

# The Role of the Quantifier *tot* in Some Catalan Temporal Phrases\*

Gemma Rigau

Universitat Autònoma de Barcelona. Departament de Filologia Catalana  
08193 Bellaterra (Barcelona). Spain  
gemma.rigau@uab.es

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## Abstract

This article analyzes two kinds of Catalan temporal adjuncts headed by the quantifier *tot* 'all': the intensive *tot XP* ('all XP') and the extensive *tot XP que* ('all XP that'), and offers an explanation for their different behavior. The selection restrictions imposed by the quantifier *tot* in temporal adjuncts and the restrictions on aspectual properties of the sentence predicate will be considered. Furthermore, the complementizer *que* 'that' in the constructions headed by *tot XP que* is analyzed as an aspectual-temporal marker that forces the situation expressed by the predicate to be interpreted as hodiernal (i.e. present tense or present perfect). Finally, it will be shown that temporal adjuncts provide an excellent opportunity to study the properties of the left periphery categories and the split of the complementizer layer proposed by Rizzi (1997).

**Key words:** temporal adjuncts, degree quantifier, left periphery, Catalan.

## Resum. *El quantificador tot en algunes oracions temporals del català*

En aquest article s'analitzen dos tipus d'adjunts temporals del català: *a*) l'adjunt introduït pel quantificador *tot* seguit d'una expressió temporal i *b*) l'adjunt format pel quantificador *tot*, una expressió temporal i la conjunció *que*. El quantificador del primer tipus d'adjunt té un valor intensiu, mentre que el del segon pren un valor extensiu o duratiu. S'estudien també les restriccions que la presència d'aquests adjunts imposa al mode d'acció (o 'Aktionsart') expressat pel predicat oracional. D'altra banda, la conjunció *que* d'aquestes construccions és analitzada com un marcador temporal-aspectual que determina les propietats de temps i aspecte de l'oració. Finalment, aquest treball planteja la conveniència de considerar la proposta de Rizzi (1997) sobre la complexitat de les posicions sintàctiques perifèriques que encapçalen l'oració.

**Paraules clau:** adjunts temporals, quantificador de grau, perifèria esquerra, català.

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## 1. Introduction

Some Catalan temporal adjuncts are headed by the quantifier *tot/tota/tots/totes* ('all'), as shown in (1).

- (1) a. Tot aquest estiu ha plogut.  
 all this summer has.3sg rained  
 'It has rained all summer.'
- b. Tot aquest estiu que ha plogut.  
 all this summer that has.3sg rained  
 'It has rained all summer.'

The difference between (1a) and (1b) is in the presence of the complementizer *que* 'that', in (1b). Although the contribution of *que* appears minimal in (1), in some cases its presence can be necessary, as shown in (2), where the negative element *no* 'not' is present.

- (2) a. \*Tot aquest estiu no ha plogut.  
 all this summer not has.3sg rained
- b. Tot aquest estiu que no ha plogut.  
 all this summer that not has.3sg rained  
 'It hasn't rained all summer.'

Moreover, (1a) can be paraphrased by (3a), where the temporal adjunct is below the VP node, just as other circumstantial phrases of place, time or manner (see Cinque 1999:1.6), whereas a sequence such as (3b) would be ungrammatical.

- (3) a. Ha plogut tot aquest estiu.  
 has.3sg rained all this summer  
 'It has rained all summer.'
- b. \*Que ha plogut tot aquest estiu.  
 that has.3sg rained all this summer

At first glance, the presence of the conjunction *que* ('that') in (1b) might appear to be related to the presence of this complementizer in other Romance constructions such as those in (4).

- (4) a. Ben bo que és! (Catalan)  
 very good that is.3sg
- b. ¡Sabrosita que estaba! (Spanish, Kany (1976: 459))  
 delightful/tasty that was.3sg  
 'It was delicious indeed!'

By preceding *que* ('that'), the constituent in (4) is given a focused meaning. Its natural position is postverbal, as shown in (5), where the exclamative interpretation disappears and the complementizer is not needed.<sup>1</sup>

- (5) a. És ben bo  
 is.3sg very good  
 'It is very good.'
- b. Estaba sabrosita.  
 was.3sg delicious  
 'It was delicious.'

However, no exclamative meaning is present in (1b), although in other contexts the quantifier *tot...que* ('all...that') can appear in exclamative sentences in Catalan, as shown in (6).

- (6) a. (I) tot un dia que es va quedar a casa meva!  
 (and) all one day that himself stayed.3sg at house mine  
 'He spent the entire day at my house!'
- b. (I) tot el poema que pensa recitar-nos!  
 (and) all the poem that intends.3sg to-recite-us  
 'He is certainly planning to recite a long poem to us!'

In spite of their apparent similarity, (1b) and (6a) are different. Only the sentence in (6a) receives an exclamative intonation and its initial phrase *tot XP* receives an emphatic interpretation.

The aim of this paper is to analyze the Catalan temporal adjuncts headed by the quantifier *tot/tota/tots/totes* ('all') exemplified in (1), and to offer an explanation for their different behavior. In section 2.1, the selection restrictions imposed by the quantifier *tot* in temporal adjuncts and the restrictions on aspectual properties of the sentence predicate will be described. In subsection 2.2 and 2.3, a distinction will be made between two kinds of *tot* quantifiers in Catalan temporal adjuncts: intensive *tot* and extensive *tot...que*, these two kinds of quantifiers being also visible in adjective phrases quantified by *tot*. In subsection 3, it will be shown that temporal adjuncts provide an excellent opportunity to study the properties of the left periphery categories and the split of the complementizer layer proposed by

1. On the role of the quantifier *ben/bien* ('very, completely'), see Hernanz (1999).

Rizzi (1997, 1999). Other cases of Catalan temporal adjuncts that coappear with the complementizer *que* ('that') will also be briefly considered.

## 2. *Tot XP vs. Tot XP que*

Firstly we will deal with some properties shared by both constructions in (1), such as the selection restrictions of the quantifier *tot* and the aspectual properties that have to show the predicates in those sentences. In 2.2 and 2.3 we will describe the more important behavior divergencies between the constructions in (1).

### 2.1

The quantifier in (1) selects an XP that denotes a period of time. This XP may be a deictic adverbial phrase (*tot avui* ('all today'), *tot ahir* ('all yesterday')), a deictic DP (*tota la setmana* (lit. all the week, eng. 'all (this) week'), *totes aquestes darreres setmanes* (lit. all these last weeks, eng. 'all these last few weeks'), *tot el mes passat* (lit. all the month past, eng. 'all last month'), etc.), a definite description (*tota la setmana que vaig ser allà* ('all the week I was there'), or a day of the week, a year, a month, a semester, an academic year, etc. (*tot dilluns* ('all (of) Monday'), *tot el maig* ('all of May'), *tot el 1999* ('all of 1999'), *tot aquest curs* ('all of this school year')).<sup>2</sup> However, neither an indefinite NP expressing a temporal measure—such as *tot un dia* (lit. all one day, eng. 'one whole day') or *tot de dies* (lit. all of days, eng. 'many days')—is not licensed in the constructions in (1), nor a temporal DP or an adverbial phrase whose meaning is punctual, nor a durative temporal phrase is licensed in these constructions.<sup>3</sup> See (7).

- (7) a. \*Tot un dia ha plogut.  
all one day has.3sg rained
- b. \*Tot un dia que ha plogut.  
all one day that has.3sg rained
- c. \*Tot ara que plou.  
all now that rains.3sg
- d. \*Tot ara ha plogut.  
all now has.3sg rained
- e. \*Tot durant el mes de gener va ploure.  
all during the month of January rained.3sg

2. In contrast to *tots aquests dies* ('all these days'), *tots els dies* ('all-the-days') is not available in constructions like (1). When accepted by speakers, it has the distributive meaning of *cada dia* ('every day').

3. According to Vlach (1981) and Pérez Saldanya (1994), there are three kinds of temporal phrases: situational temporal phrases (*demà* ('tomorrow'), *aquest mes* ('this month')), punctual temporal phrases (*a les tres* ('at three o'clock'), *ara* ('now')), and durative temporal phrases (*durant tres dies* ('for three days'), *de sis a set* ('from six to seven')).

The quantifier *tot* can be modified by a quantifier like *quasi* ('almost'), *gairebé* ('almost') or *menys* ('unless'), as shown in (8).

- (8) a. *Quasi tot avui que plou.*  
 almost all today that rains.3sg  
 'It has rained almost all day.'
- b. *Va ploure gairebé tot dilluns.*  
 rained.3sg almost all Monday  
 'On Monday it rained almost all day.'
- c. *Tot aquests darrers dies menys avui que ha plogut.*  
 all these last days less today that has.3sg rained  
 'It has rained all these last few days except today.'

The presence of a temporal adjunct headed by the quantifier *tot (...que)* 'all (that)' in a sentence depends on the aspectual properties of the predicate. As shown in (9), the temporal adjunct *tot avui* ('all today') is licensed in (9a) and (9b), where the predicate *plorar* ('to cry') expresses an atelic (or undelimited) situation, but not in (9c) and (9d), because of the telic (or delimited) interpretation of the predicate *néixer* ('to be born').

- (9) a. *Tot avui ha plorat. / Ha plorat tot avui.*  
 all today has.3sg cried / has.3sg cried all today  
 'He's being crying all day.'
- b. *Tot avui que ha plorat.*  
 all today that has.3sg cried  
 'He's been crying all day'
- c. *\*Tot avui neix.*  
 all today is.3sg- born
- d. *\*Tot avui que neix.*  
 all today that is.3sg- born

Nevertheless, a telic non-processive predicate can license the temporal adjunct such as *tot avui* 'all today' if the iterative reading is available, as shown in (10).

- (10) a. *Tot avui que neixen pollets. / \*Tot avui que neixen*  
 all today that are-born.3pl chicks / all today that are-born.3pl  
 els pollets.  
 the chicks  
 'Chicks have been being born all day.'
- b. *Tot avui arriben cartes. / \*Tot avui arriben aquestes cartes.*  
 all today arrive.3pl letters / all today arrive.3pl these letters  
 'Letters have been arriving all day.'

- c. Tot avui que has tossit.  
all today that have.2sg coughed  
'You have been coughing all day.'
- d. Tot avui has tossit. / Has tossit tot avui.  
all today have.2sg coughed / have.2sg coughed all today  
'You've been coughing all day.'

Predicates expressing an accomplishment, that is, a telic and processive situation, cannot coappear with the quantifier *tot (que)* ('all (that)'). Compare (11a), whose predicate is a realization, with (11b), where the predicate is an activity, which is an atelic and processive situation.<sup>4</sup>

- (11) a. \*Tota la tarda que condueixo cent quilòmetres.  
all the afternoon that drive.1sg one-hundred kilometers
- b. Tota la tarda que condueixo per autopista.  
all the afternoon that drive.1sg by highway  
'I've been driving on the highway all afternoon.'

Moreover, a stage-level predicate can license a temporal adjunct headed by *tot (que)*, whereas an individual-level predicate cannot.<sup>5</sup>

- (12) a. Tota aquesta tarda que tinc febre.  
all this afternoon that have.1sg fever  
'I have had a fever all afternoon.'
- b. Tot ahir vaig estar content.  
all yesterday was.1sg happy  
'I was happy all day yesterday.'
- c. \*Tot aquest matí que he sabut la notícia.  
all this morning that have.1sg known the news
- d. \*Vas ser intel·ligent tot el maig.  
Were.2sg intelligent all the May

The data in (9)-(12) show that the presence of the quantifier *tot/tota (que)* ('all (that)') heading a temporal adjunct turns the expression into a degree phrase that multiplies the situation expressed by the predicate. Note that the ungrammaticality of the sequences in (10a) and (12c) disappears when the quantifier *tot (que)* is not present.

4. On the aspectual properties of predicates, see Vendler (1967). On telic and atelic meaning, see Comrie (1976: §2.2).

5. According to Carlson (1977), an individual-level predicate is a predicate that expresses an inherent property, whereas a stage-level predicate expresses a contingent property.

- (13) a. Avui neixen els pollets  
 today are-born.3pl the little-chickens  
 'The chicks are being born today'
- b. Aquest matí he sabut la notícia  
 this morning have.1sg known the news  
 'I heard the news this morning.'

In spite of the similarities described in this subsection, the degree character of the quantified phrases *tot XP* and *tot XP que* is semantically different, and consequently their syntactic behavior is not the same, as shown in the next subsection.

## 2.2.

In (14) *tot* ('all') is a degree quantifier modifying a temporal expression. However, whereas in (14a) the quantifier has an intensive meaning, in (14b) its meaning is extensive.

- (14) a. Tota aquesta setmana ha nevat a muntanya.  
 all this week has.3sg snowed at mountain  
 'It has snowed in the mountains all week.'
- b. Tota aquesta setmana que ha nevat a muntanya.  
 all this week that has.3sg snowed at mountain  
 'It's been snowing in the mountains all week.'

In (14a) *tot* indicates that the situation expressed by the predicate has taken place every subdivision of this week. Here the meaning of the quantifier *tot* is close to the adverbial *persistently* or *repeatedly*. However, in (14b) the presence of the complementizer *que* ('that') forces an extensive interpretation of the quantified phrase, whose meaning more or less is «this week in all its duration». In other words, the event has been taking place from the first instant of the present week till the time of speech. The extensive reading of *tot...que* is close to the adverbial *steadily* or *continuously*.

The intensive/extensive meaning of the degree quantifier *tot* in (14) is also visible in other Catalan constructions. The degree quantifier *tot* in (15a) receives an intensive meaning denoting the highest degree of the quality expressed by the adjective, whereas in (15b) *tot* quantifies the extension of the quality expressed by the adjective.<sup>6</sup>

- (15) a. En Pere gesticulava tot neguitós.  
 the Peter gesticulated.3sg all anxious  
 'Peter gesticulated frantically.'

6. See Sánchez López (1999: 16.5.5) for the properties of the Spanish equivalent examples in (15).

- b. La capseta era tota daurada.  
 the little-box was.3sg all golden  
 'The little box was completely golden.'

In (15a) the quality expressed by the adjectival phrase is in its maximum degree. However, (15b) means that the quality expressed by the adjectival phrase is predicated on every part of the little box. Interestingly, there is a correlation between (14) and (15). When the quantifier has an intensive meaning, the construction cannot be negated, as shown in (16), whereas when the quantifier has an extensive meaning, the negation is available.

- (16) a. \*Tota aquesta setmana no ha nevat a muntanya.  
 all this week not has.3sg snowed at mountain
- b. \*En Pere no gesticulava tot neguitós.  
 the Peter not gesticulated.3sg all anxious
- c. Tota aquesta setmana que no ha nevat a muntanya.  
 all this week that not has.3sg snowed at mountain  
 'It hasn't snowed in the mountains all week.'
- d. La capseta no era tota daurada.  
 the little-box not was.3sg all golden  
 'The little box was not completely golden.'

Note that the cause of the ungrammaticality in (16a) and (16b) is the presence of the negation, which indicates the absence of a specific event or state. Nevertheless, the presence of a negative prefix does not preclude the presence of the intensive *tot*. By contrast, the predicate *intranquil* 'restless' in (17) expresses a state, rather than the negation of a state.<sup>7</sup>

- (17) a. Tot ahir vas estar intranquil. / \*Tot ahir no vas estar  
 all yesterday were.2sg restless / all yesterday not were.2sg  
 tranquil.  
 calm  
 'You were restless all day yesterday.'

7. Similarly, a prospective aspectual modifier like *amb prou feines* ('hardly') cannot coappear with the intensive *tot* 'all', whereas it is available with the extensive *tot...que* ('all that'), as shown in (i).

- (i) a. ??\*Tot ahir amb prou feines vas parlar / ??\*Amb prou feines  
 all yesterday hardly spoke.2sg / hardly  
 vas parlar tot ahir.  
 spoke.2sg all yesterday
- b. Tot aquest any que amb prou feines m' has escrit.  
 al this year that hardly to-me have written  
 'You have hardly written me all year.'

- b. En Pere estava tot intranquil. / \*En Pere no estava tot tranquil.  
 the Peter was.3sg all restless / the Peter not was.3sg all calm  
 'Peter was completely unsettled.'

This notwithstanding, when the quantified phrase *tot XP* is introduced by the central coincidence preposition *en* ('in'), the phrase gets extensive meaning, even though the complementizer *que* is not present. However, because of the preposition, the temporal period denoted by *tot XP* is seen in its totality: from the initial endpoint to the final endpoint. Consequently, the sentence cannot be in present tense. Compare the ungrammatical sequences in (18) with the grammatical sentences in (19).

- (18) a. \*En tot (el dia d')avui penso en tu (dos cops).  
 in all today thought.1sg on you (two times)
- b. \*En tot l' estiu em vas trucar.  
 in all the summer to-me called.1sg
- (19) a. En tot l' estiu em vas trucar dos cops. / \*Tot l' estiu  
 in all the summer to-me called.2sg two times / all the summer  
 em vas trucar dos cops.  
 to-me called.2sg two times  
 'You only called me twice all summer.'
- b. En tot el semestre no et vas queixar gens. / \*Tot  
 in all the semester not yourself complained.2sg at-all / all  
 el semestre no et vas queixar gens.  
 the semester not yourself complained.2sg at-all  
 'You didn't complain at all during the whole semester.'
- c. En tot aquest temps aniran a París dos alumnes. / \*Tot  
 in all this time will-go.3pl to Paris dos students / all  
 aquest temps aniran a París dos alumnes.  
 this time will-go.3pl to Paris dos students  
 'During this period, two students will be going to Paris.'

In order to be licensed, the temporal PP in (19) has to have in its scope some quantified phrases like *dos cops* ('two times') or *gens* ('not at all'). The quantified phrase *dos cops* ('two times') in (19a) multiplies the event in the frame established by the temporal PP.<sup>8</sup>

8. Note that the extensive quantifier *tot XP...que* is incompatible with a numerically quantified phrase like *vint vegades* 'twenty times', as shown in (ia). However, when the quantified phrase is a degree adverb or NP, the situation changes, as shown in (ib)-(ie).

(i) a. \*Tot aquest any que ha plogut vint vegades.  
 all this year that has.3sg rained twenty times

## 2.3.

Different temporal restrictions govern the occurrence of *tot* and *tot...que* in a sentence. The extensive quantifier *tot...que* modifies those sentences whose temporality is related to the present tense, whereas the quantifier *tot* is preferentially licensed in sentences in past and future tense.

- (20) a. Tot ahir va ploure.  
all yesterday rained.3sg  
'It rained all day yesterday.'
- b. \*Tot ahir que va ploure.  
all yesterday that rained.3sg
- c. Tot demà plourà.  
all tomorrow will-rain.3sg  
'It will rain all day tomorrow.'
- d. \*Tot demà que plourà.  
all tomorrow that will-rain.3sg
- e. \*Tot avui plou.  
all today rains.3sg
- f. Tot avui que plou.  
all today that rains  
'It has been raining all day.'

The sentences in (20) show that the extensive quantifier *tot...que* indicates that the situation expressed by the predicate holds throughout the period denoted by the temporal phrase, a period which ends at the time of speech, whereas the intensive quantifier *tot* is preferred in those sentences whose tense is not present tense.<sup>9</sup> The duration expressed by the adjunct *tot XP que* coincides with the total-

- 
- b. \*En tot aquest any ha plogut molt.  
in al this year has.3sg rained a lot
- c. Tot aquest any que ha plogut molt.  
all this year that has.3sg rained a lot  
'It has rained a lot all year long.'
- d. Tot aquest any que has pres moltes pastilles.  
all this year that have.2sg taken lots of pills  
'You have been talking lots of pills all year long.'
- e. \*En tot aquest any has pres moltes pastilles.  
in all this year have.2sg taken lots of pills

9. However, there is some dialectal variation.

ity of the denotation of the temporal XP up to the time of speech. Accordingly, the sentence (20f) means ‘It has been raining throughout the present day up to now.’<sup>10, 11</sup>

Nevertheless, in spite of our claim that the duration expressed by the adjunct *tot XP que* coincides with the totality of the denotation of the temporal XP up to the time of speech, there is a perfective temporal form that accepts a temporal modifier headed by either *tot* or *tot...que*: the so-called present perfect (or compound perfect). This temporal form indicates that the event (or state) took place in the present morning, night, day, month, year, etc. Note that one can say (21) during the afternoon or evening of the present day.<sup>12</sup>

- (21) Aquest matí he pensat en tu.  
 this morning have.1sg thought about you  
 ‘I thought of you this morning.’

Like the examples in (14), those in (22) show that present perfect sentences allow both extensive and intensive reading of the temporal modifier headed by *tot* when the predicate expresses an atelic situation or accepts an iterative reading.

- (22) a. Tot aquest matí he pensat en tu.  
 all this morning have.1sg thought about you  
 ‘I have been thinking about you all morning.’

10. The so-called present tense in subjunctive mood does not license the presence of a temporal adjunct headed by the extensive *tot*. Compare the subordinate clauses in (ia) and (ib).

- (i) a. \*Lamento que tot avui que rebí advertiments.  
 regret.1sg that all today that receive.subj.3sg warnings  
 b. Diuen que tot avui que rep advertiments.  
 say.3pl that all today that receives.3sg warnings  
 ‘They say that he has been receiving warnings all day long.’

In fact, the so-called present tense in subjunctive mood is not a real present. It is a non-past tense.

11. The fact that the present tense in *tot XP que* constructions is not interpreted as the time of the speech act is shown by the contrast in (i).

- (i) a. Avui et prometo que anirem a Roma.  
 today to-you promise.1sg that will-go.1pl to Rome  
 ‘Today I promise you that we will go to Rome’  
 b. Tot avui que et prometo que anirem a Roma.  
 all today that to-you promise.1sg that will-go.1pl to Rome  
 ‘I’ve been promising you all day that we’ll go to Rome.’

With (ia) the speaker makes a promise, whereas with (ib) he makes a description of several promises. On the other hand, *tot* ‘all’ cannot coappear with *ara* ‘now’, the time of the speech act.

12. In contrast with French, where the perfect has completely supplanted the simple past, Catalan uses periphrastic past (or, in some dialects, simple past) to specify preodiurnal past tense: *Ahir tu {vas cantar / cantares}* (‘Yesterday you sang’). See Comrie (1976: §3.1).

- b. Tot aquest matí que he pensat en tu.  
all this morning that have.1sg thought about you  
'I have been thinking about you all morning.'
- c. \*Tot aquest matí no he pensat en tu.  
all this morning not have.1sg thought about you
- d. Tot aquest matí que no he pensat en tu.  
all this morning that not have.1sg thought about you  
'I haven't been thinking about you all morning.'
- e. \*Tot aquest matí (que) ha mort.  
all this morning (that) has.3sg died

Although the interpretations of (22a) and (22b) are very close, sentence (22a) with the intensive *tot XP* indicates that the situation expressed by the predicate has taken place in every subdivision of the morning of the present day, whereas the presence of *tot XP que* in (22b) forces an extensive or durative interpretation of the quantified phrase, whose meaning more or less is 'the morning of the present day in its total extension.' The constructions in (22c) and (22d) show that *tot XP*, whose meaning is intensive, is not licensed in a negative sentence, whereas the extensive *tot XP que* is licensed (see subsection 2.2). On the other hand, the ungrammaticality of (22e) is due to the inherent aspectual properties of its predicate. It is an achievement, i.e. a telic and non-processive event.<sup>13</sup>

The data shown in section 2 allow us to conclude that the temporal expression *tot XP...que* requires that the situation expressed by the predicate is interpreted as taking place during the present day or some division of the present day previous to the time of speech. On the other hand the temporal expression *tot XP* requires that the situation expressed by the predicate takes place during some period previous to or later than the time of speech. In the next section we will try to account for the structure of the sentences we are studying.

### 3. Syntactic analysis

When either the extensive temporal adjunct *tot XP que* or the intensive temporal adjunct *tot XP* precede the sentence, they are in a left peripheral position connected to the main clause by the complementizer *que* ('that'). The function of these adjuncts is to modify the temporal-aspectual properties of the clause. According

13. Note that present perfect tense may coappear with the PP *en tot XP* ('in all XP'):

- (i) a. En tot aquest any ha plogut vint vegades.  
in all this year has.3sg rained twenty times  
'In all this year, it has rained (only) twenty times.'
- b. En tot aquest any no ha plogut gens.  
in all this year not has.3sg rained at-all  
'It hasn't rained all this year'

to Rizzi (1997: 281), the complementizer layer of the sentence has an articulated structure able to host topics and various operator-like elements such as interrogative and relative pronouns, focused elements, etc. The articulated structure for the complementizer system postulated by Rizzi (1997) is reproduced in (23).

(23) Force (Top\*) (Focus) (Top\*) Fin IP (Rizzi 1997)

Rizzi (1997:285f) argues that the Force-Finiteness system expresses the selectional relations between a complementizer system and the immediately higher and lower structural systems. Rizzi (1997:283) regards «the complementizer system as the interface between a propositional content (expressed by IP) and the superordinate structure (a higher clause or, possibly, the articulation of discourse).» The node Force expresses the fact that a sentence is a question, a declarative, etc. Force is expressed sometimes by overt morphological encoding on the head, for example, in Bearnese Occitan, as shown in (24).

- (24) a. *Que* me 'n vau tà casa.  
 that myself cl. go.1sg to home  
 'I'm going home'  
 b. *E* vòs vin?  
 particle want.2sg wine  
 'Do you want some wine?'

The elements in italics are the overt realisation of a declarative and interrogative head, respectively. According to Rizzi (1997:288), «if the topic-focus field is activated, it will inevitably be 'sandwiched' in between force and finiteness, as these two specifications must terminate the complementizer system upward and downward, in order to meet the different selectional requirements and properly insert the complementizer system in the structure.» The node Top defines a kind of 'higher predication', a predication within the complementizer system. However, phrases in the specifier of a left periphery node do not always receive a Topic-Comment meaning or a Focus meaning. Because of this and other reasons, Rizzi (1999) redefines the typology positions in the left periphery of the clause by adding a Modifier node, as shown in (25). In (25b) *last year* is in the specifier position of an empty Modifier node.

- (25) a. Force (Top\*) (Focus) (Mod\*) (Top\*) Fin IP  
 b. I think [that [last year Mod<sup>0</sup> [she read many books]] (Rizzi 1999)

According to this proposal, peripheral temporal phrases headed by *tot* are in the specifier position of the Mod head, as represented schematically in (26b) and (27b).

- (26) a. Tot demà seré aquí.  
 all tomorrow will-be.1sg here  
 'I will be here all day tomorrow.'  
 b. [ForceP [ModP [tot demà] Mod<sup>0</sup> [FinP [IP seré aquí]]]]

- (27) a. Tot avui que penso en tu.  
 all today that think.1sg about you  
 'I have been thinking about you all day.'
- b. [ForceP [ModP [PP tot avui]] Mod<sup>0</sup> [FinP que [IP penso en tu]]]

One of the differences between (26) and (27) is in the Fin node, which is empty in (26) and occupied by *que* in (27). According to Rizzi (1997:283), the information expressed by Finiteness faces the inside, the content of the IP embedded under it. Finiteness reflects certain properties of the verbal system of the clause. For instance, it is responsible for the co-occurrence of *that* and a tensed verb, or *for* and an infinitive in English. Thus, Fin node can manifest temporal properties of the IP, mood distinctions, agreement properties, etc. On the basis of Rizzi's analysis, it can be suggested that Fin node may also manifest temporal-aspectual properties of the IP system. It is generally assumed that Aspect is a temporal notion (Smith (1991), Hoekstra (1992), Dermidache-Urbe-Etxebarria (1998), among others). Hence, *que* in (27) may be analyzed as the morphological realisation of the temporal-aspectual properties of the IP selected by Fin node.

The empty/non-empty nature of Fin node in (26) and (27) suggests that the temporal and aspectual properties that this node hosts may also be different. It could be claimed that the proposed circumstantial phrase in (26) sets a non-speech time temporal frame within which the rest of the sentence must be interpreted. Consequently, the tense of the main clause must be a past or future tense. In other words, the Fin node in (26), which is empty, manifests past or future time, and this property has to be shared with the IP selected by it.

In contrast to the clauses with the intensive temporal phrase *tot XP*, where the clause may be either past or future, the clauses in present tense (*penso* ('I think'), *estic pensant* ('I am thinking')) or present perfect (*he pensat* ('I have thought')) can only coappear with an extensive temporal phrase *tot XP*. We can attribute this fact to the aspectual-temporal properties hosted by the Fin node *que* selected by this Modifier. That is to say, the complementizer *que* in Fin node in (27) can be analyzed as an aspectual-temporal marker that forces the situation expressed by the predicate to be interpreted as hodiernal (i.e. present tense or present perfect).<sup>14</sup> Note that the present perfect (*he pensat* ('I have thought')) is licensed by both kinds of temporal phrases headed by *tot*. This is due to the fact that this Catalan tense is a hodiernal past (i.e. a «before now tense») but not a pre-hodiernal past.

Concerning the role of *tot XP* in ModP in sentences like (26) and (27), it quantifies the temporal-aspectual contour of the event or state described by the sentence, which is called the assertion time. According to Klein (1995), «the assertion time is the time for which an assertion is confined, for which the speaker makes a statement.»

Mod node causes minimality effects<sup>15</sup>, as shown in (28), where the *wh*-phrase cannot move to the specifier of Mod.

14. From Latin *hodie* 'today'. See Dahl (1985:125f).

15. On minimality effects, see Rizzi (1990).

- (28) a. \*How many books did last year she read? (Rizzi 1999)  
 b. \*On tot demà seràs?  
 where all tomorrow will-be.2sg  
 c. \*En qui tot avui que penses?  
 about whom all today that think.2sg

#### 4. Concluding remarks

The present article favors the hypothesis stated by Rizzi (1997, 1999) about the properties of the left periphery categories and the split of the complementizer layer. Actually, a main clause connected to a preposed temporal adjunct by the complementizer *que* is not an unusual phenomenon in Catalan and other Romance languages (see Rigau (to appear)). Consider sentences in (29).<sup>16</sup>

- (29) a. Des de les set que estudia.  
 since of the seven that studies.3sg  
 'He has been studying since seven o'clock.'  
 b. D'ençà d' aquell dia que no em truca.  
 since of that day that not me calls.3sg  
 'He hasn't called me since that day.'  
 c. De l' abril que no el veig.  
 since the april that not him see.3sg  
 'I haven't seen him since April.'  
 d. Desde el año pasado que no llueve. Spanish  
 since the year past that not rains.3sg  
 'It hasn't rained since last year.'

All these temporal PPs in the ModP are headed by an relative preposition (*de, des de* 'since'). They identify a period of time by marking its initial point.

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16. A sentence can also be headed by a modality adjunct, as in (i). The adjunct transmits its modality properties to the clause through the complementizer *que* 'that'.

- (i) Segurament que ella ho sap.  
 surely that she it knows.3sg  
 'She surely knows it'

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