The Internal Structure of Absolute Small Clauses

Luis López

Cornell University

This paper is an investigation into the functional structure of Absolute Small Clauses (ASCs), with data based on Spanish. ASCs are composed of a predicate and an NP and they are adjoined to a main clause without a mediating complementizer. It is shown that their structure is not 'special' but a proper subset of main clause structure. ASCs have some interesting restrictions: (i) Individual Level (IL) predicates are disallowed, (ii) deep subjects are disallowed, and (iii) the order NP+predicate is disallowed. The analysis of (i)-(iii) relies on recent proposals regarding clause structure, in particular, (i) Diesing's Mapping Hypothesis and her structural analysis of the Individual/Stage Level distinction and (ii) what Koizumi has termed the Split VP Hypothesis, according to which some functional categories are generated between the lower and the upper VP shells. Additionally, the question of how the case of the NP is checked is addressed, and it is suggested that the feature composition of the head Aspect in ASCs is minimally different from that of main clauses. A discussion of Italian ASCs ensues and it is argued that they have the same

1. Introduction

The empirical scope of this paper is Spanish Absolute Small Clauses (henceforth ASCs). ASCs are adjuncts composed of a predicate—usually, but not necessarily, a past participle—and a noun phrase, which is optional in many cases. In (1a) the predicate that heads the ASC is a participle, in (1b,c) it is an adjective, in (1c,d) it is an adverb (examples from Hernanz (1991)):

structure as the Spanish ones.

- a. Desaparecidas las joyas, llamaron a la policía.
   disappeared the jewels called-3pl to the police
  - b. Limpias las armas, los soldados salieron a la calle.
     cleaned the weapons the soldiers went-out to the street
  - c. Tenso el gesto, el gato nos observaba desde la silla.

    tense the gesture the cat us looked-at from the chair
  - d. Así las cosas, uno no sabe qué pensar.
     like-this the things one not knows what believe
  - e. Lejos los buques, la población isleña pudo retornar a sus casas.

    far the boats the population of-island could return to their homes

Here I focus mainly on participial ASCs, though the analysis presented extends to the other types. Using the examples in (2), I sketch the distinctive characteristics of this construction. ASCs are unaccusative or transitive:

- a. Desaparecidas las joyas, llamaron a la policía.
   disappeared the jewels called-3pl to the police
  - b. Rotos los vínculos familiares por la irresponsabilidad de los padres, los broken the bonds familiar by the irresponsibility of the parents the adolescentes se sumen en la depresión.
     adolescents SE sink into the depression

In both cases, the NP can be phonetically empty. If so, it has to be controlled by some constituent in the main clause, usually the subject. I assume this empty category to be pro:

(2) c. Sitiada proi durante varios meses, la ciudadi tuvo que rendirse.
besieged for several months the city had that surrender

d. declarada proj en estado de emergencia por tercera vez en pocos meses, el declared in state of emergency for third time in few months the gobierno decidió enviar refuerzos militares a [la ciudad de Ayacucho]; government decided send reinforcements military to the city of Ayacucho

When the predicate is transitive, it admits a by-phrase:

(2) e. Destruido el litoral por la mancha de petróleo, los pescadores emigraron. destroyed the shore by the spot of oil the fishermen emigrated

The NP must be a 'deep' object, that is, the subject of an unaccusative verb or the object of a transitive verb. 'Deep' subjects are disallowed (Perlmutter (1978), Belletti (1981)):

- f. \*Trabajado Juan, se fue de paseo.
   worked Juan SE went-3sg of walk
  - g. \*Destruido el general, miró la ciudad con orgullo.

    destroyed the general looked-3sg the city with pride

The order participle+NP is obligatory. The sequence NP+participle is ungrammatical:

(2) h. \*Los vínculos familiares rotos, los adolescentes se sumen en la depresión.

the bonds familiar broken the adolescents SE sink into the depression

Finally, the NP receives nominative Case:1

<sup>&</sup>lt;sup>1</sup> I use a pronominal NP to show the morphological Case difference. While ASCs with pronouns sound somewhat unnatural, there is a definite contrast between (2i) and (2j).

(2) i. Desmayado yo, la reunión no pudo comenzar.

fainted I the meeting not could begin

j. \*Desmayado mí, la reunión no pudo comenzar.

fainted me the meeting not could begin

Notice that ASCs do not show any trace of a tense morpheme. Since current theory (see for instance Chomsky (1993)) links nominative Case to finite Tense, the availability of nominative in ASCs is a phenomenon that needs to be accounted for.

Another characteristic of this type of constructions —noticed by Hernanz and by Stump (1985) for English, is that the participle must be a Stage Level (SL) predicate, it cannot be an Individual Level (IL) predicate (see Carlson (1977) for a description of the distinction):

(3) - a. \*Sabidas muchas matemáticas, Carlos pudo entrar en la universidad.

known many mathematics Carlos could enter in the university

b. \*Hablado español, Susana consiguió un buen trabajo.

spoken Spanish Susana got a good job

In this paper I will argue for an analysis of ASCs that answers the following questions:

Q1. what the functional structure of ASCs is;

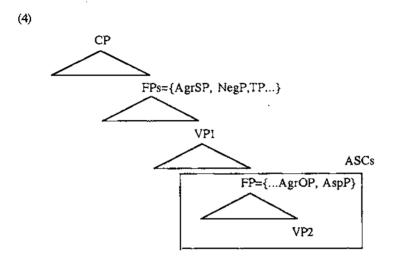
Q2. why ASCs must be SL predicates;

O3. why the NP must be a 'deep' object;

Q4. why the order V+NP is obligatory;

Q5. how the NP receives nominative Case.

Following Belletti's, De Miguel's and Hernanz's insights, I show that ASCs are composed of the lower part of an ordinary clause. Furthermore I claim that ASCs provide strong evidence for the view that some functional structure has to be projected between the two VP shells (in the sense of Larson (1988)), as has been argued by Travis (1991), Bowers (1992), Koizumi (1993), Zagona (1993) and Collins and Thráinsson (1993). Following Koizumi, I call this the split-VP hypothesis. If (4) represents an ordinary clause, ASCs consist of only the VP2, the inner shell, and the functional projections associated with it (FP=functional projections):



I call the functional projections projected by V2 'inner' functional categories, and the functional projections projected by V1, 'outer' categories.

The fundamental hypothesis that underlies my discussion is that the functional hierarchy is fixed by UG, variation limited to the feature composition of the functional categories (Borer (1983)). This has two consequences for an analysis of ASCs. First, the structure of Spanish ASCs has to be a proper subset of the grammar of Spanish clauses —i.e., the structure of ASCs cannot be 'special' with respect to ordinary clauses. Since structure is not subject to intralinguistic variation, 'subgrammars' (Addis (1993)) must be defined in other terms. I will argue that the feature composition of the functional category Aspect in ASCs is minimally different from that of main clauses.

Secondly, ASCs in other languages should have the same structure, hence the same properties as ASCs in Spanish —except word order, which depends not on hierarchy but on the strength or richness of features, as generally assumed (Pollock (1989), and many others). In this respect, I believe that the analysis that I present here extends to ASCs in English and Italian.

This paper is organized as follows: in section 2, I present the structure that I propose for ASCs, answering QI. In section 3, I explain why ASCs must be SL predicates. In section 4, I show how the split VP hypothesis accounts for the absence of external arguments in ASCs. In section 5, I discuss the word order problem. In section 6, I present an account for the licensing of the NP, with which I answer Q5. Section 7 summarizes my results so far. In section 8, I discuss Italian ASCs and finally, in section 9, I argue *contra* Belletti (1990), De Miguel (1990) and Hernanz (1991) that there is no CP in ASCs, in keeping with the hypothesis that the structure of ASCs is properly contained in the structure of ordinary clauses.

# 2. The Structure of ASCs

## 2.1. No 'Outer' TP in ASCs

Belietti (1990), De Miguel (1990) and Hernanz (1991) argue that there is no Tense Phrase in ASCs. I agree that there is no 'outer' Tense in ASCs. Participles in Spanish do not support any tense morphemes: when participles are constituents of full clauses, tense features need the support of an auxiliary. ASCs are ungrammatical with an auxiliary with finite tense, as shown in (5). It is possible to have a gerundive auxiliary with a participle forming a sentential adjunct, as in (5b), but then we obtain a different type of construction, as we shall see in section 2.5.

- (5) a. \*Ha disuelto el sulfuro en agua, pierde sus propiedades corrosivas.

  has dissolved the sulphur in water loses its properties corrossive
  - b. Habiendo disuelto el sulfuro en agua, el químico sonrió a la audiencia.
     having dissolved the sulphur in water the chemist smiled to the audience

Moreover, as I mentioned at the beginning of this paper, adjectives and adverbs can also head an ASC, and neither of these categories are assumed to project a TP.

On the other hand, De Miguel (1992) claims that TP is the highest node in ASCs. This TP is described as an abstract morpheme but as a syntactically relevant category. Her motivation is that ASCs contain the temporal information that the event described in the ASC is anterior with respect to the event taking place in the main clause. She thus characterizes the head of TP as containing the feature [+anterior]. This feature would be responsible for the variety of adverbial functions vis-à-vis the main clause that an ASCs may have, since all of them are to be understood as temporally anterior. For instance, in (6a) the ASC is to be read as causal, whereas in (6b) it is conditional (examples from De Miguel (1992:65), who attributes the first one to Alcina and Blecua and the second one to Lázaro Carreter). Both causality and conditionality are thus encapsulated in the feature [+anterior]:

- (6) a. Dada su poca seriedad, optamos por no renovarie el contrato. given her little seriousness choose-1pl for not renew-3sgDat the contract
  - b. Gastada esa agua, no podremos ni beber.
     wasted that water not can-FUT-1pl neither drink

Since the TP that De Miguel argues for cannot be identified with the overt Tense of main clauses that has a clear morphological correlate, I suggest that it is an 'inner' Tense, not an 'outer' one. The claim that there is a functional node Tense internal to the VP has been put forward by Travis (1991) and Collins and Thráinsson (1993). Thus, De Miguel's argument for a TP in ASCs would provide further evidence for this hypothesis.

## 2.2. No NegP in ASCs

Belletti (1990), De Miguel (1990) and Hernanz (1991) correctly point out that there is no NegP in ASCs either:

(7)\* No disuelto cl sulfuro en agua... dissolved the not sulphur in water b. \* No sulfuro... disuelto, el not dissolved the sulphur

Following these authors. I attribute the ungrammaticality of (7) to the absence of a NegP.

De Miguel (1992) claims that the prohibition against negation in ASCs is of a semantic, not a syntactic nature, derived from its temporal nature. However, compare the participial absolute of (8a) with the gerundive of (8b):

- (8) \*No disuelto ei sulfuro de la manera adecuada, Juan hubo de not dissolved the sulphur of the right Juan had way conclusión del posponer la experimento hasta el día siguiente. postpone the conclusion of the experiment until the day following
  - b. No habiendo disuelto el sulfuro de la manera adecuada, Juan hubo de not having dissolved the sulphur of the way right Juan had to posponer la conclusión del experimento hasta el día siguiente.
    postpone the conclusion of the experiment until the day following

(8a) is ungrammatical, in contrast with the grammatical (8b). I cannot find any semantic feature that distinguishes (8a) from (8b) and that can be held responsible for the ungrammaticality of (8a).<sup>2</sup> I conclude that lack of the necessary structure causes the ungrammaticality of (8a).

<sup>&</sup>lt;sup>2</sup> Notice that the positive counterpart of (8b) has a different interpretation:

 <sup>(</sup>i) Habiendo disuelto el sulfuro, Juan prosiguió con el experimento.
 having dissolved the sulphur Juan went-on with the experiment

#### 2.3. No CP in ASCs

Belletti (1990), De Miguel (1990) and Hernanz (1991) claim that there is a CP in ASCs. Since this point has numerous ramifications, I postpone it to section 9, where the hypothesis of a CP in ASCs is discussed in detail. It will be shown that there is no convincing evidence for a CP in ASCs.

## 2.4. AgrOP

Participles and adjectives in ASCs agree with the NP. This is shown in (9), where the vowel suffix -a indicates feminine and -s indicates plural:

- (9) a. Acabada la cena, Jesús se dirigió a los apóstoles.
  finished-fem the-fem dinner Jesús SE addressed to the apostles
  'Dinner finished, Jesus addressed the apostles.'
  - b. Acabadas las tareas, los niños salieron a la calle. finished-fem-pl the-fem-pl homework the children went-out to the street 'Homework finished, the children went out.'

Following Kayne's (1985, 1989) analysis for participial agreement in French, which involves an AgrP, I conclude that the participle of ASCs projects an AgrP.

Now we are in a position to answer Q1: the functional structure of ASCs reaches as far as AgrOP and maybe to some TP.

Whereas (i) can have both a temporal and a causal interpretation, (8b) can only have a causal one (see Rigau (1991) for a similar phenomenon with Catalan infinitives, also cited in De Miguel (1992)). It could be argued that negation makes the adjunct clause in (8b) obligatorily causal, and that ASCs do not have this interpretation—however, (6a) shows that ASCs can have a causal interpretation. The question is why (8a) cannot be grammatical with a causal interpretation.

### 2.5. Absolute Full Clauses (AFCs)

This seems to be a good moment to make a distinction between ASCs and what I term Absolute Full Clauses (AFCs) (see also Addis (1993) for a discussion in a Relational Grammar framework). Though AFCs are somewhat eccentric to the main purpose of this paper, I believe they provide an interesting counterpoint to the previous and the following discussions. AFCs are headed by a gerund:

(10) Disolviendo el sulfuro, el químico sonreía a la audiencia.

dissolving the sulphur the chemist smiled at the audience

Notice that, in spite of its similarity to ASCs, (10) does not necessarily have the perfective reading that is the hallmark of ASCs, but rather, the action of dissolving and the action of smiling are simultaneous. However, perfectivity may come in with the participation of an auxiliary, which bears the gerund morphology and selects for a past participle, as in (11a,b).

The properties of AFCs can be defined in contradistinction to ASCs. AFCs allow for a NegP, and the gerund is headed by [-finite] 'outer' Tense feature, a feature that can be supported by an auxiliary:

(11) a. No habiéndose disuelto el sulfuro, el experimento no pudo acabarse. not having-SE dissolved the sulphur the experiment not could finish-SE

AFCs project an external argument. Unergative predicates are therefore licensed:

(11) b. Habiendo Juan disuelto el sulfuro, el experimento se llevó a cabo having Juan dissolved the sulphur the experiment SE carried to end en menos de dos horas.

in less of two hours

(11) c. Conduciendo Juan, seguro que llegamos tarde.

driving Juan surely that arrive-1pl late

When the subject of an AFC is empty, it is obligatorily controlled by the subject of the main clause. Lack of control accounts for the ungrammaticality of (11e). (11e) contrasts with (11f): in ASCs there is no external argument, therefore no requirement of control:

- (11) d. Habiendo disuelto el sulfuro en agua, el químico sonrió a la audiencia. having dissolved the sulphur in water the chemist smiled to the audience
  - e. \*Habiendo disuelto el sulfuro, pierde sus propiedades corrosivas.

    having dissolved the sulphur loses its properties corrosive
  - f. Disuelto el sulfuro, pierde sus propiedades corrosivas.
     dissolved the sulphur loses its properties corrossive

# IL predicates are licensed:

(11) g. Sabiendo Juan tantas matemáticas, no es de extrañar que obtuviera knowing Juan so-many mathematics not is of surprise that obtain-3sg ese empleo en el banco.

this job in the bank

So AFCs are big—that is, as big as any ordinary clause— as opposed to the smallness of ASCs, and this bigness correlates with the loss of two distinct characteristics of ASCs: absence of IL predicates and absence of 'deep' subjects. The comparison of AFCs and ASCs strongly suggests that the characteristics of the latter are a direct consequence of their being small. In sections 3 and 4 this suggestion receives an analysis.

The distinction between ASCs and AFCs cuts across the more traditional one of free adjuncts vs. absolutes, based on the presence or absence of an overt NP, and which has found its way

in more modern works, such as Stump (1985) and Kortmann (1991), both working on English. As should be clear from the previous pages, I believe that the crucial distinction is whether an external subject is generated or not —its phonetic content being irrelevant for a typology of adjunct clauses.<sup>3</sup>

# 3. Why IL Predicates Are Not Licensed in ASCs

The claim that there is no functional structure above the AgrOP gives us the answer to Q2: why ASCs must be SL predicates:

- (3) a. \*Sabidas muchas matemáticas, Carlos pudo entrar en la universidad.
  - known many mathematics Carlos could enter in the university
  - b. \*Hablado español, Susana consiguió un buen trabajo.
    - spoken Spanish Susana got a good job

According to Diesing (1992:23-29), the subjects of IL predicates are licensed at LF in [Spec,IP], whereas SL predicates are licensed in [Spec,VP]. Since ASCs simply do not seem to have an IP (=TP, NegP, AgrSP), it follows that the subject of an IL predicate cannot be licensed. Notice that this account predicts that generic NPs should not be allowed in ASCs, because, as Diesing explains, the subjects of IL predicates raise to [Spec,IP] in order to be in the restriction of a generic operator. In section 4 we will see that this prediction holds.

<sup>3</sup> Kortmann claims that absolutes and adjuncts in English can have heads of any category. I have argued that in Spanish gerunds project full clauses whereas participles, adjectives and adverbs project small clauses. After examining the extensive corpus of data provided by Kortmann, I conclude that the absolute phrases projected by gerunds and participles in English have exactly the same set of properties as their respective Spanish counterparts. Kortmann's data, therefore, upholds the hypothesis presented in the introduction that the structure of ASCs is identical crosslinguistically.

## 4. The Split VP Hypothesis and a Proposal for ASCs

In this section, I give an answer to Q3, i.e., why the NP of an ASC must be a 'deep' object:

- (2) f. \*Trabajado Juan, se fue de paseo. worked Juan SE went-3sg of walk
  - g. \*Destruido el general, miró la ciudad con orgullo.

    destroyed the general looked-3sg the city with pride

The standard theory on clause structure (see for instance Chomsky (1993), among many) holds that all functional projections are projected above VP. (12a) would be a representation of the Universal Base. Instead, (12b) represents the split VP hypothesis, according to which some functional categories are projected between the two VP shells. V1 and V2 are two different verbs, that incorporate by spell-out:

- (12) a. [CP [FP={AgrSP,NegP,TP,AgrOP...}] [VP1 SUBJECT [VP2 OBJECT ]]]]
  - b. [CP [FP=(AgrSP,NegP,TP,...) [VP1 SUBJECT [FP=(AgrOP,AspP...) [VP2 OBJECT ]]]]]

(12b) represents the view put forward by some authors (Travis (1991), Bowers (1992), Collins and Thráinsson (1993), Koizumi (1993), Zagona (1993)). Instead of reviewing all their arguments, which would take us too far afield, let us take a look at a particularly convincing one that will throw a light on ASCs. Arguing for a Raising to [Spec,AgrOP] analysis of ECM constructions in English (see also Postal (1974), Chomsky (1993)), Bowers points out that this raising has to be done overtly, in order to get the right word order in (13):4

(13) the president proclaimed Mickey Mouse; to the public [t; to be a soviet spy]

<sup>&</sup>lt;sup>4</sup> Other authors have argued for some verb movement in English: Pesetsky (1989), Johnson (1991), Koizumi (1993).

In order for *Mickey Mouse* to appear to the left of the PP, it must have raised overtly out of the infinitival clause. Consequently, the verb must raise above AgrO by spell-out. Since there are good reasons to assume that the English verb does not raise to Tense (Pollock (1989), Chomsky (1991)), our best alternative is to generate AgrOP between the two VP shells, as in (14):5

(14) the president [VPI proclaimed<sub>v</sub> [Agrop Mickey Mouse; t<sub>v</sub> [VP2 t<sub>v</sub> to the public [IP t<sub>i</sub> to be a soviet spy]]]]

## (i) [Agrsp [TP [AgrOP [VP ]]]]

Now consider the sentence (iia). The analysis in (iib) claims that the wh-word has gone through [Spec,AgrOP] or adjoined to AgrOP, triggering agreement on the participle in AgrO (see Kayne (1985, 1989)):

- (ii) a Combien de tables a-t-il repeintes?

  how-many of tables has-he repainted-fem-pl
  - b. [CP combien de tables;  $a_{aux} [A_{gr}SPil] t_{aux} [TPt_{aux} [A_{ux}Pt_{aux} [A_{gr}SPil] t_{repeintes_v} [VPt_j t_v t_i]]]]]$

The derivation in (ii) creates a problem with minimality. Combien de tables has raised overtly to [Spec,AgrOP] above the subject in [Spec,VP]. This is not a problem because verb raising renders both Specs equidistant (see Chomsky (1993) for the notion of equidistance based on the complement domain of a chain). The problem is that now we have to raise the subject above the object. The closest Spec is [Spec,AuxP]. However, the head of AuxP is already taken by a, so the participle cannot raise into it (though see Den Dikken (1994) for a solution precisely in these lines). The Spec of Aux and the Spec of AgrO are not equidistant and raising of the subject into [Spec,AuxP] violates minimality.

One way to get around this problem is to assume that there is another functional category between AgrO and Aux, but this kind of solution would render the notion of minimality with respect to head chains vacuous. The best solution is to generate AgrOP between VPI and VP2. This way, subject and object never interfere with one another, that is, we have nested rather than crossing paths.

<sup>&</sup>lt;sup>5</sup> Consider also the following argument in favor of the split-VP hypothesis. Assume, for the sake of argument, that AgrOP is projected above VP, in the type of structure proposed in Chomsky (1993):

(14) shows that (i) the functional category that checks accusative Case in English has to be projected between VP1 and VP2, and that (ii) raising to object in English has to be carried out overtly.

That objects in English must raise by spell-out is corroborated by the existence of object expletives. Compare (15a) and (15b):

- (15) a. It seems that John is not home.
  - b. I take it that John is not home.

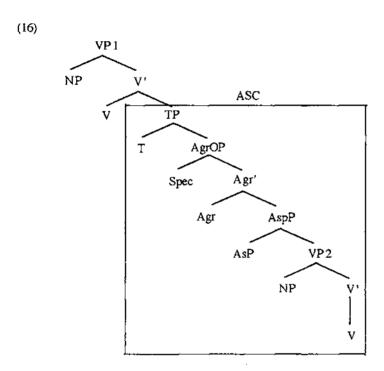
Chomsky (1993) proposes that Tense has strong features that need to be checked by spell-out. If there is a subject NP, this has to raise overtly to check them. Otherwise an expletive like it in (15a) is inserted. Similarly, (15b) shows that there are strong features in the inner Tense, which entails that objects must raise overtly.

Under the hypothesis presented in the introduction that the hierarchy of functional categories should not vary crosslinguistically, let us assume that also in Spanish AgrOP is generated between the two VP shells. Let us further assume that NPs are always generated in [Spec, VP]: the Spec of upper VP1 is reserved for the so called 'deep' subjects, the Spec of the lower VP2 is for the 'deep' objects. My proposal is that ASCs are composed of the lower VP2 shell and the functional categories associated with it, whereas the upper VP1 is not generated—or rather, the lexical head of VP1 is not inserted.

I further assume that an Aspect Phrase is projected. De Miguel has argued extensively that a head Asp(ect) is necessary to host the [±perfective] features, the only value of Asp in ASCs

<sup>6</sup> Suppose instead that the lexical head V1 is inserted and VP1 is projected, but its functional categories are not. Since functional categories (at least the L-related ones) are projected to satisfy morphological properties of a lexical head, one should wonder why this particular V1 does not need them. On the other hand, assuming that V1 is not inserted does not create any problems because lexical insertion is free.

being [+perfective]. In participial absolutes, Asp is morphologically realized on the participle. See also Carstens and Kinyalolo (1989) on AspP and Travis (1991) and Zagona (1993) on the existence of an 'inner' aspect. Finally, see Collins and Thráinsson (1993) on an 'inner' Tense, connected, as I mentioned in section 2.1, with De Miguel's (1992) proposal for a TP in ASCs. The structure that I propose for ASCs is the one contained in the box of (16):



(16) gives us a direct answer to Q3: 'deep' subjects are generated in the upper VP1 shell and this is not present in ASCs. Also, it accounts for the licensing of the by-phrase and hence the passive appearance that transitive ASCs have, as can be seen in example (2e), repeated here:

(2) e. Destruido el litoral por la mancha de petróleo, los pescadores emigraron.

destroyed the shore by the spot of oil the fishermen emigrated

The external θ-role in an ordinary clause is assigned by V1, the upper verb. In a passive construction, the passive morphology suppresses the external θ-role (Baker et al. (1989), among others), which in our terms means that V1 loses its ability to license it. Then the external θ-role may reappear as an oblique. In ASCs the upper V1 is not inserted, so the external θ-role is not licensed by a predicate. It follows that ASCs have no 'deep' subjects and, as a consequence, the agent role can reappear as an oblique. Since the external argument is not generated, an ASC is effectively identical to a truncated passive construction, the result of suppressing an external argument and of not generating it in the structure being the same. Addis (1993) and Franco (1993) argue that Spanish ASCs are passive constructions. Given the analysis in (16), saying that ASCs are passives is redundant because it would entail suppressing something that was never there in the first place.<sup>7</sup>

In order to confirm that (16) is needed to account for the absence of 'deep' subjects in ASCs, let us try to see if Q3 could be answered from a structure in which AgrOP is projected above VP1, as in (12a). Let us assume (12a') as the structure of the clause. In (12a') there is no functional structure between the two VP shells. The curly brackets represent the structure of ASCs as argued for by Belletti (1990) and Hernanz (1991) (I omit any reference to a CP, TP or AspP, to simplify):

<sup>&</sup>lt;sup>7</sup> A passive formed with a flip verb (i.e. a verb in which the patient gets nominative Case and the experiencer gets dative) is ill-formed, as shown in (i). As pointed out by an anonymous reviewer, ASCs formed with a flip verb are also ill formed, as shown in (ii):

<sup>(</sup>i) \*Los claveles son gustados por Juan.
the carnations are liked by Juan

<sup>(</sup>ii) \*Gustados los claveles por Juan ... liked the carnations by Juan

I do not have an explanation for the ungrammaticality of (i) and (ii). In any case, the fact that flip verbs are unacceptable in both types of constructions does not entail that one is a sub-type of the other. As I explain in the main text, suppressing a  $\theta$ -role and not generating a  $\theta$ -role are distinct processes that give rise to constructions with the same properties.

# (12) a'. [CP [AgrSP [NegP [TP { [AgrOP [VP1 SUBJECT [VP2 OBJECT ]]] }]]]]

Assuming the structure of ASCs represented in (12a\*), we can predict that the subjects of transitive verbs are not licensed because there is only one Case position —[Spec,AgrOP]— and two arguments. [Spec,AgrOP] is taken by the object, and the subject does not have a place where it checks its case and  $\phi$ -features and cannot be licensed.

However, (12a') does not rule out unergative predicates: since they do not have an object, nothing prevents their only argument from being licensed in [Spec,AgrOP]. Nothing explains the ungrammaticality of (2f).

As Collins (p.c.) points out, Kayne's (1993) proposal could be relevant at this point. He suggests that unergative predicates contain an empty complement that raises to [Spec,AgrOP] to check features. Kayne proposes this empty object to make sure that the subject of an unergative verb does not stop at [Spec,AgrOP] and triggers agreement on the participle in a typical perfective construction in Romance. With the structure proposed in (16) this problem does not arise. The subject of an unergative predicate is generated in [Spec,VP1], that is, at a position higher than [Spec,AgrOP], therefore the subject of an unergative cannot check features in [Spec,AgrOP] unless it lowers, a movement disallowed for principled reasons.

Moreover, the claim that languages like English and French can license an empty object needs elaboration, since so far all the available evidence has pointed out in the opposite direction (see, for instance, Rizzi (1986)). I conclude therefore, that Kayne's idea is not a viable alternative to the analysis defended in this paper.<sup>8</sup>

<sup>8</sup> Incidentally, Kayne's proposal contradicts the analysis of unergatives developed by Hale and Keyser (1991).
Hale and Keyser propose that unergatives contain an incorporated object which, following current assumptions on the nature of incorporation, entails that it cannot check features in [Spec, AgrOP].

Belletti (1990) assumes a structure like (12a') and, acknowledging the problem presented, she offers a solution. However, her solution is based on assumptions different from mine. As I mentioned above, she argues that there is a CP dominating AgrP in ASCs. Further, she claims that C contains a Case feature. When the unergative participle, also containing a Case feature, raises to C (a movement that she argues is necessary to license the NP) a Case conflict arises. The assumption of a CP violates one of the basic hypotheses of this paper, namely, the notion that the structure of ASCs is a subset of the structure of ordinary clauses. More on this in section 8.

Moreover, Belletti must assume that unergative verbs have an accusative Case to assign. In current conceptions of Case Theory —as in Chomsky (1993)—, Case is regarded as a feature that must be checked. Unchecked features give rise to crashing derivations. Assuming this, if unergative verbs have a Case feature that is not checked, then the derivations of unergative verbs will never converge.

#### 5. Word Order

## 5.1. English and French

In this section I turn to Q4, the word order issue. As we saw in (2h), repeated here, the order participle+NP is obligatory. This contrasts with the situation in other languages: French and English participial absolutes must have the order NP + participle, as can be seen in (17):

- (2) h. \*Los vínculos familiares rotos, los adolescentes se sumen en la depresión. the bonds familiar broken the adolescents SE sink into the depression
- (17) a. All things considered, the situation is not that bad.
  - b. Dinner finished, we left for the opera. (from Kortmann (1991))
  - c. Ceci dit, la réunion a pu commencer.

    this said the meeting has could start

(17) d. Le chat parti, les souris dancent. the cat gone the mice dance

A good answer to Q4 should try to encompass (2h) and (17). Let us first consider the English and French cases. Main clauses in English and French have obligatory preverbal subjects. Following Chomsky (1993), this means that their 'outer' Tense projects strong N-features.

As we saw in (14) and (15), evidence seems to indicate that the 'inner' Tense also has strong N-features that attract an object NP by spell-out in English. Therefore, the order NP+participle in English ASCs is the result of overt movement of the NP to [Spec,TP]. By hypothesis, the same analysis would extend to French. The logic of this argument leads to the conclusion that the 'inner' T in Spanish has weak N-features and that is why it does not raise.

## 5.2. Spanish: the Theme/Rheme Distinction

As I discuss in more detail in Section 9, Belletti, De Miguel and Hernanz propose that the NP moves out of the VP to [Spec,AgrP], the participle moving to a position higher than AgrP.9

The order participle+NP can be obtained with several different scenarios, given the structure proposed here. The NP could remain *in situ* and the participle could raise to either Asp, Agr or T. The NP could make a short movement to [Spec,AspP] and the participle still has two possible surface positions. Finally, the scenario preferred by the cited authors is one in which the NP is in [Spec,AgrOP] and the participle is in a higher position.

I do not have anything to add concerning the surface position of the participle. Let us assume that the predicate that heads an ASC has an extra feature, call it [absolute], that triggers overt

<sup>&</sup>lt;sup>9</sup> A head T for De Miguel, C for Hernanz and Belletti.

movement to Asp, where the feature is checked. At this point, this feature is a mere stipulation, but in section 6. I show that it is necessary for a full account of ASCs.

As for the NP, I present a piece of evidence that suggests that the NP remains in situ in Spanish. In (18a), we can see that an NP subject in an ordinary clause can strand a quantifier when it raises and in (18b) we can see that this is possible even when the NP raises to a position to the right of the verb — [Spec,TP], probably. In ASCs, even though the subject can have a universal quantifier, as in (18c), this quantifier cannot be stranded, as in (18d). The conclusion is that the NP in an ASC does not raise out of its base generated position:

- (18) a. Los hombres decidieron todos quedarse en casa.

  the men decided-3pl all stay-SE at home
  - b. Saludaron los embajadores todos al hijo del monarca.

    greeted-3pl the ambassadors all to-the son of-the monarch
  - c. Saludados todos los embajadores, el hijo del monarca sonrió a las cámaras.

    greeted all the ambassadors the son of-the monarch smiled to the cameras
  - d. \*Saludados los embajadores todos, el hijo del monarca sonrió a las cámaras.
     grected the ambassadors all the son of-the monarch smiled to the cameras

Let us take a look at the position of subjects in ordinary clauses. Ordinary clause subjects in Spanish do not need to raise to [Spec,AgrSP] in the overt syntax. Consider the following grammatical sentences:

- (19) a. Vino Pedro.

  came Pedro

  'Pedro came.'
  - b. Telefoneó Pedro.
    called Pedro
    'Pedro called.'

- (19) c. ¿Compró Pedro las patatas?

  bought Pedro the potatoes

  'Did Pedro buy the potatoes?'
  - d. Las patatas las compró Pedro.
     the potatoes them bought Pedro
     'Pedro bought the potatoes.'
  - e. Fueron atacados los cargueros.

    were attacked the cargos

    'The cargos were attacked.'

It seems that Spanish subjects do not raise into [Spec,AgrSP] overtly. I propose that Spanish AgrS has weak N-features and subjects do not need to raise until LF to check their morphological features. I suggest that Spanish AgrO also has weak N-features, so the NP generated in [Spec,VP2] does not need to raise to [Spec,AgrOP] until LF. This hypothesis would explain why the NP of an ASC can stay in situ. However, the subjects of ordinary clauses can always raise. What is left to explain is: (i) what triggers NP movement in ordinary clauses, (ii) why the subjects of ASCs must stay in situ.

Why do Spanish subjects raise? One possibility could be to assume that [Spec,AgrSP] optionally projects strong features in Spanish. <sup>10</sup> An alternative is suggested in Contreras (1976) and Suñer (1982). They show how the SV order makes the subject theme, whereas the VS makes it rheme. For the purposes of this paper, I adopt the notion of Suñer (1982:4): rheme is the part of a sentence that is asserted, theme is the part that falls out of the scope of assertion.

<sup>10</sup> Chomsky (1993) proposes this for Standard Arabic. However, the case of Arabic is different from Spanish: when the subject is in situ in Arabic, the verb does show poorer morphology.

Let us see it with an example. In (20) there are two possible conversations. In (20a), the subject is preverbal, hence theme, whereas the verb is rheme. This means that the issue that is talked about is what Juan is doing, and we are asserting that he is coming. In (20b), the subject is rheme, so the issue is whether Juan or someone else is coming:

(20) a. A: Creo que Juan viene.

'I think that Juan is coming.'

B: No, se queda.

'No, he's staying.'

a. B': \*No. Pedro.

'No, Pedro.'

b. A: Creo que viene Juan

'I think that Juan is coming.'

B: \*No, se queda.

'No, he's staying.'

B': No. Pedro.

'No, Pedro.'

I suggest that overt NP raising in Spanish ordinary clauses is triggered by this semantic reason: NP subjects raise in order to make the distinction between theme and rheme: theme being the position(s) external to the VP, rheme the position(s) internal to the VP.<sup>11</sup> Tentatively, I suggest including the theme/rheme distinction in the Discourse Representation Theory tradition stemming from Heim (1982) and the Mapping Hypothesis in Diesing (1992). Given a logical representation of the form  $Op_x$  [P(x)] Q(x), the restrictive clause is the non-

<sup>11</sup> In the most recent version of the Principles and Parameters Theory, that of Chomsky (1993), movement is only triggered by morphological feature checking. Semantic or discourse factors are not supposed to play a role. This entails that my proposal in this section does not fit into the Minimalist Program as is. However, it seems to me that Chomksy's strong position will have to be revised in order to reintroduce at least Quantifier Raising back into the theory. Attempting to do this is out of the scope of this paper.

asserted and the nuclear scope is the asserted part. <sup>12</sup> Syntactically, thematic subjects will show up in the Spec of a high functional category, rhematic ones inside the VP projection. My claim concerning ASCs is that, being too small for a tripartite structure, they cannot license any of the operators (as for instance the generic operator) that take scope in a quantification structure. This has the following set of predictions: (i) IL predicates are not licensed in ASCs (see section 2), (ii) generic subjects are not licensed in ASCs, (iii) lacking a motivation to raise, the subjects of ASCs should stay in situ. In the next paragraphs I look at the interpretations of NPs in ordinary clauses in preverbal and postverbal position and in ASCs. I show how all those predictions hold.

Let us first consider the behavior of indefinite subjects in ordinary and small clauses.<sup>13</sup> In ordinary clauses, preverbal indefinites get a generic reading, and they cannot get an

(i) Un español llegó con retraso.

a Spaniard arrived with late

The reviewer suggests that the absence of generic readings in ASCs is tied to perfectivity—it has been noted that ASCs must have the perfective aspect (see De Miguel (1990, 1992), Hernanz (1991)). However, in a full clause, an NP with a definite determiner can have a generic reading even in the perfect:

(ii) Desde tiempos inmemoriales los españoles han llegado tarde a sus citas.

from times immemorial the Spaniards have arrived late to their appointments

However, in the context of an ASC, NPs with a definite determiner cannot have a generic reading (see (26)). So, the fact remains that generic readings are not available in ASCs and that this is not a by product of perfectivity. It seems that a variety of factors influence generic and existential readings in main clauses, some of which I have to abstract away from until they are better understood.

<sup>12</sup> As Molly Diesing points out, not all discourse phenomena can be represented in a quantification structure. There is, however, some overlap, which I exploit here.

<sup>13</sup> The discussion concerning (21), (22), (24) and (25) should be considered a rough sketch where some variables are left out. An important variable, pointed out by the reviewer is perfectivity. Indefinite NPs cannot be generic in a perfect tense, even if placed before the verb:

existential one, as seen in (21). On the other hand, postverbal indefinites get an existential and not a generic reading, as seen in (22):<sup>14</sup>

- (21) Un español llega con retraso.
  a Spaniard arrives with late
  \*E<sub>x</sub> x a Spaniard x x is late
  Gen<sub>x</sub> [x is a Spaniard] x is late
- (22) Llega con retraso un español.

  arrives with late a Spaniard

  E<sub>x</sub> x is a Spaniard A x is late

  \*Gen<sub>x</sub> [x is a Spaniard] x is late

Indefinite subjects in ASCs must also be existential. In example (23) I do not provide the main clause so that the reader makes sure that I am not favoring one interpretation over the other:

(23) Llegado con retraso un español, ...

arrived with late a Spaniard

E<sub>X</sub> x is a Spaniard A x is late

\*Gen<sub>X</sub> [x is late] x is late

Examples (24) through (26) show the same point: a plural definite NP receives a generic reading in preverbal position, but not in postverbal position (where the reading they get is more like a universal quantifier):

<sup>14</sup> Regardless of whether there are other constituents between the verb and the subject. I assume that when the VOS order obtains, the subject is right adjoined to the VP, as in Bonet (1989). Rhematic readings are not related to one position in particular, the only proviso being that they be located low enough to avoid being mapped onto the restrictive clause.

- (24) Los españoles llegan con retraso.
  the Spaniards arrive with late
  Gen<sub>x</sub> [x is a Spaniard] x is late
- (25) Llegan con retraso los españoles.

  arrive with late the Spaniards

  \*Genx [x is a Spaniard] x is late
- (26) Llegados con retraso los españoles, ...

  arrived with late the Spaniards

  \*Genx [x is a Spaniard] x is late

I have already suggested why the generic reading is not available in ASCs. Following Diesing (1992), I assume that the generic operator is located at a high position in the functional structure associated with VP1, that is, not projected in ASCs. Since movement is not motivated, it is disallowed by Economy. This way, the ungrammaticality of IL predicates and of the NP+predicate word order in ASCs receives the same account, based on the most remarkable property of ASCs, its 'smallness'. 15

<sup>15</sup> Notice that my claim is that the NP in ASCs must stay inside the VP (or at least in a low position), not necessarily that it must stay in situ. Evidence shows that it can be in situ or adjoined to the right edge of the VP. In (i), the adjective has raised to Asp stranding its complement. The NP in situ stands between them:

<sup>(</sup>i) Contento el niño con su juguete, dejó de llorar y nos pudimos poner a trabajar.

happy the child with his toy stopped-3sg of cry and us could-1pl put to work

On the other hand, in (ii) the NP is to the right of the complement of the adjective. This is a sure sign that it is right adjoined:

<sup>(</sup>ii) Contento con su juguete el niño, dejó de llorar y nos pudimos poner a trabajar.

happy with his toy the child stopped-3sg of cry and us could-1pl put to work

## 5.3. ASCs Headed by a Preposition

De Miguel cites examples like the following, in which the NP obligatorily precedes the participle or adjective:

- (27) a. Con el niño enfermo, no se puede trabajar.
  - b. \*Con enfermo el niño, no se puede trabajar.

'With the child sick, one cannot work.'

She proposes that the participle raises to T except when there is a preposition. The preposition conveys the temporal features of T, and the participle does not need to raise. In her analysis, it is not clear whether the preposition selects for the ASC, or it is generated in T or it is generated at a lower position and raised to T. If the participle is the head of the ASC and the preposition selects for it, it is not clear how my account of word order can deal with (27). Moreover, if a PP dominates the ASC, then we cannot sustain the idea that the structure of ASCs is properly contained in the structure of ordinary clauses. So, I will attempt an alternative account here.

I believe that the preposition con ('with') is actually the head of this construction. In (28), we see how we can have an ASC with con ('with') but without a participle:

- (28) Con este niño, no vamos a poder trabajar.with this child not go-1pl to can work'With this child, we will not be able to work.' (because it is crying, for instance)
- (28) shows that prepositions, like adjectives and adverbs, can also head an ASC. As for the word order, recall that the feature [absolute] is the one that, by hypothesis, triggers the movement of the head of the ASC. Since the participle in (27) does not have this feature, overt movement is not forced and the order NP+participle obtains. The analysis of the ASC in (27) is therefore (29):

(29) [Aspp con[absolute]i [PP ti [Agrap [ el niño enfermo ]]]]

Therefore, (27) does not pose a problem to the theory developed here.

6. Case Checking in ASCs and the Feature Composition of Asp

The last question to be answered is Q5, how the NP receives nominative Case:

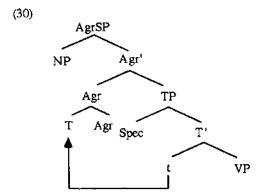
(2) i. Desmayado yo, la reunión no pudo comenzar.

fainted I the meeting not could begin

The availability of nominative Case poses a problem for the theory of Principles and Parameters. According to this framework, nominative Case is supposed to be a function of finiteness, but, as we saw in section 2, there is no visible tense in ASCs—actually, the overt tense morpheme cannot occur in ASCs, as we saw in (5a), repeated here for the reader's convenience:

(5) a. \*Ha disuelto el sulfuro en agua, pierde sus propiedades corrosivas. has dissolved the sulphur in water loses its properties corrossive

Recent formulations of the theory (Chomsky (1993), Bobaljik and Jonas (1993)) require that Tense adjoins to AgrS for the nominative Case of the subject to be checked:



To resolve this quandary, I propose that the extra feature [absolute] has the capacity to license and check Case with the NP. This feature is present in ASCs and absent in ordinary clauses.

In order to show the need of the feature [absolute], let us try the alternative strategy, apparently more principled, of assuming that the feature composition of Asp in ASCs does not contain any feature that ordinary clauses does not have.

De Miguel (1992) argues explicitly for such an approach. Concretely, she argues that the feature [+perfective] licenses and assigns Case to the subject of an ASC. Since ordinary clauses can also be perfective, it follows that ASCs do not have any special features, in De Miguel's view (which represents, I believe, what is implicitly assumed by the other authors). This proposal overgeneralizes because it is probably not the case that participles in main clauses can assign or check structural Case. Let us see how. Consider the English sentences in (31):

- (31) a. All things considered, the meeting was not all that bad.
  - b. \*After were all things considered, the meeting was not all that bad.
  - c. After all things were considered, the meeting was not all that bad.

According to De Miguel, in (31a) the NP would receive Case assigned by the aspectual feature [+perfective]. This has consequences for an analysis of (31b) and (31c). If the NP checks Case with Asp, one should wonder why (31b) is ungrammatical: since the NP checks its Case features with the Asp head, it does not need to raise to [Spec,AgrSP]. It follows that the source of the ungrammaticality of (31b) is that there are unchecked features in Tense and AgrS.

In order to overcome the ungrammaticality of (31b), the NP must be raised, and this would explain the well-formedness of (31c). Since the NP is licensed at a low position, this raising must be motivated because Tense and AgrS have the capacity to attract an NP—that is, an NP can raise not only to satisfy its own need to be licensed in a structure, but also to satisfy other constituents' licensing requirements.

Raising an element  $\alpha$  to license another element  $\beta$  is explicitly prohibited in Chomsky (1993) under the principle Greed. Greed's job is to make sure that constituents move only to satisfy their own need to be licensed in a structure. Greed is necessary in the Theory of Grammar because a sentence like (32) must be ruled out:

#### (32) \*John seems is happy.

Without Greed, in (32), the NP John could check its features against the lower AgrS and thus be licensed. Then, it could go on raising to the upstairs AgrS and check the features of AgrS. Every constituent in (32) would be licensed and the sentence would be grammatical. A grammar without Greed would predict that (32) should be grammatical. Since this is undesirable, I conclude that Greed is a necessary UG principle. As a consequence, in (31c) the NP raises to check its own features, which entails that it cannot do so in the lower position [Spec,AspP] or [Spec,AgrOP]. The conclusion is that the Asp head in ASCs can license an NP, but not in full clauses.

Moreover, the problem becomes more acute when we consider ASCs formed out of unaccusative predicates. Unaccusative verbs have no Case to check (Burzio (1986)), which makes it even more surprising that the unaccusative participle in an ASC does.

Finally, (1) shows that adjectives and adverbs can head an ASC. It is standardly assumed that neither adjectives nor adverbs can license an NP. However, they can do so when they head an ASC and only then.

The solution is to assume that the feature composition of ASCs has to be minimally richer than that of ordinary clauses so that the Asp head of the former but not of the latter can license an NP argument.

I propose that the lexical head of an ASC is generated into the tree structure with some feature, call it [absolute]. [Absolute] is category neutral, and can enter into the feature matrix of adverbs and adjectives — which explains how the adjectives and adverbs in (1) can license an NP. This feature has a Case to check, so the lexical head that bears it becomes a predicate that can license an argument. The case feature of [ABSOLUTE] varies crosslinguistically. As (33a) shows, an ASC in Latin, receives ablative Case and (33b) shows that in Classical Greek it receives genitive:

- (33) a. H-is proeli-is fact-is, pontem in Arara faciendum curat.

  this-abl-pl battle-abl-pl made-abl-pl bridge in Arar be-made takes-care of

  'Finished these battles, he had a bridge made in Arar.'

  (from Allen and Greenough (1991))
  - b. T-o:n somat-o:n thelynomen-o:n, kai hai psychai arrhostoterai gignontai.
     the-gen-pl body-gen-pl enfeebled-gen-pl also the souls weaker are-made
     "If the bodies are enfeebled, the souls become weak too."
     (from Smyth (1984))

It seems that the Case that the predicate of a ASC checks is some kind of default Case. This could certainly be argued for Latin, since ablative is a synchretic Case that embraces locatives, oblique agentives and instrumentals.

This type of solution fits into the program set out in the introduction of this paper. Though the hierarchy of functional categories does not vary, the features of the functional categories do vary, giving rise to crosslinguistic variation and, as I have shown in this section, also intralinguistic. The problem of at least this particular type of 'sub-grammar' (Harris (1968))—i.e. the fact that certain constructions seem to have a grammar that intersects instead of being properly contained in the grammar of the language as a whole— is resolved by positing feature variation rather than structure variation.

We still have one more wrinkle to iron out. Transitive verbs are assumed to have an accusative Case to check. If verbs are generated with this Case, then ASCs have two Cases available: nominative Case of [absolute] in Asp and the accusative Case of the verb. This problem becomes more apparent than real if we incorporate Collins and Thrainsson's (1993) Case theory. Drawing on Icelandic data, they conclude that V2 does not have a Case feature, and that accusative Case is actually borne by V1, which itself projects an AgrOP—thus, there are two AgrOPs in the clause, one projected by V1, where Case is checked, and the other is projected by V2, a place where φ-features are checked, but no case because V2 has no Case to check. Therefore, the participle of ASCs, which is a V2, never has any accusative Case to check. <sup>16</sup>

<sup>16</sup> As the reviewer points out, something should be said about what I termed AFCs:

<sup>(</sup>i) Habiendo Juan disuelto el sulfuro, el experimento pudo realizarse en menos de dos horas.

having Juan dissolved the sulphur the experiment could accomplish-SE in less of two hours

The questions should be asked concerning (i): (a) does the gerundive in (i) have an [absolute] feature?, (b) does the subject of the AFC check Case against this feature [absolute]? I do not have any evidence in Spanish to answer any of those questions. However, consideration of crosslingustic data could give us a clue. Latin and Classical Greek have AFCs with active participles —at all effects, equivalent to AFCs like (i) because they admit two arguments. In these constructions the subject NP exhibits ablative Case in Latin, genitive in Greek, and these

## 7. Mid-Way Conclusions

Now we are in a position to answer Q1-5. The remarkable properties of ASCs have been shown to be derived from their 'smallness': their functional structure includes AgrOP and excludes any other higher categories, which has the following consequences: (i) the subjects of IL predicates lack a Spec position where they can be licensed, following Diesing's (1992) theory; (ii) since the upper verbal head is not generated, 'deep' subjects cannot be generated either; (iii) the word order participle+NP is obligatory because the order NP+predicate in Spanish is the result of raising a thematic subject to a restrictive clause in Heim's (1982) sense and this is unavailable in ASCs. Finally, the NP can check Case with an extra feature in Asp, absent in ordinary clauses.

In the next section I test the hypothesis that ASCs should have the same structure crosslinguistically against the Italian data presented in Belletti (1990). Though the results obtained in this part of my research are tentative, I believe that this hypothesis gives us better empirical predictions than assuming a different structure —as argued for, in a Relational Grammar framework, by Addis (1993).

are the Cases that the subject of an ASC gets. On the other hand, the object gets accusative Case. (ii) is a Latin example (from Allen and Greenough (1991)) and (iii) is Greek (from Smyth (1984)):

- (ii) Eo imperi-um tenente, eventum timeo.

  he-Abl-sg power-Acc-sg holding-Abl-sg outcome fear-1sg

  With him in power, I fear the outcome.'
- (iii) Tosaut-a eipont-o:n t-o:n platai-o:n, Arkhidam-os so-many-things-Acc-pl having-said-Gen-pl the-Gen-pl plataean-Gen-pl Archidamus-Nom-sg hupolab-o:n eipen.

  answering-Nom-sg said

  Having the Plataeans said so many things, Archidamus replied.

Since these subjects do not get the expected nominative of the subject of a main clause but the Case of the NP of an ASC, it seems plausible to assume that the same feature that checks ablative or genitive in ASCs checks ablative or genitive in AFCs. *Mutatis mutandis*, it could be argued that in (i), and in general in AFCs in any language, the subject is licensed by the feature [absolute].

## 8. Italian Transitive ASCs

Apparently, Italian unaccusative ASCs work the same way the Spanish do. (34) is an example:

(34) Arrivato io, la reunione è cominciata.

arrived I the meeting is started

However, transitive ASCs differ significantly. In the first place, they do not have the 'passive look' that transitive ASCs have in Spanish: the NP receives accusative Case, as we can see in (35) and by-phrases are disallowed, as can be seen in (36) (from Belietti (1990)):

- (35) Salutata me/\*io, si è accorto che c'era molta altra gente.

  greeted me I SI is realized that there-were many other people
- (36) Salutata me (\*da Gianni), tutti uscirono dalla sala.

  greeted me by Gianni everybody left of-the room

As I mentioned above, it is the case that [absolute] checks different cases crosslinguistically, the variation being more or less unpredictable.

Belletti argues that transitive ASCs are control structures, i.e., apart from the overt NP there is also another argument PRO. According to the theory of clause structure laid out here, this extra argument would have to be generated in the Spec of VPI. Though it is theoretically possible that Italian transitive ASCs had more structure than the Spanish ones (Addis (1993)), I argue here that they do not. Let us review and critique Belletti's arguments for PRO.

First, according to Belletti, this PRO has to be controlled by the subject of the main clause. The ungrammaticality of (37a) contrasts with (37b) because in (37a) the PRO is not controlled:

(37) a. \*Chiamato il taxi, smise de piovere.
 called the taxi stopped-3sg of rain
 b. PRO<sub>i</sub> chiamato il taxi, Maria; uscì.
 called the taxi Maria went-out

However, Rosen (1988) shows that control in Italian ASCs can be purely pragmatic. In (38a), it is probably the judge who absolved the defendant, so a case could be made for subject control, but in (38b) the judge or jury is absent from the linguistic context:

- (38) a. Assolto l'imputato, il giudice se n'andò a pranzo.

  absolved the-defendant the judge SE NE-went to lunch
  - b. Assolto l'imputato, scopiarono gli applausi.
     absolved the-defendant burst-out-3pi the applauses
- (38) weakens Belletti's argument because pragmatic control does not require a PRO subject.
- (39) is the Spanish equivalent of (37). In Spanish, however, the person who calls the taxi is not necessarily Maria—it could be the hotel porter, for instance:
- (39) a. \*Llamado el taxi, paró de llover.

  called the taxi stopped-3sg of rain

  b. [e]<sub>i/j</sub> llamado el taxi, María, salió.

  called the taxi Maria left

In Italian, like in Spanish, therefore, transitive ASCs are not controlled: the construction allows for an arbitrary subject to perform the action—the mirror image of a verb like *eat* which, in its unergative usage, allows for any arbitrary thing to be eaten. As for the unacceptability of (37a), I believe it is due to a lack of obvious semantic connection between the main and the absolute clause and not to any grammatical reason.

Belletti's second argument is that the overt NP can be a reflexive:

- (40) a. Elogiata solo se stessa, Maria restò del tutto isolata.

  praised only herself Maria remained completely isolated
  - b. Lavatasi le mani, Maria è uscita.
     washed-herself the hands Maria is left

She claims there has to be a PRO argument in the ASC that binds the reflexive. However, this is not the only analysis available. If there is no 'deep' subject, ASCs do not contain an accessible SUBJECT, therefore the binding domain of the anaphor is the main clause and not the ASC. My Italian informants certainly agree that se stessa ('herself') has to be coreferent with Maria, which confirms my hypothesis. 17. Thus my claim is that we do not need to posit a PRO in ASCs any more than we need it in the adjunct phrase near each other in the sentence Near each other they saw snakes (thanks to Wayne Harbert (p.c.) for suggesting this example to me). On the other hand, the claim that there is a PRO in 'deep' subject position raises an empirical problem: why can't there be unergative ASCs? The subject of the unergative could be generated as PRO and a sentence like (41) should be grammatical. But (41) is ungrammatical in Italian, as it is in Spanish:

(41) \*PRO<sub>i</sub> telefonato, Gianni<sub>i</sub> andò all'appuntamento.

telephoned Gianni went to-the-appointment

Therefore, the reasons adduced by Belletti to have a PRO in transitive ASCs do not seem so convincing. On the other hand, it seems that there are good reasons not to have a PRO, and

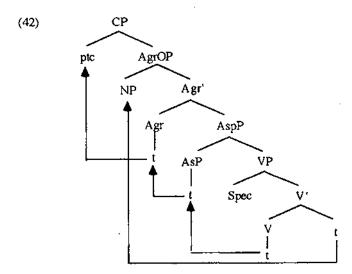
<sup>17</sup> Italian ASCs are therefore transparent to external binders, whereas the Spanish ones are not. I consider this a consequence of the fact that in Spanish absolutes the NP bears nominative Case and nominative anaphors are disallowed.

stick to our analysis of ASCs without a VPI. It seems, therefore, that my hypothesis that the structure of absolute clauses does not vary crosslinguistically can be maintained.

## 9. The Problem of a CP Node in ASCs

## 9.1 Belletti's Arguments for a CP in ASCs

In the remainder of this paper, I will discuss Hernanz's (for Spanish) and Belletti's (for Italian) claims that the AgrP is dominated by a CP. If Hernanz's and Belletti's claim were to hold, it would seriously threaten my hypothesis that the structure of ASCs is properly contained in the grammar of ordinary clauses. The surface structure that they offer for ASCs is the following:



There are three points that need to be discussed with respect to (42):

 Whether there is direct evidence for a CP in ASCs. This will occupy the rest of this subsection.

- Whether predicate raising can provide indirect evidence for a CP in ASCs. This will
  occupy subsections 9.2 and 9.3.
- Whether NP movement provides indirect evidence for a CP in ASCs. This will occupy subsection 9.4.

Belletti provides two types of evidence for a CP in Italian ASCs. First, she claims that the free relative *quanto* ('what') can introduce an ASC, as in (43):

(43) Quanto comunicatoci, ...
what communicated-us

Under current assumptions on the licensing of wh-words, the most likely analysis for (43) should include a [Spec,CP] that would house quanto. However, quanto communicatoci is an infinitival relative and cannot be used as an adjunct. 18 (44) is an example of its use:

(44) Quanto comunicatoci ci ha disturbato molto.

what communicated-us us has disturbed a-lot

Belletti's second argument is that Italian ASCs can be introduced by anche se ('even if') and benché ('although'), which she takes to be complementizers. This entails that there must be a C where they can be generated. In (45) are two examples:

- (45) a. Benché partita da sola, Maria si divertì.

  although left by alone Maria SI had-fun
  - b. Anche se arrivata in ritardo, Maria non si scusò.
     even if arrived in late Maria not SI apologize

<sup>18</sup> Chierchia (p.c.). He also provided (44).

However, both benché and anche se may introduce other types of phrases in which it is not assumed there to be a CP:19

(46) a. Questo è spiegato in una maniera detagliata benché [Ap non chiara].

'This is explained in a detailed though not clear manner.'

b. Questo ragazzo, anche se stupido, reuscirà a conseguire la laurea.

This young man, even if stupid, will manage to obtain the BA.

The examples in (46) show that there is not a one-to-one correspondence between these words and the presence of a C position, therefore they do not provide a strong reason to assume that there is a CP in Italian ASCs. A careful analysis of *anche se* ('even if') and *benché* ('although') is out of the scope of this paper. Pending further research, I suggest they could be analyzed as adjoined elements.

## 9.2. Does the Participle Raise into C?

Hernanz and Belletti agree that the participle raises to C, though their rationale for the movement differs. If their claim were demonstrated, then we would have indirect evidence that there is a CP in ASCs. However, I will argue against their analyses.

Hernanz shows that there cannot be an ASC as complement of a subordinating preposition like por ('for'), para ('in order to, for'), sin ('without'), in contrast to the very similar infinitivals:

(47) a. Sin comprar comida, no te atrevas a venir.

b. \*Sin comprada comida, no te atrevas a venir.

'Without buying food, do not dare come.'

<sup>19</sup> Thanks to Carol Rosen for providing these examples.

- (47) c. Para comprar comida, ve al supermercado.
  - d. \*Para comprada comida, ve al supermercado.
     'In order to buy food, go to the supermarket.'
  - e. Por hacer travesuras, te quedas castigado.
  - f. \*Por hechas travesuras, te quedas castigado.
    'For doing mischief, you will be punished.'

Her argument is that, assuming that these prepositions occupy the Co position, the reason why they are ungrammatical in ASCs is because the participle raises into Co, therefore two elements are competing for the same position. However, under the same assumptions, it could alternatively be suggested that if there is no C in ASCs, there cannot be subordinating prepositions either, which would neatly account for the ungrammaticality of (47b,d,f). On the other hand, it is well known that in Romance prepositions appear to select for CPs rather than occupy the Co position:

- (48) a. No sé cómo rechazarlo sin que parezca grosero.
  - 'I don't know how to reject him, without that it seems rude.'
  - b. No sé cómo disimularlo para que no parezca grosero.

'I don't know how to hide it for that it doesn't seem rude.'

Moreover, there may be other reasons why (47b,d,f) are ungrammatical. Let us consider the above prepositions a bit more carefully. Sin ('without') can take NPs as complements, but not adjectives or adverbs:

- (49) a. Sin la comida, no te atrevas a venir.
  - 'Without the food, do not dare come.'
  - b. \*Sin cansado, no te atrevas a venir.
     without tired not dare to come

(49) c. \*Sin rápidamente, no te atrevas a venir.

without quickly not dare to come

It seems that *sin* requires an NP complement. I claim that the infinitival in (47a) contains nominal features that make it, in some intuitive sense, *like* a noun. Since ASCs are not nominal but adjectival or adverbial in nature, the source for the ungrammaticality of (47b) is a violation of the selectional properties of the preposition *sin*.

Let us take a look at *por* and *para* (both meaning 'for'). Selectional properties are again crucial to account for the ungrammaticality of (47d) and (47f). *Por* and *para* may take adjectives as complements, but only if they form IL predicates, never if they form SL predicates:

- (50) a. Para tonto, mi hermano.
  - for silly my brother

'My brother is an example of a silly person.'

- b. Por tonto perdiste el tren.
  - for silly missed-2sg the train

'Because you were silly, you missed the train.'

- c. \*Para furioso, mi hermano.
  - for angry my brother

'My brother is an example of an angry person.'

- d. \*Por furioso, te castigaremos.
  - for angry you punish-FUT-1pl

'Because you were angry, we will punish you.'

It seems that the generalization that *por* and *para* cannot select for SL predicates is clear. Since ASCs must be SL predicates (see (3) and discussion in section 2.4.), it follows that they

cannot be selected by *por* neither *para*. The conclusion is again that there is no evidence for a CP in ASCs.

# 9.3. Why Should the Participle Raise to C?: Temporal Defectivity vs. Case Assignment

According to Hernanz, the Spanish participle raises to C to solve a problem with temporal defectivity. Participle raising into C yields the participle+NP order characteristic of these constructions. She claims that temporally defective verbal forms, which include the participle, have to raise to C, which is supposed to have temporal features, and from the C position the participle can Case-mark the NP although Case marking is not the trigger but a consequence of the movement. However, as we saw in (17), repeated here, in French and English the participle does not raise above the NP:

- (17) a. All things considered, the situation is not that bad.
  - b. Dinner finished, we left for the opera.

(from Kortmann (1991))

- c. Ceci dit, la réunion a pu commencer.

  this said the meeting has could start
- d. Le chat parti, les souris dancent.
   the cat gone the mice dance

This would entail that participles are temporally defective in Spanish and Italian but not in English and French. I do not know of any reason for this difference.<sup>20</sup>

Belletti also argues that the participle raises to C, but she claims that the participle does not always raise to COMP, but only when there is an NP in the ASC. She takes this as evidence that this movement is motivated by Case reasons. There is some feature in C—she says that it is a tense-like feature—that allows government and Case assignment of the NP by the

<sup>&</sup>lt;sup>20</sup> The spirit of the argument can be maintained adopting De Miguel's (1992) TP: the participle could raise to T in English, French and Spanish, but in the latter the NP does not raise.

participle. Consider (55a) and (55b) (from Belletti's), and the kind of analysis she proposes in (55c):

- (55) a. Anche se arrivata in ritardo, Maria non si scusò.
  'Even if arrived late, Maria did not apologize.'
  - \*Anche se arrivata Maria, tutti si rifiutarono di partire.
     'Even if Maria arrived, everybody refused to leave.'
  - c. [C' arrivata; [AgrP Maria [Agr' t; [PpP t; [VP t; ]]]]]

According to Belletti, the reason why (55b) is ungrammatical is because *anche se* occupies the C position, so the participle cannot raise and the NP is not Case marked. Assuming that phonetically empty pronominals do not need Case, the grammaticality of (55a) follows.

I have already explained that the presence of anche se does not entail the presence of a C position. On the other hand, Chomsky and Lasnik (1993) and Chomsky (1993) have put forward the idea that even PRO needs licensing by checking a null Case.

As pointed out by Hernanz, the consideration of English and French ASCs poses a paradox for the Case assignment motivation of participle movement to C. As I discussed above, ASCs in English and French, have the subject in preverbal position. In the preminimalist framework that Belletti and Hernanz work with, Case could be assigned either under government or in a Spec-head relation with an INFL head that contained agreement features. It is therefore paradoxical that Spanish participles, that have overt agreement, need to raise to C in order to govern and assign Case to the NP, whereas the English and French participial absolutes, which do not show agreement, do not need to govern the NP.

Though I do not have an account for the ungrammaticality of (55b), I nevertheless conclude that Beiletti's account raises enough questions to suggest that some other explanation should be attempted.

I conclude that (i) the evidence presented to argue for a participle-to-C movement can be explained more plausibly by other means, (ii) the reasons suggested for such movement —temporal defectivity or Case-marking—raise empirical problems when comparing similar constructions across languages.

## 9.4. Does the NP Raise into [Spec, AgrOP]?

De Miguel (1990) and Hernanz (1991) claim that the NP raises to [Spec,AgrOP]. The reason is that the NP should be in a Spec-head configuration by spell-out with the participle in Agr so that they mutually check their  $\phi$ -features. If that were the case then the conclusion reached in the previous section —that the participle does not raise—, would be seriously threatened because if the NP moves to [Spec,AgrOP] and the participle does not, we obtain the wrong word order (see (2h)). However, as I showed in section 3, the subjects of ordinary clauses do not need to raise overtly for Case reasons, therefore, if the NP in ASCs does, some motivation other than Case Theory should be provided. Moreover, I showed evidence that the NP in ASCs does not move out of its base generated position at all (see the discussion related to (18)).

Belletti argues that the NP raises to [Spec,AgrOP] overtly in Italian ASCs. She shows evidence that the NP has abandoned its base generated position with arguments based on the ne clitic and on definiteness effects. However, the fact that the Italian NP has moved does not entail that it has done so to [Spec,AgrOP]: it could have raised to the intermediate position, like [Spec,AspP]—in (18b) I showed that Spanish licenses movement to intermediate positions so, mutatis mutandis, the same could take place in Italian.

To summarize the results in section 9: there is no conclusive evidence for a CP in ASCs, there is no evidence that the participle moves to a hypothetical C position and, at least in Spanish, there is evidence that the NP does not move out of the VP. Therefore I conclude that there is

not enough reason to abandon the strong hypothesis that the structure of ASCs is a subset of the structure of main clauses.

#### 10. Conclusion

I have provided an analysis of ASCs that is better motivated than previous analyses and I have derived the peculiar properties of this construction from its most obvious characteristic: that it does not project the higher layers of clausal functional structure. Then I have shown that this analysis can be extended to Italian ASCs, on the surface a very different construction. Finally, in order to support the hypothesis that the structure of ASCs is a proper subset of the structure of main clauses, I have shown that the evidence that Hernanz and Belletti present for a CP in ASCs can be explained by other means. The hypothesis that functional structure is invariant is upheld.

• I thank Wayne Harbert, Vicki Carstens and Margarita Suñer for their invaluable help in refining my rough first draft. An earlier version was presented at a Cornell colloquium and I thank the audience for their comments. Chris Collins, Molly Diesing, Zelmira Núñez del Prado, Carol Rosen and Xavier Villalba provided some interesting comments. Finally, the reviewer for CatWPL was crucial in pointing out some inadequacies. All the remaining errors are my own.

### References

Addis, K. (1993) Unauxiliated Participial Clauses and Agreement in Spanish, PhD dissertation Cornell University.

Allen, G.H. and J.B. Greenough (1991) New Latin Grammar, Aristide D. Caratzas Publisher, New York.

- Baker, M., K. Johnson and I. Roberts (1989) 'Passive Arguments Raised', *Linguistic Inquiry* 16, 219-251.
- Belletti, A. (1981) 'Frasi Ridotte Assolute', Rivista di Grammatica Generativa 6, 3-32.
- Belletti, A (1990) Generalized Verb Movement, Rosenberg and Sellier, Torino.
- Bobaljik, J. and D. Jonas (1993) 'Specs for Subjects', MIT Working Papers in Linguistics 18, 59-98.
- Bonet, E. (1989) 'Subject Positions in Catalan', ms. MIT.
- Borer, H. (1983) Parametric Syntax, Foris, Dordrecht.
- Bowers, J. (1992) Class lectures, Cornell University.
- Bowers, J. (1993) The Syntax of Predication', Linguistic Inquiry 24, 591-656.
- Burzio, L. (1986) Italian Syntax, Reidel, Dordrecht.
- Carlson, G. (1977) Reference to Kinds in English, PhD dissertation, University of Massachusetts, Amherst.
- Chomsky, N. (1991) 'Some Notes on Economy of Derivation and Representation' in R. Freidin (ed) Principles and Parameters in Comparative Grammar, The MIT Press, Cambridge, 417-454.
- Chomsky, N. (1993) 'A Minimalistic Program for Linguistic Theory' in K. Hale and S.J. Keyser (eds) *The View from Building 20. Essays in Linguistics in Honor of Sylvain Bromberger*, The MIT Press, Cambridge, 1-52.
- Chomsky, N. and H. Lasnik (1993) 'Principles and Parameters Theory' in J. Jacobs, A. Van Stechow, W. Sternfeld and T. Vennemann (eds) Syntax, an International Handbook of Contemporary Research, Berlin, De Gruyter.
- Collins, C. and H. Thráinsson (1993) 'Object Shift in Double Object Constructions and the Theory of Case', MIT Working Papers in Linguistics 19.
- Contreras, H. (1976) 'Theme and Rheme in Spanish Syntax' in M.Luján and F.Hensey (eds)

  Current Studies in Romance Linguistics, Georgetown University Press, Georgetown.
- Den Dikken, M. (1994) 'Auxiliaries and Participles', Proceedings of NELS 24.
- Diesing, M. (1992) 'Bare Plural Subjects and the Derivation of Logical Representations,

  Linguistic Inquiry 23, 358-380.

- Diesing, M. (1994) 'Yiddish VP Order and the Typology of Object Shift in Germanic', ms. Cornell University.
- Franco, J. (1993) Object Agreement in Spanish, PhD dissertation, University of South California.
- Hale, K. and S. J. Keyser (1991) 'On the Syntax of Argument Structure', Lexicon Project Working Papers 34.
- Heim, I. (1982) The Semantics of Indefinite and Definite Noun Phrases, PhD dissertation, University of Massachusetts, Amherst.
- Hernanz, M.L. (1991) 'Spanish Absolute Constructions and Aspect', Catalan Working Papers in Linguistics 1, 75-128.
- Kayne, R. (1985) 'L'Accord du Participe Passé en Français et en Italien', *Models Linguistiques* 7, 73-89.
- Kayne, R. (1989) 'Facets of Romance Past Participle Agreement', in P.Benincà (ed) *Dialect Variation and the Theory of Grammar*, Foris, Dordrecht, 85-103.
- Kayne, R. (1993). 'Toward a Modular Theory of Auxiliary Selection', Studia Linguistica 47.
- Kempchinsky, P. (1986) Romance Subjunctive Clauses and Logical Form, PhD dissertation, UCLA.
- Koizumi, M. (1993) 'Object Agreement Phrases and the Split VP Hypothesis', MIT Working Papers in Linguistics 18, 99-148.
- Koopman, H. and D. Sportiche (1988) Subjects, ms. UCLA.
- Kortmann, B. (1991) Free Adjuncts and Absolutes in English, Routledge, London.
- Johnson, K. (1991) 'Object Positions', Natural Language & Linguistic Theory 9, 577-636.
- Larson, R. (1988) 'On the Double Object Construction', Linguistic Inquiry 19, 335-391.
- Miguel, E. de (1990) El aspecto verbal en una gramática generativa del español, PhD dissertation, Universidad Autónoma de Madrid.
- Miguel, E. de (1992) El aspecto en la sintaxis del español: perfectividad e impersonalidad, Ediciones de la Universidad Autónoma de Madrid, Madrid.
- Perlmutter, D. (1978) 'Impersonal Passives and the Unaccusativity Hypothesis', Berkeley Linguistic Society 4, 157-189.

- Pesetsky, D. (1989) 'Language Particular Processes and the Earliness Principle', ms. MIT.
- Pollock, J.-Y. (1989) 'Verb Movement, Universal Grammar and the Structure of IP', Linguistic Inquiry 20, 365-424.
- Postal, P. (1974) On Raising, The MIT Press, Cambridge.
- Rigau, G. (1991) 'La legitimació de les construccions temporals d'infinitiu', ms. Universitat Autònoma de Barcelona.
- Rizzi, L. (1986) 'Null Objects in Italian and the Theory of pro', Linguistic Inquiry 17, 501-557.
- Rosen, C. (1988) The Relational Structure of Reflexive Clauses: Evidence from Italian, Garland, New York.
- Smyth, H. (1984) Greek Grammar, Harvard University Press, Cambridge.
- Sportiche, D. (1988) 'A Theory of Floating Quantifiers and Its Corollaries for Constituent Structure', Linguistic Inquiry 19, 425-450.
- Stowell, T. (1981) Origins of Phrase Structure, PhD dissertation, MIT.
- Stump, T. (1985) The Semantic Variability of Absolute Constructions, Reidel, Dordrecht.
- Suñer, M. (1982) Syntax and Semantics of Spanish Presentational Sentence-Types, Georgetown University Press, Georgetown.
- Travis, L. (1991) 'Derived Objects, Inner Aspect and the Structure of VP', paper presented at NELS 22.
- Zagona, K. (1994) 'Perfectivity and Temporal Arguments' in M. Mazzola (ed) Romance Linguistics: Theory and Issues.

203 Morrill Hall

Cornell University

Ithaca NY 14853

USA

E-mail: ll26@cornell.edu