

The Syntax of Small Clause Predication

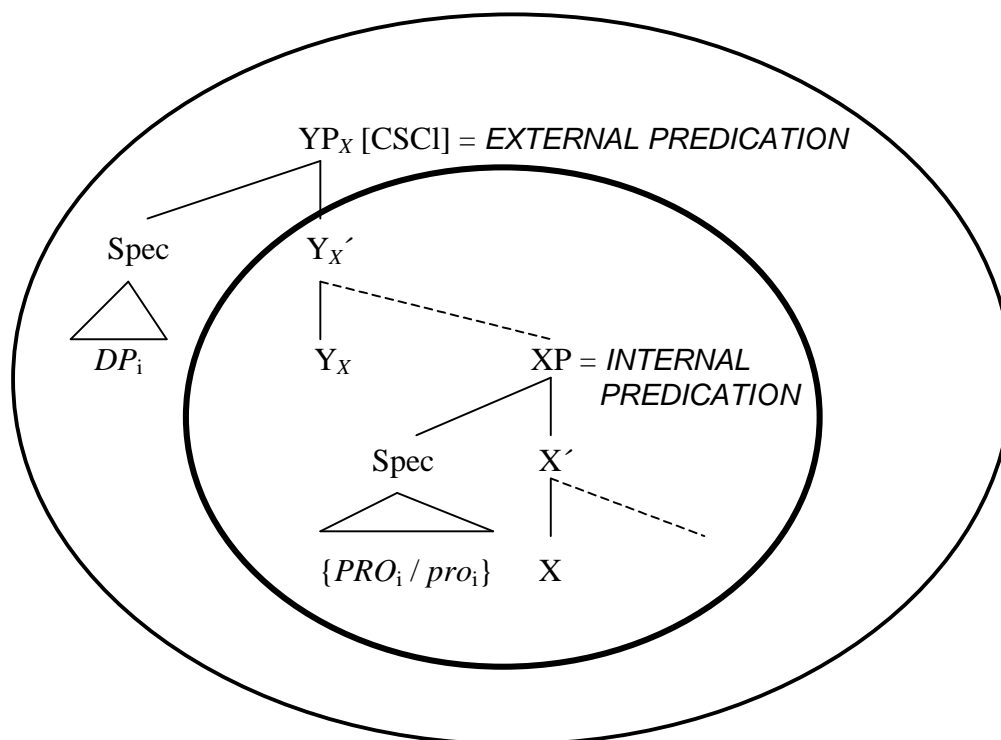
Abstract

In this paper I put forward and justify a syntactic configuration that I call *Complex Small Clause-structure*. I show that this *single* syntactic structure can explain both the semantic value and the syntactic behavior of a range of constructions that up to now have been explored separately and, hence, proposed divergent analyses among them.

1 The Complex Small Clause-structure

The syntactic configuration that I want to propose and defend in this article is depicted in (1). This is the syntactic configuration of what I call a *Complex Small Clause (CSCI)*.

(1)



From the bottom up, we can see here that a *lexical head* X selects an external argument (alternatively, a *constituent* of lexical material selects an external argument if X appears with complements). This external argument is base-generated in the specifier of the projection headed by this lexical element, that is, in $Spec, XP$. As usual in a syntactic configuration like this, these two components end up establishing a subject-predicate relationship, which will have to be licensed within a functional domain. Typically, the members and the content of each member of this functional domain will be determined by the lexical head X , in the sense that each functional projection of this domain will have to be associated with the lexical head of the predicate (X) (see Grimshaw 1991, Riemsdijk 1998).

In the structure in (1), I only represent the *highest* extended projection associated with X , which I call YP . The subscript X on the YP -projection indicates the association of this functional category

with the lexical head X. The dots between XP and YP, on the other hand, mean that other functional projections may also appear between these two projections, but, of course, only if required by the lexical head X.

Now, going back to the external argument of the lexical head X, we can see in (1) that this argument has to be null in a CSCI, that is, it must be either a *PRO* or a *pro*. The former will show up if this argument cannot check Case within the functional domain of X, namely somewhere between the XP-projection and the head Y, or, alternatively, it can only check off null Case.¹ The latter will appear if it can check off nominative Case within the functional domain of X.

As you may have already noticed, up to this point nothing special has been said in the structure in (1), since the syntactic configuration as described so far actually embodies the syntactic configuration of an ordinary predicative domain.

The special thing in the structure in (1), however, arises when we consider the highest extended projection of X, that is, the YP-projection. As it can be observed here, the unusual thing is that a DP-argument appears base-generated in its specifier, i.e., Spec, YP. As indicated by the subscript, we also notice that this DP will have to corefer with the grammatical subject downstairs, which is the null subject *PRO/pro*.

Now what this syntactic configuration tells us is that, if this arrangement of lexical and functional categories can be instantiated by some construction in some language, then language in general must permit the possibility for a *single* extended projection - YP in (1) - to contain two predicative relationships. In (1), on the one hand, we have the predicative relationship that is established by the null subject *PRO/pro* in Spec, XP and the X'-constituent. I call this subject-predicate relationship the *internal predication* of the CSCI. As we will see, this internal predication can come in two varieties: either as a verbal clause (section 2) or as a Small Clause (section 3).

On the other hand, we also have the predicative relationship that is set up by the DP in Spec, YP and the Y'-constituent. I call this predicative relationship the *external predication* of the CSCI. Now the nature of this external predication will determine the status, and hence the behavior, of the whole construction in (1). At this point, we already know that Y must be the highest extended projection of the lexical head X. This means that Y cannot be itself a lexical head, but a functional element (or semilexical, grammatical... head (see Corver and Riemsdijk 2001, Rafel 2001). On the other hand, we know that the head of a full clause can only be verbal. Therefore, if the construction in (1) is headed by Y, which is not a verb, then we can already anticipate that the whole construction in (1) will behave like a Small Clause.² Hence the name complex *Small Clause*.

Differently from ordinary SCIs, though, here the predicate of this "Small Clause" contains a full-fledged predication. In other words, its predicate is much more complex than that of a regular SCI.³ Hence the term *Complex small clause*.

What I want to do in the remainder of this article is to discuss the properties of several constructions in order to demonstrate that the syntactic configuration described by the CSCI-structure in (1) really exists. And, importantly, it really exists as a general structure. That is, this configuration is proven to encode the semantic and syntactic properties of various constructions in different languages. This means that language must indeed admit the possibility for a single extended projection to contain two predicative relationships, an idea that, I think, would be worth taking into account when we intend to explain the semantic or syntactic properties of constructions that behave like SCIs.

The constructions that I deal with here are divided in two types. Type 1 represents constructions that express an event in progress in Romance and Germanic languages. These

¹ This apparent "optional choice" simply responds to the more general controversy surrounding the type of Case that *PRO* checks, if any.

² For the concept of Small Clause, see Stowell 1981, 1983, and for some discussion with regard to this notion, see Cardinaletti and Guasti 1995.

³ Recall that the predicate of a regular SCI is X', where X is a lexical category (N, A, P). As I point out in section 4.2 below, there cannot be "regular" SCIs where X is V. I claim that the so-called Verbal Small Clauses are actually Complex Small Clauses, where X is V and the (C)SCI-subject is base-generated in the specifier of the highest extended projection associated with that V.

constructions are discussed in section 2. Type 2, on the other hand, are complex constructions the predicate of which is nominal or adjectival. I explore constructions containing the words *regard-as* and *take-for*. But within this type I also include resultative constructions in Chinese, although I claim that the analysis for the Chinese resultative constructions can also be extended to the resultative constructions in English. This is the topic of section 3. Finally, in section 4, I point out some general conclusions both for the general Theory of Grammar and for the SCI-Theory that can be drawn from the CSCI-structure presented in this article.

2 Complex Small Clauses *Type 1: The Progressive*

The constructions that are discussed in this section have two properties in common at least. The first one is that they all respond to the CSCI-structure presented in (1) above. And the second one is that they all express an event in progress. In section 2.1, I focus on the so-called Pseudo-Relative in Romance. In section 2.2, I consider the so-called Prepositional Infinitival Construction, which is found in European Portuguese, in some Italian and English dialects, and in Middle English. But, as we will see, the nominal version of this construction is also found in languages like German and Dutch.

2.1 The Pseudo-Relative

The so-called Pseudo-Relative (PR) is a construction that is used in the majority of the Romance languages to express an event in progress. An example is provided in (2) for Spanish, (2a), and French, (2b).⁴

- (2) a. He visto a [PR Juan que corría.]
 b. J'ai vu [PR Jean qui courait.]
 I have seen to-ACC John that ran.he-IMPERF
 'I saw John running.'

Before going on, let me just remark that this construction is not a relative clause. There are some arguments that conclusively show that this is so. Here are some of them:

(i) In the PR, the *that*-constituent does not modify the DP, but it rather expresses a situation in which that DP is a participant. This is what allows the whole construction to express an event in progress.

(ii) The DP can be a proper name in the PR, and, importantly, there is no break in the intonation between the DP and the *that*-constituent, at least necessarily.

(iii) Differently from a relative clause, the DP can only be interpreted as (or associated with, see shortly below) the subject of the embedded finite verb.

(iv) The tense of the *that*-constituent must match the tense of the matrix clause only in the PR.

(v) And only in the PR the DP can be extracted leaving the *that*-constituent behind.

Now, from a semantic point of view, the PR can only express an *event* in progress. In other words, this construction cannot denote a *proposition* despite being a CP-constituent. As expected, then, the only type of verbs that will be able to appear in this structure are verbs that are related to events. If this condition is not satisfied, the sentence becomes ungrammatical. This is what the example in (3a) shows us.⁵

⁴ Constructions like *I saw [John running]* are ungrammatical in some Romance languages like, for instance, French and Italian.

⁵ In this section I use Spanish data, but crucially the same effects do also hold for the other Romance languages that possess this construction.

- (3) a. *Vi a [Juan que *sabía* francés.] PR → *proposition
 saw.I to-ACC Juan that knew.he French
 b. Vi [que Juan *sabía* francés.] CP → ^{OK}proposition
 saw.I that Juan knew.he French
 ‘I saw that Juan could speak French.’

Notice that here the verb used is *saber* (‘to know’), namely a verb typically linked to propositional expressions. The example in (3b), on the other hand, indicates that the verb *saber* (‘to know’) can appear in an ordinary CP-structure, since the inherent semantic properties of this verb are not in conflict with the propositional status of a CP.

There are also some interesting syntactic facts that define the PR. To begin with, it is important to remark that this construction is interpreted as a single constituent, at least in one possible reading. Therefore, a pronoun like *lo* (‘it’) can resume the whole construction, as illustrated in (4).⁶

- (4) He visto a [María que corría.] Yo también *lo* he visto.
 have.I seen to-ACC María that ran.she I also it have.I seen
 ‘I saw María running. I saw it too.’

Note, incidentally, that this possibility clearly indicates that we are not dealing with a complex DP headed by the N *María* in (4), but rather with a “thing.” And this “thing” here is an event.

As far as the assignment / checking of theta-roles and Cases is concerned, we must assume, first, that the constituent headed by the V assigns an external theta-role to an argument base-generated in its Spec, namely, in Spec, VP. This theta-role will be that of AGENT if the V is *to run*, as in (4). The Case that this argument will check off will be the nominative that is provided by the finite IP. Now, at this point, we can follow two possible ways:

Hyp. 1] The first one is to suppose that the argument that is base-generated in Spec, VP is the lexical DP (*Juan*). In this hypothesis, then, this is the element that will check off the nominative Case that is provided by the finite IP.

Hyp. 2] The second approach consists in saying that the argument that is base-generated in Spec, VP is null, and that this is the element that will check off the nominative Case that is provided by the finite IP. Since this null argument checks nominative Case, then it has to be a *pro*. Notice that, in this hypothesis, the licensing of *pro* in the PR does not differ from the licensing of the *pro* that appears in an ordinary clause, like the one in (5).

- (5) *pro* corría.
 ran.(s)he-IMPERF
 ‘(S)he was running.’

Now, if we adopt this second hypothesis, then we must address the question concerning the position in which the lexical DP (*Juan*) is base-generated in the PR. The claim is that this lexical argument is base-generated in Spec, CP. This idea is consistent with the fact that this argument shows up preceding the C *that*, which is the highest extended projection of the lexical head, namely the verb, and the fact that the whole construction can be replaced by the pronoun *lo* ‘it’ (see (4)). Notice that this latter fact prevent us from saying that the DP is base-generated in a higher position. Were this the case, then the whole construction would be expected to behave like a complex DP-structure, contrary to what we have.

The next question that arises from this second hypothesis is how this DP is licensed semantically and structurally. The answer is that it must be semantically licensed by predication. If

⁶ As expected, all the traditional constituency tests can be also successfully applied to this construction. So, for example, the PR can be clefted, pseudoclefted, the answer to a question, etc.

predication necessarily involves the assignment of a theta-role, then we should assume that this DP gets a theta-role from the C'-constituent, since this C'-constituent is predicated of this DP. On the other hand, the sentence in (6) shows us that this DP is structurally licensed by checking off the accusative Case that is provided by the matrix verb.

- (6) {Lo / La} he visto [que (pro) corría.]
 him / her have.I seen that ran.(s)he-IMPERF
 'I saw {him / her} running.'

Now this fact is crucial since it immediately allows us to rule out the first hypothesis presented above. This is so since, according to that approach, the lexical DP (*Juan*) would end up checking off two structural Cases in the PR. The nominative assigned by the embedded finite IP, and the accusative assigned by the matrix verb (see (6)). Of course, this goes against the general idea that an argument is frozen in place when it checks structural Case (Chomsky 1995). So, at this point, we are just left with one hypothesis, the second one.

Another interesting fact about the PR is that the lexical subject must necessarily corefer with the null subject *pro*. In the example in (7), for instance, this condition is not fulfilled. So, as expected, the sentence is ruled out.

- (7) *He visto a [María_i que pro_k corrían.]
 have.I seen to-ACC Maria that ran.they

The observations provided so far are just part of a battery of arguments that lead us to analyze the PR the way it is shown in (8).⁷

- (8) PR = [CP (CSCI) Juan_i [C' que [IP [VP pro_i [V' corría]]]]]]]
 Juan that ran.he-IMPERF
 (1) CSCI = [Y_{Px} DP_i [Y_x Y_X [XP {PRO_i / pro_i} [X' X ...]]]]]

Now notice that this structure reproduces the syntactic configuration that is put forward by the CSCI-model presented in section 1 above. The CSCI-model is reproduced here again so we may compare the general structure, (1), with a specific realization of this model, (8).⁸

2.2 The Prepositional Infinitival Construction

Interestingly enough, European Portuguese does not accept the PR despite being a Romance language. Instead, it uses the so-called Prepositional Infinitival Construction (PIC) to express an event in progress. As we can see in (9), the PIC is formed by a lexical DP, the *P a* ('at'), and an infinitive, which can show up inflected, as in (9a), or as a bare infinitive, as in (9b).

- (9) a. Eu vi [PIC os meninos a correrem.]

⁷ There are two important things that must be pointed out here. The first one is that the PR can be an argument or an adjunct. In the former case, the PR is selected by a lexical head. The analysis, then, would be as shown in (8). In the latter, it just functions like a depictive SCL. This means that Spec, CP would be occupied by a *PRO* which would be controlled by a DP argument. These two versions are also found in the Prepositional Infinitival Construction (section 2.2) and in the progressive *-ing* Construction (section 2.3).

The second thing is that the lexical DP in Spec, CP in (8) must corefer with the *grammatical* subject of the internal predication, independently of the semantic properties of this grammatical subject. That is, the grammatical subject can turn out to be a nonanimate entity or an internal argument. This latter possibility is what we find when the verb in the PR is unaccusative or passivized. Again, these phenomena also apply to the Prepositional Infinitival Construction and to the progressive *-ing* Construction.

⁸ For more details on the analysis in (8) and the analyses that are presented in the remainder of this article, see Rafel 2000b.

- b. Eu vi [_{PIC} os meninos a correr.]
 I saw the children at run-_{INF}-(3P, PL)
 'I saw the children running.'

The sentences in (10), on the other hand, tell us that the same structure is also productive in some Italian and English dialects, and was productive in Middle English.

- (10) a. [L'] ho visto [a corre.] [Falconara dialect, Italy]
 him have.I seen at run-_{INF}
 'I saw him running.'
 b. [He]'s been [a-hunting a deer.] [Modern Appalachian English, U.S.A.]⁹
 c. [He] was [{on > a} laughing.] [Middle English]

Not surprisingly, the PIC behaves semantically and syntactically just like the PR. From a semantic viewpoint, then, this construction cannot express a proposition, but only an event. So the argument that was used above to show this very same thing for the PR can be reproduced here again this time using the PIC. Consider the following contrast:

- (11) a. *Eu vi [o João a *saber* francês.] PIC → *proposition (cf. (3))
 I saw.I the João at know-_{INF} French
 b. Eu vi [que o João *sabia* francês.] CP → ^{OK}proposition
 I saw.I that the João knew.he French
 'I saw that João could speak French.'

As expected, the verb *saber* ('to know') cannot appear in the PIC, (11a), but it can show up in a regular CP-structure, (11b). This indicates that the PIC is a syntactic construction that can only denote an event and, because of that, it cannot contain verbs that are not inherently linked to that ontological category.

As far as its syntactic properties are concerned, we must say first that the PIC can also be interpreted as a single constituent in one reading. So it can be resumed by the clitic *it* or be pseudoclefted. This latter possibility is illustrated in (12).

- (12) *O* que eu vi foi [os meninos a correr(em).] (cf. (4))
 what that I saw was.it the children at run-_{INF}-(3P, PL)
 'What I saw was the children running.'

As usual, we must also suppose here that the specifier of the phrase projected by the infinitive, that is, Spec, VP, hosts the argument that will be assigned the theta role of AGENT by the constituent headed by the V *to run*. But, once again, the nature of this argument leads us to consider two possible ways to proceed.

Hyp. 1] In the first hypothesis, we would say that the argument that is base-generated in Spec, VP is the lexical DP (*os meninos*). From this viewpoint, this argument would be the one that checks off the nominative Case that is provided by the IP only when the infinitive shows up inflected. If the infinitive is bare, then this lexical DP would need to move up into the matrix clause to check off accusative Case.

Hyp. 2] The second approach consists in saying that the argument that is base-generated in Spec, VP is null. This null argument would be a *pro* if it can check off nominative Case. This would

⁹ It is interesting to notice that the DP *the deer* is not preceded by the P *of*, which indicates that *hunting* is a V and, as a such, it assigns accusative Case.

occur when the infinitive appears inflected. If the infinitive is bare, then the null subject would be a *PRO*, and presumably would check off a sort of null Case.¹⁰

Of course, this second hypothesis needs to tell us where the lexical DP (*os meninos*) is base-generated in the construction. The answer would be that this DP is base-generated in Spec, PP. Again, this would be so because of the fact that this argument appears preceding the P *a* ('at') and the whole construction is not interpreted as a complex DP, but as a clause.¹¹ This latter aspect prevent us from assuming that this DP is base-generated in a higher position.

So, according to this second hypothesis, the lexical DP is base-generated in the specifier of the highest extended projection of the lexical head of the construction, namely the verb. Notice that the P *a* ('at') is the aspectual element that provides the PIC with its progressive interpretation. This means that this element is a functional head that operates on the infinitive. Now the idea that it is the highest head of the verbal functional domain is strongly supported by the German and Dutch data presented shortly below.

The sentence in (13), on the other hand, shows us that the accusative Case that is provided by the matrix verb is checked off by the lexical subject contained within the PIC.

- (13) Eu vi- [*os a correr(em).*] (cf. (6))
 I saw them at run-INF-(3P, PL)
 'I saw them running.'

Interestingly, it shows us that this occurs independently of the agreement properties of the embedded verb. In other words, the lexical DP checks off accusative Case even when the embedded IP can provide nominative Case. Again this leads us to adopt the second hypothesis pointed out above as the right one. Otherwise we would be claiming that an argument can check off two structural Cases.

Exactly like in the PR, the lexical subject has to corefer necessarily with the null grammatical subject downstairs. Thus, the sentence in (14) is out just because this condition is not satisfied.

- (14) *Eu vi [*o João_i a {PRO_k / pro_k} correr(em).*] (cf. (7))
 I saw the João at run-INF-(3P, PL)

Based partly on the analysis that Raposo 1989 proposes for these constructions, partly on the properties that we have seen here, we can say that the syntactic analysis of the PIC is as shown in (15).

- (15) PIC = [PP(CSCI) *os meninos_i* [_{P'} *a* [CP [_{C'} [IP [VP *pro_i* [_{V'} *correrem*]]]]]]]]
 PIC = [PP(CSCI) *os meninos_i* [_{P'} *a* [CP [_{C'} [IP [VP *PRO_i* [_{V'} *correr*]]]]]]]]
 the children at run-INF-(3P, PL)
 (1) CSCI = [_{YP_X} DP_{*i*} [_{Y_{X'}} Y_X [_{XP} {*PRO_i / pro_i*} [_{X'} X ...]]]]

As you may have already noticed, the syntactic organization of this construction, (15), also faithfully matches the more general syntactic configuration that I have called CSCI-structure, (1).

Before moving on to the English data, let us very briefly consider the German and Dutch examples that we have in (16).

- (16) a. [Jan] war [am Schreiben eines Briefes.] (German)
 Jan was at.the write a-GEN letter-GEN
 'Jan was writing a letter.'

¹⁰ See footnote 1.

¹¹ For example, it can be resumed by the clitic *it*, as pointed out above, and it triggers a third person, singular agreement on the matrix verb when the whole construction occupies the subject position in the sentence.

- b. [Jan] was [een brief aan het schrijven.] (Dutch)
 Jan was a letter at the write
 `Jan was writing a letter.'

The elements that make up these constructions are just like the elements that make up the PIC. And, just like the PIC, these structures do also express an event in progress, as we can see through the translations into English. Now the only relevant difference between the constructions in (16) and the PIC is found in the fact that here the aspectual P *at* is not part of the extended projection of a V, but part of the extended projection of a nominalized V. Since this seems to be the only significant difference between these constructions and the PIC, it seems plausible, at least in principle, to analyze the constructions in (16) as indicated in (17). (‘Nom.’ means ‘nominalized version of the PIC’.)

- (17) Nom. = [PP Jan_i [P' an [DP dem [NP PRO_i Schreiben eines Briefes]]]]
 Jan at the write a-GEN letter-GEN
 (1) CSCI = [Y_{Px} DP_i [Y_X Y_X [XP {PRO_i / pro_i} [X' X ...]]]

Notice that these constructions clearly show, on the one hand, that the lexical DP is base-generated in the specifier of the projection headed by the aspectual marker *an* ‘at’, namely Spec, PP. And, on the other hand, that this aspectual element is the highest head associated with the lexical noun, since it precedes a DP-projection with an overt D (*dem*).¹² This is strong evidence in favor of the idea that, in the verbal version of this construction, namely in the PIC, the lexical DP is also base-generated in this position, that is, in Spec, PP, and that the P *a* ‘at’ is also the highest head associated with the lexical head of the construction, namely the verb (see (15)). Now the difference lies in that in the PIC the P *a* ‘at’ precedes a CP, the head of which is null.¹³

2.3 The *-ing* Construction

An obvious question that arises at this point is whether a similar syntactic configuration like the one proposed here for the PR and the PIC can also be applied to the progressive construction in Modern English, in which a suffix *-ing* appears attached on the verbal head (*-ing* Construction). An example is provided in (18) for Spanish, which also admits it, and English.

- (18) a. He visto a [*-ing* C Juan corriendo.]
 have.I seen to-ACC Juan running
 `I saw Juan running.'
 b. I saw [*-ing* C John running.]

I can already anticipate that the answer is affirmative, that is, that this construction perfectly accommodates to the CSCI-model put forward here. But before presenting the analysis, let me first remark some properties that show that this construction behaves just like the PR and the PIC.

The first important thing for our purposes here is that this construction does not denote a proposition. So, as we have already seen before for the PR and the PIC, a verb that does not express

¹² As David Adger points out to me, the nominal version of the PIC is also used in Irish, as shown in (i).

(i) Chunnaic mi lain na ruith.
 saw I John in-AGR (his) running
 `I saw John running.'

The interesting thing about Irish lies in that the P *na* ‘in’ appears inflected. This indicates that there is a *pro* between this P and the nominalized verb. That an inflected P is followed by an argumental *pro* in Irish has been independently demonstrated in McCloskey and Hale 1984.

¹³ The (phonological) null properties of the C must be attributed to the infinitival form of the verb. That is, in Portuguese, as in many other Romance languages, an infinitive is always linked to a null C. So, in this sense, the PIC does not stand as an exception at all.

an event will not be allowed to appear in this construction. This is the case of the verb *to know*. This fact is illustrated by the already familiar contrast in (19) (cf. (3) and (11)).

- (19) a. *I saw [John *knowing* the answer.] *-ing* C → *proposition
 b. I saw [that John *knew* the answer.] CP → ^{OK}proposition

In this sense, the *-ing* Construction differs from another construction in English in which the verb also appears bearing the suffix *-ing*. This construction, which can be combined with verbs like *to hate* and *to remember*, is apparently an ordinary CP and, as expected, denotes a proposition. A pair of examples are provided in (20).

- (20) a. I hate [{everybody / PRO } *telling* him what he has to do.] = proposition
 b. I remember [PRO *having* read all these books.] = proposition

Some relevant differences between this construction and the progressive *-ing* Construction are the following:

(i) The embedded structures in (20) do not express an event in progress, but a proposition.

(ii) The subject of the embedded constructions in (20) can be a null PRO. This possibility is not available in the progressive *-ing* Construction. Compare (20) with (21).

- (21) a. I saw [*-ing* C { *John* / **PRO* } *watching* the stars.] = event
 b. I saw [*-ing* C { *myself* / **PRO* } *watching* the stars.] = event

(iii) Even though Spanish has the progressive *-ing* Construction, (22a), it does not possess the propositional construction with *-ing*, (22b).

- (22) a. He visto a [*-ing* C Juan *corriendo*.] = event
 have.I seen to-ACC Juan running
 `I saw Juan running.`
 b. *Odio a [todo el mundo *diciéndole* lo que tiene que hacer.] = proposition
 hate.I to-ACC all the world *telling*.him what that has.he that do-INF
 (intended meaning: `I hate everybody telling him what he has to do.`)

Thus, in the Spanish counterparts of the English sentences in (20) we can only find either a *that*-clause (when the subject of the matrix clause and the subject of the embedded clause do not refer to the same person), (23a), or an infinitival complement (when the subject of the main clause and the subject of the embedded construction do refer to the same person), (23b).

- (23) a. Odio [*that*-clause *que* todo el mundo le diga lo que tiene que hacer.]
 hate.I that all the world him tell what that has.he that do-INF
 `I hate everybody telling him what he has to do.`
 b. Odio [*Inf*-clause *PRO* decirle lo que tiene que hacer.]
 hate.I tell-INF-him what that has.he that do-INF
 `I hate telling him what he has to do.`

This indicates that the progressive *-ing* Construction and the embedded structures in (20) are indeed different constructions.

Like the PR and the PIC, the progressive *-ing* Construction can also be interpreted as a single constituent, at least in one possible reading. Thus, the whole (embedded) structure in (24) can be resumed by the clitic *it*.

(24) I saw [John running.] I saw *it* too. (cf. (4) and (12))

Let us point out now what we know for sure about the assignment of theta-roles and Cases in this construction. First, we know that, as usual, the verb *to run* in (25) assigns an external theta role (AGENT) to an argument situated in the Spec of its projection, that is, Spec, VP. And, secondly, we know that a lexical DP contained within the progressive *-ing* Construction checks off the accusative Case that is provided by the matrix verb in the example in (25).

(25) I saw [*him* run(n)ING.] (cf. (6) and (13))

On the other hand, we also know for sure that the suffix *-ing* that appears on the verb is the aspectual marker that provides the construction with its progressive interpretation, and that this construction does not denote a proposition. In other words, it seems fair to think that this construction cannot be an ordinary CP-structure, probably in contrast to the embedded *-ing* constructions in (20).

Now, if we put together all the things that we know for sure about the *-ing* Construction,¹⁴ then we are led to analyze this construction the way it is depicted in (26).

(26) *-ing* C = [CP (CSCI) John_i [C' *-ing* [IP [VP PRO_i [V' run(n)_]]]]]
 (1) CSCI = [YP_X DP_i [Y_{X'} Y_X [XP {PRO_i / pro_i} [X' X ...]]]

Now, as you may have already noticed, the only difference between this construction, on the one hand, and the PR and the PIC, on the other, lies in the morphological nature of the CSCI-head. That is, in this construction the CSCI-head is the aspectual suffix *-ing*. So, as a suffix, it will have to appear at the overt Syntax attached on a lexical element, in this case the verbal head. Differently, the CSCI-head in the PR and in the PIC, namely *que* and *a*, respectively, is an unbound element. So it will be able to show up at Syntax as an independent morphological head. All in all, this means that Modern English uses a *synthetic* version of the progressive construction, whereas those languages that utilize the PR or the PIC make use of the *analytic* version of exactly the same construction.

2.4 Summary

The specific instantiations of the CSCI-model that have been presented in this section are reproduced here once again in (27).

The progressive construction → A single syntactic configuration

(27) a. [CP (CSCI) Juan y María_i [C' *que* [IP *pro*_i corrían]]] (*analytic*)
 b. [PP (CSCI) O João e a Maria_i [P' *a* [CP [C' [IP *pro*_i correrem]]]]] (*analytic*)
 c. [PP (CSCI) O João e a Maria_i [P' *a* [CP [C' [IP PRO_i correr]]]]] (*analytic*)
 d. [CP (CSCI) John and Mary_i [C' *-ing* [IP PRO_i run(n)_]]] (*synthetic*)

The main properties that characterize these structures are the following:

¹⁴ The ones mentioned in the text but also the idea that the verb must be associated with an IP- and a CP-projection; the fact that this construction behaves like a SCI, and just like the PR and the PIC, which do also express an event in progress; or the fact that the lexical subject can move further up to an A-position:

- (i) a. *John*_i was seen [CSCI *t*_i running.]
 b. *John*_i is [CSCI *t*_i running.]

- (i) The CSCl-predicate (i.e., the internal predication) can be either verbal (Romance, English) or nominal (German, Dutch, Irish).
- (ii) The highest extended projection of X is an aspectual marker: [Y = Asp]¹⁵
- (iii) The aspectual marker can be an independent head (*analytic* version [Romance, German, Dutch, Irish, dialectal and Middle English]) or a bound head (*synthetic* version [Modern English and some Romance languages]).

3 Complex Small Clauses Type 2: *regard-as* / *take-for* and Resultative Constructions

The question that arises at this point is whether the CSCl-model presented in section 1 can only account for the progressive construction in various languages or, differently, this syntactic configuration is more productive than that. Well, the answer is that this structure *is* more productive than that. I claim that it can also be found in constructions that here I call *regard-as* and *take-for* constructions (section 3.1), and may also be found in resultative constructions (section 3.2).

3.1 *regard-as* and *take-for* constructions

The examples of CSCl that here I call the *regard-as* and *take-for* constructions are provided in (28).

- (28) a. I regard [John as my best friend.]
 b. They took [John for a fool.]

Once again, let us first start remarking what we surely know about these constructions. To begin with, we know that the SCI-predicate *my best friend* and *a fool* in (28) must assign a theta-role to a subject, just like it does in the sentences in (29).

- (29) a. *John*_i is [_{SCI} *t*_i my best friend.]
 b. *John*_i is [_{SCI} *t*_i a fool.]

On the other hand, we know that the lexical DP *John* in (28) checks off the accusative Case that is provided by the matrix verb. This is shown in (30).

- (30) a. I regard *him* as my best friend.
 b. They took *him* for a fool.

Now, if we want to make things easy, we can say at this point that the argument that gets the theta-role from the SCI-predicate in (28) and the argument that checks Case within the matrix clause in (30) is exactly the same one, that is, the lexical DP *John*. Thus, from this perspective, the DP *John* would be the thematic subject of the SCI-predicate *my best friend* or *a fool*, that is, it would be base-generated in a position following the particle *as / for*. Later on, it would move up in the structure in order to check Case within the matrix clause. Hence, this lexical DP ends up in a position preceding the particle *as / for* at the overt Syntax. This line of reasoning has actually led to many linguists to propose what we can call the “traditional” analysis of these constructions. The representation is given in (31).¹⁶

¹⁵ For arguments in favor of the idea that the C *que* ‘that’ behaves like an aspectual marker in the PR, see Rafel 2000a, b.

¹⁶ The particles *as / for* have been taken as ‘prepositional complementizers’ (see Starke 1995). Even though I also use this term here, my analysis does not depend at all on the categorial status of these heads.

- (31) a. [CP [C' as [XP(SCI) John [my best friend]]]]
 b. [CP [C' for [XP(SCI) John [a fool]]]]

Although the analysis in (31) seems to be the simplest one (even the most logical one), it raises some important problems that should not be ignored for the sake of simplicity. Some of these problems are the following:¹⁷

(i) Differently from English, in Spanish subjects do not have to appear necessarily in Spec, IP at the overt Syntax (or its equivalent in a SCI). So, for example, in SCIs the subject can show up either following or preceding the SCI-predicate. This is shown in (32).

- (32) a. Tomaron a [*Juan* por tonto.]
 took.they to-ACC Juan for fool
 'They took Juan for a fool.'
 b. Tomaron [por tonto a *Juan*.]

Despite that, the subject cannot appear in this construction between the particle *por* 'for' and the predicate *tonto* ('fool') ever. This is illustrated in (33a).

- (33) a. *Tomaron [por *Juan* tonto.]
 took.they for Juan fool
 b. Tomaron a [Juan por *extraordinariamente* tonto.]
 took.they to-ACC Juan for extraordinarily fool
 'They took Juan for a big jerk.'

The example in (33b), on the other hand, tells us that the ungrammaticality of (33a) cannot be attributed to some kind of affixation of the particle *for* onto the predicate *fool*.

(ii) Following the analysis in (31), we must assume that in the passive sentences in (34) the DP *John* has moved from the position where it is base-generated (an A-position), to the Spec of the projection headed by the particle *as / for* (an A-bar position)¹⁸ and, finally, into the subject position of the matrix clause, where it checks off nominative Case (again an A-position).

- (34) a. *John*_i is regarded [*t*_i [as [*t*_i my best friend.]]]
 b. *John*_i is taken [*t*_i [for [*t*_i a fool.]]]

Now the legitimacy of this movement operation is not, by any means, obvious since we obtain a mixed [A, A', A] chain and, according to the generative tradition, this combination should get us an ungrammatical output, in contrast to what we have, (34).

(iii) Another question is why the lexical DP in (35a) cannot be assigned structural Case by the P *for* contrary to what we have in (35b). Furthermore, we may wonder why the D/NP *women* [3 person, plural] in (36a) has to move to a position preceding the particle *as* if this D/NP does not check off the nominative Case that is provided by the finite IP of the matrix clause [3 person, singular].

- (35) a. *They took [for *him* a fool.]
 b. For *me* to do that, ...

- (36) a. [*Women* as engineers] still surprises some people. (from Emonds 1985: 276)
 b. *[As *women* engineers] still surprises some people.

¹⁷ For more arguments and details, see Rafel 2000b, 2001.

¹⁸ Since this is not an agreement position nor a theta position in this analysis. Recall, furthermore, that in this analysis *as* and *for* are considered 'prepositional complementizers'.

(iv) And, finally, in the *regard-as* case, we happen to have a version in which the particle *as* introduces a finite clause, as shown in (37b).

- (37) a. I regard *John* as my best friend.
 b. I regard *John_i* as if *he_i* were my best friend.

In this finite clause we find a subject that, in this example, must corefer with the lexical DP that appears preceding the particle. Of course, the analysis in (31) does not tell us anything about the obvious relationship between the SCI-version, (37a), and the finite clause-type, (37b).

The position we are at this point is the following. We know that the SCI-predicate *my best friend* and *a fool* must assign a theta-role to a subject (see (28)-(29)), and that the lexical DP checks off the accusative Case that is provided by the matrix verb (see (30)).

But we now know that this lexical DP, first, cannot appear between the particle and the predicate ever, and, secondly, cannot move up into the matrix clause without violating some theoretical principle.

At this stage, we also know that there are some constructions that contain two subjects, one lexical and one null, within a single extended projection. Now the obvious thing to suppose at this point is that maybe a similar analysis can also be applied to these constructions. Were this the case, we would obtain the structures in (38).

- (38) *regard-as* = [_{CP} (CSCI) John_i [_{C'} as [_{DP} (SCI) *PRO_i* my best friend]]]
take-for = [_{CP} (CSCI) John_i [_{C'} for [_{DP} (SCI) *PRO_i* a fool]]]
 (1) CSCI = [_{YP_x} DP_i [_{Y_{x'}} Y_X [_{XP} {*PRO_i* / *pro_i*} [_{X'} X ...]]]]

Now the surprising thing is that by adopting this analysis we can immediately account for the problems that we encounter by using the traditional analysis. Here are the explanations:

(i) The lexical DP (*John*) cannot appear between the particle and the SCI-predicate because this DP is base-generated in a higher position in the structure, namely Spec, CP. Of course, the same goes for languages with a relatively free word order like Spanish (see (33a)). But, as we have already seen, in Spanish, even though we can find the SCI-subject either preceding or following the SCI-predicate (see (32)), and even lexical material between the particle *por* 'for' and the predicate *tonto* 'fool' (see (33b)), we can never find the lexical DP between these two elements. This fact could be attributed to a prohibition of inserting an argumental DP-subject into the subject domain already occupied by another argumental subject, namely *PRO*, which is, furthermore, coindexed with, or controlled by, that very same lexical DP.

(ii) In this configuration, the specifier of the projection headed by the particle turns out to be an A-position. This is so because the lexical DP is base-generated there. So this lexical DP will be free to move further up in the structure to an A-position. Hence the grammaticality of the passive sentences in (34), where we end up with a uniform [A, A] chain.

(iii) The lexical DP cannot get Case from the prepositional C *for* (see (35a)), as opposed to what we find in structural contexts like that in (35b), because in the derivation this lexical DP never occupies a position below that particle.

(iv) The only difference between (37a) and (37b) lies in that the constituent introduced by the particle *as* is a SCI in (37a), the subject of which is a *PRO* because it cannot check structural Case, whereas it is a finite clause in (37b), where the subject is a pronoun that can check off nominative Case.

3.2 Resultative Constructions

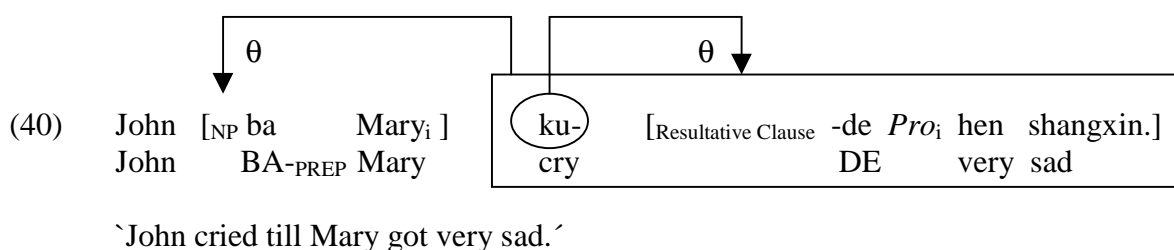
Interestingly enough, Huang (1992) proposes an analysis for the resultative constructions in Chinese that reminds us a great deal of the CSCI-structure that we are testing here.

An example of the resultative construction in Chinese is given in (39).

- (39) John [ba Mary] ku- [de hen shangxin.]
 John BA-_{PREP} Mary cry-DE-_{CLITIC} (=OLD V 'obtain') very sad
 (lit. John to Mary cried till very sad.)
 'John cried till Mary got very sad.'

In this sentence, we can see that the resultative construction in Chinese is formed by two constituents, the ones that appear into brackets. In the first one, we have a DP, *Mary*, which is introduced by a particle, presumably a Case marker. In the second one, on the other hand, we have a particle, which derives from the old verb *to obtain*, plus an adjectival predicate that indicates the state in which the DP *Mary* ends up in.

Now, the analysis that Huang proposes for this construction is the one depicted in (40).¹⁹



According to this analysis, the V (*cry*) selects and theta-marks the resultative clause (“*obtain*” *very sad*). After that, the resultative clause (“*obtain*” *very sad*) plus the V (*cry*) select and theta-mark the lexical DP (*Mary*).

So the question at this point is whether this analysis accommodates or relates, if it does in any way, to the general CSCI-structure that we are using here. Well, the answer is clear cut: It does relate to the general CSCI-model since the analysis in (40) is nothing more than a “restructured” version of the CSCI-configuration. The analysis in (40) previous to the restructuring operation would look like (41).

- (41) Resultatives = [CSCI Mary_i [de [Pro_i [very sad]]]]
 (1) CSCI = [Y_{Px} DP_i [Y_{X'} Y_X ... [XP {PRO_i / pro_i} [X' X ...]]]]

Here we only have to say that the CSCI-head, which is *de* in (41), incorporates at Syntax onto the matrix verb (*cry*). Nothing else needs to be said.

Just like in other types of CSCI, the lexical subject checks structural Case (accusative) within the matrix clause, and it must corefer with the null subject *Pro*, which gets the theta-role from the adjectival predicate. As expected, if the subject of the external predication and the subject of the internal predication do not corefer, then we obtain an ungrammatical sentence. This is shown in (42) (from Huang).

- (42) *ta_k ba fan_i chi-de [t_i [Pro_k hen bao]]
 he BA-_{PREP} rice eat-DE very full
 (intended reading: 'He ate rice and got very full.')

The natural question to ask at this point is whether the same approach to the resultative constructions in Chinese can also be extended to the resultative clauses in English. I think that, as a hypothesis, this is a plausible idea. We would only need to say that in the resultative constructions in English the head of the CSCI is null. So the structure of the embedded construction in (43a) would be as depicted in (43b).

¹⁹ Huang uses *Pro* for *pro* or *PRO* due to the lack of morphological evidence in Chinese in favor of one or another.

- (43) a. John kicked [the door open.]
 b. [CSCI(PP) the door_i [P' ∅ [= "obtain"] [AP(SCI) PRO_i [A' open]]]
 (1) CSCI = [Y_{Px} DP_i [Y_{X'} Y_X ... [X_P {PRO_i / pro_i} [X' X ...]]]

As I said, this is a hypothesis that, I think, would be worth looking into.

3.3 Summary

The analyses of the constructions that have been considered in this section are reproduced here once again in (44).

Non-verbal constructions → A single syntactic configuration

- (44) a. [CP(CSCI) John_i [C' as [DP(SCI) PRO_i my best friend]]] (*analytic*)
 b. [CP(CSCI) John_i [C' for [DP(SCI) PRO_i a fool]]] (*analytic*)
 c. [PP(CSCI) the door_i [P' ∅ [AP(SCI) PRO_i open]]] (??)

The main properties that characterize these structures are the following:

- (i) The CSCI-predicate is nominal or adjectival.
- (ii) The highest extended projection of X is either a modal marker (*as / for*) or a relational element (resultatives).
- (iii) This marker can be an independent head (*analytic* version [*regard-as* and *take-for* constructions]) or a bound head (*synthetic* version [Chinese resultative constructions]).

4 The Complex Small Clause-structure: Some consequences

In this article, I have put forward the structural model of what I have called a *Complex Small Clause*, and have applied this model to several constructions in different languages. The (main) constructions that have been examined and the analysis in terms of a CSCI that has been proposed for each one of these constructions appear in (45).

(45)

- | | | | |
|----|-----------------------------------|---|----------------------|
| a. | [CP(CSCI) Juan _i | [C' QUE [IP pro _i corría]]] | (<i>analytic</i>) |
| b. | [PP(CSCI) os meninos _i | [P' A [CP pro _i correrem]]] | (<i>analytic</i>) |
| c. | [PP(CSCI) os meninos _i | [P' A [CP PRO _i correr]]] | (<i>analytic</i>) |
| d. | [CP(CSCI) John _i | [C' _ING [IP PRO _i run(n)_]]] | (<i>synthetic</i>) |
| e. | [CP(CSCI) John _i | [C' AS [DP(SCI) PRO _i my best friend]]] | (<i>analytic</i>) |
| f. | [CP(CSCI) John _i | [C' FOR [DP(SCI) PRO _i a fool]]] | (<i>analytic</i>) |
| g. | [PP(CSCI) the door _i | [P' ∅ [AP(SCI) PRO _i open]]] | (??) |

In this section, I remark some consequences that can be drawn from the discussion presented in this paper. In section 4.1, some consequences for the general Theory of Grammar are pointed out. In section 4.2, I outline some consequences for the SCI-Theory. Of course, these general consequences must be implemented by the ones drawn by the reader.

4.1 Some consequences for the General Theory of Grammar

- We have learned that a structural model, the one put forward by the *Complex Small Clause*-structure, explains the semantic and syntactic properties of a set of constructions that up to now have been analyzed in tremendous different ways.

- The constructions examined here have told us once again that every element counts, be it an independent head or a morpheme. So the simplest element can determine the syntax and semantics of the construction it appears in. For example, we have seen that the particle *as* that shows up in the *regard-as* construction is not an “optional” head, that is, the phonological realization of the head of a PredP-projection, as sustained in Bowers 1993, but the head of a CSCI. So there is an important semantic and syntactic difference between the example in (46a), on the one hand, and the ones in (46b, c), on the other.

- (46) a. I consider [_{SCI} John my best friend.]
 b. I consider [_{CSCI} John *as* my best friend.]
 c. I consider [John *as* if he were my best friend.]

This means that, if there is really a PredP introducing a clause, be it a full clause or a small clause, its head cannot be covert or overt optionally.

The *-ing* Construction, on the other hand, shows us that the same simple element can also be linked to different semantic and syntactic structures. We have seen that the suffix *-ing* can be associated presumably with a plain CP, (47a), or associated with a CSCI-configuration, (47b). In the former case, the construction has a propositional value, whereas in the latter context it denotes an event.

- (47) a. I hate [_{CP} people *telling* him what he has to do all the time.]
 b. I saw [_{CSCI} him *running*.]

4.2 Some consequences for the SCI-Theory

- The CSCI-model suggests that predication is the result of a syntactic relationship. We have seen that a full-fledged predicative relationship can be itself predicated of a subject, although certain conditions must be met. The most remarkable ones are (just to recall):

(i) The CSCI-subject must be base-generated in the Spec of the *highest* extended projection associated with the lexical head of the construction (X).

(ii) The CSCI-subject must corefer with the *grammatical* subject of the internal predication.

This structural configuration is used to express the idea that an entity (DP) is or becomes (progressive and resultatives, respectively) a participant in some sort of *event* (e) [Type 1] or *situation* (s) [Type 2]:

- (48) a. [DP ^ e] where *e* is [Event PRO V]
 b. [DP ^ s] where *s* is [Situation PRO A / N]

- A functional (or semi-lexical, grammatical...) element (see Corver and Riemsdijk 2001, Rafel 2001) can be the head of a SCI. This occurs when a subject is base-generated in the specifier of its projection. This means that the asymmetry between lexical and functional categories traditionally assumed by the Small Clause Theory (since Stowell 1981, 1983) does not exist.

The functional properties of the CSCI-head make us expect this head to “look for a lexical host.” It can already do it at the overt Syntax. In this case, we can see that the CSCI-head can look either “down,” like in the progressive construction in English [*-ing* run(n)-], or “up,” like in the resultative constructions in Chinese [eat-*de*]. But it can also wait and do it after Spell Out. In this

case, the CSCl-head shows up at the overt Syntax as an independent head, like in the PR [*que corría*], PIC [*at work*], `regard-*as*`, and `take-*for*` constructions.

- The so-called `Verbal Small Clauses` may just be tokens of the CSCl-model. From this viewpoint, in a full clause the subject would be base-generated in Spec, VP, whereas in a Verbal Small Clause the subject of the construction would be base-generated in the Spec of the highest extended projection associated with the verb. This is what occurs in the examples of Verbal Small Clause that have been considered in this article, namely the PR, the PIC and the progressive *-ing* Construction. But it is also expected to happen in other examples of Verbal Small Clause, typically in the so-called Bare Infinitive (BI), (49). ((49a) is in Spanish.)

- (49) a. He visto a [BI Juan correr.]
 have.I seen to-ACC Juan run
 `I saw Juan run.`
 b. I saw [BI John run.]

According to the position adopted here, the BI would be analyzed as shown in (50). Compare (50) with the version of the PIC in which the lexical head is a bare infinitive, (15).

- (50) BI = [_{CP} John_i [_{C'} Ø [_{IP} [_{VP} PRO_i [_{V'} run]]]]]
 (1) CSCl = [_{YP_x} DP_i [_{Y_{x'}} Y_X ... [_{XP} {PRO_i / pro_i} [_{X'} X ...]]]]

This is a possibility that, I think, deserves to be explored seriously, just like the analysis of the resultative construction in terms of a CSCl addressed in section 3.2 above.

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