

LOW APPLICATIVES IN CATALAN: THE CASE OF *VEURE-HI**

Cristina Real Puigdollers

Centre de Lingüística Teòrica - Universitat Autònoma de Barcelona

ABSTRACT. This paper analyzes an argument structure alternation found in Catalan in which a verb of perception appears with a non-referential locative pronominal clitic *hi*. In this alternation, a transitive verb like *veure* ‘to see’ can combine with the pronoun *hi* and form a stative intransitive predicate *veure-hi*, which means ‘to be able to see’, and with a reflexive pronoun *es*, as in *veure-s’hi*, which has a similar meaning plus an inchoative interpretation. This paper analyzes this alternation within the argument structure framework laid out by Wood and Marantz (2017). Specifically, I propose that the locative pronoun *hi* and the reflexive pronoun *es* are the exponents of expletive pronouns associated with identity functions that license different values of a single argument introducer head, *i**. In the former case, *hi* appears in the complement position of *i**, which gets a low applicative head interpretation, and the latter in the specifier position of a *Voice* functional head. With this approach, the paper paves the way for a unified approach to the different values that the locative pronoun *hi* can display in Catalan.

Keywords. Applicatives; argument structure; locative clitic; states; perception verbs.

RESUMEN. Este artículo analiza una alternancia en la estructura argumental en catalán, en la que un verbo de percepción aparece con el clítico pronominal locativo no referencial *hi*. En esta alternancia, un verbo transitivo como *veure* ‘ver’ puede combinarse con el pronombre *hi* y formar un predicado intransitivo estativo *veure-hi*, que significa ‘poder ver’, y con un pronombre reflexivo *es*, como en *veure-s’hi*, que tiene un significado similar pero con una interpretación incoativa. Este artículo analiza esta alternancia dentro del marco de la estructura argumental propuesto por Wood y Marantz (2017). En concreto, propongo que el pronombre locativo (*hi*) y el reflexivo (*es*) son exponentes de pronombres expletivos asociados con funciones de identidad. Estos pronombres permiten la expresión de diferentes valores de un único núcleo introductor de argumentos, *i**. En el primer caso, *hi* aparece en la posición de complemento de *i**, que recibe una interpretación de núcleo aplicativo bajo, y en el segundo caso, *es* aparece en la posición de especificador de un núcleo funcional *Voz*. Con este enfoque, el artículo sienta las bases para una propuesta unificada sobre los distintos valores que puede tomar el pronombre locativo *hi* en catalán.

Palabras clave. Aplicativos; estructura argumental; clítico locativo; estados; verbos de percepción.

* I thank the members of the project *Expletiveness and Expressive Meaning* and the audience of the 34th *Colloquim on Generative Grammar* at Universidad de Educación a Distancia (UNED) for their insightful comments on previous versions of this work. This research has been funded by the project PID2023-150347NB-I00 (AEI) and the 2021 SGR 00787 (AGAUR). Special thanks go to Víctor Acedo-Matellán, Joana Rosselló, Xico Torres, Jeroni Tutusaus and two anonymous reviewers at *Borealis*. All errors are my own.

there is a compulsory non-referential locative clitic *hi* and the verb *veure* cannot appear with a direct object. Crucially, the situation denoted by sentence in (1b) is understood as the assertion of a property of the subject, *Tià*, specifically that *Tià* has the capacity to see. In example (1c), a reflexive clitic appears in addition to the locative clitic *hi*. In this case, the reading is similar to (1b), with the additional understanding that the property has been brought about by some event. The following contrasts illustrate this difference.

- (2) a. [?]El Tià no hi veia quan feia els deures.
the Tià NEG OBL saw when did the homework
Intended meaning: *Tià* was unable to see, while he was doing homework.
- b. El Tià no s' hi veia quan feia els deures.
the Tià NEG REFL'OBL saw when did the homework
'Due to some event, *Tià* was unable to see when he was doing the homework.'
- (3) a. Els nadons hi veuen a partir de la segona setmana.
the babies OBL see at leave of the second week
'Babies can see from the second week of life.
- b. [#]Els nadons s'hi veuen a partir de la segona setmana.
the babies REFL'OBL see at leave of the second week
Intended meaning: Due to a specific previous event, babies have the ability to see from the second week of life.

In (2a), *Tià* is asserted to be incapable of seeing while doing homework. Although the sentence is somewhat semantically awkward, as it does not provide a clear explanation for *Tià*'s inability, one could imagine possible scenarios to account for it (such as a trauma that causes him to be unable to see anything while doing homework). In contrast, in (2b), *Tià*'s inability to see is explicitly understood to be the result of an event, such as a blackout or lack of proper lighting.

Similarly, in (3a), the sentence asserts that newborns develop the capacity to see starting from the second week of life. By contrast, (3b) is semantically awkward because it implies that newborns gain the ability to see due to a specific prior event, which contradicts our world knowledge about the development of vision in newborns. Overall, the *hi*-variant is considered less specific than the *s'hi* variant, and so there is an asymmetry in their distribution. While the *hi* form can sometimes appear in a situation in which the ability has temporal boundaries, the *s'hi* form is only allowed when the state can be linked to a previous event, making it exclusively interpreted as referring to a state with temporal boundaries.

Additionally, these predicates exhibit a strong connection with modality. Both the *hi* and *s'hi* alternants share the interpretation that the subject has the capacity to see. In fact, they typically appear in the imperfective aspect, an aspect that is typically associated with ability modals. The link between these predicates and modality becomes evident in their ability to trigger actuality entailments when combined with perfective aspectual operators. This is a typical entailment triggered by ability operators (Hackl 1998, Bhatt 1999, Mari & Martin 2007, Hacquard 2006, 2009, Giannakidou and Starki 2015, Vatrican 2015). Crucially, for this entailment to arise, a modal verb of ability must be present.⁵

⁵ Note that a predicate like *cantar* 'to sing' in the imperfective aspect (*El Joan cantava* 'John sang habitually') carries different entailments than the predicate modified by the modal *El Joan podia cantar* ('John could sing'). Crucially, while the latter is compatible with an extension such as *but he never did*, the former would be false if John never acted upon his ability to sing. In the case of *veure-s'hi* the

- (4) a. El Joan hi/s'hi veia bé, però no hi/s'hi va
 the Joan OBL/REFL'OBL saw well, but not OBL/REFL'OBL AUX
 veure en aquell moment.
 see in that moment
 'Joan was able to see well, but he didn't see at that moment.'
- b. El Joan hi/s'hi va veure bé,
 the Joan OBL/REFL'OBL AUX saw well,
 #però no hi/s'hi va veure en aquell moment
 but not OBL/REFL'OBL AUX see in that moment
 'John managed to see well, #but he did not see at that moment.'
- (5) a. El Joan podia cantar, però no va cantar
 the Joan could sing but not AUX sing
 en aquell moment.
 in that moment
 'John could sing, but he did not sing at that moment.'
- b. El Joan va poder cantar, #però no va
 the Joan AUX can sing but not AUX
 cantar en aquell moment.
 sing in that moment
 '#John managed to sing, but he didn't sing at that moment.'

The modal interpretation associated to both alternants could explain why these predicates are normally associated with an imperfective aspect, negation, or an adverbial of manner (on the association between generics, modality, and adverbials of manner of the type *This book reads easily*, see Lekakou 2004). In the corpus diachronic study of Francesch (2025) of *hi/s'hi* perception verbs, most examples feature negation, or an adverbial of manner in the imperfective aspect, present, past or future. The examples in (6) obtained from a search in the *CTILC* exemplify this point for Modern Catalan as well. All in all, *hi/s'hi* perception verbs in Catalan appear in sentences with a generic and modal interpretation.⁶

- (6) a. ... i a la llum del nou dia hi veuré millor.
 and at the light of.the new day OBL will-see best
 '... and in the light of the new day, I will see better.' (Espriu, Salvador, *Les roques i el mar, el blau*, 1984)
- b. En realitat, ell tampoc no hi veia clar ...
 in reality he neither not OBL saw clear
 'Actually, he couldn't see clearly either...' (Villalonga, Llorenç, *Mort de dama*, 1931)
- c. La nit era serena però, sense lluna i
 the night was calm but without moon and
 enlluernada per les llànties del Saló, no m'hi veia i amb por
 dazzled for the lights of.the Hall not REFL'OBL see and with fear
 de caure al riu [...]

interpretation in the imperfective is compatible with a reading in which the subject did not see anything, as long as he was able to see. This is taken to be evidence in favor of the fact that *veure-(s)'hi* contains a covert modal.

⁶ Corpus textual informatitzat de la llengua catalana, <https://ctilc.iec.cat/> (retrieved on 14/03/2024).

of falling at.the river

‘The night was calm, but without the moon and dazzled by the lamps of the Hall, I couldn't see, and afraid of falling into the river,..’ (Casp, Xavier, *Proses en carn*, 1952)

In this paper, I present an analysis of the *veure-hi/veure-s'hi* alternation couched within a syntactic approach to argument structure, based mainly on the approach developed by Wood (2015) and Wood and Marantz (2017). Crucially, I base my analysis on the idea that argument structure patterns arise from the general syntactic operation of Merge, which combines different types of syntactic objects. I follow Acedo-Matellán and Real-Puigdollers's (2014, 2019) framework, whereby roots are a pairing of semantic and phonological information which is inserted independently of the narrow syntactic module (which builds structure). In this way, the conceptual content of roots is integrated into the syntactic structure through categorizers, which are understood as functional heads introducing type theoretic variables. Thus, an *n*-categorizer introduces a type theoretic variable for an entity, and a categorizer like *v* introduces a variable of eventuality, which encompasses both states and events. At this time, I will leave out of the discussion other types of categorizers, like adjectives or prepositions, which have been argued not to be universal (see Mateu 2002, Baker 2003, Mitrović & Panagiotidis 2020, a.o.).

Building on these assumptions, I propose that the clitic *hi* in the constructions mentioned above is associated with a low applicative head, thus aligning with Rigau's (1978, 1982) analysis, which interprets the clitic *hi* as a type of dative. Specifically, I propose that the pronoun *hi* is always associated with a pronoun in the complement of a general argument-introducing functional head, which can be interpreted in different ways, depending on the syntactic context (Wood & Marantz 2017). This analysis paves the way for a solution to the puzzle posed by the *veure-(s)'hi* alternation—namely, the question of why the locative clitic *hi*, which is associated with a wide range of meanings, appears in this construction as a non-referential pronoun, that intransitivizes, stativizes, and modalizes an otherwise transitive predicate.

The remainder of this paper is organized as follows. Section 2 examines the behavior of the pronoun *hi* in Catalan and highlights the fact that *hi* is associated with a substantial variety of meanings. Section 3 focuses on the aspectual interpretation of the *veure-(s)'hi* alternants. Section 4 provides an analysis of these constructions, building on the hypothesis that *hi* originates as the complement of an applicative head. Finally, section 5 concludes the paper.

2. The many meanings of *hi* in Catalan

As has been widely discussed in the literature (Rigau 1978, Rigau 1982, Bonet 1991, 1993, 1995, Todolí 2002, Bonet 2002, Martín 2012a, Boeckx & Martín 2013, Cabré & Fábregas 2019, 2020, Cabré 2022, a.o.), Catalan features a pronoun *hi*, which appears in many contexts associated with different interpretations. This pronoun has been classified as a locative pronoun in the Catalan tradition because it is normally used to resume locative PP complements and adjuncts. However, the pronoun *hi* has different interpretations that go beyond location. This pronoun can be used to refer to a goal, a location, a non-verbal secondary predication, or a committative/instrumental adjunct. All in all, *hi* replaces any non-temporal PP introduced by a preposition other than *de*.

- (7) a. El Joan *hi* va arribar, a l'escola. [Goal]
the Joan OBL AUX arrive, at the'school

- ‘Joan arrived at the school’
- b. El Jaume *hi* viu, al Guinardó. [Location]
 the Jaume OBL live at.the Guinardó
 ‘Jaume lives in the Guinardó neighborhood.’
- c. S’*hi* treballa bé, amb aquesta professora. [Commitative]
 REFL’OBL work well, with this professor
 ‘It’s easy to work with this professor.’
- d. S’*hi* escriu bé, amb aquest bolígraf. [Instrumental]
 REFL’OBL write well, with this pen
 ‘One writes well with this pen.’
- e. Pensa-*hi*, en la teva decisió. [Prepositional Object]
 think-OBL, on the your decision
 ‘Think about it, about your decision.’
- g. No era ric, però s’*hi* ha tornat. [Depictive pred]
 NEG was rich but REFL’OBL AUX become
 ‘He wasn’t rich, but he has become so.’

Additionally, in some varieties, the clitic *hi* appears in third-person singular and plural dative accusative combinations. The fact that third-person plural datives in these varieties appear as in (8) has been interpreted by some scholars as evidence that [i] serves as the exponent of a dative case feature (Viaplana 1980, Mascaró 1986, Bonet 1991, 1993, 1995, a.o.).

- (8) a. Els *hi* donarem, els llibres, a la Gemma.
 3PL OBL give.FUT.1PL the books at the Gemma
 ‘We will give the books to Gemma.’
- b. Els *hi* donarem els llibres, als nens.
 3PL OBL give.FUT.1PL the books at.the children
 ‘We will give the books to the children.’

Furthermore, *hi* also appears in combination with first- and second-person accusative pronouns to repair problems deriving from the Person Case Constraint (Bonet 1991, 2002). The example in (9) is ungrammatical because it features a first person accusative weak pronoun in combination with a third person dative pronoun. (9) shows that the constraint does not occur if the dative is a full PP, and not a clitic. Moreover, if the dative clitic is substituted by a pronoun *hi* the sentence becomes grammatical. Crucially, in the example (9) the clitic *hi* is interpreted as a dative, coreferential with a third person singular/plural animate dative, so it is not a case of an inanimate indirect object (Rigau 1984).

- (9) a. *Me li presentaran, a mi,
 ACC.1SG DAT.3SG introduce.FUT.3PL to me
 al president.
 to.the president
- b. Em presentaran al president.
 ACC.1SG introduce.FUT.3PL to.the president
 ‘They will introduce me to the president’
- c. M’ *hi* presentaran.
 ACC.1SG OBL introduce.FUT.3PL
 ‘They will introduce me to them’

While the previous data showed that *hi* can be used as a referential pronoun resuming arguments and adjuncts, an equally important aspect to consider is its occurrence in cases where *hi* appears without referential force, impersonalizing otherwise transitive agentive or experiencer predicates. Examples of such constructions feature verbs like *posar* ‘put’, *dir* ‘say’, and *tocar* ‘touch’, which appear in impersonal constructions when combined with the pronoun *hi* (Solà 1990, 1993, 1994, Rigau 1997, Todolí 2002, references therein). The resulting construction is similar to the existential predicate *haver-hi* ‘lit. have-OBL’ (equivalent to *there is/are* construction, Ramos 1998, 2001) with the difference that *haver-hi* does not appear without the clitic *hi*. The presence of the clitic in constructions with *posar* ‘put’ and *dir* ‘say’ deagentivizes and stativizes these predicates, which thereby become impersonal (Rigau 1997). Their stative nature is evidenced by their preference for the imperfective aspect, (10). Additionally, a locative PP argument can occupy the topic position. In the absence of such an argument, a proximal deictic interpretation—here—is obtained.

- (10) a. L' estudiant *hi* va posar el nom, al full.
the student OBL AUX put the name at.the page
‘The student wrote the name on the sheet.’
b. Al full *hi* posava el nom.
at.the sheet OBL put the name
‘The name is written on the sheet.’
- (11) a. L' estudiant va dir que vindria aviat.
the' student AUX say that come.IMPF.3SG soon
‘The student said that he would come soon.’
b. Aquí *hi* diu/#ha dit que vindrà aviat.
here OBL say/have said that come soon
‘Here it says that he will come soon.’

One of the properties of this construction is that the clitic *hi* is not coreferential with the locative argument, as noted by Solà (1990, 1993, 1994), based on observations from Ferrater (1981; see Todolí 2002). Notably, in Central Catalan the presence of the clitic is mandatory in impersonalized constructions, whereas in coreferential uses of *hi*, the pronoun’s presence depends on the absence of the coreferential locative PP within the clause. A minimal pair is provided in (12) and (12).

- (12) a. (*Hi) va viure a Barcelona.⁷
OBL AUX live at Barcelona
‘He lived in Barcelona.’
b. *(Hi) posa el teu nom al peu de pàgina.
OBL put the your name at.the foot of page
‘Your name appears on the footpage.’

In addition to these impersonalizing uses, there is a similar construction in which the clitic *hi* appears with a dislocated locative complement in topic position. In these constructions, the locative pronoun is also compulsory, and it seems to be coreferential with the dislocated PP. Typically, the predicate is usually classified as unergative. However, these unergative predicates behave as stative unaccusative verbs in these constructions. Crucially, the subject of the unergative verb is indefinite and postverbal,

⁷ The sentence becomes grammatical if the locative PP is right dislocated: *Hi va viure, a Barcelona* ‘He lived in Barcelona’.

and it can be replaced by a partitive clitic *en* (Rigau 1997, Rigau 2002, Mateu & Rigau 2002).

- (13) a. En aquesta facultat, hi canten molts estudiants.
 in this faculty OBL sing lots.of students
 ‘In this faculty, a lot of students sing.’
 b. En aquesta facultat, n’ hi canten molts.
 in this faculty PART’OBL sing lots
 ‘In this faculty, a lot of them sing.’

As in the previous case, the presence of *hi* is compulsory, and it coappears with the locative PP. At the same time, *hi* stativizes and deagentivizes the construction. Proof of this lies in the fact that resumption by a proform like *fer-ho* ‘do so’ is not possible in the locative inversion *hi* construction, (14)- (14), as *fer-ho* can only resume agentive/eventive verbs (*Gramàtica de la llengua catalana* 2016: §21.2.1.1*d*; see also the discussion in McDonald 2024 for *hacerlo* “do so” in Spanish, which is similar to Catalan in this respect). Note that the presence of a locative complement is possible in the agentive meaning, proving that it is the presence of the clitic *hi* alongside the locative in a dislocated position that renders the stative interpretation.

- (14) a. #En aquesta facultat hi canta el Joan i la
 in this faculty OBL sing the Joan and the
 Maria també ho fa.
 Mary also ACC does
 b. El Joan canta a l’ església i la Maria també ho
 the Joan sing at the’ church and the Maria too ACC
 fa.
 does
 ‘Joan sings at the church and Maria does it too.’

The absence of a locative PP triggers an anaphoric or deictic interpretation. A locative argument is always understood with these predicates, as in the case of the *posar/dir* ‘put/say’ alternation.

- (15) Hi estudiaven molts americans.
 OBL study-PAST.3PL lots.of americans
 ‘There were lots of Americans studying there.’

Furthermore, *hi* appears as a non-referential pronoun in so-called inherently pronominal verbs. While most of these verbs feature a reflexive pronoun, some of them feature the pronoun *hi* or both. The verbs that I analyze in this paper belong to this latter class. Based on the description in Todolí (2002) and the *Gramàtica de la llengua catalana* (2016), I distinguish at least two types of inherent pronominal verbs featuring *hi*: those that feature a verb of perception or cognition that has a similar meaning when pronominalized, and those that appear with a verb for which we cannot identify a coherent semantic class and for which the presence of *hi* results in an unrelated idiomatic meaning. Examples from this latter type are verbs like *caure-hi* ‘lit. to fall-*hi*; to realize’, *guanyar-hi* ‘lit. to earn-*hi*; to benefit from something’, *fer-s’hi* ‘lit. to do-s’*hi*’ ‘to get on well’ etc. What is crucial in inherent pronominal verbs of this type is that the locative and the reflexive clitic are non-referential, as shown by the following minimal pair, from the *Gramàtica de la llengua catalana* (2016, §18.6.4.4).

- (16) a. Què hi guanya, aquest aquí?
 what OBL win this here
 ‘What is in it for this guy here?’
 b. Què guanya, aquest aquí?
 what win this here
 ‘What is this guy earning here?’

Lastly, there is a whole class of verbs of perception or cognition that feature the pronoun *hi* and display an intransitive stative meaning, which is not entirely idiomatic, since the basic perceptive meaning is still present in the pronominal variant. The difference between the non-pronominal and the pronominal variants is that the latter denotes a capacity, —a general ability of the subject. In some varieties, *sentir* ‘to hear’ and *veure* ‘to see’ (as well as synonyms like *clissar* ‘to glimpse’ and *guipar* ‘colloquial for to see’) can also appear with a reflexive pronoun, indicating that the ability has been brought about by a specific event, as described in the introduction.

In summary, the clitic *hi* has several meanings in Catalan. First, it is a referential pronoun that can be used to resume locative, goal, comitative, instrumental and predicative complements. Moreover, *hi* can also be used as a (possessive and beneficiary) dative in certain syntactic contexts. Beyond this, certain non-referential uses of *hi* appear in idiomatic constructions, impersonalized constructions and some perception verbs, triggering a stative meaning.

From the data examined above, a key question emerges as to the precise syntactic and semantic contribution that *hi* makes in all these contexts. Despite its varied meanings, *hi* is consistently associated with applicative functions, including datives (Pineda 2014, 2020), secondary predications, instrumental/comitative complements, spatial prepositional meanings, and with a role in argument reduction alternations such as stativization and argument suppression. In this paper, I propose that the clitic *hi* is an exponent linked to an unspecified argument introducer head, i^* , which spans a range of semantic and syntactic functions, including applicative heads, *Appl* and prepositional heads, P (Wood & Marantz 2017).

The analysis presented in this paper focuses on the interpretation of *hi* with perception verbs, but it also serves as a case study for the broader hypothesis that all instances of *hi* involve an argument introducer functional head i^* . Its varied meanings can be explained through contextual allophony, a mechanism by which a functional head is interpreted in different ways depending on the syntactic context. This approach lays the groundwork for a unified understanding of the syntactic and semantic properties of the range of constructions in which referential and non-referential *hi* appears. In the next section, I explore the aspectual interpretation of the perception predicate *veure* ‘to see’ when it combines with *hi* and *s’hi*.

3. The *veure-((s)hi)* construction: aspectual properties

In this section, I show that predicates of perception like *veure* ‘to see’ change their aspectual interpretation when they appear in combination with the clitic *hi*, or with both the clitic *hi* and the reflexive *es*. This alternation provides evidence in favor of the idea that there are at least two types of states (Dowty 1979, Kratzer 1995, Jaque 2014, Silvagni 2017, a.o.): the *veure-hi* alternant belongs to the class of pure states, which can also be identified with individual-level properties or Kimian states (Acedo-Matellán and Oltra Massuet 2024), and the *veure* and *veure-s’hi* alternants, which also display stative properties (but share some of the properties of dynamic verbs) are interval states (Dowty 1979, Jaque 2014). That is, the latter are temporally bound states or states that apply to a certain temporal extension. Here, I follow the distinction between pure states

and interval states drawn by Jaque (2014) and apply it to the three different alternants. My interpretation of these facts will be laid out in section 4, in which I propose that interval states do contain an event variable, in line with what is normally assumed for Davidsonian states (Maienborn 2001, 2005, 2007) or stage level predicates (Kratzer 1995; see also Acedo-Matellán and Oltra Massuet 2024). In the next section, I provide evidence in favor of the distinctions between *veure* and both *veure-s'hi* and *veure-hi*.

3.1 Complements of verbs of perception

The first piece of evidence supporting the view that perception predicates are states comes from the fact that they resist being embedded under perception verbs (Maienborn 2005). Verbs of perception denote mental states in their transitive use and refer to ability in their intransitive pronominal alternants, so neither of them are directly perceptible. However, it is important to note that the *hi* alternant, (17), is much more degraded than either the transitive (17) or the *s'hi* version (17) of the perception predicate.

- (17) a. Els estudiants van sentir la noia
 the students AUX. hear the girl
 parlar amb la veïna.
 speak with the neighbour
 ‘The students heard the girl speaking with a neighbour.’
- b. ?/*Els estudiants van veure la noia
 the students AUX see the girl
 veure un ocellet.
 see one little.bird
 ‘The students saw a girl seeing a little bird.’
- c. *Els estudiants van veure la noia *veure-hi*
 the students AUX see the girl see-OBL
- d. ?/*Els estudiants van veure la noia *veure-s'hi*
 The students AUX see the girl see-REF’OBL
 Possible meaning: ‘the students saw the girl managing to see things.’

All in all, while none of the three variants can be embedded under verbs of perception, the *veure* and the *veure-s'hi* alternant are better than the *veure-hi* variant.

3.2 Modification by a locative adjunct

The second piece of evidence comes from the fact that states cannot be modified by locative adjuncts. However, locative PPs can appear with stative predicates when they function as frame-setting locatives. Frame-setting locatives, as defined in Maienborn (2001), modify the entire proposition expressed by the sentence, rather than just the eventuality denoted by the verbal predicate. As discussed in Acedo-Matellán and Oltra-Masuet (2024), both drawing on Rigau’s (2002) description, Catalan shows a clear morphosyntactic distinction between these two types of modifiers: while event-related modifiers can be resumed by the locative clitic *hi* when dislocated, frame-setting modifiers cannot, since they are sentential adjuncts.

Building on the previous discussion, while transitive perception verbs do allow a locative modifier (18), the two intransitivized versions do not allow for one. Note that the sentence in (18) is possible under the frame-setting interpretation defined earlier — that is, when the intended interpretation is that, when they had the temporary capacity

to see, they were located in Catalunya Square. The contrast between these interpretations becomes clear when the locative modifier appears left dislocated, as in (18b and 18c).

- (18) a. Els estudiants (s')hi van veure, a la plaça Catalunya.
the students REFL'OBL AUX see, at the square Catalunya
(sole possible interpretation, they were able to see while they were in Catalunya Square)
- b. Els estudiants hi van veure l'ocell, a la plaça Catalunya.
the students OBL AUX see, the'bird, at the Square Catalunya
'Students saw the bird at the Catalunya Square'
- c. Els estudiants van veure l'ocell, a la Plaça Catalunya.
the students AUX see the'bird, at the Square Catalunya
'Students saw the bird, while they were at Catalunya Square.'

The transitive verb *veure* allows both a low locative PP, as in (18)b, and a frame-setting locative PP, as in (18)c. In (18)b, the locative PP occupies a low position and establishes a predicative relationship with the object 'the bird'. This pattern aligns with the well-attested behavior of perception predicates, which license predicative complements. The resulting interpretation is one in which the students perceived the bird that was located in Catalonia Square. By contrast, in (18)c, the locative PP functions as a frame-setting adverbial, modifying the whole proposition, similar to the sole possible interpretation of (18)a. All things considered, although *veure* allows the occurrence of low locative PPs, these do not function as genuine locative modifiers in any of the three variants.

3.3 Interpretation in the progressive

Verbs of perception resist appearing in the progressive form, much in the way that has been extensively described for stative predicates (Vendler 1957). However, some stative predicates do accept the progressive in certain contexts (Dowty 1979, de Miguel 1999, Marín and McNally 2011, Jaque 2014, a.o). As noted by Dowty (1979, page 175), stative predicates allow the progressive in contexts in which a particular situation comes into the observer's view.

When we apply this test to perception verbs, we observe that *veure* and *veure-s'hi* can appear in the progressive, while *veure-hi* resists appearing in it.

- (19) [Context: some parents are hiding the presents to their kids for Christmas, but suddenly they realized that one of them has woken up and can see the presents.]
Goita! El Tià està veient els regals!
Look! The Tià is seeing the presents.
'Look! Tià is seeing the presents.'
- (20) [Context: we are playing a Pin the Tail on the Donkey game, in which one player is blindfolded, spun around a few times, and then tries to pin (or stick) a paper tail onto a picture of a donkey in the correct spot. We suddenly realize that the child, called Tià, is doing it too well, and it looks like that he can see, so we utter]
Goita! El Tià #(s)'hi està veient.
Watch out! The Tià (REFL)'LOC is seeing.
'Look! Tià is being able to see at this moment.'

While (19) and (20) sound acceptable in these readings, the interpretation obtained is different from the one obtained with purely dynamic eventualities. That is, the interpretation is that a particular contingent state, temporally bound, is unfolding (see also Jaque 2014). The fact that *veure-hi* sounds worse in this context than the reflexive could be linked to the fact that the *veure-hi* predicate is interpreted as a pure state.

3.4 *When-test*

Acedo-Matellán and Oltra-Massuet (2024) apply Kratzer's (1995) *when-test*, which distinguishes stage-level predicates from individual-level properties. The logic behind this test is that a *when*-clause can only receive a universal interpretation if there is an event variable available for binding. In their adaptation for Catalan, Acedo-Matellán and Oltra-Massuet use the temporal expression *cada vegada que* ('every time that'), which contains the overt universal quantifier *cada* ('every/each'). The examples in (21) demonstrate that the *cada*-test applies to activity predicates, but is incompatible with verbs that denote pure states (21) vs. (21), respectively. Once again, *veure* and *veure-s'hi* pattern similarly, as they can appear in this construction, whereas *veure-hi* cannot.

- (21) a. Cada vegada que la Maria parla francès, ...
 Each time that the Mary speaks French,
 b. #Cada vegada que la Maria sap francès, ...
 Each time that the Mary knows French,
 c. Cada vegada que la Maria veu la seva mare,
 Eac time that the Mary sees the her mother,
 d. #Cada vegada que la Maria hi veu,
 Each time that the Mary OBL sees,
 e. Cada vegada que la Maria s'hi veu,
 Each time that the Mary REFL'OBL sees,

According to this test, while *veure-hi* behaves like an individual-level predicate or pure state, the predicate *veure-s'hi* and *veure* behave as stage-level predicates.

3.5 *The life-effect reading test*

A distinction between the different variants of *veure* emerges when these constructions appear in the imperfect aspect. While *veure* and *veure-s'hi* do not allow for a *life-effect* reading (Jaque 2014), *veure-hi* does allow for this reading. The *life-effect* reading refers to the inference that arises when a property is attributed to an entity in the imperfect past tense—namely, that the property no longer holds, typically due to the subject's death or a permanent, life-altering event. This interpretation is obtained in (22), but not in (22) and (22).

- (22) a. El Joan hi veia d'un ull.
 The Joan OBL saw of'an eye
 'Joan could see out of one eye' → Joan could be dead or he might have lost the eye.
 b. El Joan s'hi veia al despatx.
 The Joan REF'OBL saw at.the office
 'Joan could see in his office' not→ Joan could be dead.
 c. El Joan veia un ocell.
 The Joan saw a bird

‘Joan saw a bird.’ not→ Joan could be dead.

This test allows us to conclude that while *veure-hi* behaves as an individual-level predicate, neither *veure-s’hi* nor *veure* does so, as they both have episodic readings.

3.6. Modification by durative time adverbials

Durative adverbials can modify any predicate that denotes a process. With accomplishments, they apply to both the process and the resulting state (Vendler 1957, Dowty 1979). In the case of states, they impose an interpretation wherein the state holds over an interval, thus resembling an event (Hallman 2010). When this test is applied to stage-level properties in the past, the interpretation remains natural in the perfective. Individual-level properties resist appearing in this construction, since the state is necessarily interpreted as holding for a limited period of time. Consider the following examples in (23).

- (23) a. El Joan va estar content durant una hora.
 The Joan AUX is happy for one hour
 ‘John was happy for an hour.’
 b. El Joan va ser intel·ligent durant una hora.
 The Joan AUX be intelligent for one hour
 ‘John was intelligent for an hour.’

The sentences above have different interpretations. In (23)a, the durative adverbial specifies the duration of the state, the state of being glad, which is normally a temporal emotional state, whereas the interpretation of *intelligent* in (23)b is coerced the sentence to denote a stage-level predicate. That is, (23)b would be equivalent to a sentence like *El Joan va estar lúcid* ‘John was clearheaded, witty’. Furthermore, the property of being intelligent is understood as no longer applying to Joan, yielding the inference that he is no longer intelligent. The sentence in (23) does not require a coerced interpretation, as the state of being glad, as a stage-level property, is valid for intervals of time (Jaque 2014).

In the case of perception verbs, we obtain similar readings. The examples in (24) and (24) do not require the entailment described for (23), while the example in (24) does. That is, the example in (24) is interpreted as quantifying the duration of the state of seeing a bird. The sentence in (24) is interpreted as Mary being able to see for just one hour, maybe because Mary was in a situation in which there was no available light, and she only managed to see for an hour. Finally, the only interpretation of (24) is one in which Mary was temporarily able to see and in which she might have gone blind afterwards. As in (23), the interpretation of (24) is that the ability to see is no longer a property of the subject.

- (24) a. La Maria va veure un ocell durant una hora.
 the Mary AUX see a bird for an hour
 ‘Mary saw a bird and she had this perception for an hour.’
 b. La Maria va veure=s’hi durant una hora.
 the Mary AUX see=REFL=OBL for an hour.
 ‘Mary was able to see for an hour.’
 c. La Maria va veure=hi durant una hora.
 the Mary AUX see=OBL for an hour.
 ‘Mary was able to see for an hour, and then she became blind.’

The facts discussed above show that *veure* and *veure-s'hi* denote states that can be temporal, whereas the predicate *veure-hi* requires coercion into a temporal state when combined with a durative adverbial.

3.7 Conclusion

As can be surmised from the summary of properties in Table 1, *veure*, *veure-hi* or *veure-s'hi* all denote states. However, while the verbs *veure* and *veure-s'hi* denote a state with temporal boundaries, *veure-hi* denotes a pure state.

	<i>veure</i>	<i>veure-s'hi</i>	<i>veure-hi</i>
Embedded under a perception predicate	✗	✗	✗
Progressive	✓	✓	✗
When-test	✓	✓	✗
Duration	✓	✓	✗
Life-effect reading	✓	✓	✗

Table 1: Summary of aspectual properties

In the next section, we will argue that the difference between these three predicates is structurally encoded through the presence/absence of a functional head that introduces an eventive variable.

4. The analysis

In this paper, I adopt a neoconstructionist perspective, wherein argument structure is derived from syntactic structure rather than from the properties of lexical items themselves. Specifically, I follow Wood and Marantz (2017), who argue that functional heads can have different interpretations depending on the syntactic structure in use. In particular, I propose that the various meanings of the clitic *hi* discussed in section 2 stem from the contextual allosemy of an abstract syntactic head, i^* .

Building on this framework, I further adopt the assumption that non-referential pronouns denote identity functions (Tsiakmakis & Espinal 2022). This analysis of so-called expletive pronouns aligns with the broader claim that, in fact, there are no truly expletive pronouns (Wood 2014, 2015; Kayne 2020; Tsiakmakis & Espinal 2022). Expletive pronouns are not expletive in the strictest sense, as they are present in narrow syntax and play a crucial role in shaping the semantic interpretation of argument structure. Specifically, the locative expletive *hi* syntactically licenses the low applicative head but does not saturate the argument of the predicate introduced by the applicative; instead, this argument remains free and must still be bound later in the structure.

According to Wood and Marantz (2017), argument structure is built compositionally through the syntactic operation of Merge. Arguments are added to the structure by a single, general-purpose argument-introducing head, i^* , semantically and syntactically underspecified. How this head is interpreted depends on the syntactic context where i^* appears, with different contexts yielding the different types of functional head. The argument introducer head is endowed with categorial features and selectional features, which are valued in different ways.

- (25) a. *voice* introduces external arguments of *v*Ps;
 b. *low Appl* introduces an argument related to a DP;
 c. *little p* introduces the external arguments of PPs (figures)
 d. *prepositions* introduce non-core arguments in a syntactically distinct manner from high *Appl*
 e. *high Appl* introduces a non-core argument.

The different semantic interpretations in each case derive from contextual allosemy rules. Examples of these rules are depicted in (26) (from Wood & Marantz, 2017: page 268).

- (26) a. $[[i *]] \leftrightarrow \lambda x \lambda s. \text{FIGURE}(x,s) / \text{___}(\text{locative PP})$
 b. $[[i *]] \leftrightarrow \lambda x \lambda e. \text{AGENT}(x,e) / \text{___}(\text{agentive vP})$
 c. $[[i *]] \leftrightarrow \lambda x \lambda y \lambda s. \text{POSS}(x,y,s) / \text{___}(\text{DP})$

Thus, the same functional head can be categorially interpreted as *p* when it combines with a locative PP, as Voice when it combines with an agentive *v*P, or as a possessive head relating two entities when combined with a DP. The semantic interpretation varies depending on the contextual allosemy rules in (26): *i** will be understood as introducing the figure of a location (26), as introducing an Agent as in (26), or as introducing a semantic relation of possession between two DPs, as in a low applicative configuration, (26).

Building on these assumptions, I propose that the pronoun *hi* with perception verbs as in *veure-hi* involves a low applicative head that links two participants: the DP that ends up being the subject of the verb of perception and a DP in the complement position, which is resumed by the expletive pronoun *hi*.

Although I do not intend here to pursue a full-fledged analysis of *hi*, I entertain the idea, defended by many authors (Rigau 1978, 1982, Martín 2012a, Martín 2012b, Pineda 2014, Boeckx & Martín 2013; but see Cabré & Fábregas 2019 for a different view) that *hi* is a defective version of *li*, and that both clitics are related with an applicative or prepositional functional head.⁸ That is, the clitic *hi* is the exponent of a DP-case marked pronoun in the complement position of *ApplP*. These assumptions set the stage for the analysis of *veure-hi* and *veure-s'hi*, which I develop in the next two subsections.

4.1. An analysis of the verb *veure-hi*

As observed in section 3, one of the main properties of *veure-hi* is that it belongs to the class of pure states. Furthermore, following Jaque's (2014) observation that Level

⁸ Crucially, the clitic *hi* is not the exponent of the functional head *Appl*, as Pineda (2014) proposes for the clitic *li*. In my view, the difference between the locative clitic *hi* and the dative clitic *li* is that the latter serves as the exponent of the DP in the specifier of *Appl*, containing D, whose exponent is /I+Number/, with case assigned by *Appl*, whose exponent is /i/. In the case of clitic *hi*, I assume that there is nothing in *Spec, Appl*; rather it resumes the DP in the complement position of *Appl*. An argument in favor of this view comes from the fact that complements of prepositions are resumed by the clitic *hi* regardless of their definiteness and animacy (cf. Rigau 1978, 1985). For example, *Vaig escriure la carta amb la Maria* 'I wrote the letter with Mary.' or *Vaig escriure la carta amb el llapis* 'I wrote the letter with a pencil' either way becomes *Hi(=with Mary/the pen) vaig escriure la carta* 'I wrote the letter with her/with the pencil.'. This evidence suggests that the ϕ -features of prepositional complements are inaccessible for pronominalization, while those at the specifier remain accessible. A more detailed analysis of these issues is left for future research (see also Fábregas & Cabré 2019 for a discussion of the differences between *hi* and *li*).

2 state predicates like *tenir* ‘have’ do not have zero-conversion nominalizations (n. *tinença* ‘ownership’) unlike Level 1 state predicates such as *pesar* ‘weigh’, which do (n. *pes* ‘weight’), I analyze verbs of perception like *veure* ‘to see’, *sentir* ‘to hear’ or *clissar* ‘to spot’ as Level 2 states, since they are not associated with zero-conversion nominals. The examples in (27) illustrate this point.

- (27) a. *veure* ‘to see’ → *vista* ‘sight’
 b. *sentir* ‘to hear’ → *oïda* ‘hearing’
 c. *clissar* ‘to glimpse’ → *clissada* ‘glimpse’

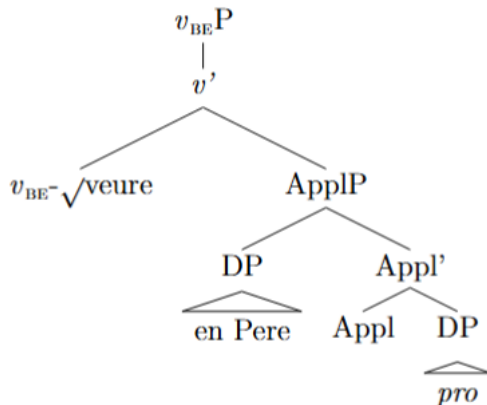
Jaque accounts for the distinction between Level 1 and Level 2 states by proposing that Level 1 predicates are associated with the functional head *Res*, whereas Level 2 predicates are associated with *Init*, which corresponds to a verbalized state. Building on this proposal, but adopting a Distributed Morphology framework, I analyze perception verbs of this type as containing a root directly adjoined to a verbalizer. The verbalizer specifies the type-theoretic category through which the conceptual content of the root is to be understood, a state in this case.

In the *veure-hi* alternant, an additional functional layer comes into play: the argument introducer head *i**. This head establishes a possessive relationship between two entities and is interpreted as a low applicative, selecting one DP in its complement and another in its specifier. In this context, *i** is associated with the contextual allosemy rule defined in (28) (based on Wood 2015).

- (28) $\llbracket i^* \rrbracket \leftrightarrow \lambda x \lambda y \lambda s. POSS(x, y, s) / _ DP$

The clitic *hi* checks the categorial features specified by the selectional requirements of this allosemy of *i**. Semantically, as an expletive pronoun, it denotes an identity function. The proposed compositional semantics for the structure in (29) appears in (30). Notably, in the structure in (29), the expletive pronoun in *Appl*'s complement does not saturate the applicative's argument. Drawing on Collins's (2024) analysis of implicit arguments, I propose that this pronoun receives a generic interpretation, which is brought about by a covert modal operator that binds the variable.

- (29) En Pere hi veu.

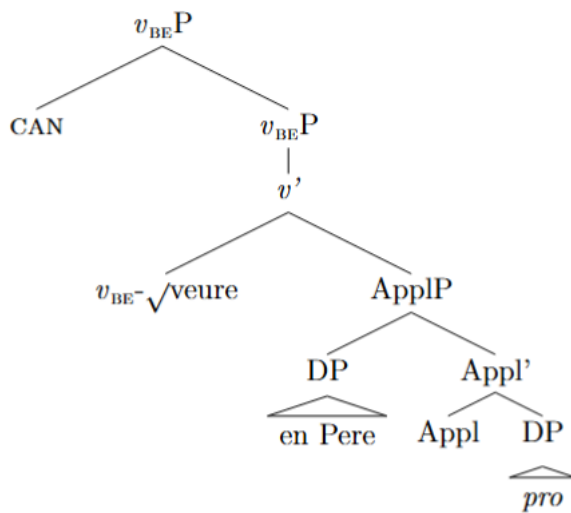


- (30) a. $\llbracket i^* \rrbracket = \lambda x \lambda y \lambda s. POSS(x, y, s)$
 b. $\llbracket pro \rrbracket = \lambda x. x$
 c. $\llbracket Appl' \rrbracket = \lambda x \lambda y \lambda s. POSS(x, y, s)$
 d. $\llbracket [DP \text{ en Pere}] \rrbracket = p$

- e. $\llbracket \text{ApplP} \rrbracket = \lambda y \lambda s. \text{POSS}(p, y, s)$ (by Functional Application of c and d)
- f. $\llbracket v - \text{VEURE} \rrbracket = \lambda s. \text{SEE}(s)$
- g. $\llbracket vP \rrbracket = \lambda y \lambda s. \text{POSS}(p, y, s) \ \& \ \text{SEE}(s)$ (by Event Identification application of f and e)

The interpretation of the vP in (30g) contains an unsaturated argument. Consequently, unlike canonical vPs , which function as predicates of eventualities, this vP denotes a relation between an individual and a predicate of states, yielding a semantic type of $\langle e, \langle s, t \rangle \rangle$. This type of denotation is incompatible with T, which uniformly selects for predicates of eventualities. To resolve this mismatch, I propose that there is a covert modal operator, CAN, that both binds the open variable and introduces universal quantification over it. The syntactic structure of the sentence *En Pere hi veu* is shown in 0.

(31) En Pere hi veu



The CAN operator combines by Functional Application with the vP since it takes a relation argument, binds the free variable with a universal quantifier, and yields a predicate of states, (32).

- (32) a. $\llbracket \text{can} \rrbracket = \lambda P_{\langle e, \langle s, t \rangle \rangle} \lambda s. \forall x, w [x \in w] \rightarrow \diamond P(x)$
- b. $\llbracket \text{can} \rrbracket (\llbracket vP \rrbracket) = \lambda s. \forall x, w [x \in w] \rightarrow [\diamond \text{SEE}(s) \ \& \ \text{POSS}(p, x, s)]$

The intended interpretation of (32b) would be akin to the interpretation of sentences containing an ability modal, as discussed in Giannakidou (2001). That is, the intended interpretation of (32b) would be that *for* any object and world, if the object is part of that world, Pere has the ability to see it. While a comprehensive intensional analysis of the modal operator lies beyond the scope of this paper, the current proposal offers a preliminary account. Crucially, the proposed analysis not only derives the modal interpretation associated with these predicates, but also establishes a connection between the interpretation of the pronoun *hi* as a non-referential pronoun and its generic and modal interpretation.⁹

⁹ This analysis is reminiscent of Lekakou's (2002, 2004) account of middles. I leave for future research a more detailed exploration of the similarities between the construction under analysis and middles. Both share the properties of being modal and stative constructions, as well as involving the suppression of an

A key prediction of this analysis is that non-referential pronouns of this type will only be licensed in the presence of an operator that binds them. In this regard, my proposal aligns with Collins’s (2024) analysis of implicit arguments, which are interpreted as either generic/universal or existential. Determining whether this prediction holds is a task I am leaving for future research. Nevertheless, certain idiomatic expressions containing these pronouns—such as *dormir-hi* (‘to arrive at a solution to a problem by sleeping on it’) or *sortir-hi guanyant* (literally ‘to go out from there winning,’ figuratively ‘to end up benefiting from a situation’)—suggest that the interpretation of these non-referential pronouns could be analyzed in similar terms.

4.2. The verb *veure-s’hi*

Turning to the *veure-s’hi* alternant, I propose that it shares the same basic structure as *veure-hi*. However, in its reflexive use, there is an additional functional head, i^* , that introduces an event of change. This analysis aligns with the generalization made by Fábregas and Marín (2017) that reflexives are associated with dynamicity, whereas datives and—and, by extension, locatives—are more linked to stativity. Specifically, the reflexive indicates a more complex functional structure, one that contains an additional argument introducer head i^* with a D feature that selects a predicate of states, v_{BEP} and, through the contextual alloosemy rule in (33), is ultimately categorially interpreted as a *VoiceP* associated with an inchoative semantics.

$$(33) \quad \llbracket i^* \rrbracket \leftrightarrow \lambda P \lambda e. \exists s. BECOME(e, s) \ \& \ P(s) / _v_{BEP}$$

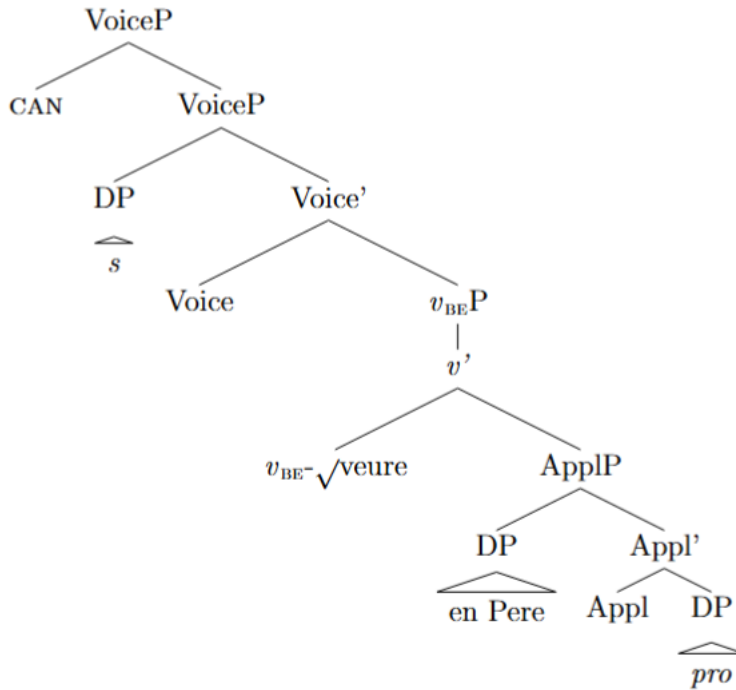
The interpretation of (33) involves a functional head that relates a predicate of states and an event, such that the state is understood as the result of that event. Notably, this functional head does not necessarily introduce a causative interpretation of the external argument. Instead, Voice is interpreted here as introducing a change-of-state predicate. In this respect, I depart from the analysis of the anticausative alternation affecting causative change-of-state predicates—such as *break* (e.g., *John broke the window* vs. *The window broke*)—as proposed by Wood and Marantz (2017). They attribute the inchoative semantics of the intransitive alternant (*The window broke*) to an additional semantic rule, which introduces inchoative meaning whenever v combines with a DP coerced as a state.

The analysis I propose offers a better account of the Catalan data, which features reflexive anticausatives (see Llabrés & Mateu 2018 for an overview), which are not easily accounted for under Wood and Marantz’s (2017) analysis. For this reason—although I do not aim to commit to a particular analysis of anticausatives in this paper (see, among many others, Alexiadou, Anagnostopoulou, and Schäfer 2006, 2015; Schäfer 2008, 2009, 2022; Llabrés & Llabrés 2018; Martin 2023 and references therein)—I propose that Voice may be associated with the inchoative interpretation defined in (33). This would explain the relation between reflexive morphology and inchoativity in Catalan and other Romance languages (Martin 2023).

(34)	En Pere	s’hi	veu.
	The Pere	REFL’OBL	see

argument that receives a generic interpretation—specifically, the agent in middles and the theme in the *veure-hi* construction.

‘Pere is able to see.’



The compositional bottom-up semantic interpretation of the sentence in (34) is described in (35). As can be seen from steps g and i, the only way to semantically compose Voice and v_{BE} is via the operation of Function Composition. The derivation is similar to the one proposed for adversity causatives in Japanese (see Wood & Marantz 2017 for discussion).¹⁰ Crucially, the reflexive satisfies the categorial D feature in Voice, but it does not saturate any argument.

- (35)
- a. $\llbracket i * \rrbracket = \lambda x \lambda y \lambda s. POSS(x, y, s)$
 - b. $\llbracket pro \rrbracket = \lambda x. x$
 - c. $\llbracket Appl' \rrbracket = \lambda x \lambda y \lambda s. POSS(x, y, s)$
 - d. $\llbracket [DP \text{ en Pere}] \rrbracket = p$
 - e. $\llbracket ApplP \rrbracket = \lambda y \lambda s. POSS(p, y, s)$
(by Functional Application of c and 2d)
 - f. $\llbracket v - VEURE \rrbracket = \lambda s. SEE(s)$
 - g. $\llbracket vP \rrbracket = \lambda y \lambda s. POSS(p, y, s) \ \& \ SEE(s)$
(by Event Identification application of f and e)
 - h. $\llbracket Voice \rrbracket \leftrightarrow \lambda p \lambda e. \exists s. BECOME(e, s) \ \& \ P(s)$
 - i. $\llbracket Voice' \rrbracket = \lambda y \lambda e. \exists s. BECOME(e, s) \ \& \ POSS(p, y, s) \ \& \ SEE(s)$ (by Function Composition of g and h)
 - j. $\llbracket se \rrbracket = \lambda x. x$
 - k. $\llbracket VoiceP \rrbracket = \lambda y \lambda e. \exists s. BECOME(e, s) \ \& \ POSS(p, y, s) \ \& \ SEE(s)$

¹⁰ The rule of Function Composition is understood here as in Wood (2015), who adopts Kobele's (2010) definition. The semantic operation combines two functions, $f: X \rightarrow Y$ and $g: Y \rightarrow Z$, and creates a new function $h: X \rightarrow Z$. Function Composition applies when other compositional rules (Predicate Modification or Functional Application) cannot apply.

i. Function Composition: If α is a branching node, $\{\beta, \gamma\}$ is the set of α 's daughters, where $\llbracket \beta \rrbracket$ is in $D_{\langle b, c \rangle}$ and $\llbracket \gamma \rrbracket$ is in $D_{\langle a, b \rangle}$, then $\llbracket \alpha \rrbracket = \lambda x_a. \llbracket \beta \rrbracket (\llbracket \gamma \rrbracket (x))$.

As before, the denotation of the VoiceP contains a free variable, and so it cannot combine with a TP. The covert modal operator acts again to bind this free variable and yield a set of events (that become states) in which Pere experiences the condition of having the ability to see anything. In the analysis offered here, the presence of *hi* in all contexts has a single source: *hi* resumes a case-marked DP pronoun associated with an applicative head, which can have multiple alloemes. All in all, the analysis captures the fact that the *s'hi* alternant is less stative than the *hi*-alternant because it involves an eventive variable. The *s'hi* alternant keeps the modal flavor, while at the same time it links the state of being able to see to a particular event, understood as causing the state in question.

5. Conclusions

This study of the *veure-hi/veure-s'hi* alternation in Catalan points toward possible solutions to a variety of puzzles in linguistic theory. First, it paves the way to an account that derives the various meanings associated with the clitic *hi*, and discussed in section 2. The approach developed here, based on Wood and Marantz (2017), proposes that *hi* is always associated with the same type of functional head—an argument introducer head, *i**—which can have different alloemes depending on the syntactic context.

Second, this analysis sheds light on the syntactic and semantic role that clitics without referential force have in argument structure. In particular, I have proposed that this argument structure alternation involves a process of intransitivization, stativization and modalization. Specifically, I argue that the *hi* resumes a pronoun that cannot provide a value for the variable introduced by the applicative head and must be bound by a generic and modal operator introduced at the *v*P level. This operator introduces universal quantification over objects and worlds, which binds the non-saturated argument of the structure.

Finally, this analysis paves the way toward a deeper understanding of the semantics of pronouns in idiomatic constructions, which frequently have either an existential (*dormir-hi* ‘to sleep on something’) or a universal interpretation (*veure-hi* ‘to be able to see anything’). Moreover, it provides insight into the syntactic role of expletive pronouns. Expletive pronouns syntactically license functional heads—for example, in the case of *hi*, licensing a low applicative head, or in the case of the reflexive, licensing an additional Voice head that introduces an eventive variable.

Several loose ends and open questions remain. Among them is the need for a fully developed formal analysis of the modal operator introduced at the *v*P level. Additionally, further investigation is required into the interaction between modality and negation, as well as modality and manner adverbials, both of which are common in the *veure-(s)'hi* alternants analyzed in this paper.

Cristina Real Puigdollers
 Departament de Filologia Catalana
 Centre de Lingüística Teòrica
 Universitat Autònoma de Barcelona
cristina.real.puigdollers@uab.cat
<https://orcid.org/0000-0001-5340-0196>

References

- Acedo-Matellán, V., & Oltra-Massuet, I. (2024). Prepositional Verbs and the Individual-/Stage-Level distinction. *Glossa: a journal of general linguistics*, 9(1). <https://doi.org/10.16995/glossa.9976>
- Acedo-Matellán, V., & C. Real-Puigdollers. (2014). Inserting roots into (functional) nodes: Categories and cross-linguistic variation. *Linguistic analysis*, 39(1-2), 125-168.
- Acedo-Matellán, V., and C. Real-Puigdollers (2019). Roots into functional nodes: Exploring locality and semi-lexicality. *The Linguistic Review*, 36(3), 411-436. <https://doi.org/10.1515/tlr-2019-2019>
- Alexiadou, A. (2010). On the morpho-syntax of (anti-)causative verbs. In M. Rappaport Hovav, E. Doron & I. Sichel (Eds.), *Lexical Semantics, Syntax, and Event Structure* (pp. 177–203). Oxford-New York: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199544325.003.0009>
- Alexiadou, A. (2014). The problem with internally caused change-of-state verbs. *Linguistics*, 52(4), 879–909. <https://doi.org/10.1515/ling-2014-0011>
- Alexiadou, A.; Anagnostopoulou, E.; & Schäfer, F. (2006). The properties of anticausatives crosslinguistically. In M. Frascarelli (Ed.), *Phases of Interpretation* (pp. 187–211). Berlin-New York: Mouton de Gruyter. <https://doi.org/10.1515/9783110197723.4.187>
- Alexiadou, A.; Anagnostopoulou, E.; & Schäfer, F. (2015). *External Arguments in Transitivity Alternations: A Layering Approach*. Oxford-New York: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199571949.001.0001>
- Baker, M. C. (2003). *Lexical categories: Verbs, nouns and adjectives* (Vol. 102). Cambridge University Press. <https://doi.org/10.1017/CBO9780511615047>
- Bhatt, R. (1999). *Covert modality in non-finite contexts*, PhD thesis, Philadelphia, University of Pennsylvania.
- Boeckx, C. and T. Martín. 2013. *El clíctic datiu és més que un clíctic*. Lleida: Pagès editors.
- Bonet, E. (1991). *Morphology after syntax*. PhD dissertation, MIT.
- Bonet, E. (1993). 3rd person pronominal clitics in dialects of Catalan. *Catalan Working Papers in Linguistics* 3, pp. 85–111. <https://doi.org/10.1007/BF00992853>
- Bonet, E. (1995). Feature structure of Romance clitics. *Natural Language and Linguistic Theory* 13(4). 607–647.
- Bonet, Eulàlia. (2002). Cliticització. In Joan Solà, M. Rosa Lloret, Joan Mascaró and Manuel Pérez Saldanya (eds.), *Gramàtica del català contemporani*, 933–989. Barcelona: Empúries.
- Collins, C. (2024). *Principles of argument structure: A Merge-based approach* (Vol. 87). MIT Press. <https://doi.org/10.7551/mitpress/15436.001.0001>
- Cabré, T. (2022). Syncretism and ordering in the evolution of Catalan pronominal clitic clusters. *Borealis—An International Journal of Hispanic Linguistics*, 11(1), 173–190. <https://doi.org/10.7557/1.11.1.6428>
- Cabré, T., and A. Fábregas (2019). 3rd person clitic combinations across Catalan varieties: Consequences of the nature of the dative clitic. *The Linguistic Review*, 36(2), 151–190. <https://doi.org/10.1515/tlr-2018-2010>
- Cabré, T. and A. Fábregas. 2020. Ways of being a dative across Romance varieties, in A. Pineda and J. Mateu (eds.), *Dative constructions in Romance and beyond*, 395–411. Berlin: Language Science Press.
- Dowty, D. (1979). *Word Meaning and Montague Grammar*. Dordrecht: Reidel. <https://doi.org/10.1007/978-94-009-9473-7>

- Espinal, M.T., (2004). *Diccionari de sinònims de frases fetes*. Universitat Autònoma de Barcelona. <https://doi.org/10.5565/lib/9788449023460>
- Fábregas, A., R. Marín, & L. McNally (2012). From psych verbs to nouns. In V. Demonte and L. McNally (eds.), *Telicity, change, and state: A cross-categorical view of event structure*, pp. 162-184. Oxford, New York: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199693498.003.0007>
- Fábregas, A. & R. Marín. 2020. Datives and stativity in psych predicates, in A. Pineda & J. Mateu (eds.), *Dative constructions in Romance and beyond*, 221–238. Berlin: Language Science Press.
- Ferrater, G. (1981). *Sobre el llenguatge*. Barcelona: Quaderns Crema.
- Francesch, P. (2025). The grammaticalization of the *hi* clitic in Old Catalan verbs of perception. Ms. Universitat Autònoma de Barcelona.
- Giannakidou, A. (2001). The meaning of free choice. *Linguistics and philosophy*, 24(6), 659-735.
- Giannakidou, A., and E. Staraki. (2013). Ability, action, and causation: From pure ability to force, in M. Alda, C. Beyssade, and F. Del Prete (eds), *Genericity*, 250-275. Oxford: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199691807.003.0009>
- Hackl, M. (1998). *On the Semantics of Ability Attributions*. Unpublished draft available at <http://web.mit.edu/hackl/www/papers/files/AbilityAttributions.pdf>, MIT.
- Hacquard, V. (2010). On the Event Relativity of Modal Auxiliaries. *Natural Language Semantics*, 18(1): pp. 79–114. <https://doi.org/10.1007/s11050-010-9056-4>
- Hacquard, V. (2020). Actuality Entailments. In *The Wiley Blackwell Companion to Semantics*, Wiley Blackwell. <https://doi.org/10.1002/9781118788516.sem052>
- Hallman, P. (2009) Instants and Intervals in the Event/State Distinction. Unpublished manuscript, UCLA. <https://www.peterhallman.com/States.pdf>
- Jaque, M. (2014). *La expresión de la estatividad en español: niveles de representación y grados de dinamicidad* (Doctoral dissertation, Universidad Autónoma de Madrid).
- Kratzer, A. (1995). Stage-level and individual-level predicates. In G. N. Carlson & F. J. Pelletier(eds.), *The Generic Book*, 125–175. Chicago: University of Chicago Press.
- Llabrés, B. A., & Jaume Mateu (2018). Els verbs de canvi d'estat del català i l'alternança causativa: una proposta sintàctica. *Etudes romanes de Brno*, 39(1), 139-161. <https://doi.org/10.5817/ERB2018-1-9>
- Lekakou, M. (2002). Middle semantics and its realization in English and Greek. *UCL Working Papers in Linguistics*, 14, 399-416.
- Lekakou, M. (2004). Middles as disposition ascriptions. In *Proceedings of Sinn und Bedeutung* (Vol. 8, pp. 181-196).
- McDonald, J. E. (2024). What Spanish can tell us about the syntax of eventives vs. stative verbal predicates. *Borealis—An International Journal of Hispanic Linguistics*, 13(1), 57-86. <https://doi.org/10.7557/1.13.1.7448>
- Maienborn, C. (2001). On the position and interpretation of locative modifiers. *Natural Language Semantics* 9. 191–240. <https://doi.org/10.1023/A:1012405607146>
- Maienborn, C. (2005). On the limits of the Davidsonian approach: The case of copula sentences. *Theoretical Linguistics* 31(3). 275–316. <https://doi.org/10.1515/thli.2005.31.3.275>
- Maienborn, C. (2007). On Davidsonian and Kimian states. In Ileana Comorovski & Klaus von Heusinger (eds.), *Existence: Semantics and syntax*, 107–130. Dordrecht: Springer. https://doi.org/10.1007/978-1-4020-6197-4_4

- Mari, A. and F. Martin (2007). Tense, ability and Actuality Entailments. In A. Maria and P. Dekker, (eds.), *Proceedings of the Sixteenth Amsterdam Colloquium*, 151-156. ILLC/Department of Philosophy, University of Amsterdam.
- Marín, R., & L. McNally (2011). Inchoativity, change of state, and telicity: Evidence from Spanish reflexive psychological verbs. *Natural Language & Linguistic Theory*, 29, 467-502. <https://doi.org/10.1007/s11049-011-9127-3>
- Martín, T. (2012a) *Deconstructing Catalan object clitics*. Ph. D. dissertation, New York University.
- Martín, T. (2012b). The internal structure of dative clitics. *Proceedings of the ConSOLE XVII*, 231–252. <http://www.sole.leidenuniv.nl>.
- Mascaró, J. (1986). *Morfologia*. Barcelona: Enciclopèdia Catalana.
- Mateu, J. (2002). *Argument Structure. Relational Construal at the Syntax-Semantics Interface*. Barcelona: Universitat Autònoma de Barcelona.
- Mateu, J. & G. Rigau. (2002). A minimalist account of conflation processes: parametric variation at the lexicon-syntax interface. In Artemis Alexiadou (ed.), *Theoretical approaches to universals*, 211-236. Amsterdam: John Benjamins. <https://doi.org/10.1075/la.49.09mat>
- Mitrović, M., & Panagiotidis, P. (2020). Adjectives exist, adjectivisers do not: a bicategorical typology. *Glossa: a journal of general linguistics*, 5(1). <https://doi.org/10.5334/gjgl.940>
- Moltmann, F. (2006). Generic one, arbitrary PRO, and the first person. *Natural language semantics*, 14(3), 257-281. <https://doi.org/10.1007/s11050-006-9002-7>
- Pineda, A. (2014). *Les fronteres de la (in) transitivitat. Estudi dels aplicatius en llengües romàniques i basc*. PhD dissertation.
- Pineda, A. (2020). Double-Object Constructions in Romance: The Common Denominator. *Syntax*, 23(3), 203-240. <https://doi.org/10.1111/synt.12193>
- Ramos, J. R. (1998). Presentational sentences in Catalan dialects. *Catalan Working Papers in Linguistics*, 6, 41-58.
- Ramos, J. R. (2001). El verb haver-hi: evolució dels usos sintàctics. *Estudis romànics* 23. 123-146
- Rigau, G. (1978). Hi datiu inanimat. *Els Marges* 12. 99–102. [https://doi.org/10.1016/0036-9748\(78\)90237-5](https://doi.org/10.1016/0036-9748(78)90237-5)
- Rigau, G. (1982). Inanimate indirect objects in Catalan. *Linguistic Inquiry* 13(1). 146–150.
- Rigau, G. (1997). Locative sentences and related constructions in Catalan: ésser/haver alternation. In A. Mendikoetxea & M. Uribe-Etxebarria (eds.). *Theoretical Issues at the Morphology-Syntax Interface, Anuario del Seminario de Filología Vasca. Julio de Urquijo*, pp. 395–421. Bilbao: Universidad del País Vasco.
- Rigau, G. (2002). Els complements adjunts. In J. Solà, M.R. Lloret, J. Mascaró and M. Pérez Saldanya (eds.) *Gramàtica del català contemporani*, pp. 2045-2110. Barcelona: Empúries.
- Silvagni, F. (2017). *Entre estados y eventos. Un estudio del aspecto interno del español*. Bellaterra: UAB dissertation.
- Schäfer, F. (2008). *The syntax of (anti-)causatives: External arguments in change-of-state contexts*. Amsterdam: Benjamins. <https://doi.org/10.1075/la.126>
- Schäfer, F. (2009). The causative alternation. *Language and Linguistics Compass*, 3(2), 641–681. <https://doi.org/10.1111/j.1749-818X.2009.00127.x>
- Schäfer, F. (2022). Transitive anticausatives. In B. Pratley, Ö. Bakay, E. Neu, & P. Deal (Eds.), *Proceedings of NELS 52* (Vol. 2, pp. 85–98). Amherst, MA: Graduate Linguistics Students Association.

- Solà, J. (1990). *Lingüística i normativa*. Barcelona: Empúries.
- Solà, J. (1993). *La llengua: una convenció dialèctica*. Barcelona: Columna.
- Solà, J. (1994). *Sintaxi normativa: estat de la qüestió*. Barcelona: Empúries.
- Todolí, J. (2002). Els pronoms, in J. Solà, M.R. Lloret, J. Mascaró, and M. Pérez Saldanya (eds.), *Gramàtica del català contemporani*, Vol 2, pp. 1337-1433. Barcelona: Empúries.
- Tsiakmakis, E. & M. T. Espinal. (2022). Expletiveness in grammar and beyond. *Glossa: a journal of general linguistics* 7(1). <https://doi.org/10.16995/glossa.5807>
- Vatrican, A. (2015). La modalidad en la gramàtica: la capacidad de las construcciones saber/poder + infinitivo. *Revista Española De Lingüística*, vol. 45, n.º 2, 1, pp. 115–141, <http://revista.sel.edu.es/index.php/revista/article/view/137>.
- Viaplana, J. (1980). Algunes consideracions sobre les formes pronominals clíiques del barceloní. *Anuario de filología*, (6), 459-484.
- Wood, J. (2014). Reflexive *-st* verbs in Icelandic. *Natural Language and Linguistic Theory* 32. 1387–1425. <https://doi.org/10.1007/s11049-014-9243-y>
- Wood, J. (2015). *Icelandic morphosyntax and argument structure*. Switzerland: Springer. <https://doi.org/10.1007/978-3-319-09138-9>
- Wood, J. & A. Marantz. (2017). The interpretation of external arguments, in R. D'Alessandro, I. Franco & Á. J. Gallego (eds.). *The verbal domain* (Vol. 64), pp. 255-278. Oxford University Press. <https://doi.org/10.1093/oso/9780198767886.003.0011>
- Vendler, Z. (1957). Verbs and times. *The Philosophical Review*, 56, 143-160. <https://doi.org/10.2307/2182371>