

SYNTACTIC OR MORPHOLOGICAL STRUCTURE: TWO POSSIBLE WAYS TO EXPRESS AN EVENT IN PROGRESS*

Joan Rafel

Universitat de Girona

1 Introduction

The main goal of this paper is twofold. On the one hand, I want to present a syntactic analysis for the gerundive construction that in languages like English can appear with a perception verb, (1a), or with a copula, (1b). On the other hand, I want to contrast the analysis proposed here for this construction with an alternative structure that is used in many other languages to express what the gerundive construction refers to, that is, an event in progress. This second construction appears exemplified in the European Portuguese sentences in (2) (see Raposo 1989).

- (1) a. I saw [*John running.*]
 b. *John_i* was [*t_i running.*]
- (2) a. Eu vi [*os meninos a correr(em).*]
 I saw the children at RUN-INF-(AGR 3pl)
 'I saw the children running.'
 b. *Os meninos_i* estavam [*t_i a correr.*]
 the children were at RUN-INF
 'The children were running.'

The first general property that we should note about the gerundive construction in (1) and the prepositional structure in (2) is that in each case the DP {*John / os meninos*} and the phrase {*running / a correr(em)*} form a predication. Thus, on the one hand, the possibility for standard constituency tests to be applied to these constructions tells us that these two elements form a *syntactic unit*, (3a, b) and (4a, b). On the other hand, the possibility for this syntactic unit to be resumed by the neuter pronoun *it*, (3c), or occupy the subject position of a clause triggering singular agreement on the verb, (4c), indicate that this unit involves a *predication*.

- (3) a. It was [*John running*] the only thing that I saw that night.
 b. The only thing that I saw that night was [*John running.*]
 c. I saw [*John running.*] *Mary* saw *it* too.
- (4) a. Foi [*os meninos a correr(em)*] que eu vi.
 was the children at run-INF-(AGR 3pl) that I saw
 'It was the children running that I saw.'
 b. O que eu vi foi [*os meninos a correr(em).*]
 what that I saw was the children at run-INF-(AGR 3pl)
 'What I saw was the children running.'

* This work has been partially supported by an FPI fellowship (1995FI 05104) from the Generalitat de Catalunya.

In (11) the null C \emptyset is the head of the SCl. Like in a regular SCl (see (9)-(10)), the Spec of the node projected by this C, namely Spec, CP, contains the subject of the construction, *John*. This DP eventually moves to the matrix clause to check structural Case. As shown in (12), the Case checked is accusative in (1a), and nominative in (1b).

- (12) a. I saw *him*_i [SCl(CP) *t*_i running.]
 b. *He*_i was [SCl(CP) *t*_i running.]

On the other hand, the complement that the null C \emptyset selects in (11) is a non-finite IP. As usual, this non-finite IP contains its own predicative relationship. That is, it hosts a subject and a verbal predicate. The subject of this *internal predication* cannot be assigned nominative Case in Spec, IP simply because I is non-finite. Therefore this argument must be a PRO, which will check null Case within the embedded non-finite IP (Chomsky and Lasnik 1993). That PRO must be obligatorily controlled by the subject of the SCl, that is, *John*. Hence, the subject of the SCl and the subject of the internal predication cannot refer to different individuals:

- (13) a. *I saw [CP *John*_i [C' \emptyset [IP PRO_k running.]]]
 (cf. I saw *John*_i while *I*_k was running.)
 b. **John*_i is [CP *t*_i [C' \emptyset [IP PRO_k running.]]]

As far as extraction from the internal predication is concerned, the SCl-subject in Spec, CP in (14) does not stand as a barrier for the movement of the object out of CP, just like the SCl-subject in Spec, AP does not stand as a barrier for the movement of the adjectival object in (15).

- (14) a. *What*_i did you see [SCl(CP) John [C' \emptyset [IP PRO reading *t*_i?]]]
 b. *What*_i is [SCl(CP) John [C' \emptyset [IP PRO reading *t*_i?]]]
 (cf. ??*What*_i do you wonder [CP whether [C' \emptyset [IP John read *t*_i?]]])
- (15) a. *Who*_i do you consider [SCl(AP) John [Λ ' angry at *t*_i?]]
 b. *Who*_i is [SCl(AP) John [Λ ' angry at *t*_i?]]

2.1 A first empirical fact in favor of (11) is that we can immediately account for the non-propositional nature of the gerundive SCl. That is, (11) clearly distinguishes our construction from the propositional complements that also contain a verbal gerund:²

- (16) a. I hate *everybody interrupting me all the time*.
 b. HATE [CP [C' \emptyset_X [IP *everybody*_i interrupt-*ing*_X me.]]]

² In this example, the subject of the gerund can actually receive Case, contrary to what I am claiming for the subject of the internal predication in the gerundive SCl (see (11)). Interestingly, though, the embedded subject in (16) cannot be lexical when there appears a phrase in CP, as shown in (i). Precisely, this is the configuration that we have in a gerundive SCl, according to my analysis. That is, the subject of the SCl occupies Spec, CP.

(i) John kept walking slowly [CP while [IP { PRO / *him } drenching the road.]]

There are several arguments that help us verify the non-propositional status of our construction in front of the propositional nature of structures like (16).

2.1.1 First, when the main verb is of perception, the gerund contained within the SCI-construction must refer to an event susceptible of being perceived by the subject of the matrix clause. Thus, the ungrammaticality of (17) clearly indicates that the gerundive SCI cannot possess the same propositional value that the *that* CP-complement has in the sentences in (18).

- (17) a. *I see John knowing French.
 b. *I see John having already read all your books.

- (18) a. I see that John knows French.
 b. I see that John has already read all your books.

2.1.2 Second, the subject position of the gerundive SCI, i.e., Spec, CP, cannot be occupied by the expletive *there*, since in our construction Spec, CP is the position where the argumental SCI-subject is generated. This accounts for the deviance of (19), which contrasts with the possibility for the expletive *there* to appear in the propositional structure containing a gerund, as shown by the grammatical sentences in (21). In this case, the expletive *there* is generated in Spec, IP and is associated with the internal argument of the (unaccusative) verbal gerund, that is, *three men*.³

- (19) a. *I saw [SCI(CP) *there*_i [C' ∅ [IP coming *three men*_i.]]]
 b. **There*_i are [SCI(CP) *t*_i [C' ∅ [IP coming *three men*_i.]]]
- (20) a. I saw [SCI(CP) *three men*_i [C' ∅ [IP coming *PRO*_i.]]]
 b. There are [SCI(CP) *three men*_i [C' ∅ [IP coming *PRO*_i.]]]
 c. *Three men*_i are [SCI(CP) *t*_i [C' ∅ [IP coming *PRO*_i.]]]
- (21) a. I remember [CP [C' ∅ [IP *there*_i coming *three men*_i.]]]
 b. I remember [CP [C' ∅ [IP *three men*_i coming *t*_i.]]]

In (22) the element *it* is generated in Spec, CP and controls a PRO just like in (23) ((23a) is from Chomsky 1980, and (23b) from Pesetsky 1995).

- (22) a. I saw [SCI(CP) *it*_i [C' ∅ [IP *PRO*_i raining.]]]
 b. *It*_i is [SCI(CP) *t*_i [C' ∅ [IP *PRO*_i raining.]]]
- (23) a. *PRO*_i having rained all day, *it*_i began to snow.
 b. Did *it*_i ever succeed in *PRO*_i thundering and *PRO*_i hailing, as they'd predicted on TV?

³ Recall that the subject of the internal predication is PRO in the gerundive SCI. So in this construction the expletive *there* cannot appear in Spec, IP either.

A similar effect is found in examples where the subject of the gerundive SCl corresponds to the subject of an idiom chunk:

- (24) a. I saw [sCl(CP) *the shit*_i] [c: ∅ [IP PRO_i hitting the fan.]]]
 b. *The shit*_i was [sCl(CP) *t*_i] [c: ∅ [IP PRO_i hitting the fan.]]]

That the subject of an idiom chunk can be a pronoun bound by a DP is demonstrated by sentences like (25) ((25a) is from Rogers 1974 and (25b) from Nunberg et al. 1994).

- (25) a. *The shit*_i looks (to me) like *it*_i's gonna hit the fan.
 b. We thought *tabs*_i were being kept on us, but *they*_i weren't.

2.1.3 Thirdly, languages like Spanish and Catalan possess the gerundive SCl ((26)-(27)) but they do not have the gerundive structure denoting a proposition, that is, the structure in (16b), see (28). In this latter case, these languages can only use a *that*-complement, (29). This is another argument that demonstrates that, despite their superficial similarity, the gerundive construction in (1) and the gerundive construction in (16a) are structurally different.

- (26) a. He visto a *Juan corriendo*. (Spanish)
 b. He vist *en Joan corrent*. (Catalan)
 'I saw John running.'

- (27) a. *Juan està corriendo*.
 b. *En Joan està corrent*.
 'John is running.'

- (28) a. **Odio a todo el mundo interrumpiéndome a cada momento*.
 b. **Odio tothom interrompent-me a cada moment*.
 'I hate everybody interrupting me all the time.'

- (29) a. *Odio que todo el mundo me interrumpa a cada momento*.
 b. *Odio que tothom m'interrompi a cada moment*.
 'I hate that everybody interrupts me all the time.'

2.2 The second fact in favor of (11) is that we can explain the parallelism existing between the gerundive SCl in languages like English, and the so-called *Pseudo-Relative* (PR)⁴ in Romance:

- (30) a. **Ho visto Gianni correndo*. (Italian)
 'I saw Gianni running.'
 b. *Ho visto Gianni che correva*.
 have.I seen Gianni that ran.he-IMPERF
 'I saw Gianni running.'

⁴ For details regarding this construction, see Rafel 1997, 1998, and references cited therein.

- (31) a. ?*J'ai vu *Jean courait*. (French)
 b. J'ai vu *Jean qui courait*.
- (32) a. He visto a *Juan corriendo*.⁵ (Spanish)
 b. He visto a *Juan que corria*.

We only need to say that the null C \emptyset in (11), repeated here as (33), is phonologically overt in the PR, i.e., *que* 'that', and that this overt C selects a finite IP as usual, (34). A consequence of the presence of the finite IP is that the subject of the internal predication is a *pro*.

- (33) [FP [F' [CP *John*_i [C' \emptyset_X [IP *PRO*_i runn-ing_X]]]]]
 (34) [FP [F' [CP *Juan*_i [C' **que** [IP *pro*_i corria]]]]]

The SCI-subject checks accusative Case within the matrix clause, as shown in (35), whereas *pro* checks the nominative Case provided by the embedded finite I. Compare (35) with (12a).

- (35) *Lo*_i he visto [SCl(CP) *t*_i *que corria*.]
 him-ACC have.I seen that ran.he-IMPERF
 'I saw him running.'

Exactly as the gerundive SCl, the DP *María* in (36) and the sequence *que corria* form a syntactic unit, (36a, b), which involves a predication, (36c). Compare (36) -Spanish data- with (3) and (4).

- (36) a. Fue a [*María que corria*] lo único que vi aquella noche.
 'It was *María* running the only thing that I saw that night.'
 b. Lo único que vi aquella noche fue a [*María que corria*.]
 'The only thing that I saw that night was *María* running.'
 c. He visto a [*María que corria*.] Juan también lo ha visto.
 'I saw *María* running. Juan saw it too.'

Furthermore, the PR can appear where other SCIs can also be found, (37), as well as in isolation in specific contexts, (38). Compare these examples with the sentences in (5)-(8) above.

- (37) a. He visto a [_{SCl} *Juan {sentado / contento / con María}*.] (Spanish)
 'I saw *Juan* seated / happy / with *María*.'
 b. Con [_{SCl} *Gianni che parla*,] non faremo mai niente. (Italian)
 'With *Gianni* speaking, we will never do anything.'
- (38) [*Bambine che ballano un valzer*.] (Italian)
 'Children dancing a waltz.'

⁵ Romance languages such as Spanish, (32), and Catalan accept both the gerundive SCl and the PR. Nevertheless, in the limited structural contexts where both are possible there exist aspectual differences between them that make these two constructions not totally equivalent (see Rafel 1997). On the other hand, between these two possibilities, the PR is the only option available as a perception verb complement in (standard) Italian, (30), and French, (31).

3 The Prepositional Small Clause

There exists an alternative construction that is widely used to express an event in progress. The structure of this alternative construction is represented in (39).

(39) [FP [F' [PP DP_i [P' at [XP X]]]]]

The locative P *at* is the head of the SCl. As in other SCIs, the subject of the construction is generated in its Spec, that is, Spec, PP. Like in the gerundive SCl, this subject checks accusative when the construction appears as the complement of a verb, and nominative when it combines with a copula or a raising verb. This is shown in the European Portuguese examples in (40).

- (40) a. Eu vi-os_i [SCl(PP) t_i a correr(em).]
 I saw-them at run-INF-(Agr 3pl)
 'I saw them running.'
 b. Eles_i estavam [SCl(PP) t_i a correr.]
 they were at run-INF
 'They were running.'

In E. Portuguese, the locative P in (39) selects a verbal projection, that is, an IP. This verbal projection can contain either an inflected infinitive or an uninflected infinitive. When the infinitive is inflected, its subject must be a *pro*, since it will be assigned nominative Case (see Raposo 1987). When the infinitive is not inflected, the subject is a PRO, which presumably checks null Case. Like its English counterpart, the subject of the internal predication, *pro* / PRO, must be obligatorily coreferent with the SCl-subject. This is shown in (41) (cf. (13)).

- (41) a. *Eu vi [SCl(PP) os meninos_i [P' a [IP pro_k / PRO_k correr(em).]]]
 b. *Os meninos_i estavam [SCl(PP) t_i [P' a [IP PRO_k correr.]]]

Furthermore, the ungrammaticality of (42a) tells us that the prepositional SCl cannot denote a proposition either (cf. (17)-(18)).

- (42) a. *Eu vi o João a saber francês.
 I saw the João at know-INF French
 b. Eu vi que o João sabia francês.
 I saw that the João knew French
 'I saw that João knows French.'

The structure in (39) is also used in Irish. According to McCloskey (1983), the 'verbal noun' that is contained within the projection following the locative P *ag* belongs to a verbal category despite the fact of assigning genitive Case to its complement.⁶ Now, if this is true, then the structure for the Irish prepositional SCIs that we have in (43) would be similar to the structure employed in E. Portuguese. These examples are from Chung and McCloskey 1987. Here FP(VP) means functional projection related to a verbal head.

⁶ In Irish the 'verbal noun' is also used to create non-finite forms such as infinitives.

- (43) a. Chuala mé [PP na saighdiuirí] [P' ag] [FP(VP) imeacht.]]]
 heard I the soldiers at leave
 'I heard the soldiers leaving.'
 b. Tá [PP mé] [P' ag] [FP(VP) déanamh cléibh.]]]
 be-PRES I at make basket.GEN
 'I am making a basket.'

On the other hand, the XP selected by P in (39) is clearly nominal in languages such as Dutch, (44), and German, (45).

- (44) Jan_i was een brief_f_i [PP t_i [P' aan] [DP het schrijven t_j]]]
 Jan was a letter at the write
 'Jan was writing a letter.'

- (45) Jan_i war [PP t_i [P' an] [DP dem Schreiben eines Briefes]]]

4 Morphological or Syntactic Structure

The data examined so far tell us that there exist two structural strategies to express an event in progress. These two structures are depicted in (46) and (47).

- (46) [CP DP_i [C' Ø_X [IP PRO_i V-ing_X]]]] (Morphological)
 (47) [PP DP_i [P' at] [XP (IP / DP) (PRO_i) X]]]] (Syntactic)

4.1 In Standard English only the morphological strategy in (46) is possible:

- (48) a. I saw John running.
 b. John is running.
 (49) a. *I saw John at run.
 b. *John is at run.

Now, the idea is that the element *-ing* must check its features (alternatively, is interpreted) in the head of the CP-projection. The fact that *-ing* cannot be realized in this position is because it is a suffix and, hence, would not be morphologically licensed. So, this entails that in the phonological sequence it can only appear attached to the verbal head, which in English remains within the VP-shell. In this sense, the suffix *-ing* behaves like the tense suffix in English (Pollock 1989).

- (50) a. John Infl_X often [VP kiss-es_X Mary]
 b. *John kiss-es_v often [VP t_v Mary]
 (51) a. *Jean Infl_X souvent [VP embarrass-e_X Marie]
 b. Jean embarrass-e_v souvent [VP t_v Marie]

Interestingly, there exist some cases in Modern English in which the P *at* is used to indicate an event in progress. In (52a) *at work* could be perfectly used in the sense of 'stealing'.

- (52) a. Police say security cameras saw [PP the tourists [P' at [XP work.]]]
 b. *Something_i* is [PP *t_i* [P' at [XP work within me.]]]

4.2 On the contrary, only the syntactic structure in (47) is available in E. Portuguese:

- (53) a. *Eu vi os meninos correndo.
 I saw the children running
 b. *Os meninos estavam correndo.
 the children were running
- (54) a. Eu vi os meninos a correr(em).
 b. Os meninos estavam a correr.

In this structural pattern, the P *a* is a morphologically independent element. Therefore, it will not require to be attached to any head to be morphologically licensed. So, in the phonological sequence it can already appear in the position where it checks its features, i.e., in the PP head.

4.3 There are examples in English in which the morphological structure in (46) and the syntactic structure in (47) appear at the same time. This kind of *reduplication* is found in Middle English, (55a) (from Baugh and Cable 1993); literary or archaic English, (55b) (from The Collins English Dictionary); and Appalachian English, (55c) (from Romaine 1988).

- (55) a. *He_i* was [PP *t_i* [P' {on / a} [XP laugh + *ing*.]]] (Middle E.)
 b. Come [PP (you) [P' a [XP runn + *ing*.]]] (Lit. E.)
 c. *He_i*'s been [PP *t_i* [P' a [XP work + *ing* all day.]]] (App. E.)

4.4 Both (46)-(47) allow the passivization of what I have called the internal predication, i.e., the predicative relationship established within the node selected by the null C \emptyset or the P *at*. Here the SCI-subject is coindexed with the internal argument of the passivized verb. The Irish example in (57a) is from Chung and McCloskey 1987; the E. Portuguese sentence in (57b), from Raposo 1989; and the Appalachian English example in (58), from Romaine 1988.

- (56) *The house* was [SCI *t_i* *being* built.]
- (57) a. agus [SCI an teach *a* leagan.]
 and the house at knock-down-PASSIVE
 'As the house was being demolished.'
 b. Eu vi [SCI as raparigas *a* ser beijadas pelos rapazes.]
 I saw the girls at be-INF kissed-PASSIVE by.the boys
 'I saw the girls being kissed by the boys.'

- (58) There's [_{SCl} a new barn *a-building* down the road.]
'There's a new barn being built down the road.'

According to the structures proposed here, the internal configuration of these four examples would be as represented in (59)-(61).

- | | | | | | | | | | | |
|---------|-------------------|-----------------|-------------------|------------------------|-----------------|-----------------|-----------------|--------------------|------------------|------|
| (59) | [_{CP} | DP _i | [_{C'} | <u>ING</u> | [_{IP} | be ₋ | [_{VP} | buil + t | PRO _i |]]]] |
| (60) a. | [_{PP} | DP _i | [_{P'} | <u>AT</u> | [_{IP} | | [_{VP} | demolish + ed | PRO _i |]]]] |
| b. | [_{PP} | DP _i | [_{P'} | <u>AT</u> | [_{IP} | be | [_{VP} | kiss + ed | PRO _i |]]]] |
| (61) | [_{C/PP} | DP _i | [_{C/P'} | <u>AT</u> / <u>ING</u> | [_{IP} | | [_{VP} | build ₋ | PRO _i |]]]] |

REFERENCES

- Baugh, A., and T. Cable. 1993. A history of the English language. London: Routledge.
- Chomsky, N. 1980. A note on non-control pronoun. *Journal of Linguistic Research* 1. 1-16.
- Chomsky, N., and H. Lasnik. 1993. Principles and parameters theory. In *Syntax and international handbook of contemporary research*, ed. by J. Jacobs, A. von Stechow, W. Sternefeld, and T. Venneman. Berlin: W. de Gruyter, 506-569.
- Chung, S., and J. McCloskey. 1987. Government, barriers, and small clauses in Modern Irish. *Linguistic Inquiry* 18. 173-237..
- McCloskey, J. 1983. A VP in a VSO language? In *Order, concord and constituency*, ed. by G. Gazdar, E. Klein, and G. Pullum. Dordrecht: Foris, 9-55.
- Nunberg, G., I. Sag, and T. Wasow. 1994. Idioms. *Language* 70. 491-538.
- Pesetsky, D. 1995. *Zero syntax. Experiencers and cascades*. Cambridge, Mass.: MIT Press.
- Pollock, J.-Y. 1989. Verb movement, Universal Grammar and the structure of IP. *Linguistic Inquiry* 20. 365-424.
- Rafel, J. 1997. Verbal small clauses. Master's thesis, Universitat Autònoma de Barcelona.
- Rafel, J. 1998. To appear. From C to P: Evidence from Romance. *Probus*.
- Raposo, E. 1987. Case theory and Infl-to-Comp: The inflected infinitive in European Portuguese. *Linguistic Inquiry* 18. 85-109.
- Raposo, E. 1989. Prepositional infinitival constructions in European Portuguese. In *The null subject parameter*, ed. by O. Jaeggli, and K. Safir. Dordrecht: Kluwer, 277-305.
- Rogers, A. 1974. Physical perception verbs in English: A study in lexical relatedness. Doctoral dissertation, University of California, Los Angeles.
- Romaine, S. 1988. *Pidgin and creole languages*. London: Longman.
- Stowell, T. 1981. *Origins of phrase structure*. Doctoral dissertation, MIT, Cambridge, Mass.
- Stowell, T. 1983. Subject across categories. *The Linguistic Review* 2. 258-312.
- Suñer, A. 1990. *La predicación secundaria en español*. Doctoral dissertation, Universitat Autònoma de Barcelona.