PL have.I seen.{FEM.PL/MAS.SG}*  
 'I have seen them'  
 c. Els he {vists/(?)vist}.  
*CL.ACC.3MAS.PL have.I seen.{MAS.PL/SG}*  
 'I have seen them'
- (2) a. N' has {menjada/?menjat} massa, de sobrassada.  
*CL.PART have.2SG eaten.{FEM.SG/MAS.SG} too much of sobrassada.FEM.SG*  
 'You have eaten too much of it (sobrassada)'  
 b. N' heu {menjades/?menjat} tres perhom, de figues.  
*CL.PART have.2PL eaten.{FEM.PL/MAS.SG} three each-one of figs.FEM.PL*  
 'Each of you have eaten three of them (figs)'  
 c. Que no n' hem {menjats/(?)menjat} a bastament,  
*that not CL.PART have.we eaten.{MAS.PL/SG} enough*  
*de confits?*  
*of aniseed-balls.MAS.PL*  
 'Have'nt we eaten enough of them (aniseed balls)?'
- (3) a. Ja m' ha {pentinada/pentinat}.  
*already CL.1SG has combed.{FEM.SG/MAS.SG}*  
 '{He/she} has already combed my hair' [said by a woman]  
 b. T' han {maquillada/maquillat} la mar de bé.  
*CL.2SG have.them made-up.{FEM.SG/MAS.SG} very well*  
 'They've made you up very well' [said to a woman]
- (4) a. Ses que jo he {empeltades/empeltat} van ben bones,  
*the.FEM.PL that I have.I graft.{FEM.PL/MAS.SG} go.they very good*  
*de figueres.*  
*of fig-trees.FEM.PL*  
 'The ones (fig trees) I have graft are growing very healthy'  
 b. Quantes fotos has {fetes/fet}?  
*how-many.FEM.PL pictures.FEM.PL have.2SG done.{FEM.PL/MAS.SG}*  
 'How many pictures have you taken?'  
 c. Quines cosotes més lletges, que m' ha  
*what.FEM.PL things.PEJOR.FEM.PL more ugly that CL.1SG has*  
*{dites/dit}!*  
*said.{FEM.PL/MAS.SG}*  
 '{He/she} has said so bad things to me!'

- d. NA MARIA, he {*vista/vist*}, i no  
*ART.PERS.FEM Maria, have.I seen.*{*FEM.SG/MAS.SG*} and not  
 en Joan.  
*ART.PERS.MAS Joan*  
 ‘It is Maria who I have seen, not Joan’
- (5) a. Sa pena de mort ha {*estat/estada*}  
*the.FEM.SG penalty.FEM.SG of death has been.*{*MAS.SG/FEM.SG*}  
 {*abolida/\*abolit*}.  
*abolished.*{*FEM.SG/MAS.SG*}  
 ‘The death penalty has been abolished’
- b. He {*arribada/arribat*} tard.  
*have arrived.*{*FEM.SG/MAS.SG*} late  
 ‘I’ve arrived late’ [*said by a woman*]
- c. Ta mare encara no s’ ha  
*your.FEM.SG mother.FEM.SG yet not CL.REFL has*  
 {*arreglada/arreglat*}.  
*got-ready.*{*FEM.SG/MAS.SG*}  
 ‘Your mother has not got ready yet’

Furthermore, in Majorcan Catalan, there is another case that admits PPA optionally (at least for some speakers; not the youngest ones): when the object is left *in situ* (in its canonical post-verbal position):<sup>1</sup>

- (6) a. No havia {*presa/pres*} cap rabiada tan grossa mai.  
*not had taken.*{*FEM.SG/MAS.SG*} any rage.FEM.SG so big never  
 ‘{I/he/she} had never been so enraged’
- b. Jo no t’ he {*tocada/tocat*} sa mel.  
*I not CL.2SG have.I touched.*{*FEM.SG/MAS.SG*} the honey.FEM.SG  
 ‘I have not touched your honey’
- c. Aquella fada els havia {*seguits/seguit*}  
*that fairy CL.DAT.3PL had followed.*{*MAS.PL/SG*}  
 es passos.  
*the footsteps.MAS.PL*  
 ‘That fairy had followed their footsteps’

<sup>1</sup> The examples in (6) are from the *Rondalles mallorquines* (‘Majorcan fairy tales’) by Antoni M. Alcover. If we do not specify otherwise, all the other examples in this paper have been invented by ourselves.

From Alcover (1903), we know that PPA<sub>OIS</sub> was quite generalised in Majorcan Catalan of the early 20th century. According to Moll (1952), this phenomenon was still alive among Majorcan speakers in the country side, «not influenced by Spanish». However, nowadays this property is getting lost among people under ~ 25 years old (especially from Palma, the capital of Majorca); even for elder people, PPA<sub>OIS</sub> is not mandatory, but optional, as observed by Salvà (2015). Nevertheless, field surveys are needed.

Due to the optionality of PPA<sub>OIS</sub> in current Majorcan Catalan, whenever PPA<sub>OIS</sub> is possible, we also register the other option (with no PPA<sub>OIS</sub>) in the examples, by using curly brackets. The option with PPA is highlighted in italics.

Grammaticality judgements are based on our own linguistic intuition, although we have verified them with Joana Rosselló (UB), a Majorcan native speaker too.

- d. (Ella) s' ha {rentades/rentat} ses mans.  
 (she) CL.REFL has washed.{FEM.PL/MAS.SG} the hands.FEM.PL  
 'She has washed her hands'

PPA with the object *in situ* (PPA<sub>OIS</sub>) is also attested in Occitan, in high literary Italian from the 19th century (7), in central and southern Italian dialects —Altomurano (8), Eastern Abruzzese (9)—, some northern varieties —Quarna Soprà (10) and Bagoli—, Friulian Rhaeto-Romance (11), etc. (v. Loporcaro 1998; Manzini & Savoia 2005; D'Alessandro & Roberts 2008, 2010; Haiman & Benincà 1992):

- (7) Dopo aver asciugate in segreto le lacrime...  
 after have.INF wiped.FEM.PL in secret the tears.FEM.PL  
 'After secretly wiping her tears...'
- (8) Diego {ha/è} {aperta/\*aperto} la porta.  
 Diego {has/is} opened.{FEM.SG/MAS.SG} the door.FEM.SG  
 'Diego has opened the door'
- (9) Giuwanne a {pittite/\*pittate} ddu mure.  
 Giuwanne has painted.{PL/SG} two walls  
 'Giuwanne has painted two walls'
- (10) A i o la'vaa a 'makina.  
 CL CL have.I cleaned.FEM.SG the.FEM.SG car.FEM.SG  
 'I've cleaned the car'
- (11) Kwalkidun al a {kopas/kopá} i servidors.  
 someone he has killed.{MAS.PL/SG} the servants  
 'Someone has killed the servants'

Nevertheless, at least in current Majorcan Catalan, PPA<sub>OIS</sub> is not always possible. In next section, we characterise the phenomenon from a descriptive point of view. In §3, we summarise and review some of the previous accounts for PPA<sub>OIS</sub>, and in §4 and §5 we give our own theoretical explanation for the facts described in §2. Finally, §6 closes this paper with some conclusions and additional remarks.

## 2. Licensing PPA<sub>OIS</sub>. First approach: telicity and resultativity

The grammaticality patterns of PPA<sub>OIS</sub> in current Majorcan Catalan have remained almost ignore until Salvà (2015). In particular, it is ungrammatical in the following sentences:

- (12) a. Na Maria sempre ha {temut/\*temudes} ses bubotes.  
 ART Maria always has feared.{MAS.SG/FEM.PL} the ghosts.FEM.PL  
 'Maria has always been afraid of ghosts'
- b. Es meló ha {pesat/\*pesades} vuit lliures.  
 the melon has weighed.{MAS.SG/FEM.PL} eight pounds.FEM.PL  
 'The melon has weighed eight pounds'
- (13) a. Sa pobresa ha {preocupat/\*preocupada} na Maria des de sempre.  
 the poverty has worried.{MAS.SG/FEM.SG} ART Maria since always  
 'Maria has always worried about poverty'

- b. Es poal de fems ha {fet/\*feta} pudor  
*the bucket of rubbish has done.{MAS.SG/FEM.SG} stink.FEM.SG*  
 durant tot es sopar.  
*during all the dinner*  
 ‘The rubbish bin has been stinking throughout the whole dinner’
- (14) a. He {cercat/\*cercada} sa solució, però no  
*have.I searched.{MAS.SG/FEM.SG} the solution.fem.sg but no*  
 l’ he trobada.  
*CL have.I found.FEM.SG*  
 ‘I’ve been looking for the solution, but I haven’t found it’
- b. En Martí ha {menat/\*menada} una furgoneta tot es camí.  
*ART Martí has driven.{MAS.SG/FEM.SG} a van.FEM.SG all the way*  
 ‘Martí has been driving a van all the way’

In (12) and (13) we have stative situations. In (14) we have activities, which are dynamic events, but atelic.<sup>2</sup>

However, compare (12a) (with the object *in situ* and no PPA) with (15): with clitics and *wh*-movement, PPA is grammatical again.

- (15) a. Na Maria sempre les ha {temudes/?temut}.  
*ART Maria always CL.ACC.3FEM.PL has feared.{FEM.PL/MAS.SG}*  
 ‘Maria has always been afraid of them’
- b. Quines coses ha {temudes/temut} sempre, na Maria?  
*which things.FEM.PL has feared.{FEM.PL/MAS.SG} always ART Maria*  
 ‘Which things has Mary always been afraid of?’

Rosselló (2002: 1934, 1888) had already observed that, in (current) Majorcan Catalan, existential unaccusatives do not (completely) allow PPA with the internal argument (16a),<sup>3</sup> except in clitic dislocations (16b):

<sup>2</sup> A predicate that describes an event as having an inherent endpoint is *telic*. A predicate that describes an event as lacking an inherent endpoint is *atelic*.

In terms of features, it is generally assumed that *states* are [–telic], [+durative] and [–dynamic]; *activities* are [–telic], [+durative] and [+dynamic]; *accomplishments* are [+telic], [+durative] and [+dynamic], and *achievements* are [+telic], [–durative] and [+dynamic] (cf. Vendler 1967).

According to MacDonald (2008), *activities* describe events as possessing a beginning only; *accomplishments* and *achievements* possess both a beginning and an end (the difference is whether or not time elapses between the beginning and the end of the event), and *states* possess neither.

<sup>3</sup> As reported by Salvà (2015), in the Majorcan fairy tales, these existential unaccusative constructions can be found either with the auxiliary verb *esser* ‘be’ and PPA, or with the auxiliary verb *haver* ‘have’, both with PPA (especially in cases of *wh*-movement) or not (with the internal argument *in situ*):

- (i) a. És quedada dins es poble una cançó.  
*is remained.FEM.SG inside the people a song*  
 ‘A song has remained among the people’
- b. Allargà es dos trossos que li havien quedats.  
*passed.3SG the two pieces.MAS.PL that CL.DAT.3G had.3PL remained.MAS.PL*  
 ‘{He/she} passed the two remaining pieces’
- c. Podria esser que hagués quedat qualche cosa.  
*could.3SG be.INF that had.OPT.3SG remained.MAS.SG some thing.FEM.SG*  
 ‘It could be that something has remained’

- (16) a. Ha {faltat/?faltada} una cadira.  
*has lacked. {MAS.SG/FEM.SG} one.FEM.SG chair.FEM.SG*  
 ‘One more chair was missing’  
 b. N’ ha {faltada/?faltat} una.  
*CL.PART has lacked. {FEM.SG/MAS.SG} one.FEM.SG*  
 ‘One of them was missing’

So different explanations are needed for the different kinds of PPA: on the one hand, PPA<sub>OIS</sub>; on the other hand, clitic and *wh*- constructions. Event structure is just relevant in the case of PPA<sub>OIS</sub>.

As we saw with (12b) —repeated here as (17b)—, PPA<sub>OIS</sub> is not possible with stative situations. However, the same verb (*pesar* ‘weigh’) can be used in a telic and perfect dynamic construction, with a resultant state (17a), and then PPA<sub>OIS</sub> is grammatical (but remember that the option with no PPA is also available here, in current Majorcan Catalan).

- (17) a. En Joan ja ha {pesades/pesat} ses patates.  
*ART Joan already has weighed. {FEM.PL/MAS.SG} the potatoes.FEM.PL*  
 ‘Joan has already weighed the potatoes’  
 b. Es meló ha {pesat/\*pesades} vuit lliures. [= (12b)]

Likewise, (14b) —repeated here as (18b)—, which describes an activity, does not allow PPA<sub>OIS</sub>. Nevertheless, the same verb (*menar* ‘drive’) can come with PPA if it is used in a telic and perfect dynamic construction (18a) (where there is an explicit bounded path or maybe a result phrase, so the van ends inside the garage).

- (18) a. En Martí ha {menada/menat} sa furgoneta an es garatge.  
*ART Martí has driven. {FEM.SG/MAS.SG} the van.FEM.SG in the garage*  
 ‘Martí has driven {the/his} van into the garage’  
 b. En Martí ha {menat/\*menada} una furgoneta durant tot es camí. [= (14b)]

The same stands for (19a) and (20a), where PPA<sub>OIS</sub> is possible: even if they do not have an explicit PP path, the NP object itself can be seen as a path or an incremental theme, and the admissibility of using the time span adjunct *en dos segons* (‘in two seconds’) or the aspectual adverb *ja* (‘already’) is a test for telicity and resultativity/culmination. By contrast, (19b) and (20b), in the reading that does not allow PPA<sub>OIS</sub>, are atelic (activities), and their object is not a path, but an undergoer: [Spec, ProcessP], in Ramchand’s (2008) terms.

- (19) a. En Pau ha {empesa/empès} sa palanca en dos segons.  
 ‘Pau has pushed. {FEM.SG/MAS.SG} the lever.FEM.SG in two seconds’  
 b. En Pau ha {empès/#empesa} sa carrossa durant tota sa cercavila.  
 ‘Pau has been pushing the carriage.FEM.SG all the parade long’
- (20) a. Na Maria ja ha {untades/untat} ses persianes.  
 ‘Maria has already spread. {FEM.PL/MAS.SG} the blinds.FEM.PL (with oil)’  
 b. Avui de matí, na Maria ha {untat/#untades} ses persianes fins que sa filla l’ha cridada.  
 ‘This morning, Maria has been spreading the blinds (with oil) until her daughter has called for her’

Actually, observe that there is a reading in (19b) and (20b) where PPA<sub>OIS</sub> is possible (this is why we have used the «<sup>#</sup>» symbol here), that is to say: a *reiterative reading of a telic subevent* (for instance: Pau has given the carriage reiterated pushes, and Maria has spread all the blinds again, again and again).

In (21a), with a perfect or culminated accomplishment, PPA<sub>OIS</sub> is grammatical. By contrast, in (21b), the inherent endpoint of the telic event has not been completed, and so PPA<sub>OIS</sub> is forbidden.<sup>4</sup>

- (21) a. Avui a escola, cada nin havia de cantar una cançó, i en Miquel ha {cantada/cantat} *La Balanguera*, i ben bé que ho ha fet!  
 ‘Today at school, every child had to sing a song, and Miquel has sung. {FEM.SG/MAS.SG} *La Balanguera*, and he has done it very well!’
- b. Avui a escola, cada nin havia de cantar una cançó, i en Miquel ha {cantat/\*cantada} *La Balanguera*, però sa mestra no la hi ha deixada acabar.  
 ‘Today at school, every child had to sing a song, and Miquel has sung *La Balanguera*, but his teacher didn’t let him finish it’

As for (22a-b), here we have a telic dynamic event that has been completed. Therefore, PPA<sub>OIS</sub> is grammatical. However, the event described in (22c) is seen as it were in progress (or *perfective*, in the sense pointed out in fn. 4), and PPA<sub>OIS</sub> is ungrammatical. In (22d), which describes a stative situation, PPA<sub>OIS</sub> is also impossible.

- (22) a. Sa policia ha {barrada/barrat} s’entrada en tres minuts.  
 ‘The police has blocked. {FEM.SG/MAS.SG} the entrance.FEM.SG in three minutes’
- b. Sa policia ha {barrada/barrat} s’entrada durant dues hores.  
 ‘The police has blocked. {FEM.SG/MAS.SG} the entrance for two hours’
- c. Sa policia ha {barrat/\*barrada} lentament s’entrada (durant dues hores).  
 ‘The police has been slowly blocking the entrance (for two hours)’
- d. Una tàpia ha {barrat/\*barrada} s’entrada durant anys.  
 ‘A wall has been blocking the entrance for years’

Notice that, in (22b), the durative adjunct (*durant dues hores*) is an inner state modifier, referring to the *target state* (Parsons 1990; Kratzer 2000): the police has blocked the entrance and has kept it blocked for two hours. Hence, we still have a telic event. The same stands for the following achievement:

- (23) En Bernadet ha {alliberada/alliberat} s’àguila durant una hora.  
 ‘Bernadet has liberated. {FEM.SG/MAS.SG} the eagle.FEM.SG for an hour’

<sup>4</sup> According to Comrie (1976) and Pérez Saldanya (2000, 2002), *perfective aspect* should be differentiated from *perfect aspect*. The former refers to an event that is seen as a complete whole (graphically: [S/////E], where *S* means ‘start’ and *E* stands for ‘end’), so it is possible to use adverbial expressions regarding the moment in which the situation takes place—for instance, concerning (21b), we could say that *En Miquel ha {cantat/\*cantada} «La Balanguera» a les 9* (‘Miquel has sung *La Balanguera* at 9’). By contrast, with perfect aspect, we do not visualise the situation itself, but establish a relation between the named situation and a subsequent state of affairs (graphically: S/////E[//])—for instance, in (21a), we could say that *En Miquel ja ha {cantada/cantat} «La Balanguera»* (‘Miquel has already sung *La Balanguera*’), but not <sup>#</sup>*En Miquel ja ha cantat «La Balanguera» a les 9*. With accomplishments, PPA<sub>OIS</sub> is just possible with perfect aspect (where the inherent endpoint of the telic event has been culminated and is still relevant), but not with perfective aspect.

From these data, we can conclude that, in order to give an explanation for Majorcan PPA<sub>OIS</sub>, event structure must be taken into account. At least, we need a dynamic event, since PPA is ungrammatical with stative situations —(12), (13), (16a), (17b) and (22d)—; but this is not enough: PPA<sub>OIS</sub> is accepted in telic + resultative dynamic events (those ones with a culminated end point: perfect accomplishments, and achievements) —(17a), (18a), (19a), (20a), (21a), (22a-b) and (23)—; instead, it is not possible in some atelic dynamic constructions (activities and non perfect accomplishments, with NP objects bounded by a determiner or quantifier) —(14), (18b), (19b), (20b), (21b) and (22c).

In spite of the previous conclusion («PPA<sub>OIS</sub> is licensed in telic + resultative dynamic constructions»), there are some *prima facie* problematic cases that we need to address: (i) PPA<sub>OIS</sub> is possible with some apparently stative verbs (24); (ii) PPA<sub>OIS</sub> is perfectly possible with some activities (which are considered atelic): those ones with bare plurals (25a) or with bare mass nouns (25b); and (iii) indefinite or degree achievements allow PPA<sub>OIS</sub> too, both in telic and atelic readings (26).

- (24) a. Has {*tenguda/tengut*} una idea extraordinària!  
 ‘You’ve had. {FEM.SG/MAS.SG} a great idea.FEM.SG!’  
 b. Na Teresa ha {*coneguda/conegut*} sa seva nora.  
 ‘Teresa has met. {FEM.SG/MAS.SG} her daughter-in-law.FEM.SG’
- (25) a. En Pere ha {*cantades/cantat*} cançons tot s’ horabaixa.  
*ART Pere has sung. {FEM.PL/MAS.SG} songs.FEM.PL all the afternoon.*  
 ‘Pere has been singing songs all afternoon’  
 b. Hem {*beguda/begut*} cervesa durant tota una hora.  
*have drunk. {FEM.SG/MAS.SG} beer.FEM.SG during all one hour*  
 ‘We’ve been drinking beer for a full hour’
- (26) En Rafel ha {*encalentida/encalentit*} s’aigua {en 5 minuts / durant 5 minuts}.  
 ‘Rafel has heated. {FEM.SG/MAS.SG} the water.FEM.SG {in 5 minutes / for 5 minutes}’

We are dealing with problem (i) in §4, and with problem (ii) in §5. We are leaving problem (iii) for further research, although some ideas are suggested in §5.4. Before this, in next section we are going to summarise and review some of the proposals regarding PPA<sub>OIS</sub> that can be found in the literature.

### 3. Previous accounts for PPA<sub>OIS</sub>

#### 3.1. Traditional grammar

Fabra (1906), Ruaix (1985) and Badia (1994) believe that the presence of PPA<sub>OIS</sub> in some dialects would be a sign of the preservation of the Latin resultative construction (27), while the absence of PPA<sub>OIS</sub> in other dialects would be a sign of the grammaticalisation of the compound tenses. Prescriptively, Fabra (1918: §94) does not recommend PPA<sub>OIS</sub> in standard or formal Catalan.

- (27) Habeo [espistolam scriptam]  
 ‘I have the letter written’

According to Loporcaro (1998), this thesis is incompatible with the ambiguity found in sentences like (28) (in the Italian dialects that allow PPA<sub>OIS</sub>): both a strict resultative

reading and a compound tense reading are available. Moreover, dialects with PPA<sub>OIS</sub> also use the auxiliary verb *have* with unergative intransitive verbs (29), so they clearly possess true compound tenses.

- (28) Le scarpe le ho slacciate.  
 ‘I have my shoes untied’ or ‘I have untied my shoes’
- (29) He dormit.  
 ‘I have slept’

### 3.2. Kayne (1989)

As stated in Kayne (1989), PPA in French is a phenomenon connected to movement: we have PPA when the object (either the internal argument of an unaccusative/passive/reflexive construction, or a clitic or a *wh*-P) moves from its initial position (complement of VP) to its final position ([Spec, IP/CIP/CP]), but on its way it stops in [Spec, Agr<sub>O</sub>P] in order to check its gender and number features. According to Kayne, PPA<sub>OIS</sub> would be, in fact, a case similar to right-dislocations, with a null resumptive clitic moving through the specifier of Agr<sub>O</sub>, and so triggering PPA. Something like (30):

- (30)  $[[pro\ Cl \dots [AgrOP \langle pro \rangle AgrO [VP V \langle pro_i \rangle ]]] NP_i]$
- 

Nevertheless, Belletti (2006) claims that it would be strange that a direct object systematically be right-dislocated in these dialects, and the presence of the silent clitic would need to be independently justified.

However, in §6 we are revisiting Kayne’s proposal, as we believe that it can still be useful to account for other Majorcan data.

### 3.3. Chomsky (1995, 2001)

According to Chomsky (1995), functional categories built exclusively with uninterpretable features are not in accordance with the Minimalist Program. For this reason, Agr<sub>O</sub> is replaced by *v* (whose specifier introduces the external argument or initiator), and Spec-Head agreement is replaced by the operation *Agree*. As stated in Chomsky (2001), *v/v\** (unaccusative *v* or transitive *v\**) is a probe with unvalued  $\phi$  features that looks inside its c-command domain in order to find a proper goal (the NP object) and copy its valued  $\phi$  features.

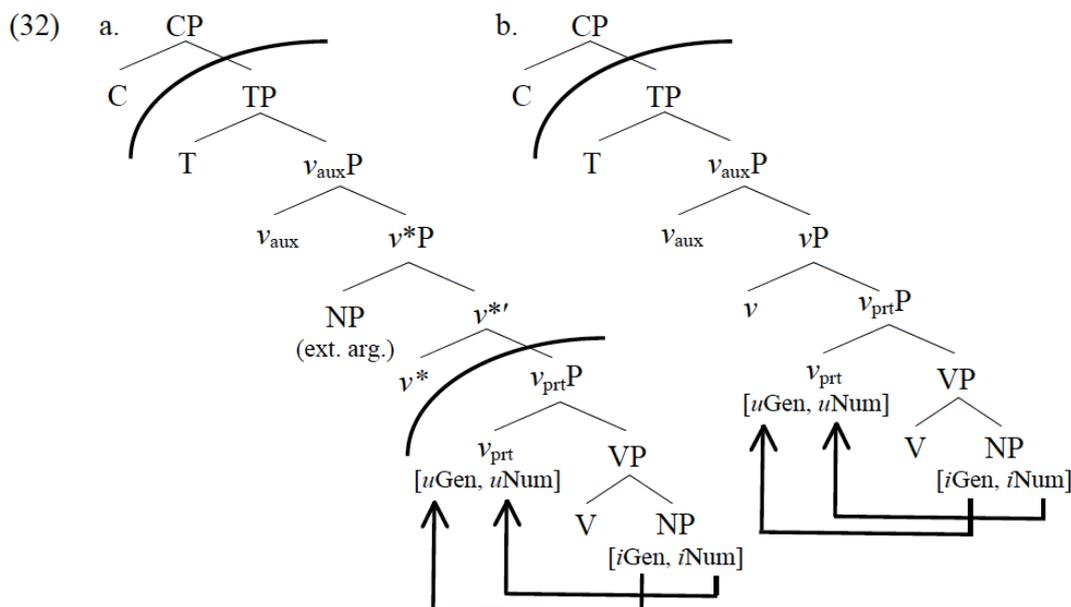
Unlike Kayne (1989), the object movement through [Spec, Agr<sub>O</sub>] is not necessary anymore: *Agree* can directly account for PPA<sub>OIS</sub>. However, we would be neglecting Kayne’s intuition that PPA is due to movement (cliticisation, *wh*-movement and object-to-subject promotion). Moreover, we are now faced with the question of what happens with those varieties (standard Italian, non-Majorcan Catalan, Spanish...) that do not allow PPA<sub>OIS</sub>.

- (31) a. Ho {mangiato/\*mangiata} la mela.      [Standard Italian]  
 b. He {menjat/\*menjada} la poma.      [Standard Catalan]  
 c. He {comido/\*comida} la manzana.      [Spanish]  
 ‘I have eaten the apple’

### 3.4. D’Alessandro & Roberts (2008, 2010)

Considering the position of low measure adverbs (Cinque 1999), D’Alessandro & Roberts (2008, 2010) propose that PPA<sub>OIS</sub> in Eastern Abruzzese would imply that both

the participle and the object remain in a position lower than  $v^*$  (a phase head), in contrast to current standard Italian, which does not allow PPA<sub>OIS</sub>: here, the participle would move to  $v^*$ , leaving the object in the first phase. Following Chomsky's (2001) PIC (*phase impenetrability condition*), they claim that PPA (under the syntactic operation *Agree*) materialises morpho-phonologically iff the participle (the probe) and the NP object (the goal) remain inside the complement of the same minimal phase head (32a). In unaccusative constructions (32b),  $v$  is a defective head, so the internal argument and the participle are always in the complement of the same minimal phase head (C); therefore, in standard Italian we have PPA here.



Nevertheless, as for measure adverbs, Majorcan Catalan behaves just like standard Catalan and Italian, not like Abruzzese:

- (33) a. Le so poche capite. [Abruzzese]  
*it am little understood*  
 b. L' ho capito poco. [Standard Italian]  
 c. Ho he entès poc. [Standard and Majorcan Catalan]  
*it have.I understood little*  
 'I (have) understood it little'

So we cannot say that, in Majorcan Catalan, the participle remains in the first phase, together with the object; conversely, the participle would move to  $v^*$ . Notwithstanding this, Majorcan Catalan allows PPA<sub>OIS</sub>.<sup>5</sup>

Furthermore, D'Alessandro & Roberts' proposal have some other problems:

(i) In Spanish and in standard (non-Majorcan) Catalan, the internal argument of unaccusatives and the participle are in the same domain —remember, since (32b), that here  $v$  is defective—, but PPA does not materialise, as shown in (34):

<sup>5</sup> It is true that we could appeal now to the LowTop position proposed in §6, so the *pro* object (in [Spec, LowTopP]) and the participle (raised to  $v^*$ ) would be inside the same morpho-phonological domain. However, D'Alessandro & Roberts' proposal has still the other problems outlined in the main text.

- (34) a. *María todavía no ha {llegado/\*llegada}. [Spanish]*  
 b. *La Maria encara no ha {arribat/\*arribada}. [Standard Catalan]*  
*(ART) Maria yet not has arrived. {MAS.SG/FEM.SG}*  
 ‘Maria has not arrived yet’

(ii) In cases of *wh*-movement, Majorcan Catalan (unlike standard Catalan, Italian and Spanish) allows PPA, as we have seen in (4). However, the *wh*-P object (finally in [Spec, CP]) and the participle are not in the same morpho-phonological domain—remember that C is a minimal phase head, as you can see in (32).

(iii) In Spanish clitic constructions, if the *pro* co-referential with the clitic is in [Spec, CLP]—between TP and CP, according to Sportiche (1996) and Gavarró *et al.* (2010)—, this *pro* object and the participle (in *v*\*) are in the same morpho-phonological domain. So why does not PPA materialise—as shown in (35)—, unlike what happens in Italian and Catalan?

- (35) *La he {escondido/\*escondida}. [Spanish]*  
*CL.ACC.FEM.SG have.I hidden. {MAS.SG/FEM.SG}*  
 ‘I have hidden {it/her}’

A possible solution could be the following. As suggested by D’Alessandro & Scheer (2015)—who allow the PIC to be parameterised and modulated—, in some languages/dialects, for phase purposes, *v* could be considered non-defective and, so, a phase head (Spanish and standard Catalan), and C could be considered defective (Majorcan Catalan). Even Cl(itic) could be considered a phase head, instead of C (in Spanish).

(iv) Be that as it may, their proposal (and also Kayne’s) would not explain the contrasts in (17)-(22), which show that, as for PPA<sub>OIS</sub> in (current) Majorcan Catalan, event structure must be considered.

#### 4. PPA<sub>OIS</sub> with high pure stative verbs

In §2 we have seen that stative constructions do not allow PPA. This is true both for Kimian or pure states (36) and for Davidsonian or interval states (37) (Maienborn 2005). The latter still denote homogeneous or non-dynamic situations, but they require extension in time (they are assessable not in time points, but intervals).

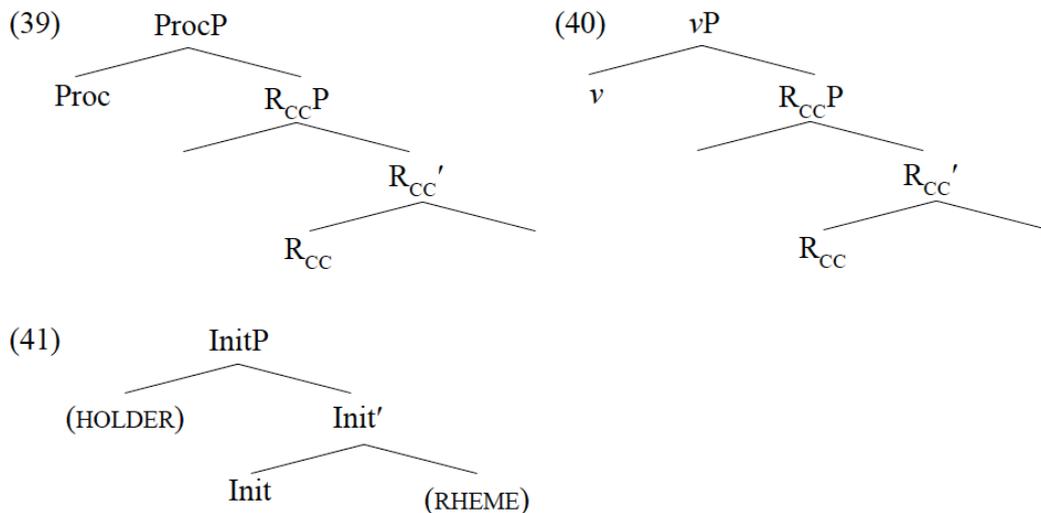
- (36) a. *Na Maria sempre ha {temut/\*temudes} ses bubotes.*  
 ‘Maria has always been afraid of ghosts’  
 b. *En Pere sempre ha {odiat/\*odiades} ses persones hipòcrites.*  
 ‘Pere has always hated hypocrite people’  
 c. *En Jordi ha {estimat/\*estimada} sa (seva) dona tota sa vida.*  
 ‘Jordi has loved his wife throughout his entire lifetime’  
 d. *Es meló ha {pesat/\*pesades} vuit lliures.*  
 ‘The melon has weighed eight pounds’  
 e. *Això t’hauria {costat/\*costades} cent pessetes.*  
 ‘This would have cost one hundred pesetas to you’  
 f. *Es nou espectacle no ha {durat/\*durada} ni una setmana.*  
 ‘The new show has not lasted even one week’

- (37) a. Sa pobresa ha {preocupat/\*preocupada} na Maria des de sempre.  
 ‘Maria has always worried about poverty’  
 b. Es poal de fems ha {fet/\*feta} pudor durant tot es sopar.  
 ‘The rubbish bin has been stinking throughout the whole dinner’  
 c. Una tàpia ha {barrat/\*barrada} s’entrada durant anys.  
 ‘A wall has been blocking the entrance for years’

However, PPA<sub>OIS</sub> is possible with some apparently stative verbs:

- (38) a. Has {*tenguda*/*tengut*} una idea extraordinària!  
 ‘You’ve had. {FEM.SG/MAS.SG} a great idea.FEM.SG!’  
 b. Na Teresa ha {*coneguda*/*conegut*} sa seva nora.  
 ‘Teresa has met. {FEM.SG/MAS.SG} her daughter-in-law.FEM.SG’  
 c. He {*vista*/*vist*} una llebre durant cinc minuts.  
 ‘I’ve seen. {FEM.SG/MAS.SG} a hare.FEM.SG for five minutes’  
 d. Sempre he {*considerada*/*considerat*} na Maria intel·ligent.  
 ‘I’ve always considered. {FEM.SG/MAS.SG} Maria intelligent’  
 e. No (m’)he {*sabuda*/*sabut*} sa lliçó.  
 ‘I’ve not known. {FEM.SG/MAS.SG} the lesson.FEM.SG’  
 f. En Mateu s’ha {*creguda*/*cregut*} sa notícia de sa premsa.  
 ‘Mateu has believed. {FEM.SG/MAS.SG} the press news’

According to Jaque (2014), D-states possess the configuration in (39), with a Proc(ess) head (that introduces the neo-Davidsonian event argument) merged with a central coincidence relation phrase (R<sub>CC</sub>P) (*cf.* Fábregas & Marín 2012). By comparison, K-states do not have Proc, and Jaque distinguishes two kinds of them: (i) *low* (or *level-1*) pure states —with the configuration in (40): a R<sub>CC</sub>P merged with a simple categoriser *v*— and (ii) *high* (or *level-2*) pure states —with the configuration in (41): just an Init(iation)P.<sup>6</sup>



<sup>6</sup> In fact, (41) is the only structure proposed by Ramchand (2008) to account for states. Usually, low pure stative verbs —which, according to Jaque (2014), lexicalise a R<sub>CC</sub>— do not give rise to deverbal nouns: *mesura* ‘measure’, *cost* ‘cost’, *valor* ‘value’, *pes* ‘weigh’, *estima* ‘love’, *odi* ‘hate’, *temor* ‘fear’, *sobra* ‘excess’, *falta* ‘lack’, etc. By contrast, high pure stative verbs lexicalise a specifically verbal head (Init), so they can give rise to deverbal nouns (*tinença*, *possessió* ‘possession’, *posseïdor* ‘possessor’, *coneixement* ‘knowledge’, *creença* ‘belief’, etc.).

(i) Low (or level-1) pure stative verbs include: measure verbs (*mesurar* ‘measure’, *costar*, *valer* ‘cost’, *pesar* ‘weigh’, *durar* ‘last’), emotional psychological verbs with an experiencer subject (*estimar* ‘love’, *odiar* ‘hate’, *témer* ‘fear’, *sospitar* ‘suspect’, *envejar* ‘envy’) and existential unaccusative verbs (*existir* ‘exist’, *abundar* ‘abound’, *sobrar* ‘exceed’, *faltar*, *mancar* ‘lack’, *escassejar* ‘be scarce’, *romandre* ‘be left’).

(ii) High (or level-2) pure stative verbs include: possession verbs (*tenir* ‘have’, *posseir* ‘possess’) and cognitive psychological verbs with an experiencer subject (*saber*, *conèixer* ‘know’, *creure* ‘believe’, *entendre* ‘understand’, *considerar* ‘consider’); we can add —following Kiparsky (1998)— perception verbs (*veure* ‘see’, *sentir* ‘hear’).

PPA is ungrammatical with D-states (37) and with low (or level-1) K-states (36). However, PPA is possible with high (or level-2) K-stative verbs (38). This is because if they are used in past simple or in a perfect compound tense, they behave as telic dynamic events and imply a change of state.

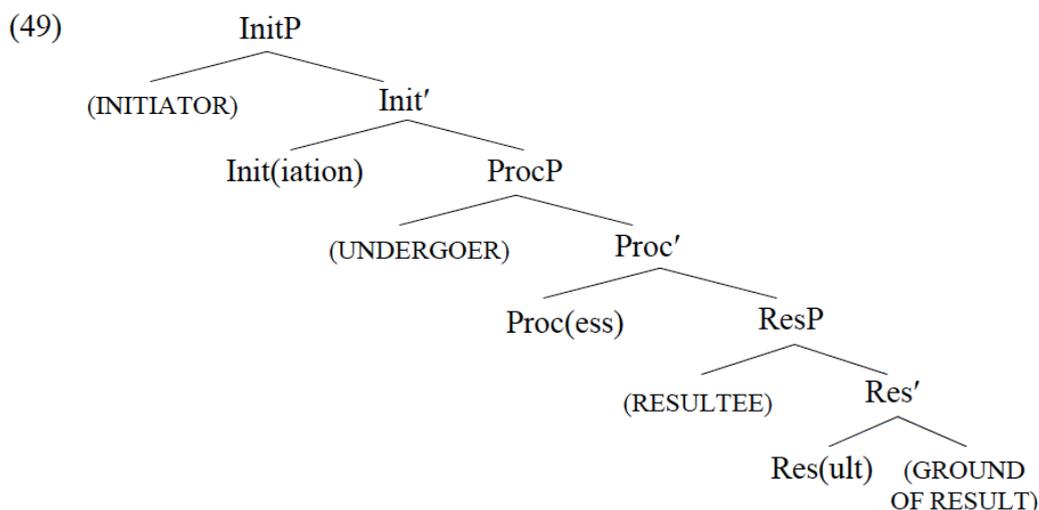
K-states are not directly perceptible (they can only be captured through high level cognitive operations) and they cannot be located in space, but just in time. For this reason, K-states cannot be the complement of a verb of perception (42) and they do not admit place modifiers (but just time modifiers) (43). By contrast, both events and D-states can be the complement of a verb of perception (44) and they admit locative adjuncts (45). Neither K- nor D-states can be anaphorically recovered by a verb like *succeir* ‘happen’ (46). However, high (or level-2) pure stative verbs, in past simple or in a perfect compound tense, behave like dynamic events (47), and their telicity can be tested using a time span adjunct (48), which expresses the time elapsed before the achievement take place:

- (42) \* *Vaig veure en Joan pesar 80 kg.*  
 \*‘I saw John weigh 80 kg’
- (43) a. *En Pere sap anglès (\*a s’habitació)*  
 ‘Pere knows English (\*in his bedroom)’  
 b. <sup>OK</sup>*En Joan ha pesat 80 kg tot l’any.*  
 ‘Joan has weighed 80 kg throughout the year.’
- (44) a. *Vaig veure en Joan engreixar.*  
 ‘I saw John get(ting) fat’  
 b. *Vaig veure es sol brillar.*  
 ‘I saw the sun shining’
- (45) a. *En Pere estudia anglès a s’habitació.*  
 ‘Peter {studies / is studying} in his bedroom’  
 b. *Es sol brilla an el cel.*  
 ‘The sun shines in the sky’
- (46) a. *En Joan pesava 80 kg. ??Això succeïa quan...*  
 ‘John weighed 80 kg. ??This happened when...’  
 b. *Es sol brillava an el cel. ??Això succeïa quan...*  
 ‘The sun was shining in the sky. ??This happened when...’
- (47) a. *Vaig veure na Teresa conèixer sa seva nora.*  
 ‘I saw Teresa meet her daughter-in-law’  
 b. *Na Teresa va conèixer sa seva nora a ciutat.*  
 ‘Teresa met her daughter-in-law in the city’

- c. Na Teresa va conèixer sa seva nora. Això va succeir quan...'  
 'Teresa met her daughter-in-law. This happened when...'

- (48) Na Teresa ha coneguda sa seva nora en només dues setmanes.  
 'Teresa has met her daughter-in-law in just two weeks'

According to Jaque (2014), high (or level-2) pure stative verbs behave as *impoverished events*: in principle, they have just the configuration of an InitP (with no event argument, so the external argument in [Spec, Init] cannot behave as an initiator), but with perfect tenses they can unfold a full event structure (49): also Proc and Res(ult) (in Ramchand's 2008 terms).<sup>7</sup>



Therefore, it is not surprising that the impersonal verb *haver-hi* behaves differently depending on the kind of construction: in an existential (pure stative) construction, PPA is weird; but in a presentational (dynamic) construction (with a meaning similar to *passar*, *succeir* 'happen'), PPA is perfect:

- (50) a. Hi ha {hagut/?haguda} molta gana.  
 'There has been a lot of hunger.FEM.SG'  
 b. Hi ha {haguda/hagut} una guerra.  
 'There has been a war.FEM.SG' = 'A war has happened'

High pure stative verbs are the same kind of verbs that allow accusative case in Finnish, apart from partitive case, as reported by Kiparsky (1998); *e. g.*: *omistaa* 'have, own', *nähdä* 'see', *tuntea* 'know', *uskoa* 'believe', *ymmärtää* 'understand'. By contrast, emotional psychological verbs (*ihailla* 'admire', *kadehtia* 'envy', *pelätä*, 'fear', *rakastaa* 'love') always need partitive case.

- (51) Omist-i-n karhu-nb.  
*own.PST.ISG bear.ACC*  
 'I had a bear'

<sup>7</sup> According to Rappaport Hovav & Levin (1998), this would be a case of *template augmentation* or *event type-shifting*. However, from our point of view, we are dealing with two different constructions.

According to Kiparsky, with this type of stative verbs, different meanings can be obtained depending on the case you use (accusative or partitive). Curiously, we also find a very interesting contrast in Majorcan Catalan, depending on the presence or absence of PPA and depending on the syntactic structure of the direct object (a small clause, or an NP modified by an AdjP/PP). The following examples are translations or adaptations from the ones given by Kiparsky (1998):

- (52) a. En Joan sempre ha {*tengudes/tengut*} [<sub>SC</sub> [ses mans] [grosses]].  
 ‘Joan has always had his hands big.’  
 b. En Joan sempre ha {*tengut/\*tengudes*} [<sub>NP</sub> unes mans de bronze].  
 ‘Joan has always had some bronze hands’
- (53) a. Aquest curs he {*tengudes/tengut*} [<sub>SC</sub> [unes estudiants] [brillants]].  
 b. Aquest curs he {*tengut/\*tengudes*} [<sub>NP</sub> unes estudiants brillants].  
 ‘This year I’ve had some brilliant female students’

In (52a), with PPA (accusative case in Finnish) and a small clause, the possession is necessarily inalienable; but in (52b), without PPA (and with partitive case in Finnish), Joan possesses, in an alienable way, a sculpture made of bronze. In (53a), *all* the female students the professor had are brilliant; but this is not necessarily true for (53b).

This parallelism between the Finnish accusative/partitive case distinction and the Majorcan presence/absence of PPA<sub>OIS</sub> needs further investigation. However, the presence of a small clause in (52a) and (53a) is an evidence in favour of a complex structure—like the one in (49), instead of (41)—in sentences like those ones in (38).

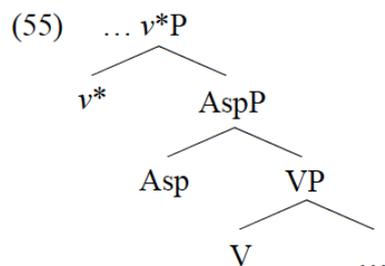
## 5. The relevance of Asp for event quantisation and for PPA<sub>OIS</sub>

In this section, we are trying to give a theoretical explanation for the facts described in §2 and, more specifically, for the possibility of having PPA<sub>OIS</sub> with bare plurals (BPLs) and with bare mass nouns (BMNs) in spite of the (apparent) atelicity of sentences like the ones in (25), repeated here as (54), which describe activities:

- (54) a. En Pere ha {*cantades/cantat*} cançons tot s’horabaixa.  
 ‘Pere has been singing songs all afternoon’  
 b. Hem {*beguda/begut*} cervesa durant tota una hora.  
 ‘We’ve been drinking beer for a full hour’

### 5.1. *Asp* as *Proc* with [uq] and [uφ] features

Let us assume with Travis (2000) and MacDonald (2008) that a specific functional head (*Asp*), related to so-called *inner aspect* (or *Aktionsart*) and to *event quantisation*, can be present in the clausal structure, between *v*\*P and VP:



Asp syntactically instantiates the so-called *object-to-event mapping* through an *Agree* relation, as the NP internal argument can influence the aspectual interpretation of the whole predicate, depending on the NP being *quantised* or *non-quantised* (Verkuyl 1972, 1993; Krifka 1989, 1992; Tenny 1994; *i. a.*):<sup>8</sup>

- (56) a. En Joan va menjar {sa pizza / un tros de pizza} {<sup>#</sup>durant 5 minuts / en 5 minuts}.  
       ‘Joan ate {the pizza / a piece of pizza} {<sup>#</sup>for 5 minutes / in 5 minutes}’  
 b. En Joan va menjar pizza {durant 5 minuts / <sup>#</sup>en 5 minuts}.  
       ‘Joan ate pizza {for 5 minutes / <sup>#</sup>in 5 minutes}’  
 c. En Joan va menjar pizzas durant 5 minuts.  
       ‘Joan ate pizzas for 4 minutes’

Starting from this observation, we could propose that Asp establishes a double *Agree* relation with the object, in order to get two kinds of unvalued features valued—in the sense of Chomsky (1995, 2001)—:

(i) its quantity or quantisation feature: [*uq*] (if Asp is valued as [+q], by an NP bounded by a D or Q, the predicate will be interpreted as telic;<sup>9</sup> if Asp is valued as [-q]—by a bare plural (BPl) or by a bare mass noun (BMN)—, the predicate will be interpreted as atelic);

(ii) and, on the other hand, its [*uφ*] (gender and number) features.

If Asp is not present in the structure—as in K-states, according to Borer (2005) and MacDonald (2008)—, the impossibility of PPA<sub>OIS</sub> follows. However, we should remember that, with high or level-2 K-stative verbs, below Init (the equivalent for *v\**), Proc (namely, Asp) and Res can also be unfolded (or not), so triggering PPA (or not) (v. §4).

I assume with Borer (2005) that neither do sentences like (14a), (14b) or (18b), (19b), (20b), (21b) and (22c) have Asp, since they are atelic (despite having a bounded NP).<sup>10</sup> As a consequence, PPA<sub>OIS</sub> is forbidden in these cases. However, they would involve a «functional shell» (F<sup>S</sup>) or, better yet, a Proc with no [*uq*] nor [*uφ*] features (a *light* or *bare* Proc). As stated in Borer (2005), F<sup>S</sup> is needed in order to introduce the internal argument in atelic sentences, while the neo-Davidsonian event argument would be introduced through an E(vent) projection, over TP. By contrast, in line with Ramchand (2008), we are assuming that it is the Proc head that licenses the neo-Davidsonian event argument.<sup>11</sup>

<sup>8</sup> The relevant property here has been given different names: *delimitation* or *boundedness* (Tenny 1984), *quantisation* or [*±SQA*] feature («specific quantity of A») (Verkuyl 1972, 1993; Krifka 1989, 1992; Kiparsky 1998), *quantity* (Borer 2005) and [*±q*] feature (MacDonald 2008).

In accordance with Borer (2005), an element satisfies the condition of being *quantity* iff is not homogeneous; an element is *homogeneous* (or *non-quantity*) iff is cumulative and divisive—in practice, for this author, BMNs and BPls (with no D nor Q) are homogeneous.

<sup>9</sup> In fact, MacDonald (2008) says that the predicate «can» be interpreted as telic, but not necessarily, taking into account atelic transitive sentences like *John pushed the car for an hour*, where the [+q] feature of the internal argument does not affect the aspectual interpretation of the predicate. According to Borer (2005), in these cases, the internal argument would be introduced as the specifier of a «functional shell» projection (F<sup>S</sup>), but not in [Spec, Asp<sub>OP</sub>]. By contrast, MacDonald assumes that transitive activities do project AspP, but the object-to-event mapping is irrelevant without an extra feature which expresses that the event has an end.

<sup>10</sup> Alternatively, in some cases—like (21b)— we could say that, despite being telic, these sentences possess *perfective* (but not *perfect*) external aspect, in the sense pointed out in fn. 4.

<sup>11</sup> An overview of Borer (2005), Ramchand (2008) and MacDonald’s (2008) approaches to event/argu-

This light or bare Proc would be also present in D-states (Fábregas & Marín 2012; Jaque 2014); consequently, they do not allow PPA<sub>OIS</sub> (v. §4).

Thus, we argue that Asp (the head immediately below  $v^*$ ) is, in fact, Ramchand's (2008) Proc head (the head immediately below Init) with  $[uq]$  and  $[u\phi]$  extra features. Contra Ramchand (2008) (who claims that telicity can emerge either from the presence of a Res(ult)P or, with no Res, simply as a semantic entailment), Majorcan PPA<sub>OIS</sub> shows, like the Finnish accusative/partitive case distinction, that (a)telicity and event quantisation is grammatically encoded. In order for PPA<sub>OIS</sub> be possible, it does not matter if  $[uq]$  is valued as  $[+q]$  or  $[-q]$ , but Asp (that is to say, Proc <sub>$[uq][u\phi]$</sub> ) must be present in the structure.<sup>12</sup>

### 5.2. *Asp or Proc with bare plurals and with bare mass nouns*

Within a neo-constructionist approach, atelic dynamic constructions with BPLs or with BMNs can be built either with Asp (Proc <sub>$[uq][u\phi]$</sub> ) or without Asp (with a bare Proc). In the first case,  $[uq]$  of Asp will be valued as  $[-q]$  by the unbounded NP, and the  $[u\phi]$  features will be valued too, so triggering PPA, as in (54) [= (25)]. In the second case (with a bare Proc), PPA<sub>OIS</sub> is expected not to be possible, as it happens to be the case in sentences with prospective aspect or with an inchoative reading (which focalises the beginning of the event, and where the time span adjunct expresses the time elapsed before the event starts) (57).

- (57) a. En Pere no s'ha fet pregar i en tres segons ens ha {cantat/#cantades} cançons.  
 'Pere hasn't needed much persuasion and in three seconds he has started to sing us songs'
- b. Després de renyar es cambrer, es comensals en vint minuts han {menjat/#menjada} pizza.  
 'After reprimanding the waiter, in twenty minutes the diners have started to eat pizza'

### 5.3. *A step further: Asp as the locus of telicity*

Now we would like to explore the possibility (sketched out in §2) that *telicity/resultativity* is, really, even with BPLs and with BMNs, the key to explain PPA<sub>OIS</sub> in (current) Majorcan Catalan. This would imply that: (i) when we find PPA<sub>OIS</sub> with BPLs or with BMNs, we are dealing, in principle, with telic events; (ii) the  $[q]$  feature of Asp is interpretable in nature ( $[iq]$ , instead of  $[uq]$ ); (iii) these NP objects are, in fact,  $[+q]$  or, at least, they can be coercively interpreted as  $[+q]$ ; and (iv) the final atelic reading is obtained by other ways.

Unlike MacDonald (2008), Borer (2005) argues that Asp ( $_{\text{Asp} \langle e \rangle Q}$  in her terminology) is the *locus of telicity*. It is an open variable that can only be assigned a *quantised* (or *quantity*) range, by a bounded NP (with a D or Q); it cannot get a  $[-q]$  value. So, if we want an atelic transitive construction, we need a «functional shell» ( $F^S$ ) to introduce

---

ment structure can be found in Salvà (2015).

<sup>12</sup> In this picture, at the core of the eventuality/situation we can find three kind of heads:

(i) A little  $v$  as a simple categoriser/verbaliser, which is adjoined to a R<sub>CCP</sub> in order to verbalise low (or level-1) pure or K-states, as represented in (40) (Jaque 2014).

(ii) Proc(ess): a special  $v$ , which introduces the neo-Davidsonian event argument, as in (39), although it could have other kind of complements —not only a R<sub>CCP</sub>, as in D-states, but also a R<sub>TCP</sub>, a DP or a DegP, in dynamic events, as claimed by Fábregas & Marín (2012).

(iii) Asp: Proc with  $[uq]$  and  $[u\phi]$  extra features.

the internal argument (either bounded or unbounded).

Nevertheless, could a BPl assign a [+q] value to  $_{\text{Asp}}\langle e \rangle_Q$ ? According to MacDonald (2008), BPls are, in fact, [+q], although they force a *reiterative reading*. In (58a), we have a *series of identical (telic) events* (SIE) forced by the durative adjunct; and, in (58b), we have a *series of similar (telic) events* (SSE) forced by the BPl:

- (58) a. En Pere ha {cantada/cantat} una cançó en 15 segons durant 2 minuts.  
 ‘Pere has sung. {FEM.SG/MAS.SG} a song in 15 seconds for 2 minutes’  
 b. En Pere ha {cantades/cantat} cançons en 15 segons durant 2 minuts.  
 ‘Pere has sung. {FEM.PL/MAS.SG} songs in 15 seconds for 2 minutes’

However, we could maintain that BPls are, in principle, [-q], and claim that, if we merge them with Asp ( $\text{Proc}_{[iq]}$ ), we are coercing them into [+q]. Actually, (59) would be evidence of this: in (59a), with Asp and  $\text{PPA}_{\text{OIS}}$ , the cherries cannot be conceived as a sum of pairs anymore (unlike the version with a bare Proc and without PPA), but only as a sum of individual units. And in (59b), Asp with a *pluralia tantum* and  $\text{PPA}_{\text{OIS}}$  is conceptually infelicitous (the usual sentence is with a bare Proc and without  $\text{PPA}_{\text{OIS}}$ ).<sup>13</sup>

- (59) a. En Tòfol ha {menjades/menjat} cireres.  
 ‘Tòfol has eaten. {FEM.PL/MAS.SG} cherries.FEM.PL’  
 b. En Tòfol ha {menjat/#menjades} farinetes.  
 ‘Tòfol has eaten. {MAS.SG/FEM.PL} gruel.FEM.PL’

As for BMNs, Chierchia (1998) —following Link (1983)— claims that they are *lexicalised plurals*. If this is so, either they are [+q] (as MacDonald propose for BPls) or they are [-q] in principle, but they can be coerced into [+q] when merged with Asp ( $\text{Proc}_{[iq]}$ ), although they could still force an iterative reading of telic subevents, giving, overall, the impression of atelicity, as in (54b). Thus, we could explain cases like (60) —with verbs like *find*, *discover*, which are problematic for Borer (2005) and MacDonald (2008)— and (61) —with a *supercompound tense*, which can only be found in telic events, according to Pérez Saldanya (2002) and Solà i Pujols (2002). In these examples, *aigua* means ‘some quantity of water’, so it is interpreted as [+q].

- (60) Es pagesos han {descoberta/descobert} aigua en mitja hora.  
 ‘The farmers have discovered. {FEM.SG/MAS.SG} water in half an hour’  
 (61) En es concurs de televisió, aquest al·lot ha {hagut<sup>3</sup>/haguda} {beguda/begut}  
 aigua en tres segons.  
 ‘In the TV show, this boy has drunk some water in three seconds’

By contrast, abstract nouns seem to be more difficult to coerce into [+q] (they would be generally [-q]), so they hardly tolerate  $\text{PPA}_{\text{OIS}}$ .<sup>14</sup> However, in (62a), we think that PPA would still be possible in the high-degree interpretation of ‘a lot of intelligence’; in (62b), the coerced meaning would be ‘several pieces of opera’:

- (62) a. N’Albert, amb so seu gest, ha {mostrat/#mostrada} intel·ligència.  
 ‘Albert, with his gesture, has shown (a lot of) intelligence’  
 b. En Joan Pons ha {cantat/#cantada} òpera durant tot es concert.

<sup>13</sup> I would like to thank A. Bartra for this suggestion.

<sup>14</sup> I would like to thank M. T. Espinal and A. Fàbregas for this suggestion.

‘Joan Pons has been singing (several pieces of) opera throughout the concert’

#### 5.4. *PPA<sub>OIS</sub> with degree achievements*

A similar explanation could be given for sentences like (26), repeated here as (63), where PPA<sub>OIS</sub> appears with indefinite or degree achievements, either in a telic reading (63a) or in an atelic reading (63b):

- (63) a. En Rafel ha {*encalentida/encalentit*} s’aigua en cinc minuts.  
 ‘Rafel has heated. {FEM.SG/MAS.SG} the water.FEM.SG in 5 minutes’  
 b. En Rafel ha {*encalentida/encalentit*} s’aigua durant cinc minuts.  
 ‘Rafel has heated. {FEM.SG/MAS.SG} the water.FEM.SG for 5 minutes’

We can propose that, in fact, in the second case, we are still dealing with telic subevents that are being reiterated and that, overall, they give the impression of atelicity; in every repetition, we would go higher and higher in the degree scale expressed by the adjectival root (in the complement of the Asp head) (*cf.* Rothstein 2004, 2008).

### 6. Final remarks

From the two previous sections, we can conclude that, in (current) Majorcan Catalan, the morphophonological insertion of inflectional (gender and number) suffixes in the past participle would be sensitive to the presence of Asp (namely, Proc<sub>[uq, uφ]</sub> or even Proc<sub>[iq, uφ]</sub>), which, previously, has maintained one (or two) *Agree* syntactic relation(s) with the NP object (depending on the [q] feature of Proc being understood as interpretable or uninterpretable). If Asp is not present in the structure, PPA<sub>OIS</sub> is not possible. This is coherent with the so-called *Borer-Chomsky conjecture*.<sup>15</sup>

(i) «The availability of variation [is restricted] to the possibilities which are offered by one single component: the inflectional component» (Borer 1984: 3).

(ii) «Parametric variation is restricted to the lexicon, and insofar as syntactic computation is concerned, to a narrow category of morphological properties, primarily inflectional» (Chomsky 2001: 2).

Notwithstanding the above, in order for PPA<sub>OIS</sub> to be possible in (current) Majorcan Catalan, it seems that *Agree* between the *in situ* object and Asp is not enough. In our opinion, Kayne’s (1989) intuition (summarised in §3.2) is on the right track —that is to say: the object (or a *pro* object co-referent with a full NP right-adjoined to TP) needs to raise to (or through) the specifier of some kind of Agr<sub>O</sub> projection.

Consider (64a): in Majorcan Catalan, when the object *in situ* is a negative polarity item (NPI), PPA is ungrammatical, unless the NPI be modified (64b) [= (6a)]. According to Cinque (1990), NPIs cannot be found in CLLD constructions (65a).<sup>16</sup>

- (64) a. No havia {pres/\*presa} cap rabiada mai.  
 not had taken. {MAS.SG/FEM.SG} any rage.FEM.SG never

<sup>15</sup> I thank J. Solà i Pujols for this suggestion. It would be a contrast between *analyticity* (Asp and the verbal form as independent categories) and *syntheticity* (Asp and the participial verbal form as a lexical unit). This parameter would be the only one that would differentiate languages: which functional heads are free and which ones form morphological units. With the theoretical complication that the free ones sometimes can be null. Acquiring a language would be, ultimately, learning its morphology.

<sup>16</sup> I would like to thank A. Fàbregas for this suggestion.

- {I/he/she} had never been enraged’  
 b. No havia {presa/pres} cap rabiada tan grossa mai.  
 not had taken.{FEM.SG/MAS.SG} any rage.FEM.SG so big never  
 ‘{I/he/she} had never been so enraged’
- (65) a. \*Cap rabiada no l’ he presa mai.  
 any rage not CL.AC.FEM.SG have.I taken.FEM.SG never  
 b. Cap rabiada {així / tan grossa} no l’ he presa mai.  
 any rage {like-this / so big} not CL have.I taken never

In the light of this, we can propose that the *pro* object moves to the specifier of a low topic position (LowTop, instead of Agr<sub>O</sub>) in «the low IP area» —somewhere between v\*P and TP, *alla* Belletti (2004). Semantically, it could be related to *givenness* (old, known or presupposed information) and, more precisely, it would be interpreted as a *background* or *tail* (unlike a typical high topic, in the CP domain, which would be interpreted as a *link*) —v. Vallduví (1992).<sup>17</sup> Thus, Agr<sub>O</sub> (now, LowTop) would not be a functional category built exclusively with uninterpretable features, in accordance with Chomsky’s (1995) MP. The full NP or DP object (co-referent with that *pro*) would be adjoined later (for instance, to TP).

As a consequence, the optionality for PPA<sub>OIS</sub> in (current) Majorcan Catalan would be explained: with PPA, we would have a low topic (66a); without PPA, we would have a canonical *in situ* or non-moved object (66b). Different interpretations would have different structures.<sup>18</sup>

- (66) a. [[TP [LowTopP *pro*<sub>i</sub> LowTop [<sub>v\*P</sub> NP<sub>EA</sub> v\* [<sub>AspP</sub> Asp [<sub>VP</sub> V <*pro*<sub>iIA</sub>>]]]]]] NP<sub>i</sub>]  
 b. [TP [<sub>v\*P</sub> NP<sub>EA</sub> v\* [<sub>AspP</sub> Asp [<sub>VP</sub> V NP<sub>IA</sub>]]]]

Therefore, in order for PPA<sub>OIS</sub> to be morpho-phonologically materialised, it would be necessary that the direct object *Agrees* syntactically twice (66a): first, with Asp; then, with LowTop. If the direct object only *Agrees* with Asp (66b), PPA<sub>OIS</sub> is not going to be spell out.

With clitics —as in (1)-(3)— and with *wh*-movement —as in (4)—, the event structure (that is to say, the presence of Asp and, so, *Agree* with it) does not seem to be relevant —remember (15). In these cases, *Agree* would also happen (at least) twice: first, in LowTop, and then, in Cl or C, respectively. LowTop could be parameterised: it would be missing in Spanish (a language with no PPA with clitics, nor with *wh*-phrases), but pervasive in Majorcan Catalan. In standard Catalan and Italian, only the *pro* objects co-referent with clitics would pass through [Spec, LowTopP], but not *wh*-phrases nor *pro* objects co-referent with TP-adjoined objects.

<sup>17</sup> According to Vallduví (1992), the informative packaging of a sentence is divided into *focus* (or *rheme*) and *ground* (or *presupposition*, *theme*); in turn, the ground is subdivided into (one or several) *links* and/or into (one or several) *tails* (or *backgrounds*, *antitopics*). *Links* indicate *where* the focus should apply in order to update the addressee’s initial epistemic state —metaphorically, they point out in which specific file or card the new information should be noted down. As for *tails*, they indicate *how* the focus has to be adjusted to the initial informative state, that is: in which way the updating should be done —metaphorically, tails point out that the focus is not added to the file designated by the link as a new condition (this would be the «default mode»), but that focus is going to complete or modify a condition already written in the file (in other words: tails point out that the updating should be done in the «non-default mode»).

<sup>18</sup> For other cases of optional PPA —like the ones in (1)-(5)—, see Guasti & Rizzi (1999) and Belletti (2006).

Sebastià Salvà i Puig  
 ORCID ID: 0000-0001-5899-2645  
 Centre de Lingüística Teòrica (CLT)  
 Universitat Autònoma de Barcelona (UAB)  
[sebastia.salva@uab.cat](mailto:sebastia.salva@uab.cat)

## References

- Alcover, A. M. (1903). «Questions de llengua y literatura catalana». *Bolletí del Diccionari de la Llengua Catalana* 1(15).
- Badia, A. M. (1994). *Gramàtica de la llengua catalana: descriptiva, normativa, diatòpica i diastràtica*. Barcelona, Proa.
- Belletti, A. (2004). «Aspects of the Low IP Area», in L. Rizzi (ed.), *The Cartography of Syntactic Structures 2*. Oxford, Oxford University Press, pp. 16-51.
- Belletti, A. (2006). «(Past) Participle Agreement», in M. Everaert, H. van Riemsdijk & R. Goedemans (eds.), *The Blackwell Companion to Syntax 3*. Oxford, Blackwell, pp. 493-521. <https://doi.org/10.1002/9780470996591.ch48>
- Borer, H. (1984). *Parametric Syntax: Case Studies in Semitic and Romance Languages*. Dordrecht, Foris. <https://doi.org/10.1515/9783110808506>
- Borer, H. (2005). *Structuring Sense, vol. 2: The Normal Course of Events*. Oxford (New York), Oxford University Press.
- Chierchia, G. (1998). «Reference to Kinds across Languages». *Natural Language Semantics* 6, pp. 339-405. <https://doi.org/10.1023/A:1008324218506>
- Chomsky, N. (1995). *The Minimalist Program*. Cambridge (Massachusetts), MIT Press.
- Chomsky, N. (2001). «Derivation by Phase», in M. Kenstowicz (ed.), *Ken Hale: a Life in Language*. Cambridge (Massachusetts), MIT Press, pp. 1-52.
- Cinque, G. (1990). *Types of A'-Dependencies*. «Linguistic Inquiry Monographs» 17. Cambridge (MA), MIT Press.
- Cinque, G. (1999). *Adverbs and Functional Heads: A Cross-Linguistic Perspective*, Oxford (New York), Oxford University Press.
- Comrie, B. (1976). *Aspect: An Introduction to the Study of Verbal Aspect and Related Problems*. Cambridge, Cambridge University Press.
- D'Alessandro, R. & I. Roberts (2008). «Movement and Agreement in Italian Past Participles and Defective Phases». *Linguistic Inquiry* 39, pp. 477-491. <https://doi.org/10.1162/ling.2008.39.3.477>
- D'Alessandro, R. & I. Roberts (2010). «Past Participle Agreement in Abruzzese: Split Auxiliary Selection and the Null-Subject Parameter». *Natural Language and Linguistic Theory* 28, pp. 41-72. <https://doi.org/10.1007/s11049-009-9085-1>
- D'Alessandro, R. & T. Scheer (2015). «Modular PIC». *Linguistic Inquiry* 46(44), pp. 593-624. [https://doi.org/10.1162/LING\\_a\\_00195](https://doi.org/10.1162/LING_a_00195)
- Fabra, P. (1906). «Esmena total [a la ponència d'Alcover]» (1906), in *Actes del I Congrés Internacional de la llengua catalana*. Barcelona, Estampa d'En Joaquim Horta.
- Fabra, P. (1918). *Gramàtica catalana*. Barcelona, Institut d'Estudis Catalans, facsimil edition.
- Fábregas, A. & R. Marín (2012). «Differentiating Eventivity from Dynamicity: the *Aktionsart* of Davidsonian State Verbs». *Proceedings of LSRL* 42.

- Gavarró, A., V. Torrens & Ken Wexler (2010). «Object Clitic Omission: Two Language Types». *Language Acquisition* 17(4), pp. 192-219. <https://doi.org/10.1080/10489223.2010.509262>
- Guasti, M. T. & L. Rizzi (1999). «Agreement and Tense as Distinct Syntactic Positions: Evidence from Acquisition», in G. Cinque (ed.), *Functional Structure in DP and IP: The Cartography of Syntactic Structures* 1. Oxford (New York), Oxford University Press, pp. 167-194.
- Haiman, J. & P. Benincà (1992). *The Rhaeto-Romance Languages*. London & New York, Routledge.
- Jaque, M. (2014). *La expresión de la estatividad en español: niveles de representación y grados de dinamicidad*. Madrid, Universidad Autónoma de Madrid, PhD dissertation.
- Kayne, R. (1989). «Facets of Romance Past Participle Agreement», in P. Benincà (ed.), *Dialect Variation on the Theory of Grammar*. Dordrecht, Foris, pp. 85-104.
- Kratzer, A. (2000). «Building statives», in *Berkeley Linguistic Society*, vol. 26, pp. 385-399.
- Kiparsky, P. (1998). «Partitive Case and Aspect», in M. Butt & W. Geuder (eds.), *The Projection of Arguments: Lexical and Compositional Factors*. Stanford (California), CSLI.
- Krifka, M. (1989). «Nominal Reference, Temporal Constitution and Quantification in Event Semantics», in R. Bartsch, J. van Benthem & P. van Emde Boas (eds.), *Semantics and Contextual Expressions*. Dordrecht, Foris, pp. 75-115.
- Krifka, M. (1992). «Thematic Relations as Links between Nominal Reference and Temporal Constitution»; in I. Sag & A. Szabolcsi (eds.), *Lexical Matters*. Stanford (California), Center for the Study of Language and Information, pp. 29-53.
- Link, G. (1983). «The Logical Analysis of Plural and Mass Nouns: A Lattice Theoretic Approach», in R. Bäuerle, C. Schwarze & A. von Stechow (eds.), *Meaning, Use and Interpretation of Language*. Berlin, De Gruyter.
- Loporcaro, M. (1998). *Sintassi comparata dell'accordo participiale romanzo*. Torino, Rosenberg & Sellier.
- MacDonald, J. (2008). *The Syntactic Nature of Inner Aspect*. Amsterdam, John Benjamins. <https://doi.org/10.1075/la.133>
- Maienborn, C. (2005). «On the Limits of the Davidsonian Approach: The Case of Copula Sentences». *Theoretical Linguistics* 31, pp. 275-316. <https://doi.org/10.1515/thli.2005.31.3.275>
- Manzini, M. R. & L. M. Savoia (2005). *I dialetti italiani e romanci: Morfosintassi generativa*. Alexandria, Edizioni dell'Orso.
- Moll, F. de B. (1952 [2006]). *Gramàtica històrica catalana*. València, Universitat de València.
- Parsons, T. (1990). *Events in the Semantics of English. A Study in Subatomic Semantics*. «Current Studies in Linguistics», vol. 21. Cambridge (Massachusetts), MIT Press.
- Pérez Saldanya, M. (2000). «Del “perfet” a l’“indefinit” (i viceversa). El nom dels temps verbals i altres problemes terminològics relacionats amb les categories gramaticals dels temps», in J. Macià & J. Solà (eds.), *La terminologia lingüística en l'ensenyament secundari*, Barcelona, Graó, pp. 91-119.
- Pérez Saldanya, M. (2002). «Les relacions temporals i aspectuals», in J. Solà, M.-R. Lloret, J. Mascaró & M. Pérez Saldanya (eds.), *Gramàtica del català contemporani* 3. Barcelona, Empúries, pp. 2567-2662.
- Ramchand, G. (2008). *Verb Meaning and the Lexicon: A First-Phase Syntax*. Cambridge,

- Cambridge University Press. <https://doi.org/10.1017/cbo9780511486319>
- Rappaport Hovav, M. & B. Levin (1998). «Building Verb Meanings», in M. Butt & W. Geuder (eds.), *The Projection of Arguments: Lexical and Compositional Factors*. Stanford, CSLI Publications, pp. 97-134.
- Rosselló, J. (2002). «El SV (I): El verb i arguments verbals», in J. Solà, M.-R. Lloret, J. Mascaró & M. Pérez Saldanya (eds.), *Gramàtica del català contemporani 2*. Barcelona, Empúries, pp. 1853-1949.
- Rothstein, S. (2004). *Structuring Events: A Study in the Semantics of Lexical Aspect*. Oxford, Blackwell. <https://doi.org/10.1002/9780470759127>
- Rothstein, S. (2008). «Two Puzzles for a Theory of Lexical Aspect: The Case of Semelfactives and Degree Adverbials», in J. Dölling, T. Heyde-Zybatowand & M. Schäfer (eds.), *Event Structures in Linguistic Form and Interpretation*. Berlin, Mouton de Gruyter, pp. 175-198.
- Ruaix, J. (1985). *El català / 2: Morfologia i sintaxi*. Moià, Ruaix.
- Salvà, S. (2015). *Concordança del participi i aspecte intern en el català de Mallorca*. Universitat de Barcelona, Universitat Autònoma de Barcelona, Universitat Rovira i Virgili & Universitat de Girona, interuniversity Master in Cognitive Science and Language (CCiL), final master thesis.
- Solà i Pujols, J. (2002). «Modificadors temporals i aspectuals», in J. Solà, M.-R. Lloret, J. Mascaró & M. Pérez Saldanya (eds.), *Gramàtica del català contemporani 3*. Barcelona, Empúries, pp. 2867-2936.
- Sportiche, D. (1996). «Clitic constructions», in J. Rooryck & L. Zaring (eds.), *Phrase Structure and the Lexicon*. Dordrecht, Kluwer, pp. 213-276. [https://doi.org/10.1007/978-94-015-8617-7\\_9](https://doi.org/10.1007/978-94-015-8617-7_9)
- Tenny, C. (1987). *Grammaticalizing aspect and Affectedness*. MIT, PhD dissertation.
- Tenny, C. (1994). *Aspectual Roles and the Syntax-Semantics Interface*. Dordrecht, Kluwer. <https://doi.org/10.1007/978-94-011-1150-8>
- Travis, L. (2000). «Event Structure in Syntax», in C. Tenny & J. Pustejovsky (eds.), *Events as Grammatical Objects*. Stanford (California), CSLI, pp. 145-185.
- Vallduví, E. (1992). *The informational component*. New York & London, Garland Publishers.
- Vendler, Z. (1967). *Linguistics in Philosophy*. Ithaca (New York), Cornell University Press.
- Verkuyl, H. (1972). *On the Compositional Nature of the Aspect*. Dordrecht, Reidel. <https://doi.org/10.1007/978-94-017-2478-4>
- Verkuyl, H. (1993). *A Theory of Aspectuality: The Interaction between Temporal and Atemporal Structure*. «Cambridge Studies in Linguistics» 64. Cambridge, Cambridge University Pres. <https://doi.org/10.1017/CBO9780511597848>