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PROGRESSIVE STRUCTURES

OF ENGLISH AND CATALAN

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In structure (19) the V *carrying* raises to the head Act, where it checks its features, the tense-like feature that allows the realisation of the predication, but also the aspect and agreement features. As a consequence, the NP *man* raises to the Specifier of ActP.

Semantically, the analysis of ActP clauses as complements of D predicts the interaction between the definiteness of the DP and the temporal and aspectual interpretation of V-*ing* clauses (discussed in section 4.2.2.2). Recall that the presence of a definite determiner (with its capacity for reference to an entity previously introduced in the discourse) may result in a temporal location of the event or state denoted by the V-*ing* clause different from that specified by the matrix tense of the clause. Examples (9) and (10) from chapter 4, repeated here as (20) and (21), illustrate the effects of DP definiteness on the temporal and aspectual specification of -*ing*: Note that indices h,i represent the anchoring relation between -*ing* and the matrix tense, whereas j indexes the trace of movement of *man* to the Spec of ActP.

(20)   a.   There were$_i$ three men at the counter yesterday$_i$. *The man carrying* $_i$ *a briefcase bought* $_i$ *a ticket to London.*

[CP [C' [C [AgrP [Agr' [Agr] [TnsP [Tns' [Tns past$_i$] [VP [DP [D' [D the] [ActP man$_j$ [Act' [Act +act] [VP t$_j$ [V'[V carrying$_i$] [DP a briefcase]]]]]] [V'[V bought] [DP a ticket to London]]]]]]]]

b. There are$_i$ three men at the counter now$_i$. *The man carrying* $_i$ *a briefcase bought* $_h$ *a ticket to London.*

[CP[C'[C [AgrP [Agr' [Agr] [TnsP [Tns' [Tns past$_h$] [VP [DP [D' [D the] [ActP man $_j$ [Act' [Act +act] [VP t$_j$ [V'[V carrying$_i$] [DP a briefcase]]]]]] [V'[V bought] [DP a ticket to London]]]]]]]]

Furthermore, progressive interpretations obtain more often for a definite DP than for an indefinite (bare plural) DP.

(21)   a.   Women looking after small children generally get paid about £1.50 an hour.

(habitual or generic reading preferred)

    b.   The woman looking after my small brother ....

(progressive reading preferred, habitual reading anomalous or *)

The influence of the head of DP can be explained as an effect of the relation between the head and its complement, i.e. -*ing* is temporally specified by D under government. If the head of the DP is definite, a progressive reading, but not a habitual interpretation obtains at LF; if the DP is a bare plural, a universal quantifier is introduced, and a habitual interpretation can obtain at LF, if it binds the event variable of the predicate of the V-*ing* clause.

5.5.3 V-*ing* clauses as complements of perception verbs

Previous work in syntax (Reuland 1983) considered that the V-*ing* clause that follows the object of a perception verb in sentences such as (22) is an adjunct of that NP.
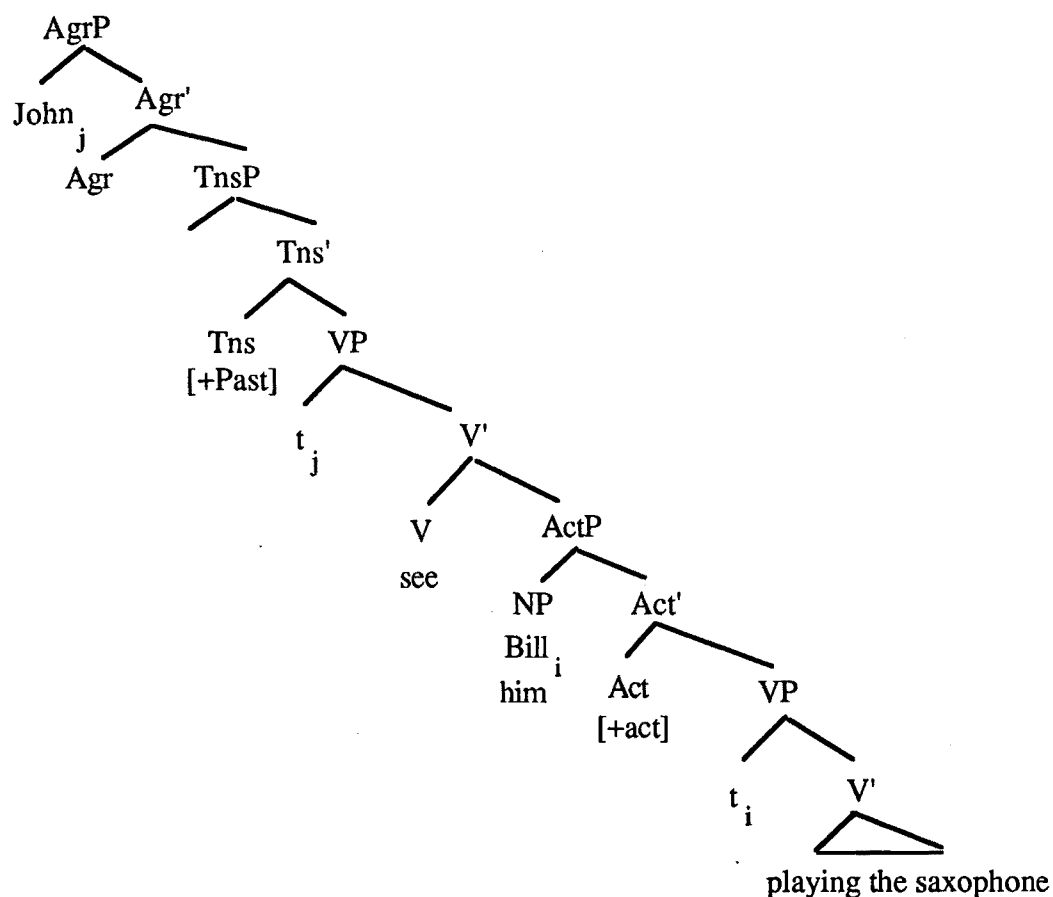
(22)   John saw Bill/him playing the saxophone.

However, there are semantic as well as syntactic reasons to consider the V-*ing* clause a complement of V instead of an adjunct of NP. From the semantics perspective, it seems clear that the object of perception is not only the individual denoted by the NP but also an event in which the individual is a participant (see Parsons 1990). From the point of view of syntax, an argument against the hypothesis that V-*ing* clauses are adjuncts to the NP argument of the perception verb is that both constructions (a V-*ing* postnominal and a V-*ing* clause "object of perception") can co-occur in a sentence, as in (23):

(23)   a.   I saw him playing the saxophone.

    b.   I saw the man wearing a green T-shirt playing the saxophone.

Perception sentences are of interest to this dissertation because the V-*ing* clause receives a progressive interpretation. As was suggested in chapter 4, section 4.3.1, the progressive interpretation of the perceived event is lexically determined (as shown by the impossibility of occurrence of verbs that denote states). Verbs of perception, encounter, etc. establish a simultaneity relation between the state they denote and the event denoted by their governed complement. Thus we can consider the V-*ing* clause a subcategorised complement of this type of verbs. In particular, I propose in this section that it is an Actuality Phrase. Given that there is an NP/DP between the main verb and the Actuality projection (e.g. *Bill/him* in (22)), we need to consider two possible structures: one for the case in which the NP is part of ActP, and another for the case in which the NP is a complement of the main V.

The first structure corresponds to the intuition that the perception predicate has two arguments, one of which denotes an event which is marked for actuality. Cowper (1992) presents such an analysis: the perception verb has one complement, a Participle Phrase headed by -*ing*. The NP/DP which stands for the perceived participant is not treated as an internal argument of the perception verb, but as the external argument of the embedded VP. If we adopt Cowper's analysis, and adapt it to the hypothesis developed in this chapter for other progressive structures, we must propose that perception verbs subcategorise for an ActP projection instead of a Participle Phrase. The head of ActP is given specific temporal reference by its governor, the matrix verb. A sentence like (22) may be analysed as having the following structure:
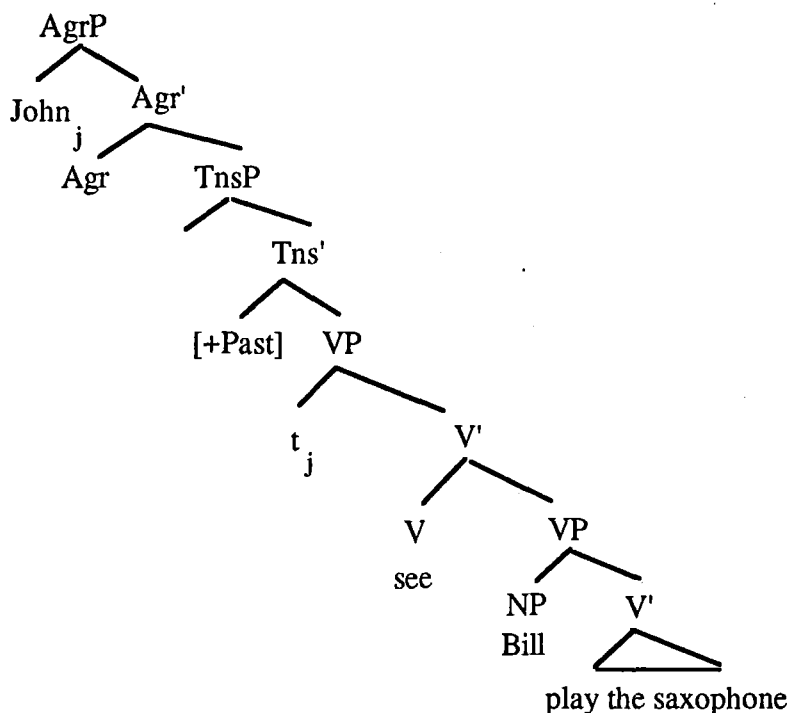
(24)

```
AgrP
├── John_j
└── Agr'
    ├── Agr
    └── TnsP
        └── Tns'
            ├── Tns
            │   [+Past]
            └── VP
                ├── t_j
                └── V'
                    ├── V
                    │   see
                    └── ActP
                        ├── NP
                        │   Bill_i
                        │   him
                        └── Act'
                            ├── Act
                            │   [+act]
                            └── VP
                                ├── t_i
                                └── V'
                                    playing the saxophone
```

In (24) the main verb *see* adjoins to the head of TnsP and to the head of AgrP to check its features. Its Specifier *John* raises to the Specifier of AgrP. The embedded verb *playing* raises to the head of ActP to check its features and realise the predication structure. Its Specifier *Bill/him* raises to the Specifier of ActP. There it can receive accusative Case from the matrix verb *see*. The contrasting sentence (25a) does not involve the projection of ActP.

(25)   a. John saw Bill/him play the saxophone

(25)   b.

```
                  AgrP
                 /    \
             John      Agr'
               j      /    \
                   Agr      TnsP
                           /    \
                        Tns'
                       /    \
                  [+Past]    VP
                           /    \
                        t        V'
                         j      /    \
                             V        VP
                            see      /   \
                                   NP      V'
                                   Bill   /__\
                                      play the saxophone
```

The analysis given in (24) is based on the assumption that the NP/DP intervening between *see* and *playing* (i.e. the perceived participant) is generated as the subject of the embedded V-*ing* clause. Support for this analysis is provided by the grammaticality of sentences such as (26), where the position of the NP is filled by pleonastic pronouns such as *it* and *there*, which are restricted to occurring as subjects (see Radford 1988).

(26)   a.   I heard it raining.

       b.   We saw there walking into the room the oddest Linguistics student we had

            ever seen.

The status of NP is not completely clear, though. It may be argued, for instance, that the NP/DP is the internal argument of the upper VP, given that it may be the subject of a passive perception clause. An example is given in (27):

(27)   a.   John saw Bill/him playing the saxophone.

       b.   Bill was seen playing the saxophone.

In (27a) the object of *see* may become the subject of a passive perception clause. This means that it may be assigned a theta-role by both the upper and the lower verb, *see* and *play*, respectively. *Bill/him* is the patient of *was seen* and the agent of *playing*. The existence of passive sentences such as (27b) could be interpreted as evidence against the hypothesis that the NP originates at the Specifier position of the verb of the embedded clause. This implies that perception verbs should be considered three-place predicates, with two arguments bearing the theta-role theme: the NP denoting the perceived individual, and the ActP denoting an actual event. Instead of a lexically realised subject, the VP contained in the ActP would have in its Specifier an empty element controlled by the NP. The structure is given in (28).

(28)
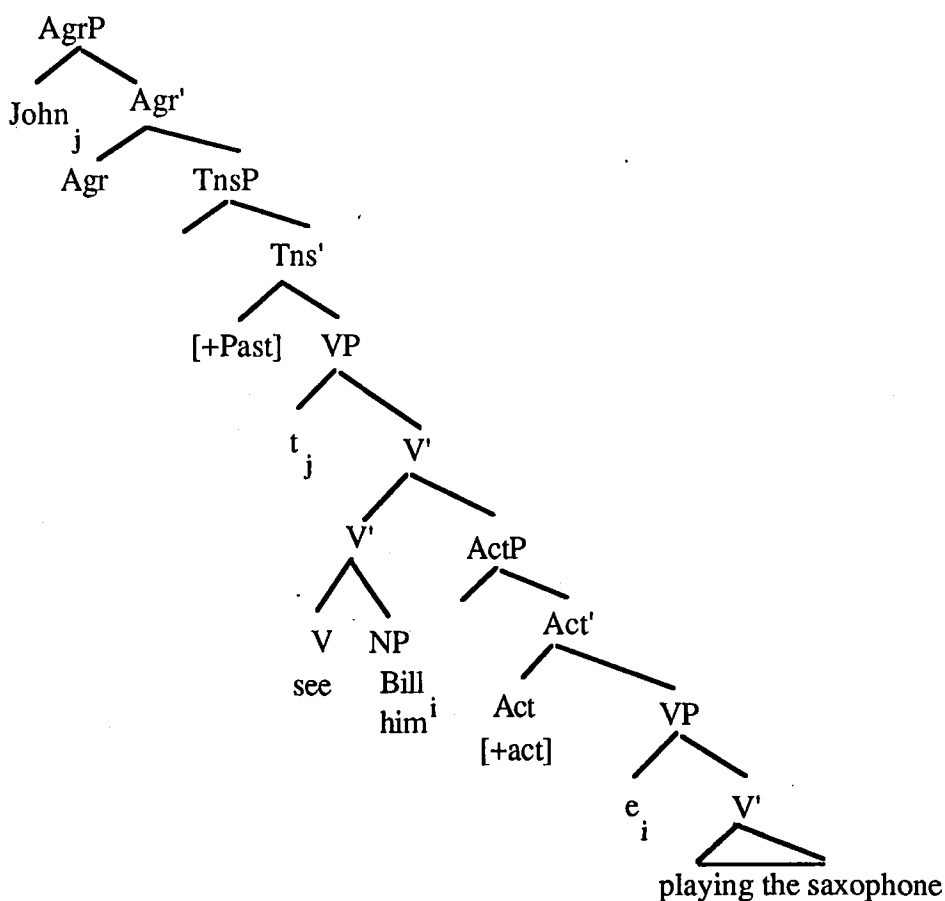
(28) allows us to account for the possibility of a passive perception sentence such as (27b). However, it does not account for the grammaticality of (26), where the expletive NPs do not receive the theta role theme. It is possible, after all, that the passive sentence (27b) is not a "passivised" version of (27a), but a different structure which does not involve a V-*ing* complement, but a V-*ing* adjunct of the NP. Interestingly, the perception clause which does not take a V-*ing* complement but a bare form, as (25) above, does not occur as a passive clause, as (29) illustrates:

(29)   a.   John saw Bill/him play the saxophone.

        b.   * Bill/he was seen play the saxophone.

I think that evidence from passive perception sentences is not conclusive enough to force us to abandon analysis (24) in favour of structure (28). I leave this issue aside for further research, given that either proposal is based on the existence of a complement ActP which is what accounts for the progressive interpretation of the event denoted by the embedded predicate.

5.6 Summary and conclusions

In chapter 4 we analysed various V-*ing* structures and concluded that -*ing* realises a more general notion than progressive aspect, i.e. it is a marker of actuality for both events and states. In chapter 5 we have given syntactic status to this notion, proposing the existence of a functional category Actuality Phrase whose head is specified by the feature [± actual] which can be better described as an amalgam of tense, aspect and possibly agreement. The V-ing structures that we have discussed in more detail are the progressive periphrasis, postnominal "adjuncts" and complements of perception clauses. In each of these structures, the features of ActP account for syntactic and semantic facts.

As far as V-*ing* postnominal clauses are concerned, two essential issues are the properties of the head Act and the adjunction site of ActP. Essentially, a V-*ing* clause is an ActP (the projection of the head Act) with a VP complement. Following Kayne (1994) --who, in turn, follows Vergnaud (1984)-- I propose that ActP is the complement of DP. In order to realise a predication relation, the embedded V head must raise to the head Act to check its tense, aspect and agreement features. The subject of the embedded verb, i.e. the NP which is at [Spec, VP] is raised to [Spec, ActP] so that it may receive case. This gives the surface postnominal order and explains the argument-sharing relation between embedded verb and matrix verb. Treating V-*ing* adjuncts as complements of DP has consequences for the explanation of the assignment of temporal reference to these structures. As adjuncts they are not governed, and thus, temporal reference is assigned indirectly, taking the matrix tense as the semantic roof under which -*ing* is temporally anchored. If a V-*ing* clause is a complement, however, -*ing* can obtain temporal reference under government from the head D. This would explain the effects of DP definiteness on the temporal anchoring of -*ing* which we have presented in chapter 4. Finally, the aspectual feature of Act (at a given period of time the event or state are actual, not culminated or finised) allows for a progressive interpretation if the predicate of the V-ing structure expresses an event. In addition, the fact that -*ing* always lexicalises the relation between an event or state and its subject (a non-affected participant) is possibly explained by agreement-like features of Act.

In the case of perception clauses I have followed Cowper (1992) in analysing as members of a single projection the DP/NP complement (perceived participant) and the projection which contains the VP that expresses the perceived event (which is always interpreted as in progress). As in the case of postnominal V-ing "adjuncts", the properties of ActP allow the realisation of the secondary predication. But instead of being a complement of D, ActP in perception clauses is a complement of the VP headed by the perception verb. Thus when the embedded verb raises to Act to check its features, its

DP/NP raises to [Spec, ActP]. Given that ActP is the complement of a VP, the matrix V head assigns accusative case to [Spec, ActP]. The aspectual feature of Act allows the progressive interpretation of the event expressed by the embedded VP. Finally, the agreement feature of Act explains why the "perceived individual" that bears accusative case is always the subject of the embedded verb.

Sequences such as *I saw the man playing the saxophone* are, in fact, structurally (possibly lexically) ambiguous in English. Given a perception verb such as see, one reading corresponds to the case where the argument is realised as a DP involving a postnominal "adjunct", discussed two paragraphs above. The other reading corresponds to the case where the argument is realised as an ActP. The analyses given so far allow to account for this structural ambiguity.

As far as the progressive periphrasis is concerned, I have proposed a VP- ActP- VP structure. The first VP is headed by the stativiser verb *be*, the progressive "auxiliary". *Be* subcategorises for an ActP, whose head is defined by the feature [+actual]. Act in turn has the lower VP as complement. The lower VP expresses the event whose progressive state is predicated. The head of the lower VP bears the affix *-ing*, an affix that relates the event to a given (but indefinite) period of time. Since -ing is non-finite, it does not give specific temporal reference to the event. The role of *be* is to pass on the specific temporal reference of the matrix Tense head onto the head of ActP, where the lower V-*ing* head checks its features.

The discussion in this chapter makes it clear that a progressive interpretation is made up of various semantic and syntactic relations expressed by several elements in the clause, the most important of which are the marker of actuality *-ing,* and the progressive verb *be*. Let us now turn to the syntax of progressive structures in Catalan.

Chapter 6

A Grammar of the Catalan Progressive Structures

6.1 Introduction

In chapters 4 and 5 we have concentrated on the content of -*ing* and -*nt* and the functional category which these affixes instantiate. This chapter is mainly devoted to the periphrases which express progressive aspect in Catalan. Given that the distinctions expressed by the two progressive periphrases depend on their V1 (the fist item of the sequence), the main topic of discussion is the syntactic status of V1, rather than the role of the affix -*nt*.

Periphrases are characterised by the syntactic cohesion displayed between the first and the second items that make them up. This has been explained by according the first items (generally called auxiliaries) the status of functional categories. Scholars that adopt this view work under the theoretical assumption that only verbs that assign theta roles may be considered heads of VPs. A further assumption is that the auxiliary of a periphrasis only differs from a verbal affix (e.g. tense markers) in the position where it occurs (see Ouhalla 1991). Following this approach, Lema (1991) proposed to analyse the progressive verb *estar* as the head of the functional projection Aspect Phrase.

In chapter 3 we have shown that *estar* and *anar*, as V1 of progressive periphrases, have lexical content, in particular they preserve their *aktionsart,* and this makes them different from any affix that may realise progressive aspect. In this chapter we argue for the superiority of the VP analysis of progressive periphrases. The chapter is organised as follows. Section 6.2 presents the degree of syntactic cohesion of the progressive periphrases through a series of tests. Section 6.3 is a critical review of the functional analysis of progressive *estar* proposed for Spanish in Lema (1991). Section 6.4 presents other types of thematically defective verbs which nevertheless are analysed as V. In

section 6.5 we review previous VP analyses of the progressive periphrases and update them incorporating the checking mechanism of the Minimalist program. In section 6.5.2 we consider the repercussion of Kayne's antisymmetry theory for previous VP accounts of the cohesion of periphrases based on adjunction. Finally, we devote section 6.5.3 to the discussion of other -*nt* structures in Catalan.

6.2 The syntactic behaviour of *estar* and *anar* + gerund

Llinàs (1990:58-70) compiles an exhaustive collection of tests to identify what she calls 'complex verbs', i.e. verbal sequences that may not be interrupted by other elements, such as the temporal periphrases *haver* + past participle 'have + past participle' and the periphrastic perfective past *va* + infinitive. If we apply those tests to the progressive periphrases *estar* and *anar* + gerund we see that they display a considerable degree of cohesion, though not as high as other verbal sequences such as the tense auxiliaries mentioned above.

1.- Placement of negation. The negative particle *no* cannot occur between an auxiliary and a main verb.

(1)   a.   * En Lluís ha no rebut la carta.

             'Lluís has not received the letter.'

       b.   * En Lluís va no rebre la carta.

             Lluís go-pres not receive-infin. the letter

             'Lluís did not receive (periphrastic perfective past) the letter.'

       c.   * L'Anna està no escrivint l'article.

             'Anna is not writing the paper.'

       d.   * L'Anna va no escrivint l'article.

             'Anna is not (gradually) writing the paper.'

2.- Post-verbal ellipsis (null complement anaphora/VP deletion). In Catalan and Spanish the verb following an auxiliary may not be omitted.

(2)   a.   *En Lluís ha rebut la carta però la Carme no l'ha ___ .

             Lluís has received the letter but Carme not it has __

             'Lluís has received the letter but Carme has not.'

    b.   *En Lluís va rebre la carta però la Carme no la va ___ .

             Lluís go-pres receive-inf the letter but Carme not it go __

             'Lluís received (periphrastic perfective past) the letter but Carme did not.

    c.   *L'Anna està escrivint l'article, i en Toni no ho està ___ .

             Anna is writing the paper, and Toni not it is __

             'Anna is writing the paper, and Toni is not.

    d.   *L'Anna va escrivint l'article, i en Toni no ho va ___ .

             Anna go-pres write-gerund the paper, and Toni not it go-pres __

             'Anna is writing the paper, and Toni is not.

3.- Clitic climbing. A clitic corresponding to the object of the main verb may appear adjoined to the left of the auxiliary verb.

(3)   a.   La Maria l'ha llegit, el teu article.

             Maria it has read, your paper

             'Maria has read it, your paper.'

    b.   La Maria el va llegir, el teu article.

             Maria it go-pres read-inf., your paper

             'Maria read it, your paper.'

    c.   La Maria l'està llegint, el teu article.

             Maria it is read-gerund, your paper

             'Maria is reading it, your paper.'

    d.   La Maria el va llegint, el teu article.

             Maria it go-pres.read-gerund , your paper

'Maria is reading it, your paper.'

The tests considered so far show that *estar* and *anar* behave like the tense auxiliaries with regard to placement of *no*, post-verbal elipsis, and clitic climbing. However, *estar* and *anar* show inconsistent behaviour in other tests.

4.- Interruption by lexical elements. A sequence of auxiliary plus main verb may not be "interrupted" by lexical elements, as illustrated in (4a,b). Lexical material intervening in the progressive periphrases does not cause complete ungrammaticality, as illustrated in (4c-g)

(4)   a.   *Han sempre arribat fins a la lliçó tres.

              'They have always reached lesson three.'

       b.   *Van sempre arribar fins a la lliçó tres.

              'They always reached lesson three.'

       c.   ? Anava sempre demanant diners.

              'He was always asking for money.'

       d.   ? No està mai fent el que hauria de fer.

              'He is never doing what he should do.

       e.   ? Anem, de mica en mica, reformant el pis.

              'We are, little by little, renovating the apartment.'

       f.   ? Estem, de moment, esperant que arribin les pluges.

              'We are, at the moment, waiting for the rains to come'

       g.   ? Estem simplement intentant fer la feina tan ben feta com sigui possible.

              'We are simply trying to do our best'

There are instances where the sequence *estar* +XP+ V-*nt* is fully grammatical, but which are suspected of being a different structure (cf. Gómez Torrego 1988). Consider the sentences in (5) [(5a) is from the text in a comic strip]:

(5)   a.   Estàvem molt tranquils jugant a pilota ... i la Meritxell diu: Albert, tu de

porter!

we were very quiet playing with the ball ... and Meritxell says: Albert,

you'll be the goalkeeper!

'We were (being) quiet and playing with the ball ...'

b.   La dona estigué una estona buscant dins el calaix, i en va treure una

fotografia.

the woman was-perfect. a while looking in the drawer, and out of it she took

a picture.

'The woman spent some time looking in the drawer, and came up with a

picture.'

It may be argued that (5a) consists of the copula *estar* with an adjective phrase as its

predicative complement, and an adjoined gerund clause; (5b) might be analysed as copula

+ temporal adjunct NP + adjoined gerund phrase. It is difficult to find tests to help us

decide whether or the sentences in (5) contain are periphrases.[1] Gómez Torrego (1988)

suggests that in Spanish non-periphrases allow *wh*-questions to be asked about the

intervening element. But this can be a confusing test, since there are different ways to

build a *wh*- question. In the particular examples of (5), from each each sentence we have

built two questions. If the V-*nt* phrase is included, (5a) behaves like a periphrasis (see

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[1]In fact, the same phenomenon is found in all those periphrases formed with an auxiliary that also occurs in the lexicon as a lexical verb. Depending on the lexical meaning as a main verb, there may be ambiguity between a periphrastic reading and a main verb reading. Consider the aspectual complex *tornar* + *a* + infinitive, 'do X again', formed from the lexical verb *tornar* 'go back', a motion verb. Sentence (ia) below is ambiguous between an aspectual and a main verb reading, corresponding to the two English paraphrases.

(i)   a. Vaig tornar a buscar el llibre al despatx.
             'I looked for the book in my office again.'   (periphrastic *tornar a* + inf)
             'I went back to my office to look for the book.'   (motion *tornar a* +place NP)
         b. Vaig tornar al despatx a buscar el llibre.
             'I went back to the office to look for / fetch the book.'

When the goal complement occurs immediately after the verb, as in (ib), there is no ambiguity: *tornar* is not the auxiliary of the periphrasis *tornar* + *a* + infinitive but the main verb 'go back, return'. In general, then, cohesion between the first and the second item is an essential property of periphrases.

(6a)) and (5b) does not (see (6c)). But if the V-*nt* phrase is left out, the opposite behaviour obtains (contrast (6b) vs. (6d)):

(6)   a.   Com estaveu?   Molt tranquils.

How were you? Very quiet.

b.   ? Com estaveu jugant a la pilota? Molt tranquils.

How were you playing ball?

c.   *Quant temps va estar, la dona? Una estona.

'For how long was the woman? For a while.'

d.   Quant temps va estar buscant dins el calaix, la dona? Una estona.

'For how long was the woman looking in the drawer? For a while.'

Depending on how we decide to apply the test, we obtain different results. Note, however, that there is a slight difference between (5a) and (5b). Whereas a *wh*-question from (5b) with the   V-*nt* phrase omitted results in an ungrammatical sentence, a similar question from (5a) is slightly more acceptable. This may be taken to suggest that (5b) contains a periphrasis, whereas (5a) does not. The results of applying other tests also point in the same direction. For instance, periphrases do not allow dissociation of the two Vs (Gómez Torrego 1988). Thus, splitting the constituents is possible for (5a) --in (7a)-- but not for (5b) --in (7b):

(7)   a.   Estàvem tranquils i estàvem jugant / jugavem a pilota

b.   *Va estar una estona i va estar buscant dins el calaix.

A test which is not included in Gómez Torrego concerns the kinds of verbs that potential periphrases accept. Both -*nt* structures in (8) have state verbs. But, while (8a) -- corresponding to (5a)--' is grammatical, (8b) --corresponding to (5b)-- is not grammatical.

(8)   a.   Estàvem tan tranquils pensant que el mestre no ens veia ...

b.   ?? La dona va estar una estona creient que la fotografia no era al calaix.

According to the tests that we have applied, we may conclude that (5b) contains a progressive periphrasis, and that (5a) is a progressive **structure** (though not a progressive **periphrasis**), in the sense that the gerund clause receives a progressive interpretation: first of all the -*nt* affix is roofed by the matrix tense; secondly, there is a simultaneity relation between the playing event and the state of quietness predicated of the subject.

5.- Preposing (and postposing). A sequence of auxiliary plus main verb may not be broken up. This is illustrated in (9a). Judgements about *estar* and *anar* vary. (9b,c) deserve question marks at least in literary language (see Espinal 1983).

(9)   a.   * Ens pensavem que es casaria però casat no s'ha.

'We thought he would get married, but married he has not.'

b.   ? Ha dit que està assajant les nadales i assajant-les està.

'He said he is rehearsing the carols, and rehearsing them he is.

c.   ? Crèiem que millorava, i empitjorant anava.

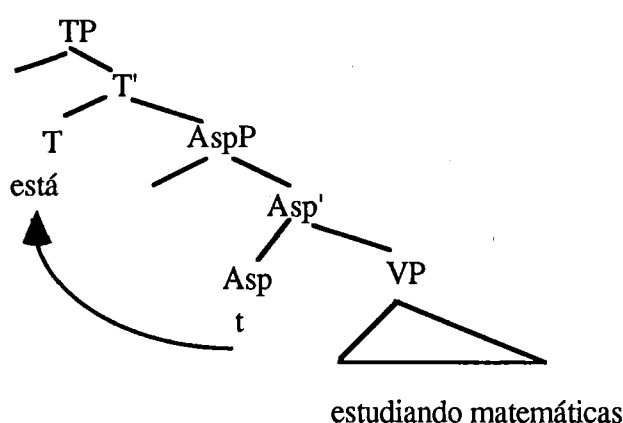'We thought he was gettig better, but getting worse he was.'

To summarise, syntactically speaking *estar* and *anar* mostly behave like the tense auxiliaries (*ha/va*), although there seem to be cases where the sequence V1 + V2 can be broken.

The degree of cohesion displayed by the progressive sequences has received various accounts in the Principles and Parameters approach. One of the latest accounts, proposed by Lema (1991) is that most of the restrictions of movement of *estar* can be explained if *estar* is considered the head of an aspectual functional projection called AspP. We will begin the review of previous work here, and will give arguments based on our conclusions from chapter 3 against considering *estar* a functional head.

6.3 *Estar* as head of Asp

Lema (1991) argues that the auxiliary *estar* is a functional category in the (Spanish) progressive, in particular, the category Aspect, a projection with progressive features which appears between T and the lexical VP. The relevant structure is given in (10)

(10)

```
        TP
       /\
      /   T'
     /  /    \
    T    AspP
   está  /    \
        /     Asp'
       /     /    \
      Asp    VP
       t    /\
           /  \
          /____\
```

estudiando matemáticas

(10) reflects the movement of *estar* to the Tense Phrase to get tense morphology. The "synthetic" counterparts of the "analytic" auxiliaries are affixes. According to Lema, the progressive aspect may also be realised by the aspectual affix corresponding to the imperfective past tense morpheme. Since the imperfective past affix is the subject of chapter 7, I will restrict myself now to his approach to the periphrasis.

The main difference between Lema's proposal and the approach defended in this thesis is that no syntactic status is given by Lema to the affix *-ndo* (Catalan *-nt*), and therefore other structures in which the verb bears the same affix cannot be predicted to express progressive aspect. But my most serious objection concerns the dubious nature of the syntactic evidence adduced in the article for the existence of an AspP headed by *estar*. To begin with, much of the argumentation for the status of *haber* and *estar* as heads of something which is not a VP is based on instances of VP-preposing and VP-ellipsis in English.

As far as Spanish is concerned, there is disagreement about the existence of VP-preposing. Lema argues that it exists, and provides the translations of English sentences which contain *haber* and *estar* separately and together, in a group of sentences whose grammaticality I find questionable. In (11) I have listed a selection from his sentences. Note that the perfect *haber* and the progressive *estar* do not behave alike. [Lema's (15) and (16)] :

(11) a.   *María negó que ya había vendido la casa, pero vendido la casa bien que

había ___ para cuando llegamos. (OK for him, * for me)

'Maria denied having sold the house, but sold the house she had __ when we

arrived.'

b.   María dijo que estaría lloviendo y lloviendo estaba cuando llegamos.

'Maria said it would be raining, and raining it was __ when we arrived.'

c.   María dijo que habría estado lloviendo y lloviendo había estado ___ todo

el día.

'Maria said it would have been raining, and raining it had been __ all day

long. '

d.   * María dijo que habría estado lloviendo y estado lloviendo había ____ todo

el día.

'Maria said it would have been raining, and been raining it had been __ all

day long.'

The contrast (11c-d) proves that in Spanish, as in English, aspectual elements cannot be preposed. However, this does not prove, as Lema intends, that *estar* and *haber* must be functional categories.

The Catalan versions are worse, and only (12b-c) might deserve a question mark:

(12)   a.   * La Maria va negar haver venut la casa, però, quan vam arribar, venuda bé que l'havia!

       b.   */? La Maria va dir que estaria plovent i plovent estava quan vam arribar.

       c.   */? La Maria va dir que hauria estat plovent i plovent havia estat ___ tot el dia.

       d.   * La Maria va dir que hauria estat plovent i estat plovent havia ___ tot el dia.

Less controversial examples of preposed VPs are provided in (13) and (14) with *estar* and *haver*, respectively, although emphatic stress must occur on the gerunds at clausal initial position.

(13)   a.   Fent els deures hauries d'estar, i no pas mirant la televisió!

            'Doing your homework you should be, instead of watching TV!'

       b.   Netejant, esteu? Em pensava que no ho feieu mai, a casa vostra!

            'Cleaning, you are? I thought you never did such a thing, at your place!'

(14)   a.   * Fet els deures, havies d'haver, i no pas mirat la televisió!

            *'Done your homework, you should have, instead of watching TV!'

       b.   * Netejat, heu? Em pensava que no ho feieu mai, a casa vostra!

            *'Cleaned, you have? I thought you never did such a thing, at your place!'

       c.   * Vaig dir que havia fet una promesa i feta l'he.

            * I said I had made a promise, and made it I have.

The contrast *estar* - *haber* (Sp.)/ *haver* (Cat) illustrated by (13) and (14) may be interpreted as the proof of their distinct syntactic nature, which in turn would reflect the amount of lexical/aspectual value they carry. Items with more lexical content can be left behind when VP-preposing occurs (e.g. *estar* in (13)), while VP preposing cannot even occur when the "auxiliaries" do not have lexical content (e.g. *haver* in (14)).

Furthermore, according to Lema's argumentation, the fact that *estar* can be left behind when its complement VP is preposed shows that it is the head of a VP and not a functional category.

It could be argued that the sentences in (13) are not really progressive periphrases, but instances of *estar* copula plus a gerund adjunct. If that is the case, we can safely assert that VP preposing of the complement of progressive *estar* is not allowed. But this only proves that *estar* and *haver* are not fully lexical; it does not not prove that they are functional categories.

Section 4 of Lema's paper provides more genuine Spanish data. This section is devoted to one of the predictions of the "*estar* as Asp" theory, namely that both aspectual *estar* and attributive *estar* are the same element, the head of an aspectual phrase, and thus, that they share one lexical entry. We are more interested in the argumentation than in the prediction itself. Lema bases his argument on the premise that *estar* cannot occur as complement of a verb that requires the category of its complement to be a VP, because *estar* is not the head of a VP. Among the verbs that require VP complements are causative *hacer*, object control verbs such as *obligar*, and perception verbs such as *ver*. Modals accept, according to Lema, both VP and AspP complements. It seems to me that, as it turns out, the "syntactic tests" do not prove the truth of the premise that progressive *estar* is not the head of a VP. Consider the causative sentence (15) [Lema's (30c)]:

(15)   *Oscar hizo a su hermana estar trabajando en su fábrica.

       'Oscar made his sister be working in his factory.'

According to Lema, (15) is ungrammatical because causatives require a verb with thematic content, and thus the periphrasis is not allowed. But clearly, the ungrammaticality of (15) is due to a well established constraint: any causative sequence

where the NP subject of the V2 precedes it is ungrammatical, as illustrated in the contrast (16a) vs. (16b):

(16) a. *Oscar hizo a su hermana hablar.

Oscar made his sister speak

b. Oscar hizo hablar a su hermana.

Oscar made speak his sister

'Oscar made his sister speak.'

Note that as soon as we cliticize the NP, the sentence is grammatical

(17) Oscar la hizo estar trabajando en esa fábrica.

Oscar her made be working in his factory

'*Oscar made her be working in his factory.'

It may be argued that the sequence *estar* + *trabajando* is not a periphrasis, but a copula *estar* followed by an attributive gerund clause denoting a property of the subject. A similar Spanish construction consists of *tener* instead of *estar*:

(18) a. Me tuvo trabajando toda la semana.

me (he) had working the whole week

'He had me working the whole week.'

b. Me tiene harta.

me (he) has fed up

'*He has me fed up.'

This argument does not hold, however, for the combination *anar*+ gerund, which occurs embedded in a causative:

(19) Em va fer *anar* treballant fins que vaig acabar tot el capítol.

(She) make-perfect. go-inf working until I finish-perfect. the whole chapter

'(She) made me work once and again until I finished the whole chapter.'

In sum, there is evidence that progressive periphrases may occur as complements of causatives.

Another environment selected by Lema is that of 'object-control verbs' like *obligar*. The relevant example is (20) [Lema's (31a)]

(20)   * Oscar obligó a su hermana a estar trabajando en su fábrica.

      *'Oscar forced his sister to be working in his factory.'

Again, the ungrammaticality can be attributed to the same constraint on the presence of the NP between V1 and V2. Note that if it occurs as a clitic, the sentence is grammatical, as illustrated in (21). In addition, the presence of elements which specify the temporal reference of the progressive state (*hasta la madrugada, desde las dos hasta las siete*) contributes to the relevance of the progressive interpretation of the sentences.

(21)   a.   Oscar la obligó a estar trabajando en su fábrica.

          'Oscar forced her to be working in his factory.'

      b.   Oscar la obligó a estar trabajando en su fábrica hasta la madrugada.

          'Oscar forced her to be working in his factory until late in the night.'

      c.   Oscar la obligó a estar trabajando en su fábrica desde las dos hasta las siete.

          'Oscar forced her to be working in his factory from two to seven.'

As far as the class of perception verbs is concerned, Lema recognises that they have "a lexical-aspectual value" because "they refer intrinsically to the event in progress" (p. 15). These verbs exclude *estar* + gerund as a complement, though they accept the event verb alone marked with the ending *-ndo*. The relevant example is (22) [Lema's (32a)]:

(22)   . Oscar vio a su hermana (*estar) trabajando en esa fábrica.

      'Oscar saw his sister (*be) working in that factory.

Lema argues that *estar* is ruled out because it is the head of the aspectual phrase, but a more obvious reason why *estar* + gerund is disallowed can be the stative nature of the progressive. Since perception verbs require events, and the periphrasis denotes a state, perception verbs reject the periphrasis, though not the Actuality value of the gerund.

Finally, as far as modal verbs are concerned, Lema argues that the reason why *estar* + gerund is allowed is that these verbs accept complements of both categories AspP and VP. But, clearly, if both categories may occur after a modal, this does not disprove that *estar* + gerund is VP. The relevant example is (23) [Lema's (29a)]

(23)   Oscar podría *estar* preparando la cena cuando llegaras.

'Oscar could be preparing dinner when you arrived.'

To summarise, on close examination of his data, we found that the ungrammaticality of *estar* + gerund was to a large extent due to the the prohibition against a full NP occurring between V1 and V2 in causatives and object control verbs. In the case of perception verbs the cause of ungrammaticality is that the progressive periphrasis does not fulfill the semantic selection of the perception verb. We conclude then that Lema's evidence in favour of *estar* as the head of an AspP is wrong in some cases and inconclusive in others.

There are two arguments against treating *estar* as the realisation of a functional category. I will give the more specific first, and then will discuss the more general.

There is one syntactic phenomenon which can be used to argue against a functional approach to *estar*, namely clitic climbing. Clitics adjoin to V1, as in (24a) (and (3) above), or can "remain" on the V2, as in (24b). Any proposal that auxiliaries are functional categories must accept that clitics adjoin to functional categories rather than to verbs.

(24)   a.   En Joan ho està llegint.

        Joan   it is   reading

    b.   En Joan està llegint-ho.

        Joan is reading-it

        'Joan is reading it.'

Lema's proposal could be modified in order to account for clitic climbing by postulating that the aspectual features of *estar* are those of an abstract AspP which has the lexical VP as complement. *Estar* would start as a lexical verb and check its progressive features at the head of AspP. The structure would be the following:

(25)

estudiando matemáticas
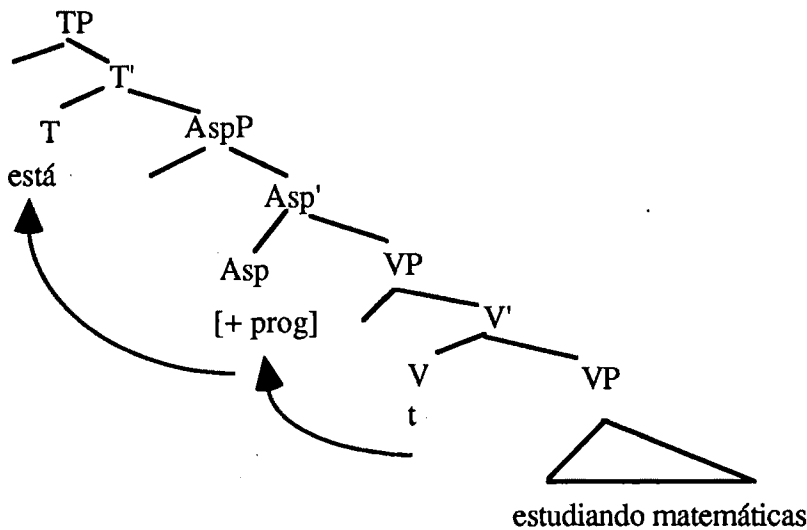
Clitic climbing to *estar* could then be explained as regular clitic climbing to a lexical verb, before the head moves to check its progressive features. Though this new configuration accounts for clitic climbing, it does not solve the weakness of the functional account of progressive verbs. *Estar* and *anar* as progressive verbs have semantic selection properties different from those of *estar* and *anar* as lexical verbs. In particular, they select event predicates, specifically events with inherent duration, and reject states. According to Ouhalla (1991), which is the main reference in Lema's paper, functional categories lack

semantic-selection properties. This means that the feature [+progressive], responsible for the semantic selection of predicates, cannot be a syntactic feature of an abstract aspectual head, but a lexical feature of *estar* and *anar*.

Finally, a further argument that the progressive verbs head VPs concerns the placement and interpretation of adjuncts, in particular of time span aspectual adjuncts such as *en tres minuts* 'in three minutes'. These adjuncts measure the time that goes by from the beginning to the endpoint of an event. As a general rule, time span adjuncts cannot occur with states, either lexical or progressive because states cannot be measured in this way. Exceptionally, if an iterative interpretation is possible for the event, time span adjuncts can occur with a progressive periphrasis. The time span adjunct is then understood to modify each event in the iterated set. Consider the sentences in (26).

(26) a. Avui estem banyant els nens en tres minuts.   (iterated event reading)

'Today we are bathing the children in three minutes.'

b. *Avui estem banyant el nen en tres minuts.   (state: progressive [2])

*'Today we are bathing the boy in three minutes.'

c. *Admiro el nen en tres minuts.   (lexical state)

*'I admire the boy in three minutes.'

The contrast (26a) vs. (26b) is explained if there are two VP projections to which the time span modifier can adjoin. In (26a), *en tres minuts* is an adjunct of the lower VP, and it has scope only on the event denoted by the VP. In (26b), its adjunction to the top VP headed by *estar* is ruled out by the fact that *estar* is a state verb and state verbs disallow time span adjuncts, as (26c) illustrates. These data cannot be explained if *estar* projects a funcional category, given that the head of a functional category presumably does not

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[2]We are obviously discarding special values, for instance, the interpretation where bathing the child in three minutes is an event inherently consisting of an iteration of subevents of the same kind.

denote either a state or an event. The issue of progressive interpretations and the scope of aspectual adjuncts plays an important role in chapter 7.

In general, the motivation for treating any auxiliary as a head projecting a functional category is based on the argument that if these verbs do not have thematic structure in the canonical sense, then they have not any lexical content whatsoever. There exist, however, groups of verbs which are thematically defective, i.e. which do not assign thematic roles to their complements, but which have semantic content, and furthermore behave syntactically like main verbs. Two such groups of verbs are modals and aspectuals, and light verbs. Modals and aspectuals provide evidence of the existence of relations other than predication between a verb and its complement. Light verbs and their arguments express events periphrastically. Thus their existence gives indirect support to a VP analysis of progressive periphrases.

6.4 Thematically defective verbs

6.4.1 Aspectual and modal verbs

Modal verbs and aspectual verbs possess some but not all the characteristics of auxiliaries. These verbs occur in sequences, that is, have verbal complements, and have a well established semantic --though not thematic-- content. Instances of modal verbs are *poder* 'can', *voler* 'want to'; instances of aspectual verbs are *tornar a V* 'V again', *començar a V* 'begin to V'. We will concentrate on aspectuals.

Llinàs (1990:73-74) shows that aspectuals behave like main verbs with respect to some syntactic phenomena (placement of negation, post-verbal ellipsis, relative ordering of sequences of aspectuals and modals, interruption of verbal unit) and as auxiliaries in other tests (transparency of selectional restrictions, discontinuous passive, no double

negation, and clitic climbing). As shown below, the behaviour of progressive verbs *estar*
and *anar* differs from that of aspectuals:

1.- Placement of negation. Like main verbs, aspectual verbs allow placing the negative
particle after the aspectual and before its complement. *Estar* and *anar* do not allow this
pattern of negation.

(27)   a.   La Carme comença a no saber què fer.

              'Carme is beginning not to know what to do.'

        b.   Tot i que em va insistir mil vegades que era perillós baixar per la paret, vaig

              continuar no fent-li cas.

              'Though he insisted one thousand times that it was dangerous to climb down

              the wall, I continued not heeding his advice.'

        c.   En Pere pot no saber què fer en un cas així.

              'Pere may not know what to do in a case like this.'

        d.   * La Carme està/va no treballant en la tesi.

              'Carme is not working on her thesis.'

This syntactic behaviour links with the semantics of these verbs. In semantic terms, the
negation of an event is a state (Herweg 1991b). For instance, 'not write a novel' is not
an event but a state. Progressive auxiliaries cannot accept a negated event as their
complement, as this violates their semantic restrictions. On the other hand, aspectual
verbs like *continuar* 'continue', *començar a* 'begin to', etc. and modals, allow both state
and event predicates and accept negated complements.

2. Post-verbal ellipsis (null complement anaphora/VP deletion). While aspectual verbs
allow ellipsis of the VP, *estar* and *anar* do not, even if the complement is recovered by
the clitic *ho*.

(28)   a.   La Maria ha decidit pintar la casa, però encara no ha començat.

              'Maria has decided to paint her house, but has not started yet.'

   b.   En Jaume ha plegat de demanar beques, però en Pere continua.

        'Jaume has stopped applying for grants, but Pere continues (to).'

   c.   *La Maria ha decidit pintar la casa, però encara no ho està.

        *'Maria has decided to paint her house, but she is not.'

   d.   *La Maria ha decidit anar canviant les cortines, però encara no ho va.

        *'Maria has decided to change the curtains gradually, but she is not.'

The semantics of the progressive does not explain why it is impossible for a periphrasis to occur without its lexical part made explicit. Ellipsis seems to be acceptable if the verb that remains, i.e. the aspectual verb, has enough lexical content.

3.- Relative ordering of sequences of aspectuals and modals. Modals may take aspectual verbs as complements, and in turn, aspectual verbs can take modals as complements. This is illustrated in (29a,b). Such reciprocity does not work with progressive *estar* and *anar* . Although they may be the complements of modals (as in (29c)), *estar* and *anar* do not allow modals as complements (as in (29d)). This is due to the fact that modals denote states rather than events, and are thus never selected by progressive auxiliaries.

(29)   a.   Torna a voler sortir a passejar.

            'Again he wants to go out for a walk.'

       b.   Vol tornar a sortir a passejar.

            'He wants to go out for a walk again.'

       c.   Vol anar acabant la tesi.

            'He wants to be gradually finishing the thesis.'

       d.   ?? Va volent acabar la tesi.

            *'He is wanting to finish his thesis.'

4.- Interruption of verbal unit. Lexical elements can occur between aspectual verbs and their complements. *Estar* and *anar* are at least questionable (cf. test 4 above).

(30)   a.   Continuava, sempre que podia, anant a veure els seus amics.

'(she) continued, whenever (she) could, going to visit her friends.'

b.   ? Estava, sempre que podia, queixant-se.

'(she) was, whenever (she) could, complaining.'

The tests provided by Llinàs show that, even though aspectual verbs have no thematic content of their own, they behave syntactically like verbs which do have thematic content.[3] Applying the tests to *estar* and *anar* we reach the conclusion that they are in between aspectuals and tense auxiliaries, informally they are "more" auxiliary-like than aspectual verbs, though "less" auxiliary than the tense auxiliaries. This seems to match their respective semantic content.

6.4.2   Light verbs

The group of light verbs, defined as those predicates whose "main semantic content (...) is provided not by the verb, but by the action nominal complement" (Kearns 1988, Mulder 1992, see also Grimshaw and Mester 1988), are verbs without thematic content which cannot be treated as auxiliaries. Instances of light verbs in English are *give* in *give someone a push, take* in *take a bath*. Catalan instances are *donar una empenta, un espant*, 'to give a push, a scare', or *fer una passejada, una dormida* 'to do a walk, a sleep' (i.e. to walk, to sleep). Light verbs have an internal argument which denotes an event, i.e. carries the lexical meaning of the combination. For example, in the sentence *John gave Mary a kiss*, the event is a kissing event, not a giving event. The verb *give* has no theta roles to asssign, though it seems to have arguments which correspond to the arguments of the verb: the giver, the thing given, the person to whom something is given. However, the thematic roles are assigned by the predicate which occurs as the direct object, i.e. *kiss*. Higginbotham (1994) suggests that in light verb constructions the verb

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[3]Llinàs proposes Baker's "abstract incorporation" analysis (incorporation at LF), acknowledging their semantic content.

lexicalises the event argument of the predicate (on the assumption that each verb projects an event argument as part of its thematic structure).

Mulder's (1992) analysis of light verbs is that they are the periphrastic versions of the event- denoting (verbal) lexical item that occurs in nominalised form: *push, bath, kick, kiss, empenta, espant,* etc. Interestingly, light verb combinations generally preserve the *aktionsart* of the verb. For instance, *give* is an achievement; therefore, as a light verb, its complements denote punctual events: a push, a kick, a kiss, a ring, etc.[4] Similarly, *have,* which lacks an endpoint, takes activities as complements: *have a bath, have a look, have a rest,* etc. The periphrastic-synthetic alternation of light verbs bears a certain resemblance to the alternation progressive sequence- simple form of *estar /anar* + gerund, as the sentences in (31) illustrate:

(31)   a.   *give* someone a push / push someone

       b.   *donar* una empenta a algú / empenyer algú

       b.   *estar* parlant / parlar

In the three cases, the main lexical content of the periphrasis (the event) is provided by the complement. In (31a,b), the event is denoted by *a push, una empenta,* which is the internal argument of *give, donar.* In (31c), the event is denoted by *parlant* 'speaking', the complement of *estar.* The light verb contributes its *aktionsart* (there is a tendency for these constructions to express achievements); similarly, *estar* and *anar* view the event as in progress, in the former case as a homogenoeus state, a state with no gaps, in the latter as a distributive or heterogeneous state, a state which allows gaps. There are more coincidences between the two kinds of verbs. In English, as Mulder (1992) shows, the internal argument of a light verb may denote, location as well as an event. This is illustrated in (32a) vs. (32b), respectively:

(32)   a.   give NP a place/ place NP

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[4]There are a few exceptions: give a speech, a lecture.

b. give NP a push / push NP

The progressive verbs *estar* and *anar* as lexical verbs denote location and direction towards a goal (though *estar* has lost its original Latin meaning 'to stand').

(33) a. La Maria ara està a l'oficina de Passeig de Gràcia.

'Maria is (works) now at the Passeig de Gràcia office.'

b. La Maria està treballant a l'oficina de Passeig de Gràcia.

'Maria is working at the Passeig de Gràcia office.'

c. La Maria va a l'oficina en autobús.

'Maria goes to the office by bus.'

d. La Maria va treballant a l'oficina del Passeig de Gràcia.

'Maria is working at the Passeig de Gràcia office.'

That is, lexically speaking, both light verbs and progressive auxiliaries instantiate the capacity of natural language grammar to express location in two cognitive dimensions: (physical) space, as (32a) and (33a,c) illustrate; and the dimension of time and events, as (32b) and (33b,d).

6.5 The structures *estar* + gerund and *anar* + gerund as VPs

6.5.1   VP -ActualityP

In Catalan the progressive verbs *estar* and *anar* require their VP complements to be marked with the affix *-nt* and no other. The past participle marks non-actuality of the event, and is thus not compatible with *estar* and *anar* as progressive verbs. Likewise, the infinitive does not give temporal reality to the event and is also incompatible with the progressive V1s.

(34) a. * Estem escoltat la ràdio.

(we) estar-present listen-inf. to the radio

b.   * Els aprenents van recollir les eines.[5]

the apprentices go-past fetch the tools

Affixation of -nt is the morphological reflex of the fact that the event denoted by the VP

complement of a progressive verb must be marked for actuality at an indefinite period of

time. In turn the functional head subcategorises for a VP complement. The syntactic

entry for the affix -nt is the following:

-nt: [+actual] [__ VP]

The existence of an Actuality projection is further argued for by the co-occurrence

restrictions of V-nt with respect to two temporal-aspectual conjunctions which introduce

absolute clauses: un cop 'once', and tot 'while'. Un cop selects the resulting state of a

culminated event, as illustrated in (35a,b). Tot, on the contrary, requires the predicate to

be marked as actual, as in (35c,d).[6]

(35)   a.   *Un cop trencant l'ou, separes la clara del rovell.

b.   Un cop trencat l'ou, separes la clara del rovell.

' Once the egg is cracked, you separate the egg white from the yolk.'

c.   Li van caure les ulleres tot jugant a futbol

d.   *Li van caure les ulleres tot jugat a futbol.

'His glasses fell on the floor while playing/*played soccer.'

In chapter 3 I suggested the semantic and lexical information that must be encoded in the

lexical entry for progressive estar and anar. These verbs contribute to the expression of

progressive aspect by virtue of their semantic content (their aktionsart). In other words,

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[5]Note that (34b) is grammatical as the periphrastic perfective past, given that this tense form combines several forms of the present tense of anar (vaig, vas, va, van) plus an infinitive. Clearly this is not the intended interpretation.

[6]Pérez-Saldanya and Cuenca (1994) consider -nt a marker of imperfective **aspect** and assume for it the reichenbachian semantics "ROE", indicating that E (the event time) overlaps R. No reference is made as to how the event marked with -nt is interpreted with respect to the matrix tense, which as we have seen is the element that gives real temporal reference to it, given that -nt is indefinite.

they can be treated as Vs which subcategorise for an Actuality Phrase. The syntactic information encoded in the lexical entries must thus be added to the lexical and semantic information.

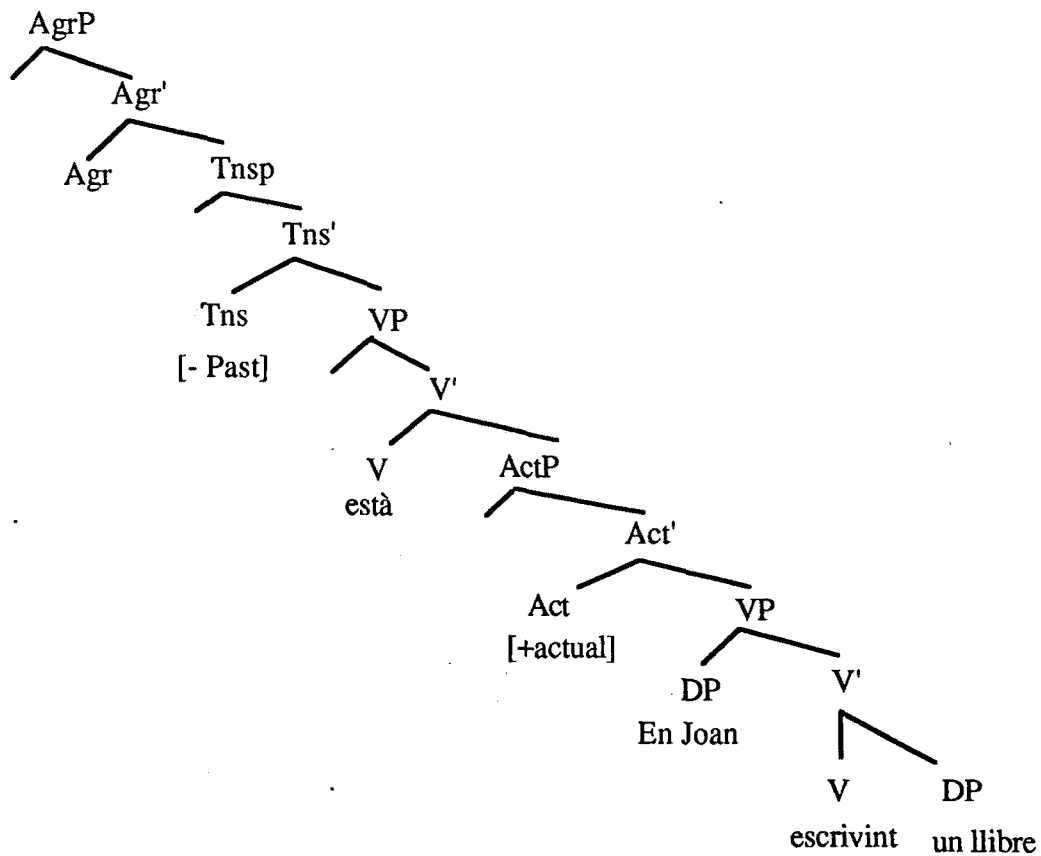> *estar*: + V, + progressive (+homogeneous), +definite
>
> __ ActP [+actual, +event]
>
> *anar*: +V, + progressive (- homogeneous), +definite
>
> __ ActP [+actual, + event]

The sentence *En Joan està escrivint un llibre.* 'John is writing a book' has the following structure:

(36)

AgrP
    Agr'
      Agr   Tnsp
            Tns'
            Tns   VP
          [- Past]   V'
                V   ActP
                està   Act'
                    Act   VP
                  [+actual]
                    DP   V'
                  En Joan
                      V   DP
                    escrivint un llibre

The verbal item *escrivint* must check the feature associated to -*nt* at the head of ActP. The verb *està* checks its Tns and Agr features. In chapter 7 we will see that there may be more structure below TnsP, and that other features, e.g. inflectional aspect, may have to be checked. The Specifier of the V2 (its subject) raises to the Spec of AgrP.

We assume the temporal location of the event denoted by the V2 to be an effect of the subcategorisation of ActP by the progressive verb. These verbs are progressive, i.e. they take a period of time and denote a property of it. They preserve the temporal reference of the matrix tense and "transmit" it to their complement. In Guéron and Hoekstra (1988)'s terminology *estar* and *anar* are T-markers. In Zagona (1988), transmission of temporal roles is achieved by head-to-head agreement, given that *estar* is assumed not to have role assignment possibilities.

The structure that has been proposed in this section does not differ greatly from that proposed in Zagona (1988, 1992), except for the fact that we have given the affix -*nt* a special status as the realisation of the functional category Actuality Phrase. There is one issue related to periphrastic constructions that we have been leaving aside, namely the syntactic cohesion displayed by these combinations. Traditional grammar assumes a diachronic process of 'grammaticalisation' of a verbal sequence that turns the originally independent verbs into a structural unit (see, e.g Fleischman 1982, Dietrich 1983 and references therein, and Squartini 1995). Two works in the Government and Binding framework explain the unit-like behaviour of periphrases as adjunction of the V2 to the V1. They are presented and adapted to the current proposal in the following section.

6.5.2 Adjunction analysis for periphrases

To account for the unit-like behaviour of the progressive periphrasis *estar* + gerund in Spanish, Zagona (1988) postulates that the lexical V2 adjoins to V1 forming a 'complex

verb' that moves up to get its Tense morphology. The process takes place between D-structure and S-structure. In a first step, V2 adjoins to V1. Once the complex verb has been formed, it moves up to get its Inflectional marker. The corresponding (bracketed) structures are provided in (37):

(37)   a.   first step = adjunction of V2 to V1 to form a 'complex verb'.

        [VP1 [V [estar] [trabajando] $_i$] [VP2 [V t $_i$]]]

        b.   second step = the 'complex verb' moves to Infl.

        [CP[IP Juan [I' [I [+present] [está trabajando] $_i$] [VP1 t $_i$ [VP2 t $_i$]]]]

The adjunction analysis of Zagona assumes VP-VP structures, i.e. verbs which subcategorise for other verbs. In the proposal defended in this chapter, *estar* and *anar* subcategorise for an ActP with the value [+actual]. Adjunction of the head V2 to V1 thus would occur once the features of *-nt* have been checked.

Adjunction has been formulated following the theory of Incorporation (Baker 1988) by Llinàs (1990:296, 1993: 139-152) for the combinations that she calls complex verbs: the tense periphrases *haver* + participle / *va* + infinitive.[7] The mechanism applies at the interface between Morphology and Syntax. The fact that V1 (the 'auxiliary') subcategorises for V2 (the 'main' verb), triggers incorporation of the V2 head to the V1 head. Incorporation consists of adjunction of the V2 head to the right of the head position of the V1. According to Llinàs, the weak phonological content of the head V1 causes its cliticisation to the adjoined head of V2. Except for the last step, the same process may be proposed for the progressive periphrases.

---

[7]Llinàs (1993) is an update of the proposals presented in her dissertation (Llinàs 1990) in the light of Kayne's (1993) analysis of Adjunction. Specifically the problem for the incorporation analysis is that right-adjunction is disallowed in Kayne (1994). Briefly summarised, Llinàs (1993) maintains that right-adjunction exists below the word-level, and that the unit-like behaviour of complex verbs can be maintained if we locate the adjunction process at that level. The implications of the ban on right-adjunction in general are discussed in section 7.5. together with a technical solution to derive surface configurations that had been analysed as involving right-adjunction.

For those cases in which Spanish allows separation of V1 and V2, Zagona (1988) postulates that when *estar* moves up to get its Inflectional affix, the lexical verb stays in its VP. It is illustrated in the following (bracketed) configuration for a sentence like *Juan está trabajando*:

(38)   [CP [IP Juan [I' [INFL [+present] está i] [VP1 t i [VP2 trabajando]]]]]

This allows Zagona to account for the behaviour of the periphrasis in yes-no questions in some dialects of Spanish where the V1 may be preposed alone:

(39)   ¿Están los abuelos paseando?

        'Are the grandparents taking a walk?

In Catalan the whole structure must be preposed in yes-no questions:
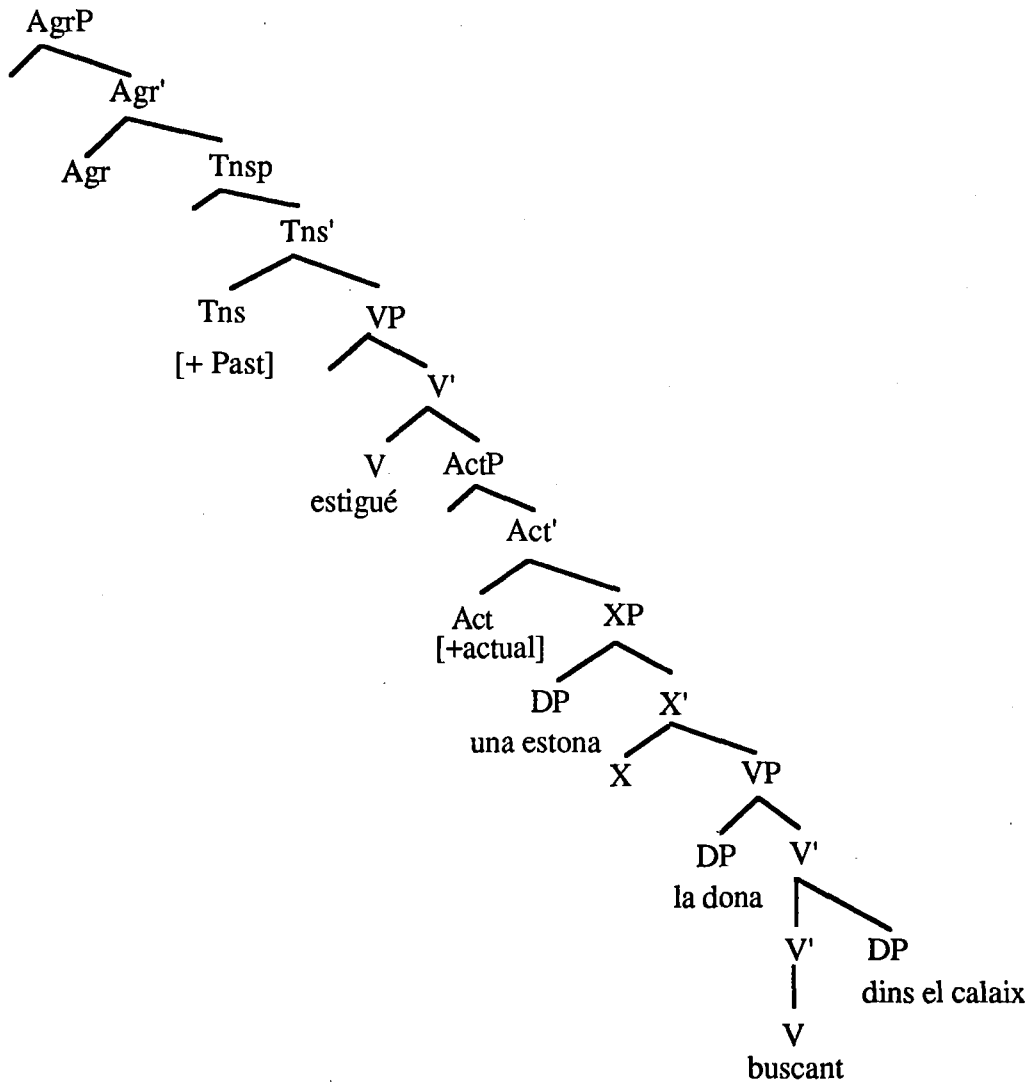
(40)   a. *Estan els avis passejant?

        b. Estan passejant, els avis?

Nevertheless, the analysis proposed for preposing of *estar* allows us to account for those instances where lexical material can intervene between V1 and V2 in Catalan, as in sentence (5b), repeated here as (41).

(41)   a. La dona estigué una estona buscant dins el calaix i en va treure una fotografia.

In general, lexical material intervening between V1 and V2 (excluding disjuncts, see Espinal 1991), must be generated in a position above the lower VP. In example (41) it may be argued that the aspectual adjunct *una estona* is generated at the Specifier of a functional projection which, for the moment, I call XP. More detailed discussion of its nature and motivation is given in chapter 7, section 7.3. During the derivation of the sentence, as the head V2 raises to check its features at the head of Act and XP, the aspectual adjunct raises to the Spec of Act. Since the V2 head does not adjoin to the head of V1, the surface order obtains.

(42)

```
AgrP
 ╱╲
   Agr'
    ╱╲
  Agr   Tnsp
         ╱╲
        Tns'
        ╱╲
      Tns    VP
    [+ Past]  ╱╲
             V'
            ╱╲
          V    ActP
       estigué  ╱╲
               Act'
               ╱╲
             Act    XP
          [+actual]  ╱╲
                   DP    X'
               una estona ╱╲
                        X    VP
                            ╱╲
                          DP    V'
                       la dona  ╱╲
                              V'    DP
                              │   dins el calaix
                              V
                           buscant
```

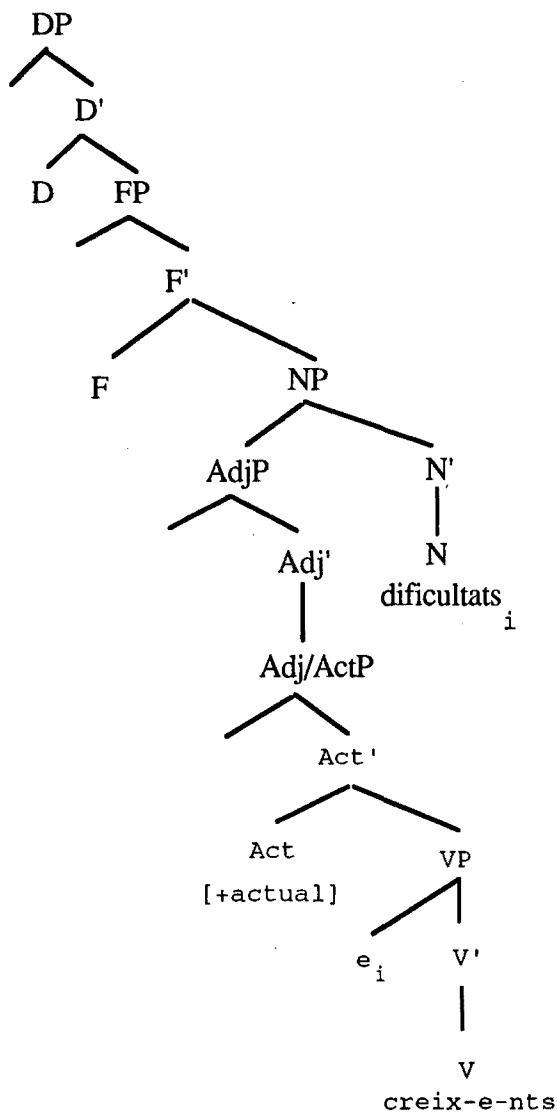### 6.5.3 Actuality in other -nt structures

6.5.3.1 -nt adjectives

In section 4.4 we examined other structures in which the affix -nt expresses actuality of the event or state denoted by its host. At that point we observed that, unlike English -ing, Catalan -nt cannot form clausal postnominal adjuncts. We argued in 5.5.1 that -ing in postnominal clauses marks the existence of a predication relation, a function canonically fulfilled by finite Infl. The impossibility of a postnominal -nt adjunct in Catalan (and Spanish) can be linked to the affix's lack of tense-like properties. This seems to correlate with diachronic data concerning the disappearance of present participles in the late Latin period, at least as productively formed phrasal structures. Note that present participles have survived as adjectives (i.e. "fossilised" at word level), as traditional grammarians have noted. Obviously this observation needs to be backed by diachronic research on the causes and effects of the loss of the tense properties, which I do not provide in this thesis.

In section 4.4.2 it was argued that Catalan adjectives ending in -nt classified by traditional grammar as "fossilised Latin present participles" express a special type of properties: the individual which they modify is a participant in the event, or instantiates the state denoted by the root of the adjective. In this subsection I argue that the affix expresses actuality not only when it is an inflectional affix whose features have to be checked in the course of a syntactic derivation, but also below the word level, as is the case of fossilised present participles. In this case, -nt forms adjectives from verbs. -nt lexicalises a relation between the verb and the noun to which the resulting V-nt item attaches: the noun is always the verb's external argument.

The phrase structure in (43) corresponds to the example NP *dificultats creixents* 'growing difficulties'. If we follow Kayne (1994)'s idea that adjunction is always to the left, we may assume that the adjective *creixents* is the realisation of an Adjective Phrase

(AP) that adjoins to the left of NP. The head of AP has internal structure below the word level, which I have represented in a different font. The subject of the root verb 'grow' is empty e , but its reference is controlled by the N *dificultats* , as indicated through index i.

(43)

```
        DP
       /  \
          D'
         /  \
        D    FP
             |\
             F'
            /  \
           F    NP
               /   \
             AdjP    N'
            /  \     |
              Adj'   N
               |   dificultats_i
           Adj/ActP
            /  \
           Act'
          /   \
        Act     VP
      [+actual] /|
            e_i  V'
                 |
                 V
             creix-e-nts
```

The adjective *creixents* must raise to the head Act to check its actuality features, so that the property that it expresses may obtain specific temporal reference. If (43) were part of a larger structure (a sentence), the c-commanding element from which temporal reference is obtained would be the matrix tense. As far as the surface order Noun + Adjective is

concerned, I am going to adopt --without discussing it-- the view of Cinque (1993) described in Kayne (1994): N raises past the AP to a higher functional head (FP).[8,9]

The structure given in (43) should predict that a head of ActP with negative value, i.e. [-actual] corresponds to a different kind of adjective derived from a verb. There seems to be a class of adjectives that matches this configuration: the 'perfective adjectives' (Bosque 1990), adjectives derived from passive participles, which denote the resulting state of a culminated event. Spanish instances from Bosque's work are: *limpio* 'clean' (from *limpiar*), *despierto* 'awake' (from *despertar*), *molesto* 'upset' (from *molestar*). Perfective adjectives in Spanish and *-nt* adjectives in Catalan seem to have one thing in common: they lexicalise the relation between an event and one of its arguments. Thus, a noun modified by an *-nt* adjective is the **external** argument of the verb from which the adjective has derived, and a noun modified by a perfective adjective is the **internal** argument of that verb. With perfective adjectives, the culmination of the event denoted by the verb affects in some way the individual expressed by the N. For instance, someone is *despierto* 'awake', or *enfadado* 'angry' if he has been affected by the event expressed by the verb *despertar* 'to awake', *enfadar* 'anger', respectively.

Perfective adjectives may be taken as evidence in support of our claim that certain adjectives have actuality features to check. We know that a state is a property predicated for an indefinite period of time (Herweg 1991a)). If perfective adjectives predicate a property of a noun related to the resulting state of an event, there must be a period of time for which this relation between an event and one of its arguments holds. One can speculate that the indefinite period of time is introduced at the head of the Actuality

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[8]Kayne does not specify what kind of projection FP is. A possibility is a projection for Number. (see Picallo 1991).

[9]In the same section (Kayne 1994, pp.98-101 108) Kayne discusses the syntax of prenominal adjectives. He argues that the complement of a definite DP is the projection of a predicate, i.e. a CP, which in turn has an IP complement. The possibility that a DP can contain a tense projection opens a new path of research for the syntax of adjective phrases like the ones I am currently discussing, i.e. those that express event-related properties. For instance, it would be worth considering the possibility that *-ing* is the realisation of the tense properties of the DP complement.

projection, where the perfective adjective has to check the feature [-actual] (which in this case amounts to [+perfective]).

6.5.3.2 Adjuncts to CP

The verbal form that occurs after a progressive verb is a gerund. In Catalan gerunds and adjectives derived from Latin present participles share the phonological shape -*nt*, which I propose is a marker of actuality in both forms.[10] In this subsection I will attempt to account for the temporal and aspectual interpretation of adjuncts to CP as structures that contain an Actuality phrase. The sentences in (44), repeated from chapter 4, section 4.4.3, illustrate this type of structures.

(44)   a.   (Tot) passejant pel parc, vaig trobar la Maribel amb el nen.

'(While) walking in the park, I ran into Maribel and her baby.'

   b.   Veient que tots volien sopar a les nou, el pare va fer el sopar més aviat.

'Seeing that they all wanted to have dinner at nine, father got it ready earlier.'

We assume that adjuncts to CP are modifiers of the matrix clause. As far as their syntactic category is concerned, adjuncts to CP can best be analysed as prepositional phrases with a clausal complement. Some PPs have an abstract head (see Portner 1992 for English). In Catalan some adjuncts have an overt preposition, e.g. Catalan and Spanish temporal infinitive adjuncts, as shown in Rigau 1995. The particle *tot* in example (44a) above could be analsyed as a preposition. The following bracketed structure represents a sentence with a free adjunct in the pre-Kayne fashion.

(45)   [CP [PP [P' [P tot [ActP [Act' [+act] [VP passejant pel parc]]]]] [CP[C'[C

[AgrP [Agr' Agr [TP [T' [T [+past]] [VP vaig veure la Maribel amb el nen]]]]]]]]

---

[10]In Spanish there are two endings: -*nte* for adjectives-present participles and -*ndo* for gerunds. I assume that, like in Catalan, they are both markers of Actuality of a situation.

Given that -nt does not have specific temporal reference, it must get it from some element in the clause. The relation between -nt in adjuncts to CP and the tense of the matrix clause is not quite like the relation between those V-nt structures that are generated below TnsP (e.g. obligatory adjuncts to the complements of perception verbs, see section 4.4.4). In the latter, Act is c-commanded by the matrix tense. In the adjuncts to CP, other maximal projections exist above TnsP, and so we cannot appeal to the c-command relation. This is true not only for temporal reference. Williams (1994) shows that in English control of a PRO subject of an adjunct like the ones we are analysing is not direct, i.e. subjected to the c-command condition; rather, it is what he calls Logophoric Control. Essentially, logophoric control involves the inference that the antecedent is the "logophoric center" of the sentence. According to Sells (1987:445), cited by Williams, three independent conditions for an NP to be the logophoric center of a sentence are: "the source of the report, the person with respect to whose consciousness (or 'self') the report is made, and the person from whose point of view the report is made [Pivot]". It seems to me a plausible hypothesis that a sentence with an adjunct to CP has not only a logophoric center, but also a logophoric time of evaluation, shared by both clauses, coreferent with the tense of the matrix clause. Clearly adjunct and main clause share the time of evaluation of the event or state each express, and the event or state expressed by a V-nt clause is interpreted as actual with respect to the matrix clause, though not necessarily simultaneously, as we saw in chapter 4, section 4.4.3 (recall that a past interpretation of the adjunct is possible if it iconically occurs before the matrix clause). We need to assume that Act (-nt) obtains its temporal reference through P, the marker of subordination that governs it. The head P, in turn, is coindexed with the node that contains the logophoric time of the sentence. A plausible candidate is the head C(omp). Enç (1987), for instance, argues that the Comp of main clause contains the time of speech. Since her data do not include complex clauses like those in (44), where the first marker of tense-aspect (-nt) is indefinite, we cannot absolutely discard the possibility that the logophoric time "lives there" too. Obviously, the complexity of this

issue requires a great deal of further research, but nevertheless I would like to conclude this discussion with the suggestion that P (and thus -*nt*) is given temporal reference by the logophoric tense of the complex clause living in C.

Having reached at least a plausible conclusion, we need to consider the "problem" raised by the fact that in structure (45) CP has two specifiers. This representation, which is not problematic in Chomsky (1995), goes against the view on adjunction of Kayne (1994). An alternative to (45) is to postulate that CP projects an empty shell in whose specifier the adjunct is generated. The CP that licenses the adjunct thus has two layers: the head of the lower layer is C; the upper layer has an empty head C. The hypothesis formulated in the previous paragraph is compatible with the double layer: we simply have to assume that the upper C is where the logophoric time of the complex clause is located. Act is governed by P, which is controlled by the upper C. This is structure (46):

(46)
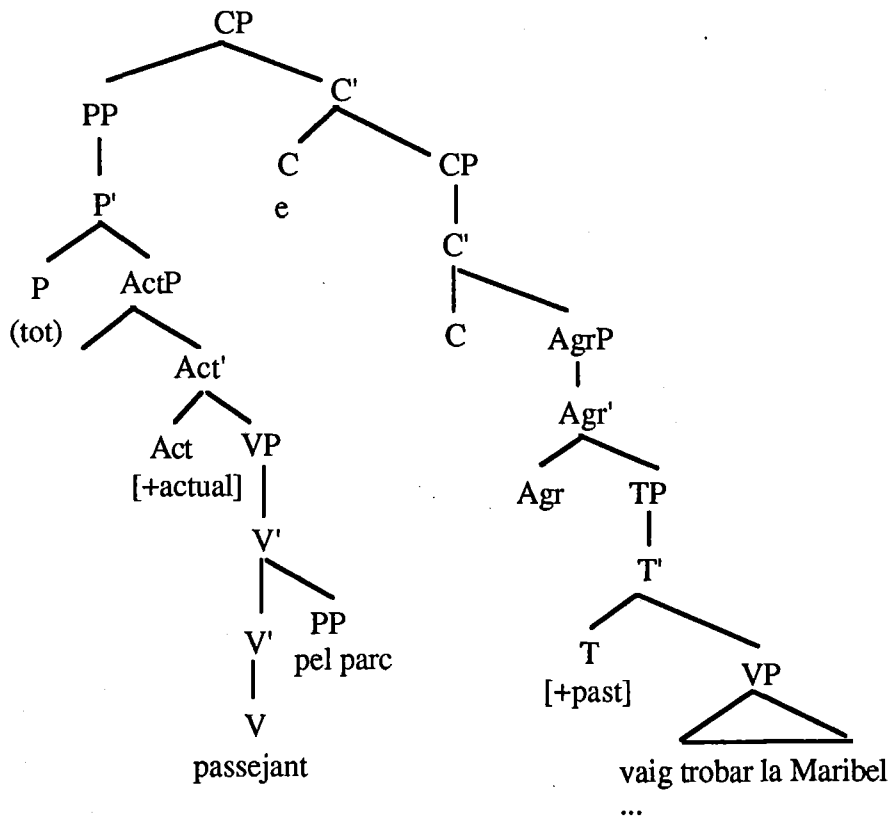
A progressive interpretation of an adjunct to CP is possible if the temporal relation existing between matrix clause and adjunct is simultaneity between the event expressed by the predicate of the adjunct and the situation expressed by the predicate of the matrix clause. In the case of (44a), simultaneity is marked overtly by *tot*, but the temporal relation may be established implicitly. When the verb of the adjunct denotes a state, though a progressive interpretation is impossible, we nevertheless obtain an actuality interpretation in which the state holds at the specific period of time when the event in the matrix clause takes place (e.g. in (44b), the knowing state expressed by the adjunct is instantiated at the time when the event in the matrx clause takes place, in this case when father cooks dinner).

6.6 Summary and Conclusions

In this chapter I have defended a VP status for the progressive periphrases *estar* + gerund and *anar* + gerund, based on the following three arguments. First of all, as we saw in chapter 3, the progressive verbs *estar* and *anar* preserve the *aktionsart* they have as lexical verbs. Different *aktionsarten* predict different perspectives on the development of an event and, furthermore, progressive verbs seem to select the type of event that their complements should express. Secondly, one of the reasons adduced for denying progressive periphrases VP status is that they are thematically defective. But the progressive verbs have this in common with other types of verbs, for instance light verbs, with which interesting parallels may be established. For instance, both types of verbs fail to assign thematic roles to their arguments; both types of verbs have arguments that denote events (light verbs have DP complements, progressive verbs have ActP complements). Finally, both kinds of verbs are lexically location verbs (in a broad sense) which are used to express location in the temporal domain, with aspectual values.

Thirdly, and finally, the functional analysis proposed by Lema (1991) does not offer conclusive evidence that *estar* instantiates a functional head.

The progressive periphrases behave mostly as a unit (see section 6.2). This syntactic cohesion may be explained --following the proposals of Zagona (1988) and Llinàs (1990)-- as involving a process of adjunction whereby the head of the V2 (the event-denoting verb) adjoins to the head of V1 (the progressive verb) after the Actuality features of the head of V2 have been checked. When lexical material intervenes between the progressive verb and its complement no adjunction process takes place. *Estar* and *anar* can stand on their own because they instantiate the head of a VP.

In the final section of this chapter I have extended the proposal of an Actuality phrase to two other progressive structures: adjectives derived from present participles and adjuncts to CP.

Chapter 7

The Imperfective Past

7.1 Introduction

The affixes -*ing* (English) and -*nt* (Catalan), which are involved in the realisation of progressive aspect, are temporal indefinites which must be anchored to the most immediate constituent with temporal reference, normally the Tense head of the sentence. The verbal inflectional morphology of Catalan (and the Romance languages) allows the realisation of Tense and Aspect in one morpheme. The aspectual notion expressed can be described informally as the contrast between denoting a property of a period of time (imperfective) and individuating an event (perfective) --see section 7.2 and especially the appendix for a detailed discussion and formalisation of these notions--. The distinction imperfective-perfective is overtly realised only for the past tense, and for most speakers only in the indicative mood.[1] In Catalan the indicative imperfective past morpheme is /ba/ or /a/ (depending on the conjugation class); the perfective past morpheme is /ra/ or ø (Mascaró 1986:111).

The (indicative) imperfective morpheme is in fact a stativiser in the same sense that the progressive sequences *estar* + gerund and *anar* + gerund are stativisers: it predicates a property of a period of time. For instance, it is the most frequent past tense form for lexical states, it denotes the progressive state of an event, and may also express habitual

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[1]Two forms express indicative perfective past in Catalan: a simple form (cantàrem) and a periphrasis formed with the present tense of the verb *anar* + infinitive (though the 1st and 2nd person plural of the V1 are formed by analogy with the rest of the paradigm). Variation in the use of one form or the other occurs both dialectally and according to register. Broadly speaking, in Central Catalan the simple form is used almost exclusively in a formal register (where the periphrastic form is also accepted); in Valencian Catalan and, to a certain extent, in Balearic Catalan the simple past rather than the periphrastic form is preferred in most registers. In addition, there exists a periphrastic perfective past in the subjunctive mood which is used in the neutral (not formal) and col.loquial registers. (Badia i Margarit 1994). In this chapter I am interested in the inflectional realisation of tense-aspect. For my purposes then, the relevant contrast is simple imperfective past vs. simple perfective past, regardless of the fact that the latter is rather formal in my own dialect, Central Catalan.

and generic situations. An account of the progressive reading of the imperfective

morpheme would be incomplete if it did not account for the other notions. Therefore, it is

necessary to provide an analysis of this affix not only as a marker of progressive aspect,

but in general as a stativiser, and this aim has shaped the structure of this chapter. Thus,

the syntactic analysis proposed in section 7.3 tries to explain the differences between

progressive and habitual readings based on the evidence provided by the respective

cooccurrence restrictions of aspectual adjuncts, discussed in detail in section 7.2.

The syntactic analysis proposed here tries to be consistent with the approach taken in

chapters 5 and 6 for the periphrastic progressive of English and Romance. Specifically,

we argued that there is no need to assume that the functional category realised by -ing/-nt

is defined strictly by a progressive feature. The motivation was that a progressive

interpretation is obtained compositionally if certain conditions are met. Similarly, we

propose that an imperfective head is defined by a more general feature, which we call [-

bounded], which is present in all readings of the imperfective past. [2]

7.2 Readings of the Romance imperfective past

There is fairly general agreement in the literature that the distinction imperfective vs.

perfective expressed overtly for the past tense in Romance languages is aspectual.[3]

According to Kamp and Rohrer (1983) (cited in de Swart 1990), sentences in the

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[2]In this thesis I do not address the referential aspects of the imperfective morpheme as a Tense marker. Since McCawley (1971) and Partee (1973), work on the semantics of tense markers has uncovered their referential properties, in particular the anaphoric character of tense in discourse, and parallels have been drawn between tenses and NPs (see also Smith 1981 and Partee 1984). With the incorporation of the reichenbachian view on tenses --according to which each tense instantiates a type of relation between E, R, and S, (see chapter 2, sections 2.3.1)-- recent work in syntax has attempted to explain the similarities between tense forms and referential expressions. Zagona (1988, 1992), reviewed in chapter 5, is an instance of the application of this view. The tense system of Catalan has been analysed from this perspective by Pérez-Saldanya (1991) and (1994) --for a brief comment on his account of the imperfective past, see section 7.3.2. I have concentrated on the aspectual distinctions expressed by the imperfective past, independently of its referential properties as a marker of Tense, i.e. those which are systematically reflected by the restrictions on the co-occurrence of aspectual adjuncts such as durational and time-span adjuncts.

[3]Although see Rojo 1991, where it is argued that it marks present tense.

imperfect past denote states, whereas sentences in the perfective past denote events. Adapting the formalism of Herweg (1991a,b), the imperfective past establishes a relationship between a period of time and an event or state, predicating the event or state of the period of time, whereas the perfective past is an "individuator", a morpheme which takes an event or a state and treats it as a completed whole, an individual (see the appendix for a formalisation of these notions taking Herweg (1991a) as a framework).

In its most common readings, the imperfective past may establish three kinds of relations between a period of time and an event or state. When the verb denotes a state, the imperfective expresses the notion that the state held for an indefinite period of time in the past (see 7.2.1). When the verb denotes an event, the relation established between it and a period of time may be of two kinds: (1) the event is in progress at the period of time (see 7.2.2), and (2) the period of time is characterised by the habitual occurrence of tokens of the same type of event (see 7.2.3). The discussion of other, less central uses of the imperfective past morpheme in Catalan (see Badia i Margarit 1962: 419-421), will be postponed until section 7.5.

7.2.1 A state holding in the past

In the imperfective past, state predicates denote a property of a past period of time. Therefore there is no implication that the state ceased to hold in the past. The opposite is true of the perfective past: the sentence denotes the occurrence in the past of an individual, definite portion of a state, in other words, a phase of a state. (cf. Herweg's definition of the phase operator in chapter 2). The implication is that the state ceased to hold. The following sentences illustrate the contrast:

(1)   a.   Quan va entrar la directora,   tots els alumnes sabien la notícia.

         when enter-perfect. the principal, all the students know-imperf. the news

         'When the principal came in, all the students (already) knew the news.'

b. Quan va entrar   la directora,   tots els alumnes van saber la notícia.

when come-perfect. in the principal, all the students know-perfect. the news

'When the principal came in, all the students got to know the news.'

The *quan*-clause denotes a situation that serves as reference for the matrix clause. Note that with (1a) the state of knowing holds before the event in the *quan*-clause, whereas in (1b) the state of knowing did not hold before that event, and only comes to hold after it. A state predicate occurring in the perfective past may receive an inchoative interpretation. This takes place with states that are not quantizable in phases (using Herwrg's terms). One phase that most states permit is reference to the moment at which they start, hence the inchoative reading. There are state verbs with a double interpretation depending on the aspect for which they are marked. Their English translation requires one word for each meaning. See, for instance, the sentences in (2):

(2)   a.   Jo la vaig conèixer quan ens vas presentar.

I her know-perfect. when us you introduced

'I met her when you introduced us.'

b.   Jo (ja)   la   coneixia   quan ens vas presentar.

I (already) her know-imperfect.   when us you introduced

'I (already) knew her when you introduced us.'

That the perfective past individuates a portion of a state is shown by the possibility of co-occurrence of cardinal count expressions, such as *tres vegades* 'three times' as in (3).

(3)   En Pere va estar malalt tres vegades el trimestre passat.

Pere be-perfect. ill   three times last quarter

'Pere was ill three times last quarter.'

A state is a property of an indefinite period of time (see section 2.4). When a state verb has imperfective past morphology, the period of time at which the state holds is located

in the past. The imperfective past thus does not change the unbounded nature of a state. For this reason, the period of time at which the state holds cannot be limited by a durational adjunct -- adjuncts which delimit the amount of time occupied by an event or state--, such as *(durant) tres anys,* 'for three years':

(4)   a.   *La Maria sabia francès tres anys.

            'Maria knew french three years.'

      b.   *En Pere estimava la Caterina tres anys.

            'Pere loved Caterina for three years.'

7.2.2 The interpretation of events in the imperfective past. The progressive.

One of the possible relations established by the imperfective morpheme between a period of time and an event is the progressive state of the event: the state characterised by the development of an event at a period of time. Being a state, the progressive reading does not entail the culmination of the event. In contrast, the perfective past denotes the occurrence of an event conceptualised as an individual in the past. One of the effects is that the culmination of the event is entailed. This is illustrated by sentences in (5).

(5)   a.   Quan la directora entrà   a l'aula,   la professora repartia els exàmens.

            when the principal enter-perf. the classroom, the teacher hand- perf. the tests

            'When the principal entered the room, the teacher was handing out the tests.'

      b.   Quan la directora entrà a l'aula, la professora va repartir   els exàmens.

            when the principal enter-perf the classroom, the teacher hand - perf. the tests

            'When the principal entered the room, the teacher handed out/began handing out the tests.'

Sentence (5a) means that an event of handing out exams is taking place but has not culminated when the principal enters the room, i.e. it had started before the event in the

quan -clause. Sentence (5b) means that the exam-handing-out event takes place at or after the entry of the principal.

Because the progressive reading is a state reading, expressions that enumerate events are not allowed. In contrast, the perfective past allows them:

(6)   a.   *Quan has entrat, explicava un conte als nens   dues vegades.

when you come-presperf. in, (I) tell-imperf. a tale to the children two times.

'*When you came in, I was telling the tale to the children twice.'

b.   Va explicar el conte als nens   dues vegades.

(he) tell-perf. the tale to the children two times

'He told the tale to the children twice.'

The cardinal count expression *dues vegades* 'twice' enumerates two events in sentence (6a), but since the verbal morphology does not entail the event's culmination, the sentence is ungrammatical.[4] In (6b), the cardinal count expression enumerates two events that the verbal morphology individuates. The different capacity to individuate or enumerate events that tenses possess is parallel to the mass-count distinction in the dimension of matter and objects. Hoepelman and Rohrer (1980) established the similarities between the reference of mass nouns and the French Imparfait (i.e. Romance imperfective past).

The inability of the impefective past to enumerate events is related to the notion of the "imperfective paradox", a difficulty for an interval-based semantics of the progressive first discussed by Dowty (1977, 1979), which refers to the fact that the imperfective past of a predicate denoting an accomplishment does not entail the culmination of the accomplishment, and so does not entail its existence. For instance, the progressive

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[4]There is a possible reading, as several readers of this manuscript have independently suggested to me: the adjunct is part of the description of the event, for instance, if telling a tale twice is a kind of event. The event in progress includes two occurrences of the same type.

sentence *John is making a cake* does not entail the sentence *John has made a cake*, in which the perfect tense marks the state that holds after the culmination of the event (Moens and Steedman 1988). The paradox in the imperfective paradox lies in the fact that we are postulating the existence of cake-making event, and so the existence of a cake, without knowing if the event will reach its culmination. As in English, the imperfective paradox holds for Catalan events with inherent culmination. The perfective past, in contrast, does entail the culmination of an accomplishment.

The lack of entailment of the culmination of the event is shown by the kinds of durational adjuncts that occur with a verb in the progressive imperfective past. Adjuncts that specify a bounded period of time during which the event takes place or the state holds are disallowed, whereas those which specify only the beginning are allowed, for instance, the clausal adjunct *feia* T *que* (T= time amount), and the semantically equivalent *des de feia* T (T= time amount)

(7)   *(Quan va sonar el telèfon) La Maria escrivia una carta (durant) dues hores.

        (when rin-perfect.-periph the phone) Maria write-imperf. a letter for two hours

        '*When the phone rang, Maria was writing a letter for two hours.'

(8)   a.   Feia   una setmana que   escrivia   la carta.

              it-made-imperf a week   that (she) write-imperf the letter

              'She had been writing the letter for a week.'

        b.   Escrivia   la carta des de   feia   una setmana.

              (she) write-imperf.   the letter since (it) make-imperf.   a week

              'She had been writing the letter for a week.'

In contrast with the imperfective, the perfective past allows durationals that define a bounded period of time, as there is semantic affinity between these and the meaning of the perfective past. This is illustrated in (9):

(9)   a.   Quan va sonar el telèfon, escriure una carta *durant dues hores*.

'Last night Maria wrote a letter for two hours.'   (accomplishment)

b.   La Maria va parlar *dues hores*.

'Maria spoke for two hours.'   (activity)

The imperfective with a progressive state reading (i.e. lacking the entailment that the event will reach its end point) is incompatible with time-span adjuncts, those which measure the amount of time that goes from a particular stage --taken as reference-- in the development of an event to its culmination. One such modifier is the PP *en* T (T=time amount, given in units), e.g. *en deu minuts* 'in ten minutes'. The perfective past, which individuates an event including beginning and end, allows them. The contrast is illustrated in sentences (10).

(10)   a.   (Quan va sonar el telèfon) La Carme va fer l'amanida en deu minuts.

(when ring-perfect.periph. the phone) Carme make-perfect. the salad

in ten minutes

'(When the phone rang,) Carme made the salad in ten minutes.'

b   *(Quan va sonar el telèfon), la Carme feia l'amanida en deu minuts.

(when ring-perfect.periph. the phone), Carme make-imperf. the salad

in ten minutes

*'(When the phone rang,) Carme was making the salad in ten minutes.'

7.2.3 The interpretation of events in the imperfective past. The habitual reading.

7.2.3.1 Introduction

A habitual reading is a relation between a period of time and an event-type. The property that defines or characterises the period of time is a plural number of occurrences of events of the same type (see definition and discussion in section 2.5.2.1). For instance, sentence (11) denotes a habitual situation:

(11)   Abans d'operar, la doctora sempre es rentava   les mans a consciència.

before operate the doctor always wash-imperfect. her hands thoroughly.

'Before performing surgery, the doctor used to wash/ would wash her hands thoroughly.'

Quantification over events may be achieved by frequency adverbials and adverbials of iteration (see de Swart (1990) for French and English). In Catalan (just like in French) the imperfective past with a habitual reading cooccurs with frequency adverbials, e.g. (12a), since frequency adverbials do not count the exact number of occurrences and preserve the unboundedness of the period of time. In Catalan frequency adjuncts are the adverbials *sovint* 'often', *mai* 'never', *sempre* 'always', *freqüentment* 'frequently', the adverbial phrases *gairebé mai* 'almost never', *gairebé sempre* 'almost always', etc. For the same reason, a habitual reading of the imperfective past does not allow iteration adverbials, as in (12b), unless the intended reading is that the type of event whose occurrence is habitual in fact consists in the repetition of two tokens of the event, as in (12c).

(12)   a.   Durant l'expedició els exploradors bullien l'aigua sovint.

'During the expedition the explorers used to boil/boiled the water often.'

        b.   *Durant l'expedició els exploradors bullien l'aigua dues vegades.

*'During the expedition the explorers used to boil/boiled the water twice.'

c. Durant l'expedició, abans de cada àpat els exploradors bullien l'aigua dues vegades.

'During the expedition, the explorers useud to/would boil the water twice before each meal.'

In (12c) the quantified NP *cada àpat* 'each meal' marks plurality of events. The sentence states that the time period characterised includes an indefinite quantity of meals, each of which is preceded by the water-boiling sequence counted by the iteration expression *dues vegades* .

The perfective past does not seem to have a habitual meaning, although it allows quantification over events, as (13) illustrates:

(13) Quan ens vas escriure   sempre et vam contestar.

when us (you) write-perfect.   always you (we) replied

'When you wrote to us, we always replied.'

In (13) there are numerous occurrences of past replying events, marked by the adverbial *sempre*, following a plurality of writing events.

When the imperfective past has a habitual reading, the occurrence of aspectual adjuncts is determined by the *aktionsart* of the VP, thus displaying quite a different behaviour from that of adjuncts in progressive sentences. As we did in section 7.2.2 we will present the co-occurrence restrictions of aspectual adjuncts. Together they constitute valuable data for a semantic and syntactic account of the imperfective past.

7.2.3.2 Habitual readings and aspectual adjuncts

The occurence of **durational** adjuncts, which is forbidden in a progressive reading, is possible when the imperfective past has a habitual reading, if the event denoted by the predicate accepts modification of the type denoted by the adjunct. Consider (14) vs. (15):

(14) a. *La cangur explicava contes al nen durant mitja hora (quan vaig arribar).

the baby-sitter tell-imperf. tales to the child for half an hour

*'The babysitter was telling tales to the child for half an hour (when I arrived)'

b. *En Joan tocava el violí mitja hora (quan vaig arribar de treballar).

Joan play-imperf. the violin half an hour

*'Joan was playing the violin for half an hour (when I arrived from work)'

(15) a. La cangur explicava contes al nen durant mitja hora (sempre que el nen no agafava el son).

the baby-sitter tell-imperf. tales to the child for half an hour

'The babysitter told tales to the child for half an hour (when he did not fall asleep).'

b. En Joan tocava el violí mitja hora (sempre que estava nerviós).

Joan play-imperf. the violin half an hour

'Joan played the violin for half an hour (when he was nervous).'

In each of the two sentences in (14), there is an event in progress (telling tales in (14a) and playing the violin in (14b). The durational adjunct cannot occur because the progressive state of an event cannot be temporally bounded. In the habitual sentences in (15), the durationals set limits to the individual events that occur in the global period of time of which the habit is predicated. Each tale-telling event, each violin-playing event lasts half an hour. The occurrence of durationals in habitual sentences is restricted by the *aktionsart* of the predicate. For instance, as activities are unbounded kinds of situations, they allow durationals to set limits to the situations they denote. The predicate 'tell tales'

has no inherent endpoint, given that the number of tales is indefinite, and may be modified by a durational. Similarly, the predicate 'play the violin' of (15b) allows the durational because it is an activity. Now, if the object of *tell* had been *a tale*, as opposed to *tales*, then the durational would be disallowed, given that an event with an inherent endpoint does not allow modification by a durational of the type *for half an hour*. Also, achievements and punctual verbs have inherent temporal limits and therefore normally reject durationals, even in habitual imperfective sentences:

(16)　a.　*En Joan es picava el dit amb el martell dos minuts.

　　　　　*'Joan hit his finger with the hammer for two minutes.'

　　　b.　*Quan era petit, sempre que el deixaven sol, en Joan queia de la cadira un minut.

　　　　　*'As a child, whenever they left him alone, Joan fell from the chair for a minute.'

Hitting one's finger with a hammer is not something that one can do for a period of time (here we are disregarding the iterative interpretation lexicalised in English through the suffix -*er*, e.g. by the verb *hammer*). Thus, there may not be a habit consisting of a number of single punctual events each limited by a durational.

Let us now turn to **time span** adjuncts. Their occurence, which is forbidden in a progressive reading, is possible when the imperfective past has a habitual reading, as illustrated in (17) vs. (18):

(17)　a.　*La cangur explicava el conte al nen en dos minuts (quan vaig arribar).

　　　　　the baby-sitter tell-imperf.the tale to the child in two minutes (when I arrived)

　　　　　*'The babysitter was telling the tale in two minutes (when I arrived).'

　　　b.　*En Joan feia l'amanida en deu minuts (quan va sonar el telèfon).

　　　　　Joan make-imperf. the salad in ten minutes (when the phone rang)

*'Joan was making the salad in ten minutes (when the phone rang).'

(18) a. Quan havia d'estudiar, la cangur explicava el conte al nen en dos minuts.

when have-imperf. to study, the baby-sitter tell-imperf.the tale to the child in

two minutes

'When she had to study, the baby-sitter used to tell the tale to the child in two

minutes.'

b. Quan anàvem a la platja, en Joan   feia   l'amanida en deu minuts.

when go-imperf. to the beach, Joan make-imperf. the salad in ten minutes

'When(ever) we went to the beach, Joan used to make the salad in ten

minutes.'

In the progressive sentences (17), the impossibility of co-occurrence of the time span

adjunct is due to the fact that the progressive state is predicated of a period of time which

cannot be bounded. In the habitual sentences in (18), time span adjuncts specify how

long it takes for each event (occurring in the global period of time of which the habit is

predicated) to culminate. The situations described in (18a) and (18b) are characterised by

an indefinite occurrence of events. In (18a) there are indefinitely many events of telling a

tale in two minutes. Sentence (18b) means that each time we went to the beach --there is

an indefinite number of occasions--, it took John ten minutes to prepare the salad. The

time extent modifier does not set a boundary to the period of time characterised by the

habit, for instance the month of August. Rather, the time extent expression limits the time

of occurrence of the salad-making event.

The occurrence of time span adjuncts in habitual sentences is restricted by the *aktionsart*

of the predicate. In particular, they occur only with accomplishments, given that these are

the types of eventualities in which there is a development stage that leads to an inherent

end point, e.g. tell a tale, make a salad. As activities are unbounded kinds of situations, they do not allow time span adjuncts, as those in (19):

(19)   a.   * En Joan sempre corria per la platja en deu minuts.

Joan always run-imperf. on the beach in ten minutes

* Joan always ran on the beach in ten minutes.

  b.   * En Joan sempre es picava el dit amb el martell en deu minuts.

Joan always hit-imperf. his finger with the hammer in ten minutes

*Joan always hit his finger with the hammer in then minutes.

The habitual reading of the imperfective past stands out for its behaviour with respect to aspectual adjuncts. What we need to account for is the fact that the stativiser imperfective past morpheme allows different behaviour of adjuncts. The presence of habituality may have other aspectually related effects. De Swart (1991: 222-223) observes that in French it neutralises the effect of the perfective-imperfective distinction in certain constructions. Specifically, she is concerned with the temporal clauses linked by the temporal connector *quand* 'when' to the matrix clause. *Quand* establishes a temporal ordering relation between the matrix and subordinate predicates. If both verbs occur in the perfective past, *quand* may establish a succession relation, as illustrated in (20a) and (20c). If the verb of the main clause occurs in the imperfective, the event becomes a state, and *quand* turns that state into the background for the event in the subordinate clause, as in (20b). Since the same holds for Catalan, I provide Catalan translations of the original French examples [(56b and d)]

(20)   a.   Quan va obrir el veredicte, va decidir apel.lar-lo.

'When he opened the verdict, he decided to appeal.'

  b.   Quan va passar el pont, el sol es ponia.

'When he crossed the bridge, the sun was going down.'

  c.   Quan va passar el pont, el sol es va pondre.

'When he crossed the bridge, the sun went down.'

In (20a) deciding to appeal follows opening the verdict; in (20b) the sun-going-down event is in progress (i.e. may have started and may continue) at the time when the crossing of the bridge takes place. In (20c) in contrast, the sun goes down exactly at the same time or immediately after the crossing event has taken place.

When both verbs are imperfective forms, a habitual reading is obtained and the chronological sequencing of predicates is determined by the *aktionsart* of verbs, as illustrated in (21) [de Swart's (61a-d)]. The *aktionsarten* of the predicates are given in brackets:

(21) a. Quan estava malalt, era difícil de tranquil.litzar.   (state-state)

          'When(ever) he was ill, he was difficult to calm down.'

      b. Quan parlava, tothom l'escoltava en silenci.   (activity-activity)

          'When(ever) he spoke, everybody listened quietly.'

      c. Quan escrivia una carta al seu fill, ell mateix la portava a correus.

          'When(ever) he wrote a letter to his son, he posted it himself.'

                                              (accomplishment-accomplishment)

      d. Quan era a París, visitava el Louvre.   (state-accomplishment)

          'When(ever) he was in Paris, he visited the Louvre.'

When both predicates are culminated, the event takes place after the event expressed by the predicate in the subordinate clause, as in (21c). When both predicates lack culmination, the relation is simultaneity, as in (21a,b). When one of them is culminated and the other one is not, the culminated event takes place during the time in which the state holds, as in (21d).

In sum, whereas in a non-habitual reading the aspectual information conveyed by inflectional morphology (imperfective vs. perfective) predominates over the *aktionsart* of

the predicate in phenomena such as the occurrence of aspectual adjuncts or the temporal ordering of two events in *quan*-clauses, in a habitual reading these relations are determined by the *aktionsart* of the predicate.

Sentences with imperfective past morphology in which the occurrence of aspectual adjuncts is grammatical must be interpreted as expressing a habitual state, an indefinite period of time characterised by the property that a plural number of occurrences of an event takes place in it. This is the only reading possible, given that the period of time of which the habit is predicated is indefinite, and therefore cannot be measured by aspectual adjuncts. Since a habitual reading entails plurality of occurrences of an event, aspectual adjuncts can measure the event time of each of the occurrences. In a progressive reading there is only an event; aspectual adjuncts thus cannot measure either the period of time of which the progressive state is predicated or the time of the event, because an event in progress is not measurable.

In syntactic terms, this translates as a restriction on the place where aspectual modifiers can adjoin. Aspectual adjuncts such as durationals and time span modifiers adjoin to VP only. For reasons that will be explained in the following section, they cannot be adjuncts of higher nodes where temporal information is specified.

7.3 Syntax

7.3.1 Introduction

Inflectional markers of aspect such as the imperfective past morpheme contribute to the formation of progressive structures in the sense given to this term in this thesis, i.e. sentences whose verbs bear the imperfective affix may express the progressive state of an event. Within a functional category approach, a possible assumption is that there exists a functional category with progressive features. That seems to be the case, for

instance, in Lema (1991). However, the fact is that the contrast expressed overtly by inflectional morphology in Romance languages is not progressive vs. perfective but imperfective vs. perfective. The marker of progressive is also the marker of habituality, of past states, and of several other notions. The question is then what are the features of the functional category or categories realised by the imperfective past marker which allow all those readings and account for the restrictions with aspectual adjuncts that we presented in section 7.2.

As will be immediately seen (section 7.3.2, a survey of previous work in generative syntax), the answer to the question 'what functional category' is 'Aspect'. The second question --'can we give a syntactic analysis of the various readings'-- has not been addressed in detail. As far as I know, the only exception is De Miguel (1992), where the link between imperfective morphology and the expression of genericity is explored. Let us proceed to the following section to examine them in more detail.

7.3.2 The Romance imperfective past in the previous syntax literature

In the pre-minimalist stage of the Principles and Parameters framework, functional heads such as Tense and Agreement --following the Split-Infl hypothesis of Pollock (1989)--, were the sites where affixes were generated. The bare head of the VP picked those affixes in a succession of movements. All the previous approaches to the syntax of Tense and Aspect to be evaluated in this section belong to this stage of the theory. The problem they had to face was that the Romance imperfective past affix (as well as the simple perfective past affix) may plausibly be analysed as the realisation of both aspect and (past) tense, and thus of two functional categories: Tns and Asp. But since it is an indivisible lexical unit, it could only be the head of one functional category, where the verb had to pick it up.

In the current stage of the Principles and Parameters Framework, the Minimalist Program (Chomsky 1995), affixation is no longer a syntactic process. Instead, the VP head is a fully inflected form. V^0s no longer have to pick their affixes in a succession of upward movements. In the words of Marantz (1994: 18), "The functional categories of Agr and T in this system are the locus of tense and agreement features that may check off or eliminate the corresponding features on a verb that moves up and adjoins to these categories." Thus, with the checking mechanism, the existence of lexical units which realise tense and aspect at the same time no longer constitutes a problem.

In the pre-minimalist stage, then, one had to explain the double (or triple) function of the Romance simple past tense markers. The approach taken by Giorgi and Pianesi (1991) was to consider the imperfective affix a **Tense** affix only, in response to a need for a strict mapping between morphology and syntax for verbal temporal morphemes. Their approach to temporal morphology is based on reichenbachian semantics, i.e. morphemes realise T-relations, binary relations between the reichenbachian points E, R and S. The essential assumption underlying their proposal is the principle they call the Biunique Mapping Principle (Giorgi and Pianesi 1991:191), which specifies that Temporal morphemes and T-relations are in biunique correspondence. The consequence of this principle is "the impossibility of hypothesizing T1 or T2 in the tree if no morpheme is in the string". Following their BMP, they propose that no morpheme appears in the tree when there is a coincidence relation (or 'comma' relation because it is expressed by a comma) between the reichenbachian points. Interestingly for us, the imperfective past in Romance may be considered to realise a coincidence relation: that of E, R (see Reichenbach 1947: 291). Giorgi and Pianesi illustrate their argument with the Latin imperfective past, which I reproduce.

The Latin imperfective past realises --according to Giorgi and Pianesi-- the reichenbachian relations "R _ S and R, E" (p.211), i.e. the reference time precedes the

speech time ("past tense"), the reference time overlaps the event time ("imperfective").

Given that in the imperfective past there is coincidence between the reference time and the

event time, only one phrase is projected, in this case the past tense projection T1. An

aspectual projection (or T2) is not necessary, as it is precisely the absence of any

projection that characterises the "imperfective" component of the morpheme. The

structure for the Latin imperfective past *laudabam* 'I praised' is given in (22):

(22)
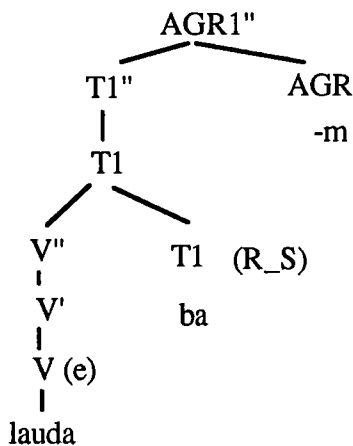
Leaving aside the usual criticism to reichenbachian semantics of the imperfective tenses

(i.e. that the 'comma' or coincidence relation is too vague to actually account for different

imperfective readings), the problem in Giorgi and Pianesi (1991) is that it assumes the

identity between morphemes and morphs. As has been observed, different tenses are

expressed not just by segments --morphs-- that we identify as instantiating tense-aspect

morphemes, but mainly as combinations of several features. Factors that make tense-

aspect identification possible are the presence or absence of the so-called theme vowel

(which marks the conjugation class), the inflectional vowel, the consonants occurring

between them, and the stress pattern (Badia i Margarit 1994:154). Or as Mascaró

(1983:137) writes:

"Naturalment, com que el català és una llengua inflectiva, cadascun d'aquests morfemes serà determinat principalment pel seu correlat (arrel, conjugació, temps o persona), però també subsidiàriament pels altres." (his emphasis)
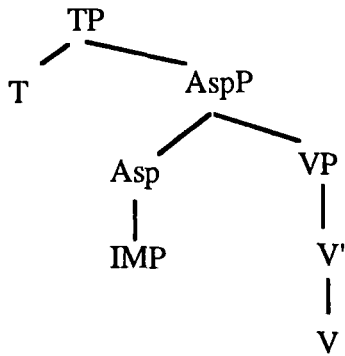
"Naturally, since Catalan is an inflected language, each of these morphemes will be determined mainly by its correlate (root, conjugation, tense or person), but secondarily also by the others."

A verb form in the imperfective past realises both tense and aspect and is therefore a challenge for approaches postulating a strict one-to-one mapping between morph and syntax. Fortunately for us, the checking mechanism proposed in the minimalist program allows us to see the whole inflected verb form as the realisation of the relevant features. The inflected V then has to check those features (Tense, Aspect, Mood in certain cases) at the corresponding functional nodes.

Other works have suggested the existence of a phrasal category **Aspect** headed by an abstract feature; the verb picks the abstract feature from Asp and the morph from the Tns head. The first reference where an aspect functional category specified for the feature [-perfective] is proposed for the aspectual content of the imperfective past morpheme in Spanish is De Miguel (1992). Her analysis focuses on the realisation of genericness, and is presented 7.3.2.2. Lema (1991) also proposed an AspP but does not specify the features of its abstract head.

Linking the proposal of an Aspect Phrase with the neo-reichenbachian approaches, Pérez-Saldanya (1991) proposes an account of the Catalan imperfective past morpheme: the imperfective past realises the relations "R before S, E overlapped to R" (p. 206). The Tense Phrase realises "R before S", the Aspect Phrase realises "E overlapped to R", indicated in the tree by "PRES", or "IMP". This corresponds to the traditional view of the imperfective past as "present in the past".

(23)

```
              TP
            /    \
          T       AspP
                 /    \
              Asp      VP
               |        |
              IMP       V'
                        |
                        V
```

Another functional category proposed as the projection of the imperfective past tense morpheme is **Modal Phrase**. The proposal was made by Laka (1990) and is part of an account of the distribution of inflectional elements in Spanish. The complete configuration with values for each head is given in the following tree:

(24)

```
          TP
        /    \
    -PAST     MP
    +PAST    /   \
          FUT     AUXP
          SUBJ   /    \
          IMPF  SER     ASPP
                HABER   /   \
                      -DO    VP
```
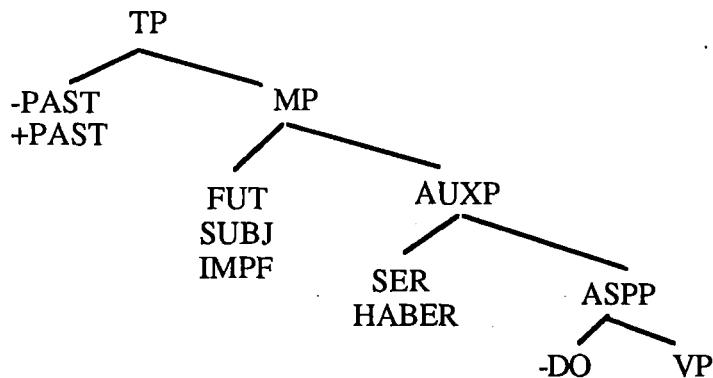
The imperfective past morpheme is, in her words, "a third value of Modal, which I will call IMPF to suggest the traditional imperfective term". Laka does not justify the modal character of the Imperfective past; the proposal seems to be the last resort to accomodate the imperfective past and the imperfective form of the perfect periphrasis *have* + past participle, after all other tense forms of Spanish have been characterised in the course of the discussion. Although it is true that the morpheme has certain modal uses, and it might

be possible to account for those readings by postulating a lexical entry for the imperfective past with modal features, the fact is that the main readings of the imperfective past are aspectual, not modal.

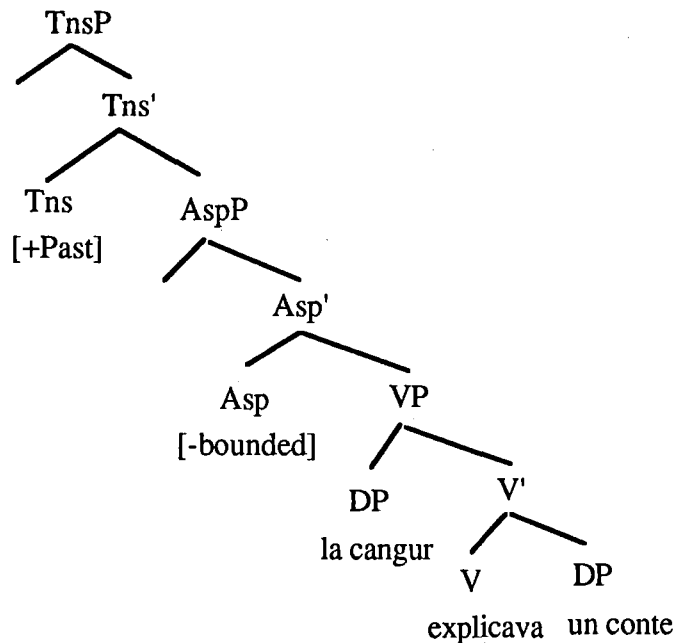### 7.3.3 An analysis of the aspectual readings of the imperfective past

7.3.3.1 Progressive reading of the imperfective morpheme

Following previous proposals, I will postulate the existence of an Aspect projection between Tense Phrase and the VP. The head of the Aspect Phrase is specified by the syntactic feature [± bounded] (equivalent to De Miguel's 1992 [± perfective]). The value [+bounded] corresponds to markers of perfective aspect (canonically the simple perfective past marker of Romance languages). The opposite value, [-bounded] corresponds to the imperfective marker of Romance languages. The feature [-bounded] reflects the stativiser nature of the imperfective marker, but does not in itself determine a progressive reading. Semantically, the Aspect phrase introduces the period of time of which the event denoted in the VP is predicated.

For a progressive reading to obtain, an event VP whose V head bears an imperfective affix must check its [-bounded] feature at the head of AspP. If the VP denotes a state, checking its [-bounded] feature will not license a progressive reading, but the reading that the state did not cease to hold. Thus our account of the progressive reading of an imperfective form is consistent with the way we accounted for the progressive reading of V-*nt* structures: we are not proposing that the Aspect Phrase is inherently progressive, i.e. it is not identified by a specific progressive feature. Rather, the progressive interpretation is the combination of a period of time, realised by the affix, and an event, expressed by the VP. The difference between -*ing*/ -*nt* and /ba/ is that the latter has inherent temporal reference, whereas the former needs to be bound by an element that locates the event or state in the past, present or future.

The structure of a sentence in the imperfective past with a progressive reading such as *La cangur explicava un conte* 'The baby sitter was telling a tale' would be as follows:

(25)

```
        TnsP
       /￣\
           Tns'
          /￣\
      Tns      AspP
    [+Past]   /￣\
                  Asp'
                 /￣\
            Asp      VP
         [-bounded] /￣\
                  DP       V'
               la cangur  /￣\
                         V    DP
                      explicava  un conte
```

In (25) the form *explicava* must check its Tense and Aspect features. Each component in the syntactic configuration contributes to the progressive interpretation: the predicate denotes an event-type; the absence of a marker of habituality (see discussion below) allows an existential reading of the progressive operator's event variable; the [-bounded] Aspect head determines a state reading of the event. Given that the event is existentially closed, the only state possible is a progressive state. [5]

A sentence expressing the truth in the past of a lexical state such as *La cangur estimava els nens* 'The babysitter loved the children' has the same syntactic configuration, i.e. a [-bounded] Aspect head and a [+past] Tense head. The basic difference is lexical, since the

---

[5] In Appendix 2 I propose a logical representation of the imperfective and perfective past operators adapted from the framework of Herweg (1991a). The logical representation of the progressive reading of the sentence with phrase structure (25) would be:

$$\lambda\, t\, \exists\, e\, [\text{ The babysitter-tell-a tale (e) and PROG (e, t) and PAST (e*, t)}]$$

The formula states that for a given time period t there exists an event of the type 'the babysitter tell a tale' which is in progress at t, located in the past with respect to the event of utterance e*.

predicate does not denote an event but a state. At the moment of interpretation the state

verb does not match the requirement of the progressive operator, which contains an

event-type variable. Given that the predicate denotes a state, and that the sentence is in

the past tense, the interpretation is a state holding in the past.[6]

Let us now try to explain why aspectual adjuncts are disallowed in progressive and past

state readings of the imperfective morpheme. If we follow Kayne (1994) in considering

adjuncts syntactically as specifiers, then mechanism of Specifier-Head agreement is

available to us to account for the behaviour of aspectual adjuncts. Consider the events

denoted by the predicates *explicar contes* 'tell tales' and *tocar el violí* 'play the violin'.

These events have no inherent endpoint, and thus, in principle, they can be modified by

durational adjuncts, as in *Vol que toqui el violí mitja hora* 'He wants me to play the violin

for half an hour', and *Vol que expliqui contes mija hora* 'He wants me to tell him tales

for half an hour.'[7] Now, in spite of the fact that durational adjuncts agree with the VPs

that they modify, when the predicate receives a progressive reading, agreement no longer

holds, as we have widely illustrated in section 7.2. The sentences in (26)-(27) are a

selection of the ungrammatical combinations.

(26)   a.   *La cangur explicava contes durant mitja hora (quan vaig arribar). = (14a)

             *'The babysitter was telling tales for half an hour (when I arrived)'

        b.   *En Joan tocava el violí mitja hora (quan vaig arribar de treballar). = (14b)

             *'Joan was playing the violin for half an hour (when I arrived from work)'

(27)   a.   *La cangur explicava el conte en dos minuts (quan vaig arribar).   = (17a)

             *'The babysitter was telling the tale in two minutes (when I arrived).'

        b.   *En Joan feia l'amanida en deu minuts (quan va sonar el telèfon). = (17b)

---

[6] Using the formula adapted from Herweg (1991a), presented in Appendix 2, the logical representation
would be:
        λt (the babysitter-love-the children (t) and PAST (e* , t))).

The formula states that the period of time t is characterised by the state 'the baby sitter love the children',
which is located in the past with respect to the event of utterance e*.

[7] I have chosen the constructions similar to the structures "what he wants me to do is X" because these
are attested as tests to identify events (see Kenny (1963), Davidson 1967).
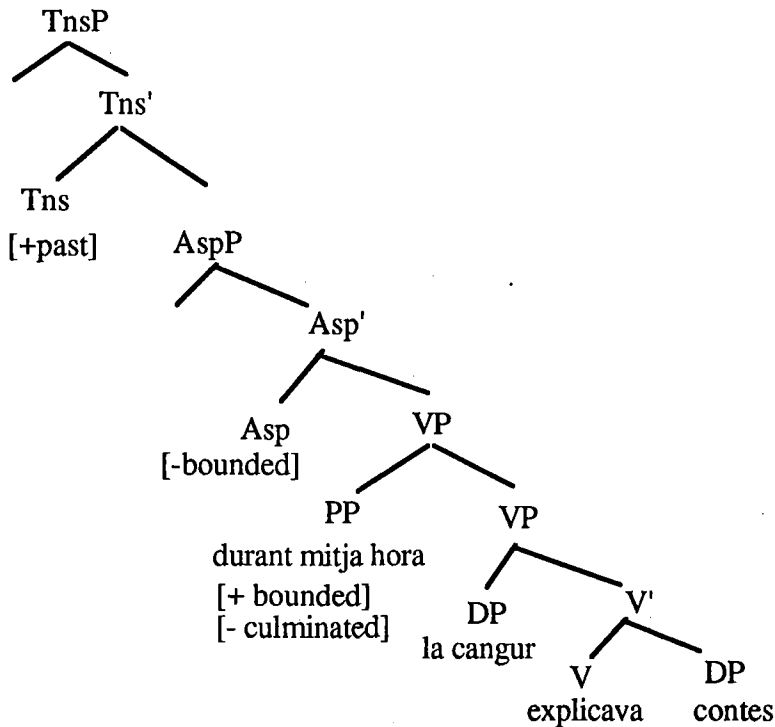
*'Joan was making the salad in ten minutes (when the phone rang).'

When it is expressed by the indicative imperfective past, the progressive state of an event may not be temporally bounded. Therefore neither durational adjuncts nor time span adjuncts occur in sentences (26) and (27), respectively. This holds both for events with inherent endpoint, such as (26a) and (27a), and for those without, such as (26b) and (27b).

The data provided in (26)-(27) may be explained by postulating that aspectual modifiers are generated as specifiers of VP. They are are identified by two features. First of all, they have restrictions on the kinds of predicates that they modify. Durationals modify predicates which denote activities (and accomplishments with an activity reading). Time span adjuncts modify accomplishments. To represent this lexical-semantic restriction I will use the feature [± culminated] (see also section 7.3.2.2 below). Thus, durational adjuncts are [- culminated], whereas time span adjuncts are [+ culminated]. Secondly, aspectual adjuncts are devices that set temporal limits to situations, and thus both durationals and time span adjuncts are syntactically defined by the feature [+ bounded].

When the V head of the VP, inflected with the imperfective past, moves to check its [-bounded] feature at the head of AspP, aspectual expressions move to the specifier of the AspP. At that position, specifier-head agreement does not hold (specifiers are [+bounded], head is [-bounded]). Consequently the derivation crashes. The phrase structure of sentence (26a), a progressive reading with a durational adjunct is represented in (28).

(28)

```
TnsP
  /\
    Tns'
    /\
 Tns    \
[+past]  AspP
         /\
           Asp'
           /\
       Asp     VP
    [-bounded]  /\
           PP      VP
     durant mitja hora  /\
        [+ bounded]  DP      V'
        [- culminated]  la cangur  /\
                          V      DP
                       explicava  contes
```

Now, if we want to follow Kayne's theory consistently (we have appealed to the Adjunct as Specifier analysis), the preceding phrase structure is not a possible structure, given that it violates the ban on double adjunction (Kayne 1994: 22). The situation is complex: on the one hand, we want to account for the agreement relation existing between the aspectual adjunct and the VP in terms of Spec-Head relation. On the other hand, the VP already has a specifier, the position where its subject DP is generated. In fact, the VP-internal subject hypothesis is the most adequate, given that the *aktionsart* of a VP is expressed compositionally by the verb and its arguments (recall from section 1.2.1.2 that, among other factors, the definiteness and number of the arguments can change the *aktionsart* of the whole VP). As things stand, the VP has two Specifier-Adjuncts: DP (Spec of VP) and the PP (aspectual adjunct).

To solve this problem, we may postulate the existence of a functional phrase intervening between AspP and the VP, of which the aspectual PP is a specifier. A possible candidate

is a functional head which would subcategorise for a VP denoting an event (with or without inherent endpoint). We could call that functional projection Aspect (lex) to distinguish it from Aspect (infl), the projection of the [± bounded] aspect head realised by the inflectional morpheme. This is not a new proposal, given that the category Aspect was first proposed precisely as the projection of the delimitedness of the event or state denoted by the predicate, (see Tenny 1987, among other works). Recently, Cinque (1995) has proposed several types of Aspect projections, two of them parallel to our Aspect (infl) and Aspect (lex).

Assume that the head of Aspect (lex) is the abstract feature [± culmination], which requires the VP complement to denote an event with inherent culmination, if the value is positive, or without culmination if the value is negative.[8] Aspectual specifiers-adjuncts agree with the abstract head: a durational cannot occur as the specifier of a [+culminated] event, whereas a time span adjunct cannot occur as the specifier of a [-culminated] event. Since aspectual adjuncts are also identified by the feature [+bounded], when the V inflected with the imperfective marker moves up to check its Aspect (Infl), and Tense features, the Spec of Asp(lex) moves to the Spec of Aspect Infl. At that point, as I already explained, the [+bounded] specifier no longer agrees with a [-bounded] head, and the derivation crashes.

An issue remians to be solved if we adopt Kayne's Adjunction analysis, namely that the surface position of the adjunct is not the original Specifier position, i.e. preceding the VP, but rather the typical adjunct position, after the VP. A possible solution to this issue is discussed in section 7.5. The gist of the analysis presented there is that since we cannot move the adjunct down to the right of the VP, it is the VP that has to move to the left of the position where the adjunct originates.

---

[8]Other features, besides [±culminated], might be [±extended], to distinguish situations with inherent development stage (e.g. accomplishments from achievements), and possibly [±consequent state], to distinguish achievements from punctual events, following Moens and Steedman (1988).

7.3.3.2 Habitual readings of the Imperfective morpheme.

Consider sentences (29) and (30), instances of an imperfective past morpheme with a habitual reading:

(29) a.   *La cangur explicava un acudit curt al nen durant mitja hora (sempre que el

nen no agafava el son). (non-iterative reading)

The babysitter would tell a brief joke to the child for half an hour (when he

did not fall asleep).'

b.   La cangur explicava contes al nen durant mitja hora (sempre que el nen

no agafava el son).   = (15a)

'The babysitter told tales to the child for half an hour (when he did not fall

asleep).'

c.   En Joan tocava el violí mitja hora (sempre que estava nerviós). = (15b)

'Joan played the violin for half an hour (when he was nervous).'

(30) a.   Quan havia d'estudiar, la cangur explicava el conte al nen en dos minuts.

= (18a)

when have-imperf. to study, the baby-sitter tell-imperf.the tale to the child in

two minutes

'When she had to study, the baby-sitter used to tell the tale to the child in two

minutes.'

b.   *Quan havia d'estudiar, la cangur explicava contes al nen en dos minuts.

when have-imperf. to study, the baby-sitter tell-imperf.tales to the child in

two minutes

*'When she had to study, the baby-sitter used to tell tales to the child in two

minutes.'

c.   Quan anàvem a la platja, en Joan feia   l'amanida en deu minuts. = (18b)

when go-imperf. to the beach, Joan make-imperf. the salad in ten minutes

'When(ever) we went to the beach, Joan used to make the salad in ten minutes.'

The occurrence of aspectual adjuncts is possible if they are (aspectually) compatible with the *aktionsart* of the event denoted by the predicate. Durational adjuncts set temporal limits to events that lack inherent endpoint, i.e. events that are non-culminated. If the predicate is culminated, as in (29a), durational adjuncts are incompatible (again, in a non-iterated reading). In (29b,c) the predicates denote non-culminated events, which accept modification by a durational. Time span adjuncts specify how long it takes for a culminated event to culminate. Culminated predicates may be modified by a time span adjunct, as in (30a). If the predicate is non-culminated, as in (30b,c), time span adjuncts are incompatible.

In sum, durational and time span aspectual adjuncts occur if they agree with the *aktionsart* of the predicate, i.e. if they modify the event-type whose occurrence takes place a number of times in a period of time, i.e. habitually.[9]

In a progressive reading, aspectual adjuncts modify the progressive state, not the event denoted by the VP. Syntactically, if the predicate has any aspectual adjuncts, they must go up to the Spec of the Aspect Phrase (Infl) when the verb moves to the corresponding head to check its [-bounded] feature. In a habitual reading, the presence of a marker of plurality of occurrences generally restricts the scope of the adjuncts to the event, i.e. to the VP which denotes it. The contrast is illustrated by sentences (26) vs. (29) and (27) vs. (30). The question is what is the nature of the marker of plurality that allows the adjuncts to stay at their original positions, and to be interpreted as having scope over the

---

[9]Habits can also be defined by multiple occurrences of phases of states, but not all states are quantisable in phases, see (i):
(i)   a. L'hotel era tancat dos mesos a l'hivern.
       'The hotel was closed for two months in winter.'
     b. L'hotel era situat a la falda del Montseny dos mesos.
       'The hotel was situated on the side of the Montseny mountains.'

event? Plurality of occurrences may be a feature of the Tense head. Or it might be an abstract feature that projects a phrase different from Tense and Aspect. We will consider both hypotheses, beginning with the first one.

A habitual reading is a state reading. The habitual occurrence of an event is the property of an indefinite period of time. In other words, markers of imperfectivity do not individuate events. Temporal indefiniteness (or lack of individuation of events) has effects on the interpretation of predicates. For instance, as De Miguel (1992) thoroughly argues, lack of temporal specification (i.e. lack of individuation of an event) seems to be directly connected to the lack of identification of the agent of that event in the Spanish impersonal clauses with the pronoun *se* illustrated in (31).

(31)   Se trabaja mejor en casa que en un despacho

       se works better at home than in an office

       'One works better at home than in an office'

Clauses like (31) are interpreted generically, i.e. as general statements, valid at all times. For a generic reading of *se* to obtain, the verbal morphology must be **imperfective** (present or imperfective past tense). In addition, there are certain structures that contribute to generic interpretations, the 'activators of genericity', a term borrowed from Hernanz (1990): conditional clauses, modals with root readings, adjuncts denoting location, time, and manner, frequency adverbials. As will be discussed below, these stuctures activate genericity because they can introduce a semantic operator that quantifies over events.

The account proposed for impersonal generic clauses is centered in many ways around the existence of an Aspect Phrase which combines both inflectional and *aktionart* information. I am going to concentrate particularly in the features of the Tense and Aspect heads in generic readings, and omit the discussion of De Miguel's innovative

analysis of the interpretation of the subject of impersonal clauses. Let us first see the structure proposed (De Miguel 1992: 184):

(32)

```
                    TnsP
                     |
                    Tns'
                   /    \
                Tns      AspP
            [+present]    |
            [- spec.]    Asp'
               a        /    \
                     Asp       VP
                   [-perf.]   /   \
                   [+gender] pro_arb  V'
                   [3rd sing]          |
                      se   (agent)     |
                                       V
                                     trabaj-
```
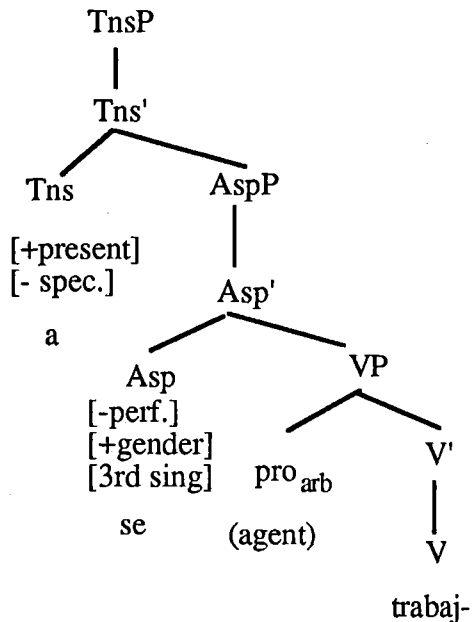
As the d-structure (32) shows, the Aspect head has two kinds of features. It has Agreeement features (postulated to account for the interpretation of the null pro subject which Asp licenses) and, more relevant to us, it has a feature [± perfective]. In generic impersonal sentences, the genericity marker is generated at Asp, and Asp is [-perfective]. Given that Asp induces a generic reading for the event expressed in the VP, the Tense head receives negative specification. [-spec.] means that the temporal information provided by Tns does not actually locate the event in the past, present or future, but has a generic character, is not true, "real" temporal information.

The 'activators of genericity' are structures which induce quantified readings over events, i.e. informally, they mark plurality of occurrences of events. For instance, the antecedents of conditional clauses can restrict a covert adverb of quantification like *always* (Kratzer 1989, based on Lewis 1975), adverbials of location such as *in the*

library may introduce quantification over events (the library as the location for a set of occasions or occurrences of an event), and so on. Thus, impersonal generic sentences, as well as habitual sentences, implicitly express plurality of occurrences. In principle, it may be possible to adopt De Miguel's analysis of impersonal generic clauses for our habitual imperfective clauses.

The difference between habitual readings of imperfective clauses and generic statements is that the former are temporally specified, and consequently, De Miguel's solution (a feature [± specified] for the Tense head) cannot be literally applied to explain the difference between a progressive reading and a habitual reading. It could be explained, however, if the Tense head is specified for Number (of occurrences of events). Instead of [±spec.], the corresponding feature may be [±plural], or [± collective].[10] Note that a sentence with a habituality marker such as the affix /ba/ contains temporal information of two kinds: about an event, and about a habit characterised by the plurality of occurrences of that event. A tense head marked as [+plural] or [+collective] would dissociate the set of occurrences of an event --as determined by the tense and aspect heads--, from the time of each occurrence of the event.

Assuming the analysis of aspectual adjuncts argued for in the preceding section, whereby they originate as specifiers of an Aspect (lex) Phrase, we explain why their scope is restricted to the lower VP. If aspectual adjuncts stay in their original position, they place temporal limits to the time *e* of the event denoted by the VP.[11] But if they move to the

---

[10]According to Brinton (1991), habitual situations make collective reference to events and are thus parallel to collective nouns.

[11]A subclass of states seems to behave like events in allowing for durational adjuncts if a habitual reading is possible, namely the class of states which are stage-level predicates (Kratzer 1989, based on Carlson 1977). Kratzer defines stage-level predicates as those which predicate a transitory property of an individual, and have an extra argument in their argument structure, the spatio-temporal location of the property. Non-transitory properties are expressed by individual-level predicates, which, according to Kratzer, do not have the spatio-temporal location argument. Events are stage-level predicates, and so are some states. Consider the contrast (i)-(ii):
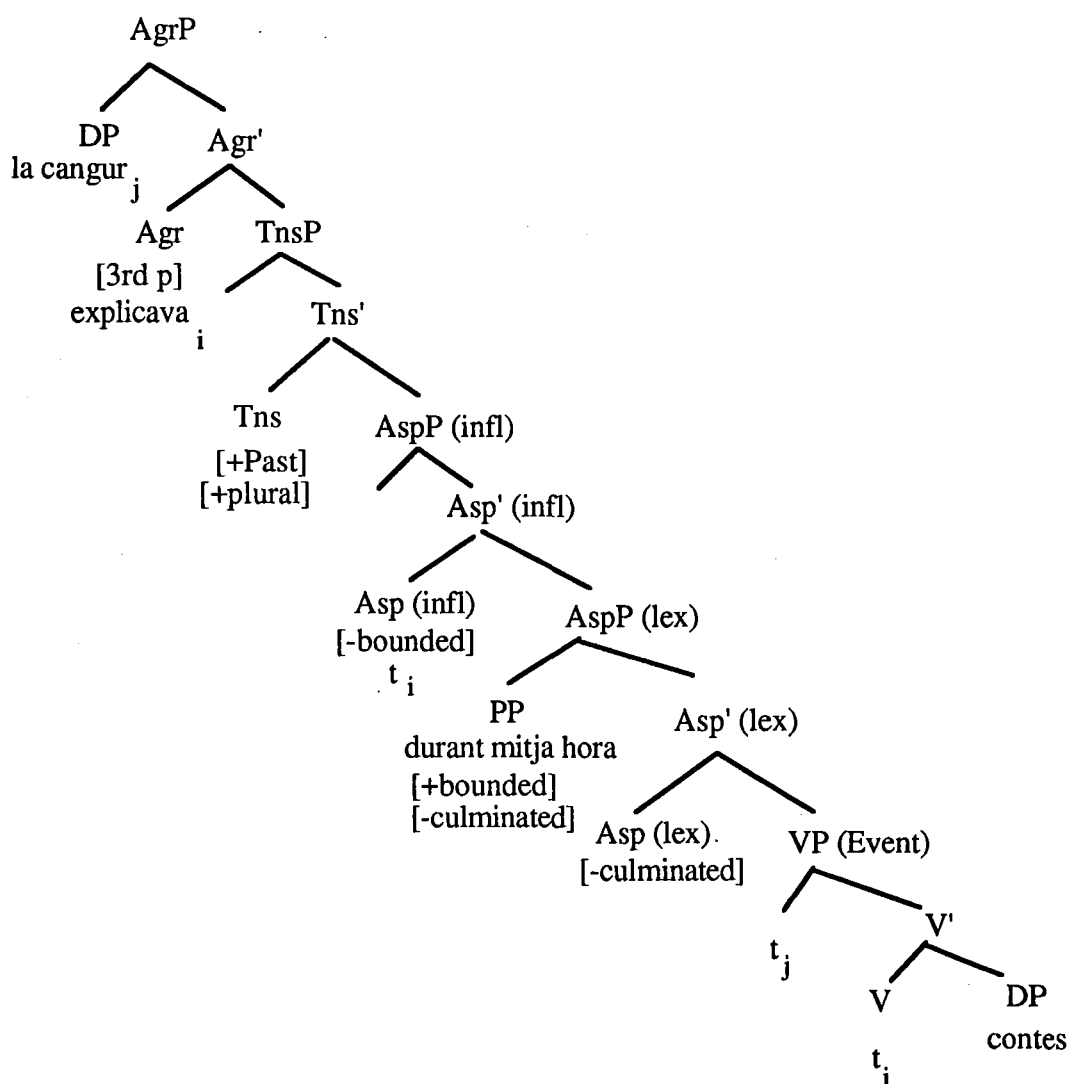
(i)   a. * Quan vam arribar, l'hotel era tancat dos mesos.   (stage-level, non-habitual reading)
       b. L'hotel era tancat dos mesos a l'hivern.   (habitual, 'in winter' = activator of habituality)
(ii)   a. *Quan vam arribar, l'hotel era enrunat dos mesos.   (individual-level, non-habitual)

Spec of AspP (infl) (when the V moves to its head in order to check its [-bounded] feature), they temporally delimit the unbounded period of time of which the habit is predicated. Since that period of time is indefinite and does not allow temporal delimitation, aspectual adjuncts would not agree with the head and the derivation would crash for the same reason that a progressive reading does not allow aspectual adjuncts. (33) is the structure of the habitual reading with a durational adjunct that delimits the time of the event denoted by the VP.

---

b. *L'hotel era enrunat dos mesos a l'hivern. (habitual, 'in winter' = activator of habituality)

The state 'be closed' is a stage-level predicate. In a non-habitual reading, such as (ia), it disallows a durational adjunct. When a habitual reading is prompted by an activator, the durational adjunct is allowed to modify the state, or rather each of the occurrences of a phase of the state, as illustrated in (ib). In (iia) the predicate 'be in ruins' is individual-level. Like in (ia), a durational adjunct cannot set temporal limits to a state. However, in (iib) a habitual reading is not possible, in contrast with (ib), and thus the durational adjunct is disallowed. The reason is that the state expressed by 'be in ruins' cannot be conceived of as being true of the same individual at different times, and thus does not accept a habitual reading.

(33)

```
                    AgrP
                   /    \
                 DP      Agr'
              la cangur   /  \
                     j  Agr   TnsP
                       [3rd p]  /  \
                       explicava  Tns'
                            i    /   \
                               Tns    AspP (infl)
                              [+Past]  /  \
                              [+plural] Asp' (infl)
                                       /    \
                                  Asp (infl)  AspP (lex)
                                  [-bounded]   /   \
                                    t          PP    Asp' (lex)
                                     i    durant mitja hora  /  \
                                          [+bounded]    Asp (lex).  VP (Event)
                                          [-culminated] [-culminated]  /  \
                                                                      t    V'
                                                                       j   /  \
                                                                          V    DP
                                                                          t    contes
                                                                           i
```

Note that the Tns head selects a functional projection, AspP (infl) whose head has the feature [-bounded]. The form *explicava* moves up to check its [-culminated, -bounded, + past , + plural, 3rd p.] features in successive steps.[12]

An alternative explanation that needs a considerable amount of further research --but which I would nevertheless like to sketch-- is to consider that the feature [±plural]

---

[12]Though lexical aspect (*aktionsart*) is not marked by the inflectional morphology of the verb in Romance languages, and thus it would seem unnecessary to check the corresponding features, there are languages which have morphemes for *aktionsart* distinctions, e.g. slavonic languages.
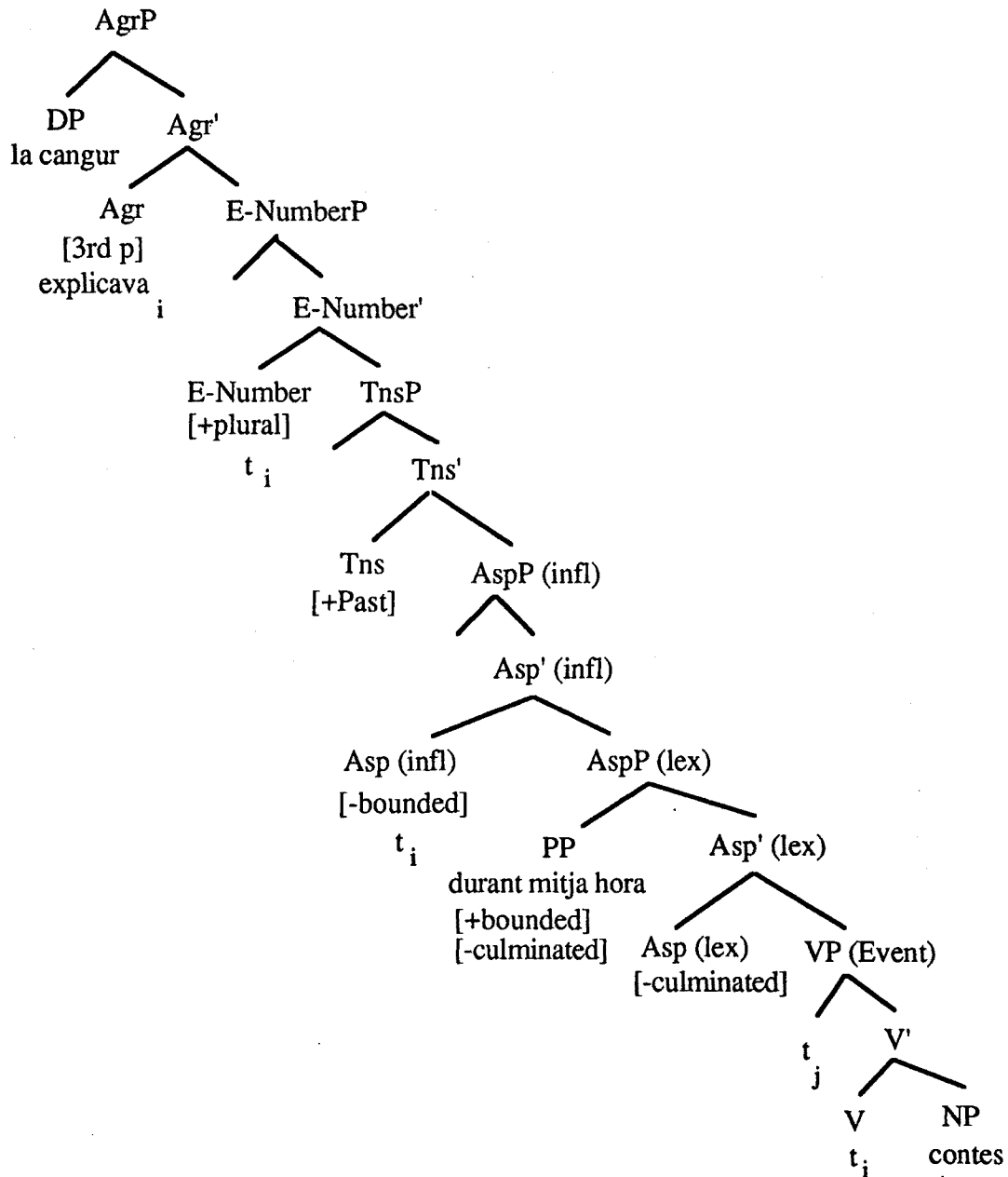
projects its own head for occurrences of events.[13] To a certain extent, plurality of events is parallel to plurality of individuals. DPs headed by nouns which are inflected for Number have been assumed to contain a functional projection Number Phrase (see, e.g. Picallo 1991 for Catalan and references therein) which takes NP as a complement.[14] If the assumption is carried over to the temporal domain, it could be argued that just as an NP may be the complement of a Number Phrase, a Tense Phrase may be the complement of a Number Phrase for Events or E-Number Phrase. In the case of NPs, "number serves to specify the extension of the set the noun denotes" (Picallo 1991:280). In the domain of the TP, E-Number phrase establishes the number of occurrences of events of the type denoted by the V in the time that the Tense phrase locates. The difference is that Nouns have number morphology, whereas verbs carry a marker of habituality.[15]

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[13]An alternative hypothesis that will not be explored is the existence of a generic (semantic) operator occurring at the topmost node of the sentence (for instance, an operator loosely analogous to Laka's sigma operator) so that everything is in its scope, with the effect that the aspectual adjuncts have scope only over the VP of which they are adjuncts, not over the whole sentence.

[14]For languages that express Gender, e.g. the Romance languages, a Gender Phrase would intervene between Number Phrase and the NP. The structure is: [DP [NumP [GenP[NP]]]] (Picallo 1991: 281)

[15]I would like to thank I.Bosque for sharing with me --in a conversation at the IV Col.loquium on Generative Grammar-- his thoughts about the need to account for the parallels between reference to multiple individuals and reference to multiple events.

(34)

```
                    AgrP
                   /    \
                 DP      Agr'
              la cangur  /  \
                      Agr     E-NumberP
                     [3rd p]   /    \
                     explicava      E-Number'
                            i      /    \
                            E-Number    TnsP
                            [+plural]   /  \
                               t      Tns'
                                i    /   \
                                  Tns     AspP (infl)
                                 [+Past]   /  \
                                        Asp' (infl)
                                        /      \
                                  Asp (infl)    AspP (lex)
                                  [-bounded]    /    \
                                     t       PP      Asp' (lex)
                                      i   durant mitja hora  /  \
                                         [+bounded]      Asp (lex)  VP (Event)
                                         [-culminated]  [-culminated]  /  \
                                                                    t    V'
                                                                     j  /  \
                                                                       V    NP
                                                                       t   contes
                                                                        i
```

The only evidence that we have is inconclusive. It may be argued that the frequency adverbials *mai* 'never', *sovint* 'often', *poc* 'seldom', *freqüentment* 'frequently', etc. are licensed as specifiers of an Event-Number projection by its head (cf. Cinque 1995, where a Generic Phrase is postulated). Frequency adverbials are not aspectual adjuncts;

in fact, they may co-occur with aspectual adjuncts in habitual readings, as illustrated in (35), which proves that they are not generated at the same position.

(35)　a.　La cangur sovint explicava contes durant mitja hora i els nens no s'adormien.

　　　　　'The babysitter often would tell tales for half an hour, and the children still would not fall asleep.'

　　　b.　La cangur mai no explicava el conte en cinc minuts.

　　　　　'The babysitter never used to tell the tale in five minutes.'

But co-occurrence of frequency adverbials and aspectual adjuncts could even more plausibly be taken as evidence that frequency adverbials are generated as the specifiers of Aspect Phrase. If aspectual adjuncts do not move when a habitual reading is obtained, it may be due to the fact that the position is filled already by the adverbial of frequency (overt or implicit). I will leave the discussion at this point.

Finally, a few words must be said about sentences with habitual progressive readings. Although generally a habitual reading of the imperfective excludes a progressive reading, and viceversa, it is possible to obtain the interpretation corresponding to a period of time characterised by the occurrence of phases of the progressive state of an event instead of occurrences of events. An example is given in (36) below. The imperfective past of the *quan*-clause creates a habitual context for the complex sentence. In (36b) the matrix imperfective past expresses the progressive state of the predicate 'the babysitter tell tales' with the added habituality component: plurality of occurrences of phases of the progressive state. Note that the incompatibility with a durational adjunct in (36b) supports the existence of a progressive reading. In (36c) we find the habitual non-progressive reading of the activity 'tell tales', which is totally compatible with the durational adjunct:

(36)　a.　Quan jo arribava, la cangur explicava contes.

　　　　　'When I arrived, the babysitter was telling tales / told tales.'

b.   *Quan jo arribava, la cangur explicava contes durant una hora.

(habitual progressive)

*'When I arrived, the babysitter would be telling tales for an hour.'

c.   Quan jo arribava, m'asseia amb els nens i la cangur els explicava contes

durant una hora.

'When I arrived, I used to sit with the children and the babysitter would tell

them tales for an hour.'

Syntactically speaking, for habitual events in progress, the Aspect (infl) feature is [-bounded], and the tense feature is [+plural]. There is no syntactic difference between the habitual and the habitual progressive readings. The only way to know which is going to be the appropriate interpretation is by pragmatic knowledge.

In the data discussed in this section, aspectual adjuncts occurred in final position. We argued that they are compatible with a habitual reading of the imperfective past because they modify the event denoted by the VP, the sentence predicate, rather than the period of time of which the habitual state is predicated. An apparent counterexample to the statement that habitual states cannot be temporally delimited is provided in (37):

(37)   Durant dos mesos, la cangur els explicava un conte (sempre que no podien

dormir)

'For two months, the baby-sitter would tell them a tale (whenever they could

not fall asleep.)'

The PP *durant dos mesos* sets temporal limits to the situation expressed by the whole sentence, not to the tale-telling event expressed by the (bare) VP. Note that the same reading does not obtain if the adjunct occurs in the sentence, e.g. in final position.

(38)   ?? La cangur els explicava un conte durant dos mesos (sempre que no podien

dormir).

'The baby-sitter would tell them a tale for two months (when they could not fall

asleep.)'

Note that (38) is anomalous because 'for two months' is interpreted as a modifier of the

tale-telling event. The contrast (37)-(38) may be taken as evidence that the PP *durant dos

mesos* is generated in different positions, and has different functions. As we have been

arguing in this section, in (38) it is the specifier of VP, and as such it sets temporal limits

to the event expressed by the predicate. In (37), in contrast, *durant dos mesos* clearly

cannot have originated as the specifier of VP. The most plausible analysis is that it is

generated as an "adverbial" time adjunct of the whole sentence. Apart from specifying the

temporal location of the sentence, this adjunct prevents a progressive reading of the

sentence. Alternatively, it acts as an activator of a habitual reading (adapting the term

from Hernanz 1990): defining the period of time as bounded discards a progressive

reading of an event predicate, and favours a habitual reading.

Evidence that the PP in (37) is an adjunct to the whole sentence is the possibility that a

durational specifier of VP occurs simultaneously, as illustrated in (39). I have marked the

VP specifiers in italics. Sentence adjuncts are set off by commas:

(39)   a.   Els dos mesos més calorosos de l'estiu, l'Anna només prenia el sol *mitja*

hora cada dia.

'For/During the two hottest months of summer Anna only sunbathed for half

an hour every day.'

b.   Durant el curs escolar, els nens veiem la televisió *una hora*, però a les

vacances, els pares no ens controlaven tant.

'During the school year, we children watched T.V. for one hour, but during

the holidays, our parents would not control us that much.'

c.   Durant els debats electorals, els polítics parlen dels seus programes els deu

minuts primers i després intenten desqualificar els oponents.

'During/at election debates, politicians talk about their programs for the first

ten minutes, and then they try to to discredit their opponents.'

In sum, in the last paragraphs I have accounted for an apparent counterexample to the

analysis proposed for the patterns of occurrence of duration aspectual adjuncts in

sentences marked for indicative imperfective past with a habitual reading.

7.4   Other values of the Catalan imperfective past morpheme

I have argued in previous sections that the indicative imperfective marker of Romance

languages is a stativiser. Imperfective entails lack of individuation of an event. Thus it is

not surprising that the special temporal and modal values expressed in English by the

available stativiser, the progressive periphrasis, are expressed in Catalan (among other

Romance languages) by the imperfective past morpheme. This marker combines two of

the notions that many natural languages of the world exploit to distance speakers'

utterances from reality: the past tense (Palmer 1986) and lack of individuating an event.

Like the progressive periphrasis in English (see section 2.5.4), the imperfective past is

used to make polite requests and to realise the temporal notion of "futurate" or future in

the past. In addition, as a marker of progressive aspect, the imperfective past has other

special temporal values such as present relevance and the so-called "perfective" value. In

what follows I am going to deal first with the temporal values, and then with those

readings of the imperfective past that express modality. Obviously, a full account of the

"special" uses of the indicative imperfective past must take into account many aspects, both semantic and pragmatic. My contribution focuses on the aspectual and temporal aspects, and must be further completed by pragmatic analysis.

7.4.1 Present relevance of a past state

This use concerns mainly complex sentences whose matrix verb is a verb of reporting (i.e. verbs of saying and believing), and whose sentential complement reports past events or states. When the reporting event is also located in the past, and the reported state or event was true both at the time of the reporting event and at the time of speech, the tense form in the embedded clause is the imperfective past.

(40)   a.   Anteriorment s'ha parlat que els preus dels habitatges a Barcelona *eren*

        escandalosos. Jo diria que, més o menys, estem a la línia europea.

        'It has previously been said that the price of housing in Barcelona was

        outrageously expensive. I would say that, more or less, we are at the

        European level.' [Reflexions sobre Barcelona, p. 78]

      b.   El mes de febrer, la comissió Droga-Delinqüència va criticar durament les

        autoritats policials, i especialment la llei Corcuera, perquè *facultava* els agents

        a actuar amb "arbitrarietat" a l'hora de fer detencions. [Nou Diari, p.4]

        'Last february the Drug and Crime Comission criticised the police authorities

        harshly, and particularly the Corcuera Law, because it allowed policemen to

        act "arbitrarily" during arrests.'

In (40a) the reporting event is expressed by *s'ha parlat* 'it has been said'. The subordinate verb is is *eren* , imperfective 'were'. The time at which the state holds extends to the present, as the sentence following it shows: *estem a la línia europea* ("we are at the European level"). In (40b) the reporting verb is *va criticar* 'criticised', a perfective past, and the reported state occurs in the imperfective: *facultava* 'allowed'.

The subject of *facultava* is a new law that was still under discussion, and thus fully actual, at the time when the article was written (the speech time).

Whether the situation expressed by the clause in the imperfective past is still actual in the present is a matter of world knowledge shared by speaker and hearer. What allows this reading is the fact that the imperfective past does not entail that the situation ceases to hold in the past. The imperfective denotes a state, it has no overt temporal limits as far as the end point is concerned. Therefore, an interpretation in which the situation was actual in the past and is actual still now is a predictable consequence of the semantics of the imperfective past. Syntactically, the tense head has the feature [+ Past]. The implication of present relevance is allowed by the fact that the AspP (infl) is [-bounded]. For this reading I will not assume any additional modal feature.

7.4.2 Imperfective with a perfective value

In the presence of temporal referential adjuncts, the imperfective past may be interpreted as expressing the occurrence of an event in the past. This is a special use of the imperfective, common in encyclopedia entries of historical facts, biographies, etc. and in news items in papers and broadcasts. It is usually treated in descriptive grammars as an exceptional value of the imperfective marker. But this apparently "twisted" use of the imperfective can be accomodated as a progressive value of the imperfective marker. Consider the examples in (41).

(41)   a.   El regidor de Seguretat de l'Ajuntament de Madrid [...] va ser el primer a

        arribar al lloc del primer atemptat. Poc després ho *feia* l'alcalde de Madrid.

        'The Security councillor of the City Council of Madrid [...] was the first one

        to reach the site of the terrorist outrage. The Mayor of Madrid would arrive

        there soon afterwards.' [*Avui*, June 22, 1993, p. 9]

b.   Ara fa poc més d'un any, el 9 de juny de 1992, nou caps i oficials de

l'armada i tres civils *resultaven ferits* en esclatar un altre artefacte.

'About a year ago, on the 9th of June, 1992, nine army heads and officers

and three civilians were (lit. resulted) wounded when another bomb

exploded.' [*Avui*, June 22, 1993, p. 9]

The predicates that receive the "imperfective as perfective" reading usually express achievements or accomplishments that take place at some point during the period of time set by the temporal adjunct: arribar '*arrive*', resultar ferit '*get injured*' *néixer* 'to be born', *morir* 'to die', *inaugurar* 'to inaugurate', etc. The imperfective denotes the progressive state of the **final stage** of the event. If the final stage is in progress, then the entailment is that the event has taken place, an entailment discarded by definition in a progressive reading. Note that this is not a regular progressive reading. If it were, we would be able to substitute the progressive periphrasis for the simple form, which is not the case, as illustrated in (42):

(42)   a.   *Poc després d'arribar el regidor de cultura, estava arribant l'alcalde.

b.   * Moments després de l'explosió de la primera bomba, estava esclatant un

altre artefacte.

The entailment that the event took place in the past is the result of selecting the final stage or culmination stage of the event denoted by the predicate. Due to the fact that this is a special progressive value (as indicated by the necessary occurrence of a temporal adjunct in order to provide specific temporal reference for the event), it seems unnecessary, from the syntax point of view, to claim that in this so-called "perfective use", the Asp (infl) head is specified with the feature [+bounded] instead of [-bounded], which is the regular, unmarked feature specification for the imperfective morpheme.

7.4.3 Futurate

The stativiser nature of the imperfective past makes it available for the expression of the futurate, i.e. the temporal reinterpretation caused by the mismatch between the period of time of which we want to predicate the progressive state of the event, on the one hand, and the time at which the progressive state starts to hold. The morphology may be present, as in (43a), or past, as in (43b and c), but temporal adjuncts do not agree with the tense specification, they locate the event in the future with respect to the tense of the sentence.

(43)   a.   Em caso el mes vinent.

          'I am getting married next month'

      b.   Em casava el mes següent.

          'I was getting married the following month.'

      c.   Ja sortia però m'han tornat a cridar.

          'I was already going out when they called me in again.'

The interpretation of (43a,b) may be syntactically explained as the result of the lack of agreement between the feature specification of the Tense head and the temporal reference of the adjunct. In (43a) the Tns head is [+ Present], whereas the temporal adjunct specifies future temporal reference. In (43b), the Tns head is [+ Past]. The temporal adjunct specifies the time of the event as future with respect to the time specified by the Tns head. In reichenbachian terms, the relation between the reference time and the event time does not correspond to the canonical meaning of the tense marker. A solution to this apparent mismatch is the interpretation of the adjunct as a temporal specifier of the lower VP (or the event that it denotes), rather than as the specifier of the Tense head. Such reinterpretation is possible if a planning stage is added to the event denoted by the VP, thus giving rise to the futurate reading.

7.4.4 Polite requests

Up to now, special uses of the imperfective past concerned the expression of time and were explained as re-elaborations of the progressive value. The fact that the imperfective expresses the lack of entailment of an event, or the lack of entailment that a state ceased to hold in the past makes it available for the expression of politeness, just as the progressive form is used in the expression of politeness in English (see section 2.5.4).

The politeness effect comes from a combination between past tense and the lack of temporal limits of the period of time of which a property is predicated. Consider (44):

(44)   Trucava per confirmar la teva assistència.

'I was calling to confirm your assistance.'

The predicate *trucava* has the form of an event in progress in the past. But obviously the calling event is in progress at the utterance time. The imperfective past entails that the progressive state of calling was true in the past and is still true in the present. If the calling event is still in progress, it involves the hearer, but the fact that it does not involve him or her as directly as a present tense signals that there is an intention on the part of the speaker. From this he or she may infer that the statement is actually a request. This inference is made quite automatically and is always the same. Like other forms of politeness, the imperfective past allows the speaker to express detachment from the here and now. Not surprisingly, it alternates with conditional markers (morphologically distinguished from the indicative and the subjunctive moods), with the subjunctive, and with negation-related modality (vg. Espinal 1993):

(45)   a.   Volia   demanar-te una còpia del teu treball.

I-want-imperf. to ask you for a copy of your paper

        b.   Voldria demanar-te una còpia del teu treball.

I-want-conditional to ask you for a copy of your paper

        c.   Si volguéssis donar-me una còpia del teu treball ...

if you-want-subjunctive-past give me a copy of your paper

d. No tens pas   una còpia del teu treball?

not 2p-have neg-particle a copy of your paper?

Syntactically, a Modal Phrase headed by the imperfective past was proposed in Laka (1990) for Spanish. As was argued in section 7.3.1, there is not enough motivation in Laka's proposal to treat the imperfective markers as realisations of a Modal Phrase in general. However, a tentative explanation could be that two imperfective markers co-exist in the lexicon: one with Tense and Aspect features, and another one with Tense, Aspect and Modality features which the fully inflected V should have to check in modal contexts such as deontic and conditional clauses.

7.4.5 Conditional clauses

The imperfective indicative past morpheme may occur instead of the imperfective subjunctive past morpheme as the marker of conditions in one type of clauses: counterfactuals, i.e. those in which the realisation of the situation expressed by the matrix clause is viewed as possible and contingent on the realisation of the situation expressed in the antecedent. The tense of the matrix clause is the simple conditional tense.

(46) a. Si compraves un bitllet tancat, la companyia no et deixaria canviar la data de

tornada.

if buy-imperf-indic-2ndp a closed ticket, the airline not you let-cond.-2ndp

change the return date

b. Si compressis un bitllet tancat, la companyia no et deixaria canviar la data de

tornada.

if buy-imperf-subj-2ndp a closed ticket, the airline not you let-cond.-2ndp

change the return date

'If you bought a closed ticket, the airline would not let you change the return date.'

The imperfective past does not occur as the marker of real conditions, i.e. conditions which involve possible or actual facts. In this type of conditionals the correlation of tenses is present or perfective past tense, respectively, in the antecedent clause and simple future or present in the matrix clause. This is illustrated in (47).

(47)   a. Si compres/vas comprar un bitllet tancat, la companyia no et deixarà/deixa

canviar la data de tornada.

b. *Si compraves un bitllet tancat, la companyia no et deixarà/deixa canviar la
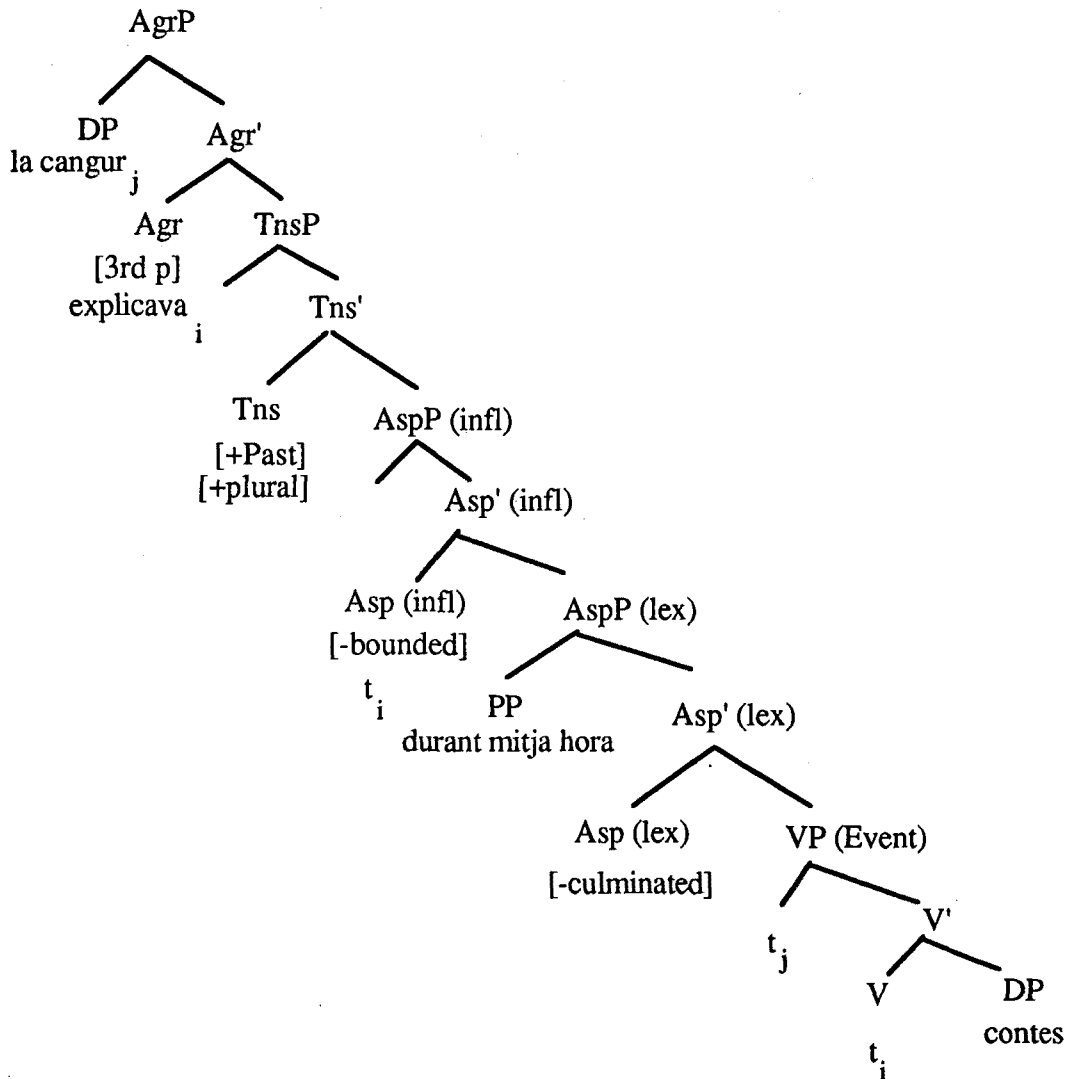
data de tornada.

'If you buy/ bought a closed ticket, the airline will not let you change the

return date.'

The main clause realises modality (it denotes a condition) and imposes the tense and mood specification of the subordinate clause. Syntactically this implies that the relevant syntactic features for Tense and Mood are checked.

7.5 Questions raised by the Adjunct-as-Specifier analysis.

Consider again structure (34) above corresponding to the sentence with a habitual reading (29b), both repeated in (48):

(48)   a. (Cada dia) La cangur explicava contes (als nens) durant mitja hora.

b.

```
            AgrP
           /    \
         DP      Agr'
      la cangur  /   \
            j  Agr    TnsP
             [3rd p]  /   \
             explicava    Tns'
                   i     /   \
                      Tns     AspP (infl)
                    [+Past]   /   \
                    [+plural]    Asp' (infl)
                              /    \
                        Asp (infl)   AspP (lex)
                        [-bounded]   /    \
                          t        PP      Asp' (lex)
                           i  durant mitja hora  /   \
                                           Asp (lex)   VP (Event)
                                           [-culminated]  /   \
                                                        t      V'
                                                         j    /   \
                                                            V     DP
                                                            t     contes
                                                             i
```

The verb head *explicava* adjoins to the head Asp (lex), to the head Asp (infl) and to the head Tns (and possibly E-Number) in order to check its features against them. The surface order predicted by (48b) will display the aspectual adjunct preceding the DP object of the verb. However, another ordering is possible, namely the aspectual adjunct may follow the DP object. We therefore have to be able to account for both possibilities, illustrated in (49):

(49)   a. La cangur explicava contes (als nens) durant mitja hora.

'The baby-sitter used to tell stories to the children for half an hour.'

b. La cangur explicava durant mitja hora contes de por (als nens).

'The baby-sitter used to tell for half an hour horror stories to the children.'

Both derivations --for sentences (49a) and (49b)-- can coexist in the grammar because they have different meanings, if we take into account differences in focus. Thus in (49a) the prominent stress falls on the durational, which receives a focus reading, whereas in (49b) the DP receives the focus reading.[16] In order to explain the order (49a) we must propose movement of the VP to some position to the left of the Spec of AspP (lex), the position where the aspectual specifier is generated. In Chomsky (1995) nothing prevents a phrase to have a Specifier and an Adjunct. According to Kayne (1994), though, this is not possible, because no head can have an adjunct if it already has a specifier.

If we adhere to Chomsky (1995), we can generate (49a) by adjunction of the VP to AspP (lex), i.e. above [Spec, AspP (lex)]. (49b) is generated as (48), where the VP stays in place. However, if we attempt to be consistent with Kayne's LCA, we have to discard adjunction of VP to AspP(lex), given that the Specifier position is already filled by the aspectual modifier. Therefore we must find a Specifier position where VP can move to.

The best position seems the Specifier of Asp (infl). This position is not used if the imperfective past has a habitual reading, given that the aspectual specifier "stays" close to the VP whose event it modifies. But recall that if the reading is progressive, when the verb raises to Asp (lex) and later to Asp (infl), the PP at the [Spec, AspP (lex)] raises to [Spec, AspP(infl)], where the features no longer match, causing the derivation to crash. The solution is to assume that movement of the VP to obtain the order in (49a) takes

[16]According to Cinque (1993) --the null theory of phrase stress--, in languages like Italian, the focus of the sentence is normally the most deeply embedded (surface) constituent. Assuming that the hypothesis is applicable to Catalan, (see Rigau 1995 for evidence concerning alternation in the order nominative DP - V), this means that in (47a) the most deeply embedded constituent is the aspectual adjunct, whereas in (47b), the object is the most deeply embedded constituent. The analyses proposed in this section seem to be compatible with Cinque's theory.

place as part of the computation only if the reading is habitual, i.e. if the aspectual adjunct does not raise to [Spec, AspP(infl)]. The representation is provided in (50).

(50)

```
AgrP
├── DP          Agr'
│   la cangur   ├── Agr
│          j    │   [3rdP]         TnsP
│               │   [sing]         ├── Tns'
│               │   explicava          ├── Tns              AspP(infl)
│               │        i             │   [+Past]          ├── VP          Asp' (infl)
│                                      │   [+plural]        │      k        ├── Asp (infl)      AspP (lex)
│                                      │   t                ├── DP    V'    │   [-bounded]      ├── PP              VP
│                                      │    i               │   t          │   t                │  durant mitja    ├── Asp' (lex)
│                                          j                │   V    DP         i                │       hora        ├── Asp (lex)     VP
│                                          ├── V  contes                                                            │   [-culminated]  t
│                                          │   t                                                                    │                    k
│                                          │    i                                                                   │   t
│                                                                                                                       i
```
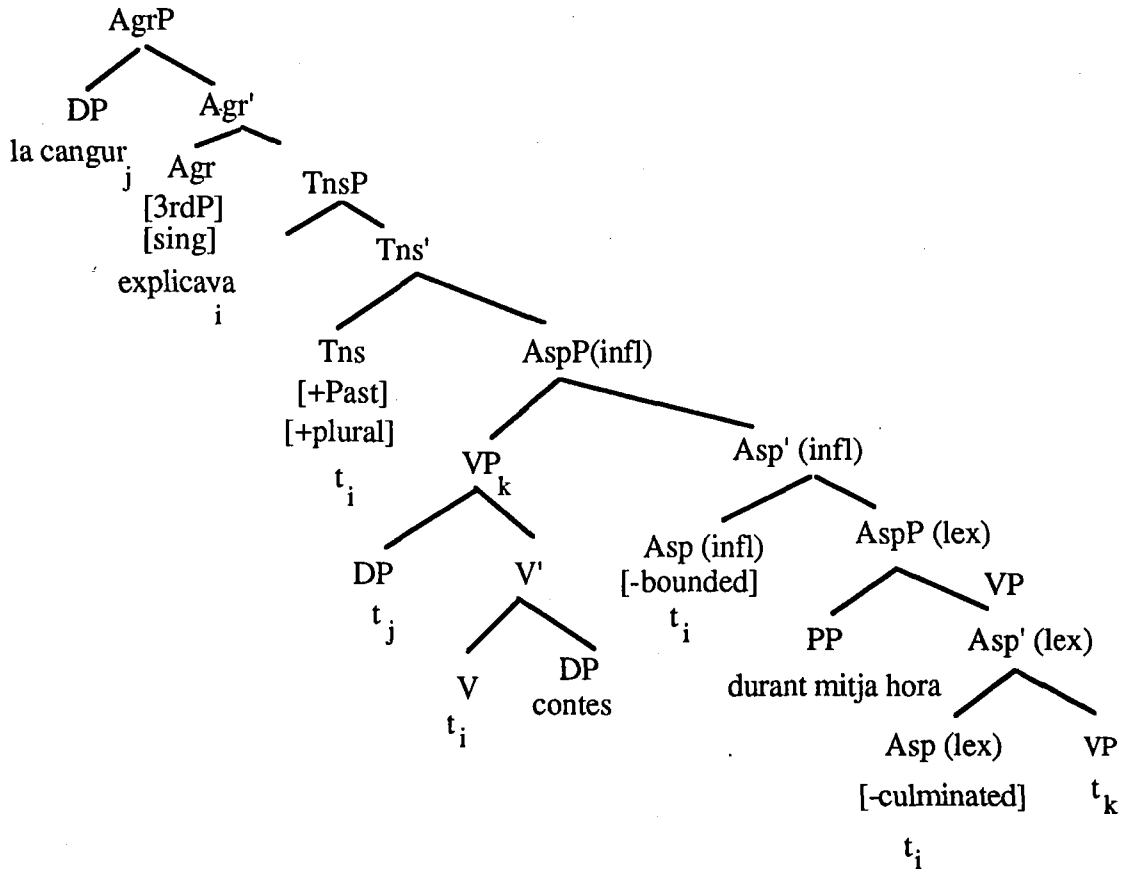
The verb form *explicava* raises to the head of AspP(lex), AspP(infl), TnsP, possibly (E-NumberP), and AgrP. The [Spec, VP] *la cangur* raises to the head of AgrP. The VP adjoins to Asp (infl). This allows the order V- DP - PP. An alternative account of this order is that VP moves to a projection which is not any of the ones proposed so far, but a functional projection generated between TnsP and Asp (infl)P. Development of this idea is left for further research.

7.6 Summary and conclusions

As we have shown in this dissertation, the core of progressive aspect is the existence of a relationship between a period of time and an event. In this chapter we have analysed the realisation of progressive aspect by the imperfective past morpheme. Given a predicate denoting an event (or, more precisely an event-type predicate), the imperfective morpheme indicates that the event is predicated of an indefinite period of time, i.e. it is [-bounded]. The progressive reading arises when there is existential closure on the event, i.e. when the Tense head or, alternatively, the E-Number head is specified as [-plural]. Whenever generic or universal quantification over events is introduced, either explicitly through an adverbial or 'activator', or implicitly, the relation introduced by the imperfective morpheme is habitual or generic, i.e. a period of time is characterised by numerous occurrences of tokens of the same event-type. Other values derived from the stativiser nature of the imperfective are several special temporal readings, and modal values such as politeness and the expression of conditions.

Syntactically we have followed previous proposals in arguing that the imperfective (as well as the perfective) morphemes have Tense and Aspect features, which have to be checked against the features of the head of two separate functional categories TnsP and AspP (infl). In addition, modal values of the imperfective morpheme may involve a Modal Phrase projection. This configuration has been proposed to account for the differences between the progressive reading and the habitual reading in the co-occurrence restrictions of durational and time span adjuncts. These adjuncts are temporal delimiters identified by the features [± culminated] and [+bounded]. Firstly, they must agree with the *aktionsart* of the predicate of the sentence. For instance, durationals occur with activities, and a time span expression occurs only with accomplishments. Secondly, they impose temporal limits to the period of time of which the state is predicated, thus they are [+ bounded]. When the inflected verb form checks its [-bounded] feature at the head of

the functional category projected by Asp (infl) --inflectional aspect--, the agreement relation between the head and its [+bounded] aspectual specifier ceases to hold.

The grammaticality of aspectual adjuncts with imperfective verb forms is linked to the existence of a plural number of events. Aspectual adjuncts then delimit the time of each of the events, rather than the period of time of which the habit is predicated. Something in the syntactic specifications of the sentence allows aspectual adjuncts to "stay" where they originated instead of moving up with the V head, and thus to avoid the violation of the Spec-Head relation which bans aspectual adjuncts from progressive sentences. I have proposed that plurality is a syntactic feature realised by the Tense head (or alternatively by an E-Number head). When the head of TenseP (or E-NumberP) is [+plural], it allows the aspectual specifiers to modify each event token. In contrast, the progressive interpretation is obtained for verbs which denote events if the Tense or E-number head is specified as [-plural]. This specification also forces the movement of the aspectual specifiers, given that there exists only one event related to the period of time.

In addition, I have included in this chapter some further reflections on the syntax of aspect which go beyond the specific topic of progressive structures. One of them is the possibility that the specification of the number of events is not a feature of the head of Tense, but rather of an independent Event-Number projection above Tense. Another suggestion concerns the existence of a functional projection Aspect (lex), at whose Specifier position the aspectual adjuncts would be licensed.

Appendix. Semantics of inflectional aspect

For his theory of tense and aspect Herweg (1991a,1991b) worked on data from English and presumably German. Since these languages have one simple past tense form, he proposed only one past tense operator, which applies equally to state and event predicates, and preserve the category of the predicates. For this reason, there is a variable ranging over predicate types in their definitions, cf. Herweg (1991a:397), reproduced below:

I. (past tense) λT λw (T(w) and Past (e*, t (w)))

T is a predicate variable for both event-type predicates and state predicates.

w is an individual variable ranging over events and periods of time.

If w stands for an event, t (w) is the time of occurrence of the event. If w stands for a state, t (w) is the period of time that the state w characterises.

Informally, the definition says that for any predicate type and any individual predicate of that type, the time of the individual predicate is anterior (to be determined deictically or contextually) with respect to the event of utterance e*.

In section 7.2 we have shown that the two simple past tense morphemes of Romance (imperfective and perfective) correspond to the past of states and the past of events, respectively. This does not imply that there are two past tense operators, simply that predicate type variable in Herweg's definition is overtly realised by different morphemes. The imperfective past tense operator applies to states in the widest sense: state predicates, habits (which are probably marked by their own habitual operator), and the in-progress state of an event. This operator is defined as follows:

II. (imperfective past tense) λS λt (S (t) and PAST (e*, t)))

Definition II says that for any state-type S and any time period t characterised by S, S (t) is in a PAST relation with respect to e* (the event of utterance).

The perfective past operator applies to events, using the term to include event predicates and also the phase-events. The instantiation for events is:

III.   (perfective past tense) λ E λ e (E(e) and PAST (e*, τ (e)))

Definition III says that, given an event e of type E, the time of the event τ (e) is in a PAST relation with the event of utterance e*.

The imperfective is thus an amalgam of past tense and statehood, i.e. lack of boundedness. Perfective is an amalgam of past tense and boundedness (eventhood in Herweg's sense: entities that can be individuated).

Chapter 8

Summary and Conclusions

In this dissertation, a study is made of structures that express progressive aspect in English and in Catalan in order to characterise the semantic, lexical, and structural factors that contribute to a progressive interpretation. Essentially, I have analysed three groups of progressive structures: a) progressive periphrases, b) structures that do not have the structure V1 + V2 but whose semantic head is a verb carrying the inflectional affix -ing in English and -nt in Catalan, and c) the Catalan (and generalising, Romance) imperfective past morpheme.

The starting point is the semantic study of the progressive periphrases, conducted in chapters 2 and 3. In both languages, the meaning contrasts in irrealis contexts between sentences whose predicates occur in a progressive periphrasis and those whose predicates bear simple inflectional morphology can be explained by the semantic properties of the progressive: viewing an event as in progress entails converting it into a state. An adequate representation of the meaning of a progressive sentence is one that explicitly contains a variable standing for a period of time. This conclusion is drawn not only after examining evidence from minimal contrasts between progressive and non-progressive markers, but also from the semantics literature in chapter 2. The definition we adopt is set within the (axiomatic) framework of Herweg (1991a,b), which attempts to synthesise event semantics and interval semantics in allowing as primitives not only events but also periods of time.

Although Herweg's framework has certain weak points (such as the fact that the progressive state of activities (processes) requires, for its representation, a counterintuitive assumption about the nature of a "canonical" activity), it is valuable in

that it gives us a basis to represent the distinction between two types of progressive perspective found in Catalan (and in other Romance languages). In chapter 3, these are defined as the homogeneous progressive, realised by *estar* + gerund, and the non-homogeneous or distributive progressive, realised by *anar* + gerund. The first item of each sequence plays an essential role; namely, its *aktionsart* as a lexical verb specifies the nature of the period of time of which the progressive state is predicated. *Estar* specifies that the period of time must be viewed as an indivisible, homogenous whole; *anar* specifies that the period of time is a sequence of periods of time, ordered by a precedence relation, allowing for gaps between different subperiods. The definitions proposed in chapter 3 illustrate a particular approach to the representation of aspectual values derived from notions that belong to the space dimension such as location and movement towards a goal. Speaking in terms of future research, I believe that the account of progressive aspect developed for the Catalan periphrases is worth extending to other Romance periphrases built with a gerund, in particular the Spanish *venir* and *andar* + gerund, whose first lexical item is also a location verb.

From the point of view of syntax, progressive verbs are thematically defective, i.e. they do not assign (canonical) theta roles to their arguments. This has been taken in previous works as a deciding argument against considering progressive auxiliaries heads of VP. The position taken in this dissertation disagrees with that approach. In chapter 6 I have discussed the parallels that exist between progressive verbs and light verbs (their complements denote the event expressed by the sentence). Given that thematic defectivity does not hinder the latter from functioning as heads of VPs, it is unclear that it should prevent progressive periphrases from functioning as VP projections.

The study of the semantic and lexical aspects of the progressive verbs, as well as their status in syntax is part of the compositional picture of the realisation of progressive

aspect that I set out to draw. Once the role of progressive verbs was established, I wanted to find out the contribution of the affix *-ing* / *-nt*.

In chapter 4 I studied V-*ing* / V-*nt* progressive structures (excluding progressive periphrases), in particular: prenominal V-*ing* participle-adjectives, V-*nt* participle-adjectives, V-*ing* postnominal adjuncts, "adverbial" adjuncts to CP, perception verbs with a V-*ing* complement or V-*nt* obligatory adjunct, V-*ing* complements of aspectual and attitude verbs. Except for the complement/obligatory adjuncts of perception verbs, V-*ing* / V-*nt* structures do not require the predicate to denote an event, in contrast with progressive periphrases. The aspectual interpretation of the structures enumerated above depends on the eventhood or statehood of the predicate, but the role of *-ing/-nt* is constant: they give temporal content to their V root, and as we were able to conclude, they mark the event or state expressesed by V as actual (instantiated, realised).

From the study conducted in chapter 4 we concluded that the affixes *-ing* / *-nt* realise a combination of (non-finite) tense, aspect, and to a certain extent, agreement. I gave the name Actuality to such combination of notions. In previous works, it has often been assumed that *-ing* in (most of) the structures listed above are markers of progressive aspect. In this dissertation evidence has been presented that they are aspect markers (though not progressive aspect), tense markers and --to a certain extent-- markers of agreement. Certainly, they realise aspect in the sense that what is marked as actual is the event or state itself, not the state that holds after the culmination of the event (if it has an inherent end point), or after the state ceases to hold. They fulfill in part the function of tense markers, given that the event or state expressed by the V to which they attach is understood as actual, instantiated at a given period of time. However, they are not deictic, i.e. they do not locate the event or state in the present, past or future time with respect to the speech time. Given that they lack capacity for true temporal reference, a V-*ing* or V-*nt* structure obtains temporal reference from a temporally specified element,

usually the finite tense marker of the matrix clause. Temporal reference may also be obtained from the previous discourse or deictically if the adjunct occurs within a definite DP.

Despite its lack of specific temporal reference, the affix -ing/-nt maintains the ability to realise predication relations, though in restricted ways. In particular, a V-ing form lexicalises the relation between the event or state denoted the root and one of its participants. In more functional terms, the V-ing word shares the V's subject with another predicate of the clause. To this extent, -ing/-nt are (defective) agreement markers. This is clearly seen in V-ing and V-nt adjuncts, both phrasal (i.e. adjective-participles) and clausal, and also in V-ing complements of perception verbs.

As a result of the study conducted in chapter 4, I have identified the conditions for a progressive interpretation of V-ing /V-nt structures. These are more complex than a simple mapping between -ing and a functional category [+ progressive], assumed in many of the previous works. For a progressive interpretation to arise, the structural relation established between -ing / -nt and the tense head of the matrix clause must be matched by a semantic relation of temporal coincidence. When one of the verb's complements is a V-ing structure whose V expresses an event, the simultaneity relation is part of the semantic (and structural) relation between head and complement. Simultaneity between head and complement is more lexical and structural than truly semantic in the progressive periphrases. In perception clauses, simultaneity is part of the semantic/lexical information of the matrix verb, since the perception state requires a perceived event. A slight variation is found in the case of adjuncts. There, the secondary predicate bearing the affix -ing/ -nt shares an argument with the main predicate, and this may result in an implicit simultaneity relation and allow a progressive interpretation of the adjunct.

As far as the syntax of progressive structures is concerned, the proposal presented in chapters 5 and 6 is that the amalgam of features that make up the notion actuality defines the head of a functional category that I call Actuality Phrase. In this dissertation the features that specify the head of Actuality Phrase (i.e. tense, aspect, and agreement) have been subsumed in the feature [±actuality] so as to maintain a global picture of the range of progressive structures. A natural continuation of this dissertation would have to determine their nature according to the Minimalist Program and their role in a derivation. In this respect, a possible starting point would be the suggestion (of chapters 5 and 6) that transmission of the temporal reference from the matrix tense to the V-*ing*/-*nt* structure happens when the tense-like feature of -*ing*/-*nt* is checked at the head Act.

A prediction of the existence of an affix realising the features that compose [+actuality] is the existence of markers of [-actuality]. I have suggested that the 'passive participle' affix both in Romance languages and in English realises the features that are subsumed in [-actuality]: tense (past with respect to a relevant non-deictic period of time), aspect (emphasis on state that holds after the culmination of an event), and agreement ("object" argument shared with another predicate). A question that arises immediately is whether the combination of feature values is specific of English and Romance or whether it is universal for all those languages that express Tense, Aspect and Agreement through affixes.

In contrast with previous accounts, I defend that progressive is not a syntactic feature, but a possible semantic interpretation of a more abstract set of features. In this way we account for those instances where -*ing* / -*nt* prompt progressive readings, and also for those in which they prompt actuality readings of state verbs, or generic readings of events. The analysis based on the functional category ActP, whose features are realised by the affixes -*ing* and -*nt*, is extended to other structures, such as postnominal V-*ing* adjuncts in English, complements of perception verbs also in English, -*nt* adjectives in

Catalan, and adjuncts to CP also in Catalan (the same analysis may be defended for English adjuncts to CP). This dissertation proves that the assumed mapping between -*ing* and a progressive functional category is not only inadequate to characterise the meaning of the affix in a wide range of structures, but also, and more importantly, that it is unnecessary to consider the progressive a primitive syntactic notion. This predicts that not all aspectual notions are realised by the grammar in the same way: some notions correspond to the interpretation of features that identify functional heads (e.g. actuality), whereas others are based on functional categories but have further semantic and lexical requirements (e.g. progressive). To this extent, this thesis shows that there is a need for a more fine-grained syntactic typology of aspect.

In chapter 7 that idea underlies the comprehensive analysis of the imperfective past morpheme as a marker not only of progressive aspect, but also of other notions related to the past of states. The novelty in my approach is that, following Herweg (1991a,b), a considerable amount of argumentative weight is carried by data concerning the co-occurrence restrictions of aspectual adjuncts. Such evidence has been crucial to reach deeper understanding of the nature of the distinct phenomena that we call Aspect, which in turn has been translated into a specific syntactic analysis.

Aspectual adjuncts (durationals and time span adjuncts) and their co-occurrence restrictions illustrate the complex interactions of various notions that we call Aspect. As I have argued in chapter 7, they have a twofold modifying function which is translated into the features [+bounded, ± culminated]. First of all, they are subject to restrictions by the predicate which they modify based on its *aktionsart*. Only situations without inherent endpoints allow durationals, and only accomplishments allow time-span adjuncts. But this is only one side of their modifying function. Even if they comply with the lexical restriction of the predicate, there are aspectual notions that reject expressions which set temporal limits, for instance, progressive aspect. This is translated into the feature

[+bounded]. In syntax terms, those are the features that define distinct functional projections: Aspect (lex) for [±culminated] and Aspect (infl) for [+bounded]. Further work should try to establish whether there exist different types of aspect features in terms of the Minimalist Program (interpretable vs. non-interpretable, weak vs. strong, etc.)

Another of the central topics discussed in chapter 7 was the affinity between plurality of events and lack of perfectivity, a topic that has long interested linguists. In this dissertation I provided evidence related to the co-occurrence of aspectual adjuncts. Descriptively speaking, they do not occur in a sentence marked for imperfective past with a progressive reading; in contrast, they occur when the sentence expresses a habit or a generic situation. The difference between the two readings lies in the number of events that occur in the relevant period of time. In order to accomodate this descriptive fact into the syntactic analysis, I have argued that plurality of events should be considered a syntactic constraint, in particular, one associated with the tense marker. As an alternative, I have suggested that the number of events could be conceived of as specifying its own functional head, the head of an E-Number projection. Elaboration of this idea has been left for further research.

We can conclude this work by saying that the study of progressive structures has taken us a step further in the understanding of the richness and complexity of the domain of aspect. The results of the study have materisalised in specific proposals for the treatment of various aspectual phenomena in the Principles and Parameters framework.

References

Abney, S. (1987) *The English Noun Phrase in its Sentential Aspect* , PhD dissertation, MIT.

Abusch, D. (1986) 'Verbs of Change, Causation and Time', CSLI Report, Stanford University.

Badia i Margarit, A.M. (1962) *Gramática Catalana*, Gredos, Madrid.

Badia i Margarit, A.M. (1994) *Gramàtica de la llengua catalana*, Enciclopèdia Catalana, Barcelona.

Baker, M. (1988) *Incorporation,* University of Chicago Press, Chicago.

Ballweg, J. (1981) 'Simple Present Tense and Progressive Periphrases in German' in H.J. Eikmeyer and H.Reiser (eds) *Words, Worlds, and Contexts*, Walter de Gruyter, Berlin.

Barwise, J. and J. Perry (1983) *Situations and Attitudes*, MIT, Cambridge.

Binnick, R. (1991) *Time and the Verb*, Oxford University Press, New York.

Bolinger, D. (1968) 'Entailment and the Meaning of Structures', *Glossa* 2, 119-127.

Bosque, I. (1990) 'Sobre el aspecto en los adjetivos y en los participios' in I.Bosque (ed) *Tiempo y Aspecto en Español*, Madrid, Ediciones Cátedra.

Brinton, L.J.(1988) *The development of English aspectual systems,* Cambridge University Press, Cambridge.

Brinton, L. J. (1991) 'The Mass/Count distinction and *aktionsart.* The grammar of iteratives and habituals' in Vetters, C. and W. Vanderweghe (eds) *Perspectives on Aspect and Aktionsart, Belgian Journal of Linguistics* 6.

Cabré, M.T. i G. Rigau (1986) *Lexicologia i Semàntica*, Enciclopèdia Catalana, Barcelona

Carlson, G.N. (1977) 'A Unified Analysis of the English Bare Plural', *Linguistics and Philosophy*, 3, 49-98.

Celce-Murcia and Larsen-Freeman (1983) *The Grammar Book. An ESL/EFL Teacher's course*, Newbury House Publishers, Rowley.

Cinque, G. (1993) 'A null theory of phrase and compound stress', *Linguistic Inquiry* 24, 239-297.

Cinque, G. (1995) 'Adverbs and the Universal Hierarchy of Functional Projections', Glow handout.

Chierchia, G. (1984) *Topics in the syntax and semantics of Infinitives and Gerunds*, PhD dissertation, University of Massachusetts.

Chomsky, N. (1981) *Lectures on Government and Binding*, Foris, Dordrecht.

Chomsky, N. (1986) *Barriers*, The MIT Press, Cambridge.

Chomsky, N. and H. Lasnik (1993) 'The theory of principles and parameters' in J. Jacobs, A.von Stechow, W. Sternefeld, and T. Vennemann (eds), *Syntax: An international handbook of contemporary research*, de Gruyter, Berlin.

Chomsky, N. (1995) *The Minimalist Program*, The MIT Press, Cambridge.

Comrie, B. (1976) *Aspect* , Cambridge University Press, Cambridge.

Comrie, B. (1985) *Tense*, Cambridge University Press, Cambridge.

Cowper, E. A. (1992) 'Inner Tense and the Realization of Aspect', *McGill Working Papers in Linguistics* 7, 105-112.

Curell, H. (1990) *The present perfect in English and in Catalan. Uses and Meanings*, Unpublished PhD dissertation, Universitat Autònoma de Barcelona.

Curme, G.O. (1931) *Syntax*. Vol II of *A Grammar of the English Language*, D.C. Heath, Boston.

Davidson, D. (1967) 'The Logical Form of Action Sentences', reprinted in D. Davidson (1980) *Essays on Actions and Events*, Clarendon Press, Oxford.

DeCaesaris, J.A. (1988) *Regular Verb Inflection in Catalan*, Unpublished PhD dissertation, Indiana University, Bloomington.

Diesing, M. (1992) *Indefinites*, The MIT Press, Cambridge.

Dietrich, W. (1983) *El aspecto Verbal Perifrástico en las Lenguas Románicas*, Editorial
Gredos, Madrid.

Dowty, D. (1972) 'Temporally Restrictive Adjectives', in Syntax and Semantics I.

Dowty, D. (1977) 'Toward a semantic analysis of verb aspect and the English
"imperfective progressive" ', *Linguistics and Philosophy* 1, 45-77.

Dowty, D. et al. (1979) *Word Meaning and Montague Grammar*, D. Reidel, Dordrecht.

Enç, M. (1987) 'Anchoring Conditions for Tense', *Linguistic Inquiry* 18, 633-657.

Espinal, M. T. (1983) *Els verbs auxiliars en català*, Servei de Publicacions de la
Universitat Autònoma de Barcelona, Bellaterra.

Espinal, M.T. (1991) 'The representation of disjunct constituents', *Language* 67, 726-
762.

Espinal, M.T (1993) 'Two Squibs on Modality and Negation', *Catalan Working Papers
in Linguistics*, 3.1, 113-138.

Espunya, A. (1994) '(In)Definiteness in the Temporal Domain: The English Past
Progressive', Proceedings of the 17th. Congreso AEDEAN (in press).

Fabb, N. (1983) 'Three Squibs on Auxiliaries', MIT Working Papers in Linguistics, vol
5, Cambridge.

Fabb, N. (1984) *Syntactic Affixation*, PhD dissertation, MIT.

Fabra, P. (1956) *Gramàtica Catalana*, Teide, Barcelona.

Freed, A. F. (1979) *The Semantics of English Aspectual Complementation*, Reidel,
Dordrecht.

Fukui, N. and M. Speas (1988) 'Specifiers and projection', in Fukui, N. T. Rapoport
and E.Sagley (eds) MIT Working Papers in Linguistics 8.

Gabbay, J. and J. Moravcsik (1980) 'Verbs, events, and the flow of time', in C. Rohrer
(ed) *Time, Tense and Quantifiers*, Max Niemeyer, Tübingen.

Gili y Gaya, S. (1961) *Curso Superior de Sintaxis Española* (9th. ed.) Bibliograph,
Barcelona.

Giorgi, A. and F. Pianesi (1991) 'Toward a Syntax of Temporal Representations',
Probus 3, 187-213.

Gómez-Torrego (1988) *Perífrasis verbales*, Arco, Madrid.

Guéron, J. and T. Hoekstra (1988) 'T-chains and the constituent structure of auxiliaries'
in A. Cardinaletti, G. Cinque and G. Giusti (eds) *Constituent Structure (Papers from the 1987 GLOW Conference)* Foris, Dordrecht, 35-99.

Gràcia, Ll. (1989) *La teoria temàtica*, Servei de Publicacions de la Universitat Autònoma de Barcelona, Bellaterra.

Grimshaw, J. and A. Mester, A (1988) 'Light verbs and θ-marking', *Linguistic Inquiry* 19, 169-180.

Grimshaw, J. (1990) *Argument Structure*, The MIT Press, Cambridge.

Hernanz, M. Ll., and G. Rigau (1984) 'Auxiliaritat i reestructuració', *Els Marges* 31, 29-51.

Hernanz, M. Ll. (1990) 'En torno a los sujetos arbitrarios: la 2ª persona del singular' in V. Demonte and B. Garza Cuarón (eds) *Estudios de Lingüística de España y México*, El Colegio de México-UNAM, México, 151-178.

Hernanz, Ma. Ll. (1991) 'Spanish Absolute Constructions and Aspect', *Catalan Working Papers in Linguistics*, 129-148.

Herweg, M. (1991a) 'A critical examination of Two Classical Approaches to Aspect', *Journal of Semantics* 8, 363-402.

Herweg, M. (1991b) 'Perfective and imperfective aspect and the theory of events and states', *Linguistics* 29, 969-1010.

Heim, I. (1982) *The semantics of definite and indefinite noun phrases*, PhD Dissertation, University of Massachusetts at Amherst.

Higginbotham (1994) 'The semantics and syntax of event reference', lecture notes of the 6th European Summer School in Logic, Language and Information, Copenhagen.

Hoepelman, J. and C.Rohrer (1980) 'On the mass-count distinction and the French imparfait and passé simple' in C. Rohrer (ed) *Time, Tense andQuantifiers* , Max Niemeyer, Tübingen.

Hornstein, N. (1977), 'Towards a Theory of Tense', *Linguistic Inquiry* 8, 521-577.

Hornstein, N. (1981) 'The Study of Meaning in Natural Language: Three Approaches to Tense' in N. Hornstein and D. Lightfoot (eds) *Explanation in Linguistics*, Longman, London.

Hornstein, N. (1990) *As Time Goes By* , The MIT Press, Cambridge.

Jackendoff, R. (1987) 'The Status of Thematic Relations in Linguistic Theory', *Linguistic Inquiry* 18, 369-411.

Jackendoff, R. (1990) *Semantic Structures*, The MIT Press, Cambridge.

Jackendoff, R. (1991) 'Parts and Boundaries', *Cognition* 41, 9-45.

Jespersen, O. (1931) *A Modern English Grammar on Historical Principles. Part IV. Syntax (Third Volume)*, John Dickens and Co., Northampton.

Johnson, M. (1981) 'A Unified Temporal Theory of Tense and Aspect' in P. Tedeschi and A. Zaenen.

Kamp, H. and C. Rohrer (1983) 'Tense in texts' in Bäuerle, Schwarze and von Stechow (eds) *Meaning, use and interpretation* , DeGruyter, Berlin.

Kayne, R. (1994) *The Antisymmetry of Syntax*, The MIT Press, Cambridge.

Kearns (1988) 'Light verbs in English', General's paper, MIT, Cambridge.

Kenny, A. (1963) *Action, emotion, and will*, Routledge and Kegan Paul, London.

Kortmann, B. (1991) *Free Adjuncts and Absolutes in English*, Routledge, London and New York.

Kratzer, A. (1989) 'Stage-Level and Individual-Level Predicates', Ms. University of Massachusetts at Amherst.

Ladusaw, W. (1992) 'Expressing Negation' in D. Dowty and C. Barker (eds) *Proceedings of the Second Conference on Semantics and Linguistic Theory*, The Ohio State University, Columbus.

Laka, I. (1990) *Negation in Syntax: On the Nature of Functional Categories and Projections*, PhD dissertation, MIT.

Landman, F. (1992) 'The Progressive', *Natural Language Semantics* 1, 1-32.

Langacker, R. (1982) 'Remarks on English Aspect', in P. Hopper (ed.) *Tense-Aspect: Between Semantics and Pragmatics*, Amsterdam, John Benjamins Publishing Company.

Langacker (1986) *Foundations of Cognitive Grammar*, vol 1, Stanford University Press, Stanford.

Leech, G.N. (1971) *Meaning and the English Verb*, Longman, Singapore.

Lema, J. (1991) *Tiempo y Aspecto, Correlatos Sintácticos y Semánticos*, Ms. Universidad Autónoma Metropolitana Iztapalapa, Mexico.

Lewis, D. (1975) 'Adverbs of Quantification' in E. Keenan (ed) *Formal Semantics of Natural Languages*, Cambridge University Press, Cambridge.

Llinàs, M. (1990) *Verbal Sequences: A Generative Approach*, Unpublished PhD dissertation, Universitat Autònoma de Barcelona.

Llinàs, M. (1993) 'An incorporation analysis revisited', *Catalan Working Papers in Linguistics* 3.1, 139-152.

Luján, M. (1981) 'The Spanish Copulas as Aspectual Indicators' *Lingua* 54, 165-210.

Lyons, J. (1977) *Semantics*, Vol 2, Cambridge, Cambridge University Press.

Marantz, A. (1994) 'A Reader's Guide to "A Minimalist Program for Linguistic Theory" (Chomsky 1993)' in G. Webelhuth, *The Principles and Parameters Approach to Syntactic Theory*, Basil Blackwell.

Martínez Laínez, A.M. and A. de la Torre (1989) 'El mode d'acció verbal com a categoria oracional: factors que intervenen en la seua configuració' in *Actes del vuitè col.loqui internacional de llengua i cultura catalanes*, Abadia de Montserrat.

Mascaró, J. (1983) *La fonologia catalana i el cicle fonològic* , Publicacions del

Departament de Filologia Hispànica, Universitat Autònoma de Barcelona,

Bellaterra.

Mascaró, J. (1985) *Morfologia*, Enciclopèdia Catalana, Barcelona.

McCawley, J. (1971) 'Tense and Time Reference in English', in C. Fillmore and D.T.

Langendoen (eds) *Studies in Linguistic Semantics* , Holt, Rinehart and Winston,

New York.

Miguel, E. de (1992) *El Aspecto verbal en una Gramática Generativa del Español.*

Universidad Autónoma de Madrid, Madrid.

Milsark, G.L.(1988) 'Singl-*ing*', *Linguistic Inquiry* 19, 611-634.

Mittwoch, A. (1988) 'Aspects of English Aspect: on the interaction of perfect,

progressive and durational phrases', *Linguistics and philosophy* 11, 203-254.

Moens, M. and M. Steedman (1988) 'Temporal Ontology and Temporal Reference',

Computational Linguistics 14, 15-28.

Moreno Cabrera, J.C. (1987) 'Lógica Temporal, Semántica de Intervalos y análisis

lingüístico del tiempo y aspecto verbales', Actes del II Congrés de Llenguatges

Naturals i Llenguatges Formals, Universitat de Barcelona, Barcelona.

Moreno Cabrera, J.C. (1991) *Curso Universitario de Lingüística General*, vol I,

Síntesis, Madrid.

Mourelatos, A. (1981) 'Events, processes, and states', *Linguistics and Philosophy* 2,

415-434.

Mufwene, S. S. (1984) *Stativity and the Progressive,* Indiana University Linguistics

Club, Bloomington.

Mulder, R. (1992) *The Aspectual Nature of Syntactic Complementation* , Holland

Institute of Linguistics Dissertations.

Ouhalla, J. (1991) *Functional Categories and Parametric Variation* , Routledge, London.

Quirk, R. et al. (1985) *A Comprehensive Grammar of the English Language*, Longman,

New York.

Palmer (1986) *Mood and Modality*, Cambridge University Press, Cambridge.

Par, A. (1923) *Sintaxi Catalana, segons los escrits en prosa de Bernat Metge*, Max
Niemeyer, Halle.

Parsons, T. (1990) *Events in the Semantics of English*. The MIT Press, Cambridge.

Partee, B. (1973) 'Some Structural Analogies between Tenses and Pronouns in
English', *Journal of Philosophy* 70, 601-609.

Partee, B. (1984) 'Nominal and Temporal Anaphora', *Linguistics and Philosophy* 7,
287-324.

Pérez-Saldanya, M. (1991) 'Imperfects are Pronominals', *Catalan Working Papers in
Linguistics* , 201-210.

Pérez-Saldanya, M. and M.J. Cuenca (1994) Tense and Aspect in Non-Finite Clauses',
Catalan Working Papers in Linguistics 4.1, 121-141.

Picallo, C. (1990) 'Modal Verbs in Catalan', *Natural Language and Linguistic Theory*
8, 285-312.

Picallo, C. (1991) 'Nominals and Nominalizations in Catalan', *Probus* 3.3, 279-316.

Platzack, Ch. (1979) *The Semantic Interpretation of Aspect and Aktionsart. A study of
internal time reference in Swedish*, Foris Publications, Dordrecht.

Pollock, J.-Y. (1989). 'Verb movement, UG and the Structure of the IP', *Linguistic
Inquiry* 20, 365-424.

Pollock, J.-Y. (1993) 'Notes on Clause Structure', Ms. Université de Picardie, Amiens.

Portner, P. (1992) *Situation Theory and the Semantics of Propositional Expressions*,
PhD dissertation, University of Massachusetts at Amherst.

Portner, P. (1993?) 'The Semantics of Complementizers', *NELS 23 Proceedings of the
North East Linguistic Society*, vol. 2, University of Ottawa, 399-413.

Radford, A. (1988) *Transformational Grammar*, Cambridge University Press
Cambridge.

Reichenbach, H. (1947) *Elements of symbolic logic*, University of California Press.

Reuland, E. (1983) 'Governing -*ing*', *Linguistic Inquiry* 14, 101-136.

Rigau, G. (1995) 'The properties of the temporal infinitive constructions in Catalan and Spanish', *Probus* 7, 279-301.

Rigau, G. (1995) '*Ésser/Haver* alternation in Catalan locative sentences'. Ms, Universitat Autònoma de Barcelona.

Roca i Pons, J. (1961) '*Estar* + gerundi en català antic', Estudis Romànics, Institut d'Estudis Catalans, Barcelona.

Rojo, G. (1990) 'Relaciones entre temporalidad y aspecto en el verbo español' in I.Bosque (ed), *Tiempo y Aspecto en Español* , Cátedra, Madrid.

Sanfilippo, A. (1991) 'Thematic and Aspectual Information in Verb Semantics' in C. Vetters and W.Vanderweghe, *Perspectives on Aspect and Aktionsart (Belgian Journal of Linguistics, 6, 1991)*. Editions de l'Université de Bruxelles, Brussels.

Scheffer, J. (1975)*The Progressive in English*, North-Holland Publishing Company, Amsterdam and Oxford.

Schubert, L. and F.J. Pelletier (1989) 'Generically Speaking or, Using discourse representation theory to interpret generics' in G. Chierchia, B. Partee and R. Turner (eds) *Properties, Types and Meaning*, II.

Sells, P. (1985) *Lectures on Contemporary Syntactic Theories*, CSLI Lecture Notes, 3, Stanford.

Sells, P. (1987) 'Aspects of logophoricity', *Linguistic Inquiry* 18, 445-479.

Smith, C. (1981) 'Semantic and Syntactic Constraints on Temporal Interpretation' in P. Tedeschi and A. Zaenen (1981).

Smith, C. (1991) *The Parameter of Aspect*, Reidel, Dordrecht

Squartini, M. (1993) 'The Aspectual Value of the Spanish Perfective Progressive Forms', *Pisa WPL* .

Squartini, M. (1995) *On the grammaticalization path of some Romance verbal periphrases*, Unpublished PhD dissertation, Scuola Normale Superiore, Pisa.

Stowell, T. (1982) 'The Tense of Infinitives', Linguistic Inquiry 13, 561-570.

Swan, M. (1980) *Practical English Usage*, Oxford University Press, Oxford.

de Swart, H. (1991) *Adverbs of Quantification: a Generalized Quantifier Approach*, Groningen Dissertations in Linguistics, Groningen.

Talmy, L. (1986) 'The Relation of Grammar to Cognition', Cognitive Science Program, University of California at Berkeley.

Tedeschi, P. and A. Zaenen, eds. (1981)*Syntax and Semantics, vol. 14, Tense and Aspect*, Academic Press, New York.

Tenny, C.L. (1987) *Grammaticalizing Aspect and Affectedness*, PhD Dissertation, MIT.

Thomason, R. H., ed. (1974) *Formal Philosophy: Selected Papers of Richard Montague*, Yale University Press New Haven.

Vendler, Z. (1967) *Verbs and Times*, Cornell University, Ithaca.

Vergnaud, J.-R. (1984) *French Relative Clauses*, PhD Dissertation, MIT.

Verkuyl, H.J. (1972) *On the compositional nature of the aspects*, D. Reidel, Dordrecht.

Verkuyl, H. J. (1989) 'Aspectual classes and aspectual composition', *Linguistics and Philosophy* 12, 39-94.

Vlach, F. (1981) 'The semantics of the progressive' in P. Tedeschi and A. Zaenen (eds).

Webber, B.L. (1988) 'Tense as Discourse Anaphor', *Computational Linguistics* 14, 61-73.

Williams, E. (1971) 'Small Caluses in English', ms, MIT.

Williams, E. (1980) 'Predication', *Linguistic Inquiry* 11, 203-238.

Williams, E. (1994) *Thematic Structure in Syntax*, The MIT Press, Cambridge.

Zagona, K. (1988) *Verb Phrase Syntax. A Parametric Study of English and Spanish*. Kluwer Academic Publishers, Dordrecht.

Zagona, K. (1992) 'Times as Temporal Argument Structure', Ms., University of Washington.

Zegarac, V. (1989) 'Relevance theory and the meaning of the English Progressive' *UCL Working Papers in Linguistics* 1, 19-32.

Zegarac, V. (1990) 'Pragmatics and verbal aspect', *UCL Working Papers in Linguistics* 2, 113-143.