

Negation with Participles and Inhibited Events*

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Abstract

Languages differ with respect to the possibility of introducing a negative operator between an auxiliary verb and a participle inside aspectual periphrases; whereas Lithuanian perfect forms allow negation in that position, Spanish rejects it. The goal of this paper is to offer an analysis of this contrast, which contributes to our understanding of low negation in the clausal domain. We propose that when negation follows an auxiliary verb, it is merged in a Polarity Phrase placed below AspP within the event domain. This low negation gives rise to an inhibited event reading, which expresses that the subject refrains himself from initiating the event. We argue that the possibility of introducing a negative operator between a participle and an auxiliary is conditional upon the hierarchical level in which the relevant participle is formed. We show that in Spanish, this verbal form is built above Asp and as a result, low negation would intervene between the verbal stem and the participial morphology. On the contrary, in Lithuanian, participles are formed in the event domain, below AspP. Low negation can, thus, be added without breaking the internal make up of the participle.

Keywords: negation, participles, auxiliaries, events, situations

1. Negation and periphrases

The goal of this article is to understand under which conditions a negative operator can be introduced in a low structural position

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within the clause, and what are the consequences of this. We will argue that a low negation triggers an inhibited event reading—described as a negative event in part of the literature (Cooper 1997; Przepiórkowski 1999; Higginbotham 1983, 2000; Arkadiev 2015, 2016, among others). We will show that low structural negation is possible only if the inhibited event properties are compatible with the higher domain of the clause, and is further restricted by familiar principles on head movement and constituency.

The empirical observation we start with in order to make our argument is the following: Spanish periphrases allow two positions for negation in certain periphrases (1, cf. RAE & ASALE 2009; García Lorente 2014; Fábregas & González Rodríguez 2019). In such cases, negation can precede (1a) or follow (1b) the auxiliary. However, it is never the case that the negative operator can appear after the auxiliary if the periphrasis involves a participle (2). Here we illustrate with the perfect constructions, but it extends to any other auxiliary combination.

- (1) a. Juan no puede pagar impuestos.
Juan not can pay taxes
'Juan cannot pay taxes.'
- b. Juan puede no pagar impuestos.¹
Juan can not pay taxes
'Juan is allowed not to pay taxes.'
- (2) a. Juan no ha pagado impuestos.
Juan not has paid taxes
- b. *Juan ha no pagado impuestos.
Juan has not paid taxes
'Juan hasn't paid taxes.'

Contra Ackerman, Stump & Webelhuth (2011), the explanation cannot be that the participle structures in Spanish disallows any material between the two verbal forms because it forms a single complex morphological word. In fact, negative polarity items—among other

¹ Note that presence of negation does not block clitic rising, showing that the structure is monoclausal: *Los puedes no pagar* (lit. 'them can.2sg not to.pay', 'You can not pay them').

constituents — are possible after the auxiliary, but there is an absolute ban in the case of the negative operator.

- (3) a. No había nunca visto nada igual.
 not had never seen nothing similar
 ‘I had never seen anything similar.’
- b. *Había no visto nada igual.
 had not seen nothing similar
 Intended: ‘I had never seen anything similar.’

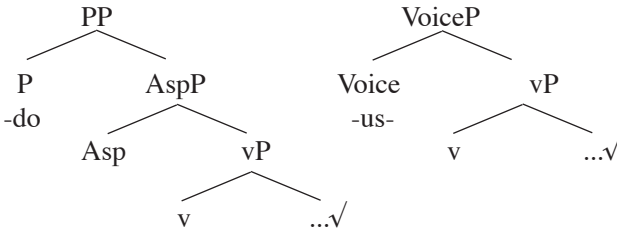
In this respect, Spanish contrasts with Lithuanian, where periphrases involving an auxiliary and a participle allow two positions for negation (Arkadiev 2015). Lithuanian verbal negation involves the prefix *ne-*, which can attach to the auxiliary (4a) or to the participial form (4b).

- (4) a. Ne-s-u miegoj-us-i
 neg-have-1sg sleep-pst.prt-nom.sg.f
 ‘I have not slept.’
- b. Es-u ne-miegoj-us-i
 have-1sg neg-sleep-pst.prt-nom.sg.f
 ‘I have not slept.’

The immediate goal of this article is to explain the contrast between (2b) and (4b) as a window to understanding the conditions and effects of low negation in the clausal domain. In a nutshell, we will propose that the syntactic structure where negation appears between the auxiliary and the auxiliated verb in both Spanish and Lithuanian corresponds to a low negation position that creates the interpretation corresponding to a negative event. That low negation is contained within the verbal domain, below Asp(ect), before the temporal parameters of the clause have been added to the eventuality. The contrast between Spanish and Lithuanian follows from the different syntactic heights at which the participial morpheme is merged in each language. In Lithuanian, where the participial system has systematic voice oppositions, the participle is built up below Asp; low negation can be introduced above the participle without intervening between the different morphemes that compose it. In

Spanish, in contrast, participles are built up above Asp because they are insensitive to voice contrasts. In consequence, introducing the low negation prevents the participle from getting formed at PF. (5) illustrates the relevant structures in Spanish (5a) and Lithuanian (5b).²

- (5) a. Spanish participle b. Lithuanian participle



When this syntactic condition is satisfied—which is never the case for the Spanish participle—the low negation triggers a negative event reading, whose Aktionsart properties are stative. This is, we will argue, the case with gerund periphrases that allow or disallow the low negation structure.³

The rest of the article is structured as follows. We will first discuss (§2) the difference in meaning between Spanish contrasts as (1), and Lithuanian (4), and will argue that when the negation follows the auxiliary the reading that emerges is what some authors have called a “negative event reading”—which we will show is better described as an inhibited event reading. We will show that this proposal explains which

² As will become clear in the course of this analysis, we assume a non-Lexicalist model of word formation where words are built up in syntax; hence, we contemplate situations where introducing a morpheme that does not form part of a word intervening between the morphemes of that word will prevent the word from forming at PF. Alternatively, a Lexicalist model such as the one privileged in Minimalism, where words are introduced in syntax fully composed, could account for the facts in essentially the same terms as our explanation by adding the additional assumption that negation in Spanish is a head that blocks head-movement of the participle to the Asp head—presumably to check its aspectual features. We remain agnostic with respect to whether head movement or intervention lie at the core of the explanation, but for independent reasons we adopt a non-Lexicalist explanation in this paper.

³ The internal logic of our argument requires gerund morphology to be low, within the verbal domain. Indeed, there seems to be evidence in favour of this. Ramchand (2018) shows that the ordering of auxiliaries and the semantic interpretation of the gerund is consistent with an analysis where the gerund morpheme builds an eventuality that corresponds to a state that illustrates the eventuality; in that case, gerunds would be built within the Aktionsart component.

infinitive and gerund periphrases allow low negation in Spanish,⁴ and will propose a formalisation using Ramchand’s (2018) theory about domains within the clause. We will then move to the specific case of the participles (§3), and we will argue that low negation with a participle is impossible in Spanish because the participle is formed at a syntactic position that is already above the structural layer where low negation is merged; in Lithuanian, in contrast, the participle is formed within the VP area, so low negation can combine with it. The conclusions of this analysis for the relations between syntax, semantics and the lexicon are discussed in §4.

2. Inhibited events and the interpretation of the low negation

In this section we will discuss the nature of the grammatical contrasts between negation that precedes the auxiliary and negation that follows the auxiliary in both Spanish and Lithuanian. We will first (§2.1.) discuss the meaning contrast in (1), for Spanish, and (4), for Lithuanian. Then we will argue that the properties of reading that involves low negation are those of negative events,⁵ and we will briefly describe the grammatically relevant aspects of negative events in §2.2. We will then show that the proposal that low negation triggers a negative event reading is supported by the fact that in Spanish when the periphrasis is not compatible with the negative event interpretation, negation must precede the auxiliary (§2.3.). Finally, we will show the syntactic structure that we assume for the low negation, embedded within Ramchand’s (2018) syntactic division between events and situations.

2.1. Two interpretations for negation in periphrases

Arkadiev (2015) shows that the two positions for negation in (4) above, repeated here as (6) for convenience, are related to two very different readings.

⁴ Although we will focus mainly on gerund periphrases, the analysis put forward here also applies to infinitive periphrases (see footnote 6).

⁵ As our analysis proceeds, it will become clear that in our view the terms “negative event” and “negated event” are misnomers, and that terms like “inhibited event” and “negated situation” would be more direct labels for the distinction we are dealing with.

- (6) a. Ne-s-u miegoj-us-i
 neg-have-1sg sleep-pst.prt-nom.sg.f
 ‘I have not slept.’
- b. Es-u ne-miegoj-us-i
 have-1sg neg-sleep-pst.prt-nom.sg.f
 ‘I have not slept.’

In (6a), the speaker is negating the relevance of the situation to the current moment; the speaker denies that he or she has the experience of having slept, as in “It is not the case that I have slept.” In contrast, (6b) asserts the current relevance of a situation, namely the situation of not having slept: the speaker now suffers the consequences of an event that was expected to happen but did not happen, as in “It is the case that I have not slept.”

A contrast like (1) in Spanish is related to a similar contrast (7).

- (7) a. Juan no puede pagar impuestos.
 Juan not can pay taxes
 ‘Juan cannot pay taxes.’
- b. Juan puede no pagar impuestos.
 Juan can not pay taxes
 ‘Juan is allowed not to pay taxes.’

Assume a view of modals as quantifiers over possible worlds (Lewis 1973). In (7a) the speaker denies that there is a situation where Juan pays taxes; there exists no possible world, compatible with the properties of the actual world, where Juan pays taxes. In (7b), in contrast, the speakers asserts that there is at least one possible world, compatible with the properties of the actual world, where Juan does not pay taxes. In more straightforward terms, (7b) means that Juan has permission to not pay taxes, while (7a) means that there is no possibility that Juan pays taxes. Translated into formal terms, (7) is represented as (8).

- (8) a. $\neg \square$ (pay taxes)
 b. $\square (\neg \text{pay taxes})$

In this respect, the high negation is related to a full propositional negation where one denies the truth of the predicate in a particular world-time pair ('It is not the case that X'). In contrast, the low negation has properties that are familiar to the type of interpretations known in the literature as "negative event readings."

(9) I saw John not kiss the bride.

According to several authors, 'not kiss the bride' in (9) should be considered a negative event. Part of their evidence is that the perception verb *see* can only combine with infinitives that denote events, in contrast to its use as an epistemic verb—where it selects a finite subordinate clause. This use of the perception verb is incompatible with predicates that denote states, as in (10).

- (10) a. *I saw John know English.
 (cf. *I saw that John didn't know English*)
- b. *I saw John be at home.
 (cf. *I saw that John was at home*)
- c. *I saw John own two houses.
 (cf. *I saw that John owned two houses*).

Therefore, contra Asher (1993) and others, the constituent 'not kiss the bride' cannot be a state. It must denote an object of the event type, because the verb is used in its perception use in combination with an infinitive. However, that event is not defined by a change or by an action, but rather by the absence of the change or action that the predicate otherwise denotes in its positive version.

Negative events are also associated to contexts where there exists the expectation that the positive event would happen. (9) is felicitous for instance in a wedding, where there is an expectation that the bridegroom will kiss the bride; in that context, John is expected to kiss the bride.

Similarly, the examples in (6b) and (7b) involve events that are defined by the failure to participate in a change or action that, given common expectations, the subject should have participated in. Normally, humans sleep every night, and normally citizens of a state have the obligation to pay taxes.

However, as other authors have pointed out (Higginbotham 1983; Arkadiev 2015), allowing negative events as ontological objects within semantics produces a number of problems, because they would be objects whose denotation is defined by the absence of properties they otherwise denote. For this reason, Fábregas & González Rodríguez (in press) have argued that cases like (9) should rather be described as inhibited events. The constituent ‘not kiss the bride’ is not an event defined by the non-existence of a kissing event, because in that case its denotation would be too broad and (9) could be used in a context where John is cooking breakfast at home, *contra* common intuitions. According to these authors, what ‘not kiss the bride’ means is the inhibition of the event ‘kiss the bride’; the subject refrains himself from initiating the event that otherwise he could have initiated—and was actually expected to initiate. Therefore, in what follows we will use the term “inhibited event” to describe the infinitive in (9), and the reading associated to the low negation in the examples above.

Let us now explore deeper the properties of inhibited events, and show that they indeed correspond to the reading found in the low negation cases.

2.2. The properties of inhibited events

An inhibited event is the event of preventing an action or change—expressed by the predicate—from occurring. Let us now show that the behaviour of the low negation and the behaviour of inhibited events are identical in the relevant grammatical properties. Consider the following pair of examples from Spanish.

- (11) a. Juan no siguió escribiendo novelas.
Juan not continued writing novels
‘Juan didn’t continue to write novels.’
- b. Juan siguió no escribiendo novelas.
Juan continued not writing novels
‘Juan continued not writing novels.’

An inhibited event is an event, after all, and it can have a measured duration during which it happens—a duration that corresponds to the time period during which the subject refrains himself from the change or action. In contrast, clausal negation denies the existence

of an event, and if the event does not exist it is impossible that it has any duration. Consider in this context how (11a) and (11b) contrast with respect to durative modifiers.

- (12) a. *Juan no siguió escribiendo novelas durante dos años.
 Juan not continued writing novels for two years
 ‘Juan didn’t continue to write novels for two years.’
- b. Juan siguió no escribiendo novelas durante dos años.
 Juan continued not writing novels for two years
 ‘Juan continued not writing novels for two years.’

Excluding constituent negation in (12) because it is irrelevant to our purposes (roughly ‘Juan continued writing novels, but it was not for two years’), (12a) is ungrammatical in combination with the duration adverb. The reason is that (12a) denies that there was any event that continued; as the event didn’t exist, its duration cannot be measured.

In contrast, (12b) is grammatical in the interpretation that Juan continued participating in an event: specifically, the event involving the inhibition of ‘writing novels’. That inhibited event is instantiated during some time period, which corresponds to two years. Negative infinitives embedded under perception verbs also combine with durative modifiers (13), as expected on the assumption that these constituents receive the inhibited event reading. (13) denotes that the event of John refraining from kissing the bride was instantiated during two hours.

- (13) Vi a Juan [no besar a la novia durante dos horas].
 saw DOM Juan not kiss DOM the bride for two hours
 Intended: ‘I saw that Juan didn’t kiss the bride for two hours.’

A second relevant property of inhibited events is that they do not contain internal changes or actions, and are therefore non-dynamic events, similar to Maienborn’s (2003) Davidsonian-events like *sit*, *lie*, *wait* or *hold*. Like these verbs, an inhibited event denotes the maintenance of a situation where changes or actions are prevented. During the running time of an event of holding a book, any change in the position of the book with respect to the agent is inhibited. In the same way, during the running time of an event like ‘not writing novels’, it is prevented that there is any change in the non-existence

of a novel produced by the agent. Therefore, inhibited events are by definition non-dynamic, because they are about making sure that a change or action fails to happen.

For this reason, inhibited events cannot be modified by manner adverbials like *quickly* and *slowly*, which specifically qualify the speed at which a change or action occurs. Notice that (14) is ungrammatical—again, exclude constituent negation readings like ‘John kissed the bride, but not quickly’.

- (14) *Vi a Juan [no besar a la novia rápidamente].
saw DOM Juan not kiss DOM the bride quickly
Intended: ‘I saw that Juan didn’t kiss the bride quickly.’

Contrast now, in this respect, high and low negation with periphrases. (15a) is possible in the reading where we deny that an event of writing novels quickly continued. Avoiding the constituent negation, (15b) is ungrammatical, because the event is inhibited and there is no change or action whose speed can be assessed.

- (15) a. Juan no siguió escribiendo novelas rápidamente.
Juan not continued writing novels quickly
‘Juan didn’t continue to write novels quickly.’
b. *Juan siguió no escribiendo novelas rápidamente.
Juan continued not writing novels quickly
‘Juan continued not writing novels quickly.’

If the inhibited event implies preventing a change or action, it will necessarily cancel the telicity entailments of a verb that is otherwise telic. As De Swaart & Molendijk (1999) discuss, negation allows duration adverbials in combination with achievements (16).

- (16) Juan *(no) llegó durante dos horas.
Juan not arrived for two hours
‘Juan didn’t arrive for two hours.’

However, crucially, the grammatical version of (16) implies an inhibited event interpretation. The interpretation is that for two hours it was the case that Juan did not arrive, which measures the duration of Juan’s participation in the inhibition of arriving. The reading of (15)

cannot be that for two hours it was not the case that Juan arrived—simply because it is impossible to interpret that outside these two hours Juan was repeatedly arriving. Thus, negation allows durative modifiers with achievements because it cancels their dynamicity by inhibiting the change, and thus turns them into atelic events which last as long as the change is inhibited.

2.3. Low negation is restricted by dynamicity

Additional evidence that the low negation is related to an inhibited event reading is that in the case of Spanish gerund periphrases only the auxiliaries that are compatible with the properties of inhibited events—specifically, non-dynamicity—license negation after the auxiliary.⁶

Gerund periphrases do not always allow negation following the auxiliary verb (RAE & ASALE 2009; García Lorente 2014; Fábregas & González Rodríguez 2019), as shown by the contrast between (17a-e) and (17f-k).⁷

- (17) a. Comenzó no respondiendo.
 started not answering
 ‘He started not answering.’
- b. Empezó no respondiendo.
 started not answering
 ‘He started not answering.’
- c. Continuó no diciendo la verdad.
 continued not telling the truth
 ‘He continued not telling the truth.’

⁶ About infinitive periphrases, see Fábregas & González Rodríguez (2019). Basically, the modal and aspectual auxiliaries that allow low negation are those that also accept stative predicates (*debes no hablar* ‘you must not talk’, *empezó a no pagar impuestos* ‘he started to not pay taxes’), and those that reject them do it because they cannot combine with states, as it is the case in gerund periphrases (**se puso a no hablar* ‘he started to not talk’). Additionally, grammaticality is somewhat degraded, for morphophonological reasons, when the periphrasis includes the invariable forms *que* ‘that’ or *de* ‘of’ after the auxiliary, but even in such cases there are attested examples (*tengo que no hablar* ‘I must not talk’). We hypothesise that the lower acceptability is caused by the fact that negation and the invariable form compete for phonological licensing as clitics to the infinitive.

⁷ For the presence of the negative particle *no* before non-periphrastic gerunds, see Bosque (1980), Sánchez López (1999) and Fernández Lagunilla (2011).

- d. Terminó no votando en contra de Pedro.
finished not voting against Pedro
'He finished not voting against Pedro.'
- e. Sigue no estudiando alemán.
continues not studying German
'He continues not studying German.'
- f. *Anda no estudiando.
walks not studying
'He is not studying.'
- g. *Va no corrigiendo exámenes.
goes not marking exams
'He is not marking exams.'
- h. *Lleva no lloviendo toda la semana.
is not raining all the week
'It has not been raining all week.'
- i. *Viene no lloviendo desde hace una semana.
comes no raining since a week
'It has not been raining for a week.'
- j. *Está no comiendo.
is not eating
'He is not eating.'
- k. *Se quedó no mirando al paisaje.
stayed not looking at the landscape
'He stayed not looking to the landscape.'

The asymmetry illustrated in (17a-e)-(17f-k) can be explained if we take into account the properties of inhibited events introduced in section 2.2. Notice that gerund periphrases in which negation cannot precede the event-denoting verb are those that require a dynamic verb. This requirement is not satisfied by inhibited events, since they are non-dynamic and their starting point does not involve any change; for example, there is no change during the temporal interval in which the inhibited event of not paying taxes takes place. As said before,

inhibited events express that the subject refrains himself/herself from initiating an event that was expected to take place.

The periphrasis <*andar* + gerund>, which requires different temporal gaps in the development of the event(s) (Laca 2006), combines mainly with activities (18a), turns a telic predicate into an atelic predicate (18b-c), and rejects states (18d) unless the state can receive a dynamic reading (18e). Thus, the low negation cannot appear in <*andar* + gerund> because this periphrasis requires dynamic predicates. (17f) and (18d) are ungrammatical for the same reason: <*andar* + gerund> rejects non-dynamic eventualities.

- (18) a. Anda buscando un trabajo.
 walks looking for a job
 'He is looking for a job.'
- b. Anda escribiendo una novela.
 walks writing a novel
 'He is writing a novel.'
- c. Anda recitando el poema.
 walks reciting the poem
 'He is reciting the poem.'
- d. *Anda teniendo dos trabajos a la vez.
 walks having two jobs at the same time
 'He is having two jobs at the same time.'
- e. Anda teniendo cada vez más problemas.
 walks having more and more problems
 'He is having more and more problems.'

As for <*ir* + gerund>, it involves an incremental temporal structure (Laca 2006) and therefore, combines with dynamic predicates, specially with those that allow a gradual progress reading, as illustrated by the contrast between (19a) and (19c) versus (19b) and (19d). As shown in (19d), this periphrasis rejects stative predicates. Since inhibited events are non-dynamic and do not allow a gradual reading interpretation, negation cannot precede the gerund in this periphrasis (17g), due to its rejection of stative predicates.

- (19) a. Iba leyendo una novela.
Went reading a novel
'He was reading a novel.'
- b. *Iba encontrando un mueble de su gusto.
went finding a furniture of his taste
'He was finding a piece of furniture as he likes.'
- c. Iba recibiendo cada vez más mercancía.
went receiving more and more merchandise
'He was receiving more and more merchandise.'
- d. *Iba teniendo dos casas.
Went having two houses
'He was having two houses.'

The periphrasis <estar + gerund> also requires a dynamic predicate (20), which again accounts for the impossibility of introducing a low negation in this structure (17j).

- (20) a. *Está teniendo dos casas.
is having two houses
'He is having two houses.'
- b. Está corriendo por el parque.
is running by the park
'He is running in the park.'
- c. Está escribiendo una novela.
is writing a novel
'He is writing a novel.'
- d. Está llegando a casa.
is arriving to home
'He is arriving home.'

We found the same situation with the continuative periphrases <llevar + gerundio> and <venir + gerundio>, as well as with the resultative construction <quedarse + gerundio>, since these constructions require a dynamic predicate (21) and reject low negation (17h, i, k)

- (21) a. *Lleva toda la vida teniendo dos trabajos.
 is all the life having two jobs
 ‘He has been having two jobs all his life.’
- b. *Viene teniendo dos trabajos desde que lo conozco.
 comes having two jobs since I CL know
 ‘He has been having two jobs since I know him.’
- c. *Se quedó teniendo dos trabajos.
 stayed having two jobs
 ‘He stayed having two jobs.’

In contrast, the gerund periphrases that are compatible with low negation are precisely the ones that allow stative predicates. This is what happens with <comenzar + gerund> (22), <empezar + gerund> (23), <terminar + gerund> (24), <continuar + gerund> (25) and <seguir + gerund> (26).

- (22) a. Comenzó no respondiendo.
 started not answering
 ‘He started not answering.’
- b. Comenzó teniendo un solo trabajo y ahora tiene tres.
 started having a only job and now has three
 ‘He started having only a job and now, he has three jobs.’
- (23) a. Empezó no respondiendo.
 started not answering
 ‘He started not answering.’
- b. Empezó hablando solo inglés y ahora habla seis idiomas.
 started speaking only English and now, speaks six languages
 ‘He started speaking only English and now, he speaks six languages.’
- (24) a. Terminó no votando en contra de Pedro.
 finished not voting against Pedro
 ‘He finished not voting against Pedro.’

- b. Terminó teniendo dos trabajos porque no podía pagar el alquiler.
finished having two jobs because not could pay the rent
'He finished having two jobs because he could not pay the rent.'
- (25) a. Continuó no diciendo la verdad.
continued not telling the truth
'He continued not telling the truth.'
- b. Continuó teniendo dos trabajos hasta que no pudo más.
continued having two jobs until that not could more
'He continued having two jobs until he could not do it any-more.'
- (26) a. Sigue no estudiando alemán.
continued not studying German
'He continued not studying German.'
- b. Sigue teniendo dos trabajos.
continues having two jobs
'He keeps on having two jobs.'

The data provided throughout this section offer evidence that in Spanish, negation can follow an auxiliary verb if the lack of dynamicity of the inhibited event is compatible with the requirements of the auxiliary. We now turn to the structural analysis of inhibited events.

2.4. Ramchand (2018): situations and events. The syntactic position of low negation

This section offers an analysis of low negation that relies on the distinction between situations and events. According to Ramchand & Svenonius (2014) and Ramchand (2018), situations and events define separate domains. As shown in (27), events are taken to define sets of properties or "event essences" (Ramchand & Svenonius 2014: 161-162) (27). Event essences are partial descriptions of eventualities containing information about Aktionsart and argument relations, but lack parameters for world and time, and in that sense do not build up a Davidsonian event.

(27) Event properties, E:

- Events are partial descriptions of eventualities that are independent of their world, time, or place instantiation (events lack time, world and place parameters)
- They can be compositionally built up.
- They can be related to each other via the “essential” relations of CAUSE, PART-OF and IS-IDENTICAL-TO.
- They can be related to entities in the domain of individuals via the “essential” relation HOLD-OF, which represents property ascription (either of a static or changing property).

In contrast, a situation conveys or exemplifies an event essence, and compositionally adds to the partial eventuality description information of time and world that anchor the exemplification of this event to a particular time period and (possible world) (Ramchand & Svenonius 2014: 162).

(28) Situations, s:

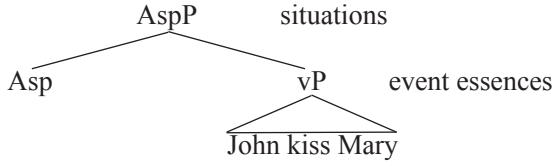
- Situations are particular states of affairs that exist in a particular world, at a particular time interval.
- They form part of a mereology (subpart relation notated \leq_s), where the world is the top element.
- Situational variables are notated with world and time parameters $s_{w,t}$.

It is worth highlighting that the main difference between events and situations is that only the latter have temporal and world-related information, because event essences are independent of their instantiation.⁸ Existential quantification of the event, then, does not entail time/world instantiation. Situations, in contrast, do have world and time parameters and instantiate the event properties in times and worlds.

Ramchand proposes that event essences are built up at the vP level. Situations belong to a different syntactic domain, above vP, where aspect, mood and tense are defined. In her view, the syntactic head that maps events into situations is AspP.

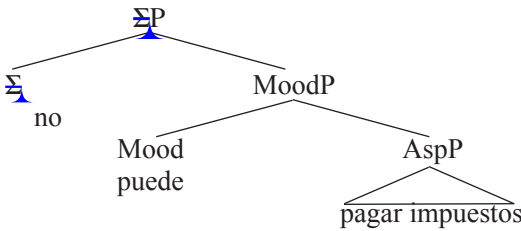
⁸ In the published version of Ramchand (2018), the division between event essences and situations is recast as one between event descriptions—encoded as linguistic symbols in the verbal domain—and Davidsonian events, defined in the transition between the verbal and the clausal domain. In this theory, EventP plays the role that AspP plays in the previous version, as the head that acts as a functor that inputs event essences and outputs objects with temporal parameters.

(29)

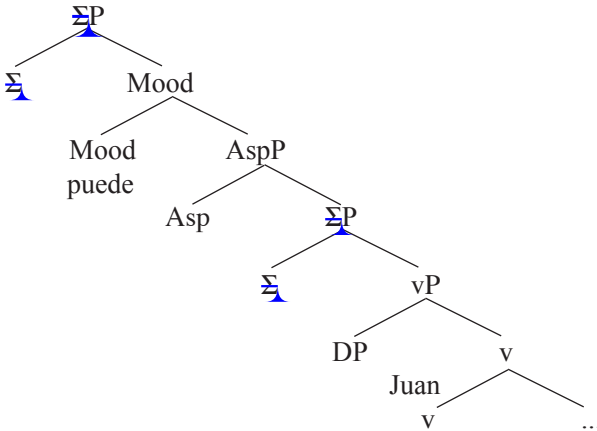


We argue that negation can occupy two different positions in the preverbal area, which correspond to different scope relations with respect to the situation and produces the two readings discussed in section 2.1. Our proposal is that the high negation occupies Laka’s (1990) Polarity Phrase (ΣP), which is located above AspP (30). The low negation is placed below AspP and, in particular, above the projection that defines a causative subevent. Thus, high negation is related to the situational domain whereas low negation is related to the event domain.

(30)



(31)



According to these structures, the existential closure of the situation establishes different scope relations with respect to high and low negation. High negation takes scope over that existential closure over

the situation. In such cases, the existence of a situation that instantiates the event essence expressed by the verb at a particular time, in a particular world is denied. In other words, we get the interpretation “there is no situation *s* that instantiates a particular event” This is the reading that we have in (32), where the existence of a possible situation which instantiates the event essence ‘paying taxes’ is negated.

- (32) Juan no puede pagar impuestos.
 Juan not can pay taxes
 ‘Juan cannot pay taxes.’

In contrast, low negation takes narrow scope with respect to the existential closure of the situational variable, and therefore, negation does not refute the existence of a situation. What low negation does is to reverse the causative relation between the external argument and the process, specifically, stating that the causation subevent is denied—and consequently that the process, if there is one, is not triggered. This gives rise to an inhibited event that is instantiated in a situation. Thus, in (33), what we assert is that there is a situation defined that instantiates the event essence ‘John does not initiate the event of paying taxes’.

- (33) Juan puede no pagar impuestos.
 Juan can not pay taxes
 ‘Juan is allowed not to pay taxes.’

Notice that this analysis naturally captures the lack of dynamicity of inhibited events and therefore, their incompatibility with *quickly* adverbs (§2.2) and with periphrases that require dynamic predicates (§2.3). If the subject does not initiate the event, the event does not take place and as a result, there is no change.

Our proposal also accounts for the fact that the inhibited event reading arises when negation follows all auxiliary verbs and precedes the event-denoting verb, since auxiliaries are introduced above AspP (Eide 2006). In addition, it must be highlighted that both negations can co-occur, something which supports the existence of two structural negations. This fact is illustrated for Spanish by (34), which asserts that there is no possible situation that instantiates the inhibited event ‘John not paying taxes’—Lithuanian allows this too (Peter Arkadiev, p.c.). The high negation is associated with the situation level, refut-

ing the existence of a possible situation; the low negation denies the causative relation between the initiator and the process, that is, that the subject initiates the event.

- (34) Juan no puede no pagar impuestos.
Juan not can not pay taxes
'John is not allowed not to pay taxes.'

We now shift our attention to the contrast in participle structures between Lithuanian and Spanish.

3. Participles in Spanish and Lithuanian

Let us now explain the contrast between (2) above, and specifically why Lithuanian and Spanish differ with respect to the possibility of building an inhibited event in the context of a participle. Note, to start with, that there is no chance that the incompatibility can be reduced to dynamicity, as it was the case with gerund periphrases (§2.3). The reason is that the perfect form of the verb is perfectly grammatical with a stative verb:

- (35) He estado en casa.
have.1sg been at home
'I have been home.'

To explain the contrast between Spanish and Lithuanian, we will argue that Spanish participles are built already on the situation area—above AspP—while Lithuanian participles can be built in the verbal domain, below AspP. If low negation involves an **SP** immediately below AspP, then it follows that Lithuanian will be able to merge negation above it, but Spanish will not. We will provide evidence that Spanish participles are insensitive to properties belonging to the verbal domain—specifically, argument structure— (§3.1.), while Lithuanian participles contrast in ways that show that they are sensitive, among other things, to the argument roles of the subject of the participle (§3.2). §3.3 makes explicit the principles that are violated if Spanish tries to merge negation above the participle, given these structural considerations.

3.1. Spanish participles

There is evidence that the Spanish participle used in perfect contexts is built with material that belongs to the situation domain, that is, above AspP. Let us review this evidence.

Even though descriptive traditional grammars (for instance, RAE 1973: §3.16.11) call the forms in *-do* “passive participles,” the form is by no means sensitive to the thematic roles of the arguments that act as their subjects. In other words: there are no oppositions between *-do* and another participle with respect to the passive or active nature of the construction. This is already evidenced by the comparison between the perfect (36a) and the passive, be it eventive (36b) or stative (36c): in all the cases, the morphological shape of the participle is the same.

- (36) a. Juan ha cocin-a-do un postre.
 Juan has cook-ThV-prt a dessert
 ‘Juan has cooked a dessert’
- b. El postre ha sido cocin-a-do.
 the dessert has been cook-ThV-prt
 ‘The dessert has been cooked’
- c. El postre está cocin-a-do.
 the dessert is cook-ThV-prt
 ‘The dessert is (now) cooked’

However, even outside the periphrastic uses it can be shown that the shape of the participle is not sensitive to the active vs. passive construction, or more generally, to the theta role of the externalised argument. Specifically, there is a class of *-do* participles that has been labeled “active,” because their externalised argument corresponds to the agent of the eventuality (cf. Borgonovo 1999; Varela 2002, 2003, 2008; Di Tullio 2008; Felú 2008; Armstrong 2017) (37).

- (37) a. un trabajo muy cans-a-do
 a job very tire-ThV-prt
 ‘a very tiring job’

- b. una persona bien com-i-da
 a person well eat-ThV-prt
 'a well-eaten person'
- c. un estudiante muy le-í-do
 a student very read-ThV-prt
 'a well-read student'
- d. un hombre muy viaj-a-do
 a man very travel-ThV-prt
 'a man that has travelled a lot'

The examples, respectively, are interpreted as the job causing someone to be tired, a person having eaten well, a student having read a lot, and a man having travelled a lot; in none of these cases can the structure be described as passive. The externalised argument of the participle is systematically interpreted as the entity that initiates the eventuality.

In short, Spanish participles do not establish a difference based on diathesis, contrasting active and passive forms. The English active participle in (38a) does not have a direct translation to Spanish—not even with a gerund, whose adjectival uses are quite restricted (38c)—with (38b) being the closest translation.

- (38) a. the shouting man
- b. el hombre que grita
 the man that shouts
- c. *el hombre grit-a-ndo
 the man shout-ThV-ger

Some descriptive (historical) grammars still associate active participles to the suffix *-nte*. This suffix did play the role of the active participle, due to its Latin origins (Leumann & Hoffmann 1928: 602) until the Late Middle Ages (Lapesa 1981: §56.3, Penny 1993: 215, Eberenz 2004), with cases such as those in (39)-(40).

- (39) un sabado esie-nt, domingo amanezie-nt /
 a Saturday be-NT, Sunday dawn-NT
 ui una grant vision en mio leio dormie-nt
 had.1sg a big vision on my bed sleep-NT
 ‘Being Saturday, dawning Sunday / I had a great vision sleep-
 ing on my bed’

[*Disputa del alma y del cuerpo*, c. 1201]

- (40) Todos eran creye -ntes que era transida.
 all were believe-NTE that was gone
 ‘All believed that she was gone’

[*Libro de Apolonio*, c. 1250]

However, the contemporary use of *-nte* in Spanish is far from the one expected from an active participle (Cano Cambroner 2013): in general, it does not license verbal arguments; its distribution is idiosyncratically determined, in competition with *-dor* ‘-er’ (41), producing either nouns (42) or adjectives (43) which sometimes have quite idiosyncratic meanings. In short, this suffix is contemporarily a derivational morpheme used to build agent nouns and causative adjectives from some verbal bases.

- (41) a. acoge-dor / *acogie-nte
 receive-DOR / receive-NTE
 ‘welcoming’

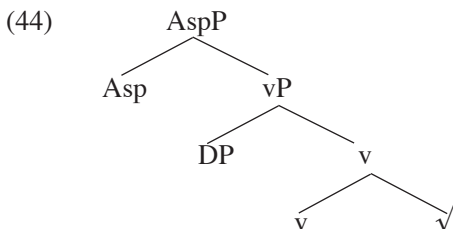
- b. alarma-nte / *alarma-dor
 alarm-NTE alarm-DOR
 ‘alarming’

- (42) canta-nte
 sing-NTE
 ‘singer’

- (43) agobia-nte
 stress-NTE
 ‘stressful’

Thus, the Spanish participle in *-do* is insensitive to voice. In fact, it is almost completely standard to analyse this form as carrying

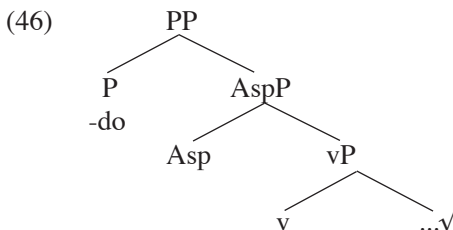
AspP or being directly related to grammatical aspect (Embick 2004, Alexiadou & Anagnostopoulou 2008, Gehrke 2015, among others). (44) reproduces the structure that Embick (2004: 367) associates to a resultative participle.



Where is the exponent *-do* placed? In the case of Spanish, it is clear that it should not be directly associated with the Asp head. The reason is that *-do* also appears in deverbal adjectives that do not presuppose the result of any change, such as (45).

- (45) complic-a-do ‘complicate-ThV-prt, difficult’;
educ-a-do ‘educate-ThV-prt, with good manners’

Gallego (2010) in fact proposes that *-do* corresponds to a prepositional head that dominates the verbal complex. If we adopt this proposal, which is able to account for why *-do* appears in both eventive and non-eventive deverbal formations, (46) would correspond to the structure of a regular verbal participle in Spanish. Note that the structure explains why *-do* is not sensitive to the argument structure properties of the verb, or to diathesis, because it is merged above AspP, which is already in the situation domain.



This is the crucial difference with the Spanish participle, which is insensitive to voice: Lithuanian participles already contain material in the event domain.

Beyond this, active and passive participles establish other kinds of contrasts that relate to the situation domain. For instance, there is a past habitual form of the active participle which includes the affix *-dav-* (50), and a future form of the present participle including *-si-* (51).

(50) *dirb-dav-us-i*
work- hab-act.prt-nom.sg.f
'the one that used to work'

(51) *dirb-si-a-nt-i*
work- fut-ThV-act.prt-nom.sg.f
'the one that will work'

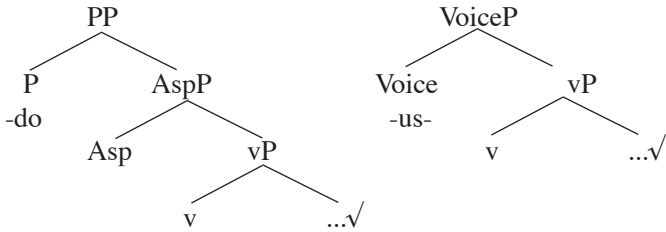
However, crucially for our purposes, the participles that incorporate aspectual information in their morphological make-up do not combine with auxiliaries to express temporoaspectual forms within the clausal structure. The periphrastic forms of verbs combining with negation in the relevant cases are restricted to the participial forms in *-us-*, active past participles which express voice, excluding any external aspect affixes between the verbal root and the participle marking (cf. Ambrazas et al. 2006: 237-238). The conclusion from this morphological and syntactic examination is that the negated participle in Lithuanian is built using material that belongs exclusively to the event domain.

3.3. The source of ungrammaticality in Spanish

Compare the structure of the Spanish participle used in combination with auxiliaries with the Lithuanian participle used in the same contexts.

(52) a. Spanish participle

b. Lithuanian participle

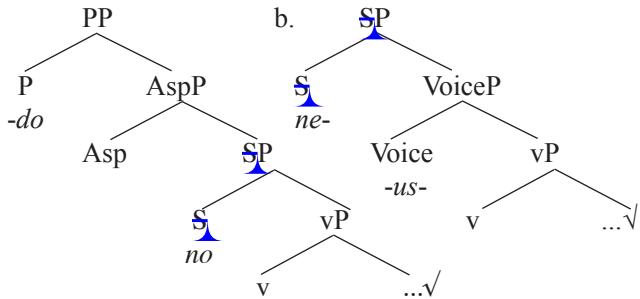


The crucial difference is that, in order to build a perfect participle in Spanish, the word crosses from the event to the situation domain; at the point where Asp is introduced, the event essence E is transformed into a situation. In Lithuanian, the participle is built at the VoiceP layer.

We have argued above that the low negation correlates with an inhibited event reading (§2.2, §2.3) and that the inhibited event reading involves negation within the event domain (§2.4.), so that the situation instantiates an event consisting of the inhibition of the event expressed by the predicate. Under these conditions, in order to negate a participle a polarity phrase should be introduced on top of the event essence domain, as in (53).

(53) a.

b.



Notice that the polarity phrase does not intervene between the heads that build the Lithuanian participle in combination with the auxiliary. Nothing here prevents the negation from being projected in this case; subsequent head movement would build the participial form (in 4, *miegoj-us(i)*, ‘slept’) unproblematically.

In contrast, in Spanish, locating the polarity phrase in the position immediately below AspP has the effect of intervening between the

heads that need to form a word when the participle is constructed. If the negation is placed there, then, the word cannot be formed; the affix *-do* would remain stranded, and therefore it would not be licensed. In other words, we propose that the impossibility of negating a participle in Spanish reduces to a violation of Travis's (1984) head movement constraint—the intervening negation prevents the verb and the participial ending from forming a constituent—combined with Lasnik's (1981) Stranded Affix Filter. Lithuanian gets around this problem basically because the relevant participle is formed with heads that are below the position of low negation.

4. Conclusions

In this paper we have concentrated on the conditions under which it is possible to have a negative operator between auxiliaries and participles, comparing Spanish and Lithuanian. We have offered an explanation of this asymmetry based on the level at which participles are built in these languages. First, we have argued that low negation triggers an inhibited event reading and involves a polarity phrase within the event domain, lower than the one proposed by Laka (1990), which is above Asp. Low negation does not refute the existence of a situation, given that situations are defined above AspP. Low negation denies that the external argument is in a causative relation with a particular event essence. Secondly, we have shown that Spanish and Lithuanian participles occupy different structural positions; whereas Spanish participles are insensitive to voice, Lithuanian participles establish systematic contrasts in voice; we take this as evidence that the Lithuanian participles involved in negated periphrases are built within the verbal domain, while Spanish participles are always built above AspP. Since low negation is hierarchically lower than participles in Spanish, negation cannot directly combine with participles. In Lithuanian, low negation is merged higher than the relevant participles and as a result, negation can appear between auxiliaries and participles.

This contrast, we believe, supports last insertion, that is, an approach in which syntax builds the structure combining grammatical properties and once the syntactic structure has been built, lexical insertion takes place. Without late insertion, lexical items would be inserted before derivation takes places. Under those conditions, the

Spanish participle should be able to combine with low negation, because the phonological properties of the items involved would be satisfied by the time that negation is introduced in the structure.

In addition, our account argues in favour of a syntactic approach to inflection, and is thus an argument against structuralist approaches. If the participle was introduced in the syntax as a fully formed word in Spanish, projecting a polarity phrase below AspP would not interrupt the internal structure of the participle; the participle could be introduced above AspP, or the negation could cliticise to it if the participle is introduced as fully formed already in the verbal domain. In either case, negation should not block the formation of the participle in Spanish. In contrast, that projecting an additional head between Asp and v blocks the participial formation is precisely what we expect under a syntactic approach to inflection.

Finally, it must be highlighted that the claim put forward here is not a templatic approach. The reason why negation is placed in two positions within the clause is that each one of the two positions correlates with two different areas that define in syntax two different basic ontological objects manipulated by semantics, situations, and events. Whereas high negation refutes the existence of a situation, low negation denies the causative relation internal to the event domain. This is counter to cartographic approaches to the extent that in this analysis each polarity phrase is made possible only by the existence of distinct entities defined compositionally by syntax, not by arbitrarily designated positions inside a functional sequence.

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