

## Detachment in Catalan and information packaging\*

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### Abstract

The existing functional analyses of right-detachment constructions, the afterthought approach and the topic and topicality family of proposals, are inadequate to deal with right-detachment in Catalan. This paper argues that right-detachment in Catalan plays a specific role in the structural representation of information packaging. In particular, it encodes a tailful instruction in the sense of Vallduví (1992). Right-detachment is contrasted with left-detachment and with pronominalization. Finally, it is pointed out that the association between a particular form and a particular function need not be constant across languages: the discourse function effected by right-detachment in Catalan can be expressed exclusively by prosodic means in English.

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### 1. Introduction

Most pragmatic studies of right-detachment fall into either of two groups: A first group proposes a performance-error-based account, arguing that right-detached phrases are *afterthoughts*, i.e. postclausal additions to a communicatively defective sentence (cf. Rodman, 1974; Hyman, 1975; Givón, 1976; Cowper, 1979; Dik, 1981; Champion, 1984; Geluykens, 1987). In contrast, a second family of accounts provides a communicative *raison d'être* for the existence of right-detached constituents: the right-detached constituent encodes a *topic* or a *topical* or *continuous* referent (e.g. Gundel, 1974, 1985, 1988; Chafe, 1976; Lambrecht, 1981; Givón, 1983).

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This paper shows that Catalan right-detachment is not accounted for by either of these proposals and argues that right-detachment constructions in Catalan encode a particular kind of information-packaging *instruction* in the sense of Vallduví (1992), which is realized by a syntactically unmarked, yet intonationally marked, structure in English.

The article is structured as follows. First, the general outlook of information packaging assumed in the paper is discussed. Second, the structural characteristics of right-detachment are examined. Then, it is shown that previous accounts of right-detachment are inadequate to account for the Catalan construction. Finally, the exact informational role of right-detachment constructions in Catalan is examined, comparing them in particular to left-detachment constructions and mere pronominalization.

## 2. Information packaging

*Information packaging* is the linguistic dimension that allows speakers to make structural choices in accordance with their assumptions about the hearer's communicative state, and that allows hearers to decode the import of those structural choices appropriately. This is the view reflected, for example, in the following quote from Clark and Haviland (1977: 5): "to ensure reasonably efficient communication, [...] [t]he speaker tries, to the best of his ability, to make the structure of his utterances congruent with his knowledge of the listener's mental world".

The term 'packaging' is first used by Chafe (1976: 28). His choice is due to the fact that the phenomena he wants to describe have to do, in his own words, "primarily with how the message is sent and only secondarily with the message itself". Prince (1986, 1992) uses the term packaging as well. She distinguishes between two 'levels' at which information packaging can operate: the sentential level and the noun phrase level. The former is a structural reflection of the articulation of propositional content for communicative purposes in the sense described above. The latter is a structural reflection of the status of discourse entities with respect to their presumed presence or absence in the hearer's discourse model and knowledge-store (referential status). As Prince (1992: 399) points out, "the two levels are mutually independent, though statistical relationships may exist between them".

When looking at the functional literature it is sometimes not easy to discern which one of these two levels of informational structuring analysts are talking about. The fact that the terms 'given', 'new', 'topic', and 'focus' have been used to talk about both levels does not help matters in any way. Despite the terminological maze, however, some authors do keep them clearly apart (cf. Reinhart, 1982; Välimaa-Blum, 1988; Horn, 1989). Still, the distinction between these two dimensions is not always taken into account. In fact, one of the frameworks that will be discussed below in relation to right-detachment, Givón's (1983, 1992) topicality, does not make this distinction at all. Henceforth, for the purposes of our discussion, information packaging will refer only to the articulation of propositional content.

In trying to describe the informational articulation of sentences, many different proposals have been put forward. Here is a list, with only sample references for each

proposal: theme–rheme (Firbas, 1964; Halliday, 1967; 1985), topic–focus (Sgall and Hajičová, 1977–78), topic–comment (Mathesius, 1929; Gundel, 1974, 1988; Reinhart, 1982), given–new (Halliday, 1967, 1985; Clark and Haviland, 1977), pre-supposition–focus (Chomsky, 1971; Prince, 1986; Rochemont, 1986; Lambrecht, 1987), oldinfo–newinfo (Välímää-Blum, 1988), dominance (Erteschik-Shir, 1973, 1986), and expectation (Sasse, 1987). Despite individual definitional and conceptual differences, these proposals can be reduced, in terms of their empirical predictions, to only two: (a) those that divide the sentence into *topic*, what the sentence is about, and *comment*, what is said about that topic, and (b) those that divide the sentence into *ground*, a noninformative, known, or expected part of the sentence which anchors it to the previous discourse or the hearer's mental world, and *focus*, an informative, news-bearing, dominant, or contrary-to-expectation part that is to be added to the discourse or the hearer's mental world.

One of the accounts of right-detachment that will be reviewed below argues that the task of right-detachment constructions is precisely to encode comment–topic articulations where the topic is the right-detached phrase and the remainder of the sentence constitutes the comment (e.g. Chafe, 1977; Lambrecht, 1981). With this account, this paper shares the view that right-detachments, at least in Catalan, are not merely the reflection of a language generation breakdown, but a true structural choice that reflects an intentional communicative task. However, we do not share the belief that this communicative task is related to the comment–topic distinction.

The account introduced in section 5 below makes use of the information-packaging articulation argued for in Vallduví (1992). This articulation is meant to reflect most of the informational distinctions made by the topic–comment and the focus–ground proposals, incorporating them into one single informational system. Details on this articulation and the exact role of right-detachment constructions within it will be discussed in section 5. First, the construction will be described and previous accounts discussed.

### 3. Right-detachment

Catalan right-detachment is characterized by the placement in a right-peripheral position of a sentential constituent that would normally appear within the core clause, i.e. the lowest sentential node (excluding any IP-adjoined elements).<sup>1</sup> In Catalan, as in Italian, right-detached constituents constitute an independent intonational phrase (see Calabrese, 1982). This phrase is placed immediately to the right of the obligatory core-clause-final nuclear stress, after a steep fall. This adjacency to nuclear stress causes the right-detached phrase to be perceived as 'deaccented' or 'intoned with a low pitch' and sometimes the steep fall is perceived as a pause (see Calabrese, 1982; Bonet, 1990; Vallduví, 1991, and Saccon, 1992). Syntactically, if

<sup>1</sup> Right-detachment is also referred to by the names of right-dislocation and *emarginazione* (in the Italian literature). Right-detached phrases have been called afterthoughts, aftertopics, antitopics, and tails.

the right-detached phrase is a (part of a) complement of the verb, it must bind a clitic that appears attached to the verb within the clause. Right-detached subjects and adjuncts do not bind a clitic, since Catalan lacks pronominal clitics for these categories.

In fact, the distribution of these clitics is evidence for the clause-peripheral position of right-detached constituents. In Catalan and Italian, co-occurrence of clitic and full constituent is, with some exceptions, illicit if the latter appears in situ (see Calabrese, 1982; Vallduví, 1992). The (b) sentences in (1)–(4) contain right-detachments, while the (a) sentences are the corresponding canonical sentences. Compare the distribution of the clitic in the (a) and (b) sentences:<sup>2</sup>

- (1a) (\*El<sub>i</sub>) vaig veure el GOS<sub>i</sub>.  
obj 1s-pst-see the dog  
'I saw the dog.'
- (1b) El<sub>i</sub>/(\*) vaig VEURE, el gos<sub>i</sub>. (object)
- (2a) El Lluç va veure el GOS.  
the Lluç 3s-pst-see the dog  
'Lluç saw the dog.'
- (2b) Va veure el GOS, el Lluç. (subject)
- (3a) (\*Hi<sub>i</sub>) visc a EIVISSA<sub>i</sub>.  
loc 1s-live in Iviza  
'I live in Iviza.'
- (3b) Hi<sub>i</sub>/(\*) VISC, a Eivissa<sub>i</sub>. (locative complement)
- (4a) No (\*ho<sub>i</sub>) crec [que PLOGUI]<sub>i</sub>.  
no obj 1s-believe that 3s-subj-rain  
'I don't think it'll rain.'
- (4b) No ho<sub>i</sub>/(\*) CREC, que plogui<sub>i</sub>. (sentential complement)

Further evidence for the core-clause-external status of right-detached constituents comes from the placement of clause-peripheral particles like *xec* 'man' and the tag *oi* 'right?'. As shown in (5), these particles cannot occur clause-internally.

- (5a) Vaig prendre (\*xec) el gos (\*xec) a Eivissa, xec.  
1s-pst-take man the dog man to Iviza man  
'I took the dog to Iviza, man.'

<sup>2</sup> Throughout the paper, the element bearing the nuclear stress is capitalized, and the right-detached phrases are set apart from the clause by a comma, following orthographic convention. Non-subject detached phrases and the corresponding coreferential pronominals in the clause are coindexed. For the sake of simplicity, the following Catalan clitics are all glossed as 'obj': *ell/illo* (and feminine and plural forms), which pronominalizes determiner-headed objects; *en/n/ne*, which pronominalizes determinerless objects and unaccusative subjects, some copular predicates, and PP complements headed by the preposition *de*; and *ho*, which pronominalizes tensed sentential complements, copular predicates, and the accusative demonstrative NPs *això* 'this' and *allò* 'that'. Clitic *hi*, which pronominalizes all prepositional complements other than those headed by *de*, is glossed as 'loc'. *Hi* can sometimes act as an indirect object clitic, replacing the default indirect object clitic *li* ('iobj').

- (5b) Vas prendre (\*oi) el gos (\*oi) a Eivissa, oi?  
 2s-pst-take right? the dog right? to Iviza right?  
 ‘You took the dog to Iviza, right?’

They may, however, appear to the left of right-detached phrases. This indeed shows that there is a clausal boundary there:

- (6a)  $Hi_1$  vaig prendre el gos, xec, a Eivissa<sub>1</sub>.  
 (6b)  $Hi_1$  vas prendre el gos, oi, a Eivissa<sub>1</sub>?

Finally, a third piece of evidence for the core-clause-external status of right-detached constituents in Catalan comes from the fact that there may be several right-detached phrases and that their relative linear order is free, as in (8) and (9). Given that the linear order of phrases in situ is invariable (disregarding heavy-NP shifted constituents), as shown in (7), the range of options available in (8) and (9) has to be the reflection of a structure where detached phrases have adjoined freely to the core sentential frame.

- (7a) Vaig prendre el gos a EIVISSA.  
 (7b) \*Vaig prendre a Eivissa el GOS.  
 (8a)  $L_1$ ’ $hi_2$  vaig PRENDRE, el gos<sub>1</sub>, a Eivissa<sub>2</sub>.  
 (8b)  $L_1$ ’ $hi_2$  vaig PRENDRE, a Eivissa<sub>2</sub>, el gos<sub>1</sub>.  
 (9a) No ho<sub>1</sub> VOL, [que ploqui]<sub>1</sub>, el Lluc.  
 no obj 3s-want that 3s-subj-rain the Lluc  
 ‘Lluc doesn’t want it to rain.’  
 (9b) No ho<sub>1</sub> VOL, el Lluc, [que ploqui]<sub>1</sub>.

Right-detachment, in fact, is the mirror image of left-detachment. All the diagnostics displayed by right-detachment – clitic-binding, iterability, free relative order among phrases, and placement with respect to clause-peripheral particles – are also present in left-detachment. Both types are identical, differing only in their directionality. The sentences in (8) do not exhaust the detachment options available. The sentences in (10) are equally grammatical:

- (10a) El gos<sub>1</sub>  $l_1$ ’ $hi_2$  vaig PRENDRE, a Eivissa<sub>2</sub>.  
 (10b) A Eivissa<sub>2</sub>  $l_1$ ’ $hi_2$  vaig PRENDRE, el gos<sub>1</sub>.  
 (10c) El gos<sub>1</sub> a Eivissa<sub>2</sub>  $l_1$ ’ $hi_2$  vaig PRENDRE.  
 (10d) A Eivissa<sub>2</sub> el gos<sub>1</sub>  $l_1$ ’ $hi_2$  vaig PRENDRE.

Most of the structural characteristics of Catalan right-detachment are shared by its Italian (cf. Antinucci and Cinque, 1977; Calabrese, 1982) and Nonstandard French (cf. Lambrecht, 1981) counterparts, despite some differences in the realization of the clitics bound by the detached phrases. Catalan right-detachment also appears to be structurally akin to English right-detachment constructions like those in (11), leaving aside the fact that in English the detached phrases bind a pronoun in situ instead of a clitic and a gap (examples from Quirk and Greenbaum, 1976: 229):

(11a) They<sub>1</sub> are all the same, these politicians<sub>1</sub>.

(11b) He<sub>1</sub>'s got a good future, your brother<sub>1</sub>, if he perseveres.

However, in section 5 it will be noted that the English informational equivalent of Catalan right-detachment is generally not a right-detachment construction, but a canonical sentence with a marked prosodic contour.

#### 4. Previous analyses

This section examines the two main analyses of right-detachment found in the literature, the afterthought analysis and the family of analyses which relate right-detachment to a topic-marking task. The afterthought analysis will be discussed first.

##### 4.1. Afterthought

Rodman (1974: 459), in an early work on the syntax of left- and right-detachment, points out that right-detachment in English occurs almost entirely in casual, relaxed speech. A possible reason for using it is that “the speaker utters a pronoun and then suddenly realizes that his audience may not be aware of the referent he intends for the pronoun, so at the end of the clause containing that pronoun he makes the reference more explicit”.

The idea has fared well in the literature on right-detachment. See, for example, Hyman's (1975: 120) statement regarding clause-external phrases in SOV languages: “the speaker may forget to say something in the course of his utterance; or he may find that it is necessary to add something, because his interlocutor has not understood; or he may realize that the sentence he has just uttered is unclear or ambiguous. In all of these cases (and doubtless others), he may wish to add something after the verb-final utterance”. Or Cowper (1979: 77), a study of right-detachment in Canadian French that argues that the function of the right-detached element is “to provide further information, as an ‘afterthought’, about some constituent, by interjecting a syntactically superfluous constituent into the sentence”. The afterthought approach is found even more recently, as in the work of Campion (1984) and Geluykens (1987), who explicitly claims that right-detachment in English is a repair mechanism.

It is but natural to think that right-detached phrases, by their very nature and location in the sentence – a ‘distressed’ string of elements following a clause-final intonation peak – could be the reflection of afterthought. Right-detachment is, from this perspective, not the reflection of communicative competence, but that of a language generation error, a mistake in sentence planning. If one of these errors occurs, a self-repair may enter the picture and the sentence may be restarted. But another way of dealing with the mishap is to carry on and adjoin the missing important information at the end of the clause. Right-detachment is the result of this second option.

While these considerations are plausible, they fail to account for Catalan right-detachment. In Catalan, right-detachment does not occur uniquely in ‘casual’ or

'relaxed' speech. It is indeed rare in formal written registers but appears in most other linguistic registers, including formal interview dialogs and written literary discourse. Example (12), where the answer contains a right-detached sentential complement which, in turn, contains two right-detached complements, is extracted from a formal newspaper interview of the major opposition politician in the Barcelona city government:<sup>3</sup>

- (12) Q: Vostè [...] ha mantingut un silenci que segur que li retrauran els votants.  
'You've maintained a silence that I'm sure voters will hold against you.'  
A: No ho<sub>1</sub> SÉ, [si l<sub>2</sub>'entendran, els votants, el meu silenci]<sub>1</sub>.  
no obj 1s-know if obj.3p-understand the voters the my silence  
'I don't know whether voters will understand my silence.' (J.M. Cullell, *Avui*, 4-06-89)

And (13) is a subject right-detachment from López del Castillo (1976: 27), a scholarly work on linguistic planning and the sociology of language in Catalonia:

- (13) S'ha parlat, doncs, de la distància entre llengua literària [...] i llengua parlada.  
*I és CERTA, aquesta distància, que s'ha fet més marcada d'ençà del*  
3s-be true this distance  
1939.  
'People have talked about the distance between literary language and spoken language. And this distance is indeed there, and has increased since 1939.'

In addition, if right-detachment in Catalan is viewed as an afterthought, examples like (14) and (15) become a puzzle. In these examples of multiple right-detachment the actual content of the core clause is quite minimal:

- (14) [S<sub>1</sub> mentions he met Solà at a conference.]  
S<sub>2</sub>: Ja pot ser, ja,  
que ja ho<sub>1</sub> ÉS, [d'anar de congressos]<sub>1</sub>, el Solà.  
that alr. obj 3s-be go of conferences the Solà  
'Could be. Solà is a conference-attending kind of guy.' (XB 03-87)  
(15) Vet aquí la veu de l'autoritat, això cal, això no cal: aquesta és la realitat [...].  
Ah, carall,  
que n<sub>1</sub>' ÉS, de dura<sub>1</sub>, de vegades, la realitat...  
that obj.3s-be tough sometimes the reality  
'Here's the voice of authority: this is necessary, that isn't. Reality is like this [...] Oh, shit, reality is tough sometimes.' (Pau Faner, *La primera oració*, *Avui* 1-25-87)

In (14), for instance, only the copula, *és*, is expressed in the clause, while both subject, *el Solà*, and predicate, *d'anar de congressos*, are right-detached. In (15) the

<sup>3</sup> Naturally-occurring examples in the text are appropriately labeled for source and date.

same phenomenon may be witnessed: the clause proper, *n'és*, could be translated as something like *it is so*. Both arguments of the copula plus the adverbial are right-detached. If right-detachments in Catalan express a repairing afterthought, then what were the utterer of (14) and the writer of (15) thinking about when they were planning their sentences? It is very implausible to assume that the speaker/writer 'forgot' to say most of the sentence at the right time and feels the need to add the material afterwards, as Hyman (1975) suggests. In (15), for instance, the afterthought would consist of the following: "Sorry but that *it* back there referred to 'reality', *so* stood for 'tough', and the statement just uttered does not hold at all possible times, but only sometimes".

Furthermore, a right-detachment may appear in a context in which its nondetached counterpart would have not been felicitous. Take, for instance, the right-detachment in (16a). It cannot be replaced by its corresponding canonical form, (16b), nor by a mere pronominalization, as in (16c):

(16a) [after having befriended and talked to a giant, the narrator watches the giant as he leaves.]

Vaig fixar-m'hi bé i, allà al fons, a la boca de la cala immensa, encara el veia, el caparrot del gegant.

*Ho, ERA, un gegant.*

obj 3s-impf-be a giant

'I looked intently, and, down by the mouth of the huge cove, I was still able to see the giant's big head. He was a giant indeed.' (Pau Faner, op. cit.)

(16b) [...] #Era un GEGANT.

(16c) [...] #Ho era.

This, of course, is totally unexpected if right-detachment is viewed as a repair which is meant to turn an insufficient pronominalization into a canonical sentence with a full NP. A paradoxical situation would arise. The writer of (16a) is striving to repair an infelicitous utterance, namely (16c). However, the putative target, (16b), is also infelicitous and, ironically, the compromise arrived at with the right-detachment in (16a) is the only felicitous option.

In conclusion, any appeal to the putative 'anomalous' nature of right-detachment is bound to remain inapplicable to Catalan.<sup>4</sup>

#### 4.2. Topic-comment and topicality accounts

The terminological and conceptual complexity around the notion or notions of topic is considerable, creating a strong potential for confusion. In fact, the notion of topic in Givón's tradition (1983, 1992) differs substantially from the notion of topic in the topic-comment framework (Gundel, 1974, 1985, 1988; Lambrecht, 1981).

<sup>4</sup> Real afterthoughts representing generation mishaps do exist in all languages. Presumably, a number of the right-detachments uttered by Catalan speakers will indeed be the reflection of sentence planning trouble. In principle, the amount of real afterthought should be the same in Catalan and English. No attempt will be made here to investigate the frequency of true afterthought in either language.

Topicality or continuity in Givón's work is a property that all discourse referents possess. Discourse participants are ranked in a scale of topic continuity. Very roughly, the most continuous referents are, *ceteris paribus*, those that have been mentioned most recently. The particular standing of a referent in the topicality scale at the time a sentence is uttered will determine how it is encoded in that sentence. This encoding is carried out both by the morphological characteristics of referential expressions (definiteness) and by word order options. Crosslinguistically, it appears that the most continuous topics appear as unstressed pronouns or zero elements *in situ*, while the least continuous ones appear as indefinite NPs. Right-detachment, left-detachment, focus-preposing, and clefting occupy intermediate positions, as will be seen below (cf. Givón, 1983). Sometimes, the most continuous topic is called 'topic' *par excellence*.

Despite the fact that topicality, then, is a property displayed exclusively by nouns and noun phrases, Givón makes no concession for a separate informational articulation of the propositional content of a sentence, in the sense outlined in section 2. In fact, he affirms that it is the topical elements of the sentence that "serve to *ground* the new information into the already-stored old information" (Givón, 1992: 9). This, in effect, rules out the possibility that verbs and other non-nominal elements of the sentence be part of the ground, and provides no account for the existence of pronominal elements that are part of the focus and of indefinite NPs that are part of the ground.<sup>5</sup>

While Givón's topicality is a property of referents in a discourse (responsible for their particular formal manifestation in the sentences in that discourse), the classic topic-comment topic is a sentence-level phenomenon. Topic has been defined as a 'point of departure' or as a 'reference frame' for the sentence and as what the sentence is 'about'. This topic need not be the most salient or continuous referent in the sentence. It also has been argued that there is a strong correlation between subjecthood and topichood, and, furthermore, in many languages, topic has been described as occupying a clause-peripheral lefthand or righthand position. See, for instance, Gundel's (1985: 86) definition of syntactic topic, "A constituent C is the syntactic topic of some sentence S, iff C is immediately dominated by S and C is adjoined to the left or right of some sentence S', which is also immediately dominated by S". Gundel specifies that if an element is encoded as a syntactic topic it must be the pragmatic topic of the sentence.

Henceforth, the term G-topic will be used to denote a highly continuous referent in Givón's framework, while the term S-topic, *pace* Välimaa-Blum (1988), will denote classic 'point-of-departure' topics. Let us illustrate the notions of G-topic and S-topic with the examples in (17):

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<sup>5</sup> Givón's topic is descriptively equivalent to the notion of 'focus' as developed by Sidner (1981), where all the referents in a discourse model enter a 'focus stack' and are hierarchically ranked according to their degree of salience or topic continuity, in Givón's terms (this notion of focus is distinct from, and must not be mistaken for, the notion of focus described in sections 2 and 5). Other frameworks that deal with referential status or topicality are centering theory (Grosz et al., 1983), accessibility theory (Ariel, 1988), and the theory of cognitive statuses in Gundel et al. (1993).

- (17a) My brother, he gave me a gun.  
 (17b) Those patients he hasn't visited yet.  
 (17c) Se l<sub>1</sub>'estima MOLT, el gos<sub>1</sub>.  
       self obj. 3s-love very the dog  
       'He loves his dog very much.'

The G-topic par excellence, given the apparent findings of Givón and associates regarding form/continuity matching patterns, is always the referent with the weakest structural encoding. This makes *me* in (17a), *he* in (17b), and the null subject (or subject agreement) in (17c) the obvious candidates to be the G-topic of their respective sentences. In contrast, the S-topic, given the definition in Gundel (1985) seen above, must be *my brother* in (17a), *those patients* in (17b), and *el gos* 'the dog' in (17c). Clearly, G-topics and S-topics are different species and, in fact, a reflection of this difference may be found in the fact that, for the most part, people talk about 'topicality' when referring to the former and to 'topichood' when referring to the latter.

The following two sections discuss the claims made concerning respect to right-detachment by each one of these two topic types.

#### 4.2.1. Givón's topicality

As mentioned above, Givón (1983) argues that marked constructions such as Y-movement (Givón's name for both focus-preposing and topicalization), right-dislocation, and left-dislocation, are used to encode referents with different degrees of topicality or topic continuity. The correspondence between degree of topicality and structural encoding is as in (18), starting with the highest degree and going down the scale:

- (18) Zero anaphora > weak pronouns > strong pronouns > right-detachment > neutral order (+definite) > left-detachment > Y-movement > clefts > indefinite NPs.

The claim in (18), then, is that right-detachment is used when the referent it encodes is too topical to be left in situ or left-detached but not topical enough to be cast in a purely pronominal form. The contrast between left- and right-detachment is observed for European French by Ashby (1988), where the fact that referents of right-detached constituents are more continuous or accessible topics than referents of left-detached constituents is confirmed.

The problem, however, is in trying to determine the difference between right-detachment and pronominalization. Givón (1983: 32) states that right-detached phrases encode very continuous topics, with a degree of topic discontinuity just "a bit higher than that characteristic of unstressed or clitic pronouns", which, as noted, encode the most continuous topics of all. This small difference in continuity, he argues, is "due more to potential interference than to referential distance". Potential interference is a measure used in Givón's framework to predict structural encoding of referents, along with referential distance. The topicality of a given referent may

decrease slightly if other semantically similar referents, with a similar degree of topic continuity, are present in the discourse. In such cases, the referent affected by potential interference deserves a more marked encoding, and right-detachment appears to be it. Thus, the use of right-detachment in a sentence like (19):

- (19) A mon germà<sub>1</sub> no l<sub>2</sub>'hi<sub>1</sub> van tornar, la llibreta<sub>2</sub>.  
 to my brother no obj.iobj 3p-pst-return the notebook  
 'They didn't give the notebook back to my brother.'

could be accounted for if in context there were a competing referent for *la llibreta* 'the notebook'. Obviously, the potential competitor could not be the referent of the null subject, the G-topic, or the referent of the less topical *a mon germà*, since they are not of the same semantic type.<sup>6</sup>

Potential referential interference, however, is hard to use as an argument for the existence of right-detachment in some of the sentences in the conversation in (20). The dialog in (20) revolves around a joke on the word *ametllons*, which means 'green shell-covered fruit of the almond tree before it ripens' but which is morphologically 'almond+augmentative'.

- (20) S<sub>1</sub>. Saps què són, ametllons?  
 'You know what *ametllons* are?'  
 S<sub>2</sub>. Ametlles grosses, suposo.  
 'Big almonds, I guess.'  
 S<sub>1</sub>. Bueno, són semblants, sí. Però aixís amb la closca i tot.  
 'Well, sort of, yeah. But like with the shell and all.'  
 (a) S<sub>2</sub>. Les ametlles també en<sub>1</sub> TENEN, de closca<sub>1</sub>.  
 the almonds also obj 3p-have of shell  
 'Almonds also have a shell.'  
 (b) S<sub>1</sub>. Ah! Jo no n'he menjat MAI, amb closca.  
 i no obj.1s-pst-eat ever with shell  
 'Really? I've never had them with a shell.'  
 (c) S<sub>3</sub>. No, jo acostumo a TREURE'/l<sub>1</sub>-zi/, la closca<sub>1</sub>.  
 i 1s-be-used-to take-off.obj.iobj the shell  
 'No, I myself usually take the shell off (them).'  
 S<sub>1</sub>. Hòstia!  
 'No shit!' (CC/JV/EV 11-86)

Let us try to analyze (20) in terms of the topicality hierarchy in (18). According to (18) the most continuous topic in a sentence is weakly pronominalized. Thus, in

<sup>6</sup> The claim that the driving force behind the existence of right-detachment is a decrease in topicality due to potential referential interference is clearly related to the claim that right-detachment is an afterthought that arises as a repair in cases where pronominalization alone is judged by the speaker (alas too late) to be ambiguous or insufficient (Hyman, 1975). In fact, Givón himself (Givón, 1986) had put forward the sentence planning error analysis in earlier years.

(20b) and (20c), ‘almonds’ must be the most continuous topic (weakly pronominalized as *n* and */zi/*, respectively). ‘Shell’, judging from its structural encoding as a right-detached phrase (*closca*), is also a very continuous topic. It must be, however, a little higher in topic discontinuity, given that, otherwise, it would be just pronominalized. This slightly higher degree of discontinuity is possibly due to potential referential interference from ‘almonds’. In (20a), however, no referent is encoded as a pronoun. The right-detached constituent here is the most continuous of all, ‘almonds’ being less topical than ‘shell’ here in terms of referential distance. Yet ‘shell’ is not merely pronominalized. Observe that there is no potential interference from any other referent in the previous immediate context either. If ‘shell’ in (20a) is unambiguously the most topical referent, why is it not just pronominalized?

What (20) does show is that, while right-detached phrases may be highly topical, topicality alone cannot distinguish between weak pronominalization and right-detachment in Catalan. In other words, topicality in itself is not sufficient to explain why phrases are right-detached. Catalan right-detached phrases indeed tend to display a high degree of topicality, but this tendency is only an artifact of their real task in communication, which will be discussed in section 5.

Finally, consider example (21b), where the right-detached phrase is an indefinite ((21a) acts as context setter):

(21a) No sabem on és, el Joan. Com el podríem trobar?

‘We don’t know where John is. How could we find him?’

(21b) No ho sé. Què FÀRIA, un detectiu, en un cas així?

what 3s-cond-do a detective in a case thus

‘Don’t know. What would a detective do in such a situation?’

In (21b) the nonspecific indefinite *un detectiu* ‘a detective’ is right-detached. In light of the topicality hierarchy in (18), the fact that indefinite NPs are right-detached is totally unexpected, since indefinite NPs are lowest in topicality and right-detached NPs are supposed to be among the highest.

#### 4.2.2. Topic–comment

For Gundel (1985, 1988), inter alia, right-detachments in most languages are comment–topic structures in which the detached phrase is an S-topic and the non-detached material constitutes the comment. The same is true for Lambrecht (1981), who, following Chafe (1976), resorts to the term ‘antitopic’ to refer to righthand S-topics. For Lambrecht (1981: 1), the French sentences (22a) and (22b) represent the same topic–comment partition, but differ in their choice of placement for the topic.

(22a) Ces Romains<sub>1</sub> ils<sub>1</sub> son FOUS.

these Romans they 3p-be crazy

‘These Romans are crazy.’

(22b) Ils<sub>1</sub> son FOUS, ces Romains<sub>1</sub>.

One question that immediately comes to mind is why there are sentences like (19) above, repeated here as (23), in which we witness both a left- and a right-detachment:

- (23) A mon germà<sub>1</sub> no l<sub>2</sub>'hi<sub>1</sub> van TORNAR, la llibreta<sub>2</sub>.  
 to my brother no obj.iobj 3p-pst-return the notebook  
 'They didn't give the notebook back to my brother.'

Both *a mon germà* 'to my brother' and *la llibreta* 'the notebook' qualify as S-topic phrases. Both fit the definitions of pragmatic sentential topic and syntactic sentential topic in Gundel (1985, 1988). Sentences like (23) and (15) above, with three detached phrases (one of which an adverb), are a problem if it is assumed that only one constituent in the sentence can be the S-topic.<sup>7</sup>

But, even if multiple S-topics are admitted, (23) posits an additional question. Apparently, (23) is simultaneously a topic–comment structure where *a mon germà* 'to my brother' is the S-topic, and a comment–topic structure where *la llibreta* 'the notebook' is the S-topic. Why is that so? Why are not both phrases either left-detached or right-detached? What determines which phrase appears at which side of the core clause? Lambrecht (1981) suggests that right-detachment, rather than left-detachment, is used rhetorically to add a sarcastic nuance to the utterance (1981: 87) or to express 'camaraderie' between speaker and addressee (1981: 98). Another answer is to say that S-topics may have additional attributes and that it is these attributes that determine the directionality of the detachment. Lambrecht (1981), Gundel (1988), and Herring (1990), for instance, argue that S-topics are either *shifted*, with a [+familiar, –activated] referent, or *continuous*, continuing an [+activated] referent. The former are necessarily subject to left-detachment, while the latter are either left- or right-detached.

To take such a tack, however, is to accept that the crucial factor behind the directionality of detachment is not topichood but rather activatedness, which is a referential-status notion. The two S-topics in (23), 'my brother' and 'the notebook', are left- and right-detached, respectively, because of their specific cognitive status. The topic–comment partition alone cannot account for the contrast between left- and right-detachment. Rather, it must resort to referential status as a determining factor (coinciding in this with the topicality framework).

Furthermore, in principle, the topichood dimension should be completely orthogonal to referential status (Reinhart, 1982: 73). One would expect a [+familiar, –activated] S-topic to display the independent structural correlates of both [+familiar, –activated] referents, e.g. a definite full NP (Gundel et al., 1993), and S-topics, e.g. a right-detachment slot. It comes as a surprise, then, that right-detached definite full NPs cannot encode a [+familiar, –activated], i.e. shifted, topic. Under the current assumptions, even if one claims that cognitive status accounts for the directionality

<sup>7</sup> See, for example, work by Daneš (1974: 107), "topic–comment structure frames each clause into the form of a message about *one* of its constituents" and Davison (1984: 802), "in general, only *one* NP per sentence is perceived as topic".

of detachment, the constraint against right-detached [+familiar, –activated] S-topics has to be especially stipulated.<sup>8</sup>

The true *raison d'être* of right-detachment, then, is neither topicality (or other notions of referential status) nor topichood. They are not sufficient conditions for detachment. However, it is clear that there is a sufficient condition for Catalan right-detachment, given that there are contexts in which right-detachment is the only option available, as shown by (24) (= (16) above):

- (24a) Vaig fixar-m'hi bé i, allà al fons, a la boca de la cala immensa, encara el veia, el caparrot del gegant.  
*Ho<sub>i</sub> ERA, un gegant<sub>i</sub>.*  
 obj 3s-impf-be a giant  
 'I looked intently, and, down by the mouth of the huge cove, I was still able to see the giant's big head. He was a giant indeed.'
- (24b) [...] #Era un GEGANT.  
 (24c) [...] #Ho era.

## 5. Right-detachment and information-packaging instructions

In this section an alternative account of right-detachment is put forth that seems to accord better with the data, but the insights captured by the analyses discussed in section 4 are preserved. But first some further observations on the informational articulation of sentences must be made.

### 5.1. A trinomial informational articulation

In section 2 it was noted that there are two main informational articulations of the sentence: topic–comment and focus–ground. In examples like (25) the two articulations split the sentence in the same way, as indicated in (26):<sup>9</sup>

- (25) What does John do?  
 John drinks BEER.

<sup>8</sup> In the work of Gundel (1974, 1985, 1988) the notion 'topic' is not always equivalent to the notion of S-topic as used in this section. In a number of contexts her topic is coextensive with the notion of ground as defined in sections 2 and 5 (as in the modern Prague School term 'topic' in the focus–topic partition (Sgall and Hajičová, 1977–78)). Needless to say, the observations made about the S-topic in this section apply to Gundel's work only where her topic would coincide with the S-topic as defined. For further details regarding the nature of the different concepts revolving around 'topic', see Schlobinski and Schutze-Coburn (1992).

<sup>9</sup> Here and below appropriately labelled brackets are used to delimit the scope of each informational primitive. The following labels are used: T for S-topic, C for comment, G for ground, F for focus, and below, L for link. The bracketing notation reflects only informational divisions and does not imply syntactic constituency of any sort.

(26a) [<sub>T</sub> John ] [<sub>C</sub> drinks beer ]

(26b) [<sub>G</sub> John ] [<sub>F</sub> drinks beer ]

But the same exact string used in a different context displays the divergent focus–ground and topic–comment segmentations in (28) (example (27) is from Dahl, 1974: ex. (3)):<sup>10</sup>

(27) What does John drink?

John drinks BEER.

(28a) [<sub>T</sub> John ] [<sub>C</sub> drinks beer ]

(28b) [<sub>G</sub> John drinks ] [<sub>F</sub> beer ]

As a matter of fact, the need for more than one articulation has long been noticed. Prague School linguistics brought in the notion of communicative dynamism precisely to capture differences in the informational standing of elements within the ground. Halliday (1967, 1985) and Dahl (1974) opt for including both topic–comment and focus–ground articulations in the informational description of sentences. (Halliday calls the former theme–rheme and the latter given–new.) Finally, scholars working within the focus–ground framework have also acknowledged that something is needed in addition. Välimaa-Blum (1988) states the focus–ground distinction (her OldInfo–NewInfo split) must be complemented with a notion of S-topic, and Prince (1984), Ward (1988), and Ward and Prince (1991) have made several proposals to account for the contrasting behavior and interpretation of left-hand versus in-situ ground elements.

In Vallduví (1992) the insufficiency of the binomial articulations was circumvented with the introduction of a trinomial hierarchical articulation that captured the highlights of both the topic–comment and the focus–ground splits while avoiding their shortcomings. The trinomial articulation divides sentences into a *focus* and a *ground*, while the latter is further composed of a *link* segment and a *tail* segment:

(29) S = { focus, ground }

ground = { link, tail }

The focus and the ground are taken directly from the focus–ground framework introduced in section 2. The link is meant to cover the cases covered by the S-topic in the topic–comment framework. The term ‘link’ is borrowed from Trávníček (cited in Firbas, 1964: 269), who describes it as ‘‘the sentence element that links up directly with the object of thought, proceeds from it and opens the sentence thereby’’. The link is a subsegment of the ground, which reflects the fact that, according to most scholars, S-topics are part of the ground (Halliday being the exception). The tail encompasses ground material that does not display link-

<sup>10</sup> It must be noted that for Gundel (1974) the topic–comment partition for (27) would not be as in (28a), but rather would be coextensional with the ground–focus partition in (28b).

like behavior.<sup>11</sup> This trinomial division cuts (25) and (27) as in (30) and (31), respectively:

(30) [<sub>G</sub> [<sub>L</sub> John ] ] [<sub>F</sub> drinks BEER ]

(31) [<sub>G</sub> [<sub>L</sub> John ] drinks ] [<sub>F</sub> BEER ]

In (30) the ground is constituted exclusively by the link phrase *John*, but in (31) the ground is complex. *John*, the link, is only a part of that ground and *drinks* is the tail. With the trinomial articulation, the shortcomings of the binomial articulations are avoided and, in contrast to some of the other earlier solutions, all distinctions are integrated into one single schema.

The role of information packaging in communication is to optimize the entry of information into (a relevant subset of) the hearer's knowledge-store. Each information-packaging configuration is designed to indicate what part of the sentence constitutes *information*, according to the speaker's assumptions, and where and how that information fits in the hearer's knowledge-store. Each one of these configurations is an information-packaging *instruction*. The information carried by a given sentence *S* ( $I_S$ ) is defined as the propositional content of *S* ( $p_S$ ) minus the knowledge (the speaker assumes) the hearer already has and is attending to ( $K_H$ ), i.e.  $I_S = p_S - K_H$ . Each sentence encodes an information-packaging instruction, along with a proposition. Different combinations of focus, link, and tail yield different instruction-types.

In order to see exactly how the information-packaging primitives in (29) contribute to this task something must be said about the structure of the knowledge-store. To this purpose, Heim's (1983) file metaphor, which she uses to describe a shared discourse model, will be adopted and extrapolated to describe the knowledge-store (without adopting any other aspects of File Change Semantics). The knowledge-store is a collection of entity-denoting file cards. On each file card there are entries recording relations and attributes pertaining to the entity denoted by that file card. The marking of referential or cognitive status is responsible for providing the hearer with instructions for file card management. Very roughly, an indefinite NP instructs the hearer to create a new file-card, while a definite NP instructs the hearer to activate a dormant, already existing file card.

The content of these file cards is updated during communication, i.e., the information carried by the sentences in a discourse is entered into the hearer's knowledge-store. It is precisely here that information packaging plays a role by making this process more efficient. From this viewpoint, interpretation of the informational notions in (29) is as in (32):

(32) Focus: what the hearer is instructed to enter into her/his knowledge-store, i.e.  $I_S$ .

<sup>11</sup> The word 'tail' is borrowed from Dik's (1981) functional grammar, where it is used to describe right-detached phrases (although in work by Dik and associates, tails are viewed as a true repair mechanism, a view that is obviously not shared here).

Ground: Elements that indicate where and how to enter  $I_S$ . The *link* points to a specific file card for the entry of  $I_S$ . The *tail* further specifies how  $I_S$  fits on a given file card.

The fact that the ground is typically known, ‘presupposed’, topical or expected is an artifact of its anchoring role. Furthermore, the ground will only appear if the speaker judges it is needed for an efficient entry of the focus, in the sense specified below. If the appropriate locus for a new bit of information is assumed to be known, no anchoring ground appears.

From this, then, it is deduced that these primitives may combine into only four possible instruction-types: all-focus, link-focus, link-focus-tail, and focus-tail. Each primitive contributes its constant informational interpretation to the rules yielding the interpretation associated with each instruction-type. Interestingly, this repertoire of instruction-types encompasses systematically all the informational constructions previously described in the literature. The all-focus instruction-type corresponds to the neutral descriptions in Kuno (1972), the news sentence in Schmerling (1976), Lambrecht’s (1987) sentence-focus structure, and thethetic judgment in Kuroda (1972) and Sasse (1987). The link-focus instruction-type corresponds to a classic topic–comment structure (e.g. Mathesius, 1929; Hockett, 1958: 201), Lambrecht’s predicate–focus structure, and the categorical judgment of Kuroda and Sasse. Finally, the two tailful instruction-types correspond to the so-called narrow, constituent or contrastive foci (e.g. Chomsky, 1971) and to the typical open-proposition structures of Prince (1986) and Ward (1988).

These types are shown in (33) to (35). The sentences in (33) encode the link-focus instruction-type, those in (34) the tailful instruction-type, and in (35) there are all-focus instructions:

- (33a) What about Luke? What can you tell me about him?  
 [<sub>L</sub> Luke ] [<sub>F</sub> loves his DOG ]
- (33b) What about Luke? What did he do?  
 [<sub>L</sub> Luke ] [<sub>F</sub> CALLED ]
- (34a) What about Luke? How does he feel about his dog?  
 [<sub>L</sub> Luke ] [<sub>F</sub> LOVES ] his dog
- (34b) What about Luke? Who does his love?  
 [<sub>L</sub> Luke ] loves [<sub>F</sub> his DOG ]
- (35a) What’s new?  
 [<sub>F</sub> LUKE called ]
- (35b) Sign on a beachside store:  
 [<sub>F</sub> SHOES must be worn ]

Finally, let us describe the exact interpretation of each one of the primitives and the interpretive import of each instruction-type. The focus segment is interpreted as being in the scope of an ENTER operator. The minimal informational interpretation of any sentence is, then, an instruction ENTER(INFORMATION). This bare all-focus structure is enriched if any ground material is present. If an expression denot-

ing a file card  $fc$  is encoded as a link, it is informationally interpreted as  $GOTO(fc)$ , i.e., it points to a specific file card, where the incoming information will be entered. Thus, the interpretation associated with a link-focus instruction is  $GOTO(fc)$  ( $ENTER(INFORMATION)$ ). It is clear now why links are not needed in every sentence. They need to appear only if a hearer is instructed to switch to a new site of information entry. If the information of a sentence  $S_n$  is to be recorded on the file card where the information of  $S_{n-1}$  was recorded, no link is needed.<sup>12</sup>

The tail further specifies the nature of the entry on the current file card  $fc$ . It indicates that the information in the focus is not simply added to  $fc$  but must substitute for something in a record already present on  $fc$ . In other words, a tailful instruction directs the hearer to a particular record on a file card and indicates that the focus completes or alters that record in some way. To operationalize this, the  $ENTER$  operator is assumed to have two distinct manifestations. One, the  $ENTER-ADD$  type, acts as a default and is the one associated with tailless sentences. The other, the  $ENTER-SUBSTITUTE$  type, is triggered by the presence of a tail. Thus, a link-focus instruction is actually interpreted as  $GOTO(fc)$  ( $ENTER-ADD(INFORMATION)$ ), whereas a link-focus-tail instruction is  $GOTO(fc)$  ( $ENTER-SUBSTITUTE(INFORMATION)$ ).

Examples (33a), (34a), and (35a), repeated here as (36a), (37a), and (38a), then, receive the following interpretations:

- (36a) [<sub>L</sub> Luke ] [<sub>F</sub> loves his DOG ]  
 (36b)  $GOTO(Luke(x))(ENTER-ADD(x \text{ loves his dog}))$   
 (36c) Go to the file card 'Luke' in your knowledge-store and then enter the information of the sentence by adding on that file card that he loves his dog.  
 (37a) [<sub>L</sub> Luke ] [<sub>F</sub> LOVES ] his dog  
 (37b)  $GOTO(Luke(x))(ENTER-SUBSTITUTE(loves, \{V \mid x \text{ V his dog}\}))$   
 (37c) Go to the file card 'Luke' in your knowledge-store and then enter the information of the sentence by substituting 'loves' for V in the record 'Luke V his dog' on that file card.

<sup>12</sup> This kind of linkless sentence is illustrated by (ii) in the following sequence:

- (i) [<sub>L</sub> Those patients ] [<sub>F</sub> he hasn't visited yet. ]  
 (ii) [<sub>F</sub> They are second shift patients that came in early. ]

The information carried in (ii) is recorded on the file card denoting *those patients*. Since that file card is the same one used in (i), in (ii) there is no need for a  $GOTO(fc)$  instruction (although, for rhetorical purposes, the link may be redundantly repeated). Several authors within the topic-comment framework would argue that in (ii) there is indeed an S-topic, *they*. This is one place where links and S-topics differ. In fact, it is argued in Vallduví (1992) that unstressed pronouns in English are irrelevant to informational interpretation. Their presence is the result of independent requirements from other components of grammar. In languages that do not have these requirements or in English cases where they are overruled (especially, 1st and 2nd person in some contexts), the subject in (ii) would be a phonologically null category.

The linkless sentences in (38) above illustrate another kind of linkless sentence. In these, no file card is designated as a site of information entry. Instead, a default 'current situation file card' is used. This reflects Kuno's (1972: 299) intuition that these 'neutral descriptions' present a whole event and are not 'about' any referent in particular (see also Gundel, 1974: 36).

- (38a) [<sub>F</sub> LUKE called ]  
 (38b) ENTER-ADD(Luke called)  
 (38c) Enter the information of the sentence by adding to your knowledge-store that Luke called (on a default situation address).

The relevance of prosody in the structural encoding of information packaging in English has long been observed and studied. The only structural difference between the link-focus sentence in (36a) and the link-focus-tail sentence in (37a) is prosodic. The fact that *his dog* in (37a) is not focal is signalled by a prosodic shift: the default clause-final pitch maximum is displaced to the left, thus indicating that only the verb is informative (cf. Selkirk, 1984; Ward, 1988; and Steedman, 1991, among others, for details about these phonologico-informational facts).

In contrast with English, Catalan makes no extensive use of prosody in the structural encoding of information packaging. Instead, Catalan must resort to syntax. In section 5.2 it is shown that this is where right-detachment plays a crucial role.

## 5.2. The role of right-detachment

### 5.2.1. Nonfocal complements in Catalan and English

The prosodic contour of sentences in English is ‘malleable’, in that the pitch maximum may appear on different positions in the clause. In Catalan, however, it appears that the pitch maximum is fixed over the righthand core-clause boundary and cannot be shifted to the left. Strings (39b) and (39c) are ungrammatical:

- (39a) Portarem el gos a EIVISSA.  
 1p-fut-take the dog to Iviza  
 ‘We’re taking our dog to Iviza.’  
 (39b) \*Portarem el GOS a Eivissa.  
 (39c) \*PORTAREM el gos a Eivissa.

In (39a) *a Eivissa* ‘to Iviza’ is part of the focus: (39a) is a felicitous response to (40a), but an infelicitous one to (40b), which requires an answer with a nonfocal *a Eivissa*:

- (40a) Què fareu, aquest cap de setmana?  
 ‘What will you do this coming weekend?’  
 (40b) I a Eivissa què hi anireu a fer?  
 ‘And Iviza, what are you going there for?’

As noted above, the English equivalent of (39a) would not be a felicitous answer to (40b) either. An English viable answer to (40b) would have to have the pitch maximum on the direct object. Given that Catalan (39b) is not available, how does Catalan express the appropriate felicitous answer to (40b)?

The answer is: By means of right-detachment. It is precisely in this type of context that right-detachment is felicitously used in Catalan. Right-detachment in Cata-

lan, then, is informationally equivalent to a sentence with a marked prosodic contour like (37a). Their equivalence is illustrated in (41) and (42) ((42) is a direct Catalan translation of (41)). The (a) context requires a focal direct object and the (b) context a ground direct object. As expected, the ground object in (42b) is a right-detached phrase:

- (41a) S<sub>1</sub>: I'm preparing the menu for the president's dinner. Is there anything he can't eat?  
 S<sub>2</sub>: Yes. The president [<sub>F</sub> hates CHOCOLATE ]
- (41b) S<sub>1</sub>: I went to Switzerland and brought back a chocolate bar for the president.  
 S<sub>2</sub>: Bad move! The president [<sub>F</sub> HATES ] chocolate.
- (42a) S<sub>1</sub>: Estic preparant el menú pel sopar del president. Hi ha res, que no pugui menjar?  
 S<sub>2</sub>: Sí. El president [<sub>F</sub> detesta la XOCOLATA ]
- (42b) S<sub>1</sub>: Vaig anar a Suïssa i he portat una rajola de xocolata pel president.  
 S<sub>1</sub>: Malament! El president [<sub>F</sub> la<sub>1</sub> DETESTA, ] la xocolata<sub>1</sub>.

Right-detachment is also used when both complements of the verb are part of the ground. (43c), of course, is ungrammatical:<sup>13</sup>

- (43a) But I [<sub>F</sub> GAVE ] the book to Mary ...  
 I don't know why she says she doesn't have it now.
- (43b) Si [<sub>F</sub> l<sub>1</sub>'hi<sub>2</sub> vaig DONAR, ] el llibre<sub>1</sub>, a la Maria<sub>2</sub>.  
 No sé perquè diu que no el té, ara.
- (43c) \*Si vaig DONAR el llibre a la Maria.

The conclusion we are forced to draw is that right-detachment in Catalan is the means by which the right focus–ground relationships in a given context are attained. In Catalan, ground elements are forced out of the core clause. Since a shift in prosodic prominence is not available, the association between focus and prominence must be achieved in some other way: the 'disturbing' ground material is moved out of the way by means of detachment (Vallduví, 1991).

As expected, if in a given context a phrase is to be understood as focal, it must be left in situ, i.e. it cannot be right-detached (see (44b)). This is true even if the phrase in question displays a high degree of topicality, in Givón's sense, like the freshly mentioned *the computer* in (45):

<sup>13</sup> Even though (43a) is acceptable in this context, (i) is probably more idiomatic:

(i) But I DID give the book to Mary.

In Catalan, a sentence with the pitch maximum on the verb can actually be the structural reflex of focusing on three distinct elements. The information of the sentence may be the verb proper, it may be the tense, or even the affirmation/negation polarity. In English, in contrast, the two latter cases, especially the third, are not encoded through prominence on the main verb but through prominence on the auxiliary (cf. Prince, 1986). In (43a) the informative element in the sentence is the fact that the book *had* been given to Mary, i.e., the temporal value of the proposition. That is why (i) is an appropriate alternative here.

- (44a) On el tens, el gos?  
 ‘Where’s your dog?’  
 [<sub>F</sub> El vaig prendre a EIVISSA ]  
 ‘I took it to Iviza.’
- (44b) #L’hi<sub>1</sub> vaig PRENDRE, a Eivissa<sub>1</sub>.
- (45a) S<sub>1</sub>: Tinc un ordinador que va molt bé. Té, mira aquest treball.  
 ‘I have a computer that works really well. Here, take a look at this paper.’  
 S<sub>2</sub>: Em pensava que els feies al macro, els treballs.  
 ‘I thought you did your papers on the mainframe.’  
 S<sub>1</sub>: Sí, però aquest<sub>1</sub> [<sub>F</sub> l<sub>1</sub>’he fet amb l’ordinador. ]  
 ‘Yes, but I did this one with the computer.’
- (45b) #Sí, però aquest-1 [<sub>F</sub> l<sub>1</sub>’hi<sub>2</sub> he fet, ] amb l’ordinador<sub>2</sub>.

Of course, the reversal is also true: if a complement must be part of the ground in a given context, it cannot be left in situ, as shown in (16) above.

### 5.2.2. Left-detachment

As noted in section 4, right-detachment is one of two detachment options available to nonfocal phrases, the other one being left-detachment. What distinguishes one detachment from the other? It was also noted that for both the topicality and the topic–comment perspectives the difference in directionality is due to referential or cognitive status and that this view is not problem-free.

From the perspective of the analysis laid out in section 5.1, there are two informational roles that ground elements may perform: link and tail. The answer given here to the question posed by the existence of both right and left-detachment is that these two options correspond to the two distinct roles carried out by ground elements: left-detachment encodes links and right-detachment encodes tails. Thus, both detachment configurations have in common the fact that they encode instructions where the ground is non-null. They differ in whether the part of the ground they encode plays a link function or a tail function: link-focus instructions are coded by means of sentences with left-detached phrases, focus-tail instructions by means of sentences with right-detached phrases, and link-focus-tail sentences by means of sentences with both.

The difference between the two detachments may not be obvious at first blush, but surfaces in the appropriate contexts. Appealing to a higher degree of topicality for right-detachment is not sufficient. The right-detached phrase in (16a) above is not highly topical in any sense and neither is the right-detached phrase in (46). In (46), *als de Cornell* ‘[the] Cornell [basketball team]’ is presumably not at all salient for the hearer, even if two other Ivy League basketball teams are playing on TV at the time of utterance. In fact, the left-detached phrase in (47) is more likely to qualify as a G-topic than the right-detached phrase in (46).

- (46) [Penn’s basketball team playing unknown Ivy League team of TV. The week before that, Penn had played Cornell.]

- Diu que els-hi van fotre una PALLISSA, als de Cornell<sub>i</sub>.  
 3s-say that obj 3p-pst-do a beating to.the of Cornell  
 ‘They say they [i.e. Penn] beat the hell out of Cornell.’ (EV 02-87)
- (47) Quant al Joan i la Isidora no t’ho sé dir,  
 ‘As for Joan and Isidora I can’t really say,’  
 doncs [<sub>L</sub> el Joan-1 ] [ el<sub>i</sub> veiem ben POC. ]  
 since the Joan obj 1p-see quite little  
 ‘since Joan we see very little of.’ (JP 03-87)

However, the difference between left- and right-detachment becomes self-evident in contexts where the link is obviously contrastive. The fact that links (or S-topics) can be contrastive has long been recognized (Kuno, 1972; Prince, 1984; Gundel, 1985). This is illustrated in (48):<sup>14</sup>

- (48) S<sub>1</sub>: Què en fareu, dels animals?  
 ‘What are you going to do with the pets?’  
 S<sub>2</sub>: [<sub>L</sub> El gos<sub>1</sub> ] [<sub>F</sub> el<sub>i</sub> prendrem a EIVISSA, ] però [<sub>L</sub> El gat<sub>1</sub> ] [<sub>F</sub> el<sub>i</sub>  
 the dog obj 1p-fut-take to Iviza but the cat obj  
 deixarem a CASA ]  
 1p-fut-leave at house  
 ‘The dog we’ll take to Iviza, but the cat we’ll leave home.’

Significantly, even though *el gos* ‘the dog’ and *el gat* ‘the cat’ are ground elements, right-detachment is completely infelicitous in the same context:

- (49) # [<sub>F</sub> El<sub>i</sub> prendrem a EIVISSA, ] el gos<sub>1</sub>,  
 #però [<sub>F</sub> el<sub>i</sub> deixarem a CASA, ] el gat<sub>1</sub>.

The fact that only left-detached phrases may be contrastive follows from the definition of links and tails given above. Recall that a link is informationally interpreted as GOTO(*fc*), i.e. it designates a specific file card as the site where the information of S<sub>n</sub> is to be recorded. There is no need for a GOTO(*fc*) if the current site of information entry is inherited from S<sub>n-1</sub>, but it is indispensable in cases in which the information of S<sub>n</sub> is to be recorded on a file card which is not the current site of entry (see section 5.1), as in (48). The contrastive feeling in (48) arises when the file card for ‘the cat’, *fc*<sub>2</sub>, is designated as a site of information entry in opposition to the file card for ‘the dog’, *fc*<sub>1</sub>. In other words, there is a salient opposition between *fc*<sub>1</sub> and *fc*<sub>2</sub> as sites of entry for the information of S<sub>n-1</sub> and S<sub>n</sub>, respectively.

<sup>14</sup> As pointed out in Szabolcsi (1981: 158), link contrast must be distinguished from focus contrast. Foci can be contrastive too if they stand in a salient opposition with some other element in a scale or set (cf. Ward, 1988). The potential contrastive nature of links has been related in the topic-comment approach to the ‘topic shifting’ function of S-topics. Lambrecht (1981: 94) notes that tails (his ‘anti-topics’) cannot perform this function.

Tails, in contrast, do not designate a file card as a site of information entry. Rather, their informational role is to specify that the mode of information entry for  $S_n$  is not ENTER-ADD but rather ENTER-SUBSTITUTE. In ENTER-SUBSTITUTE instructions, the tail denotes a specific record  $R$  already present on the file card that acts as current site of information entry. The information of  $S_n$  alters and completes  $R$  in some way. As an illustration, consider example (16) again, repeated here:

- (50a) Vaig fixar-m'hi bé i, allà al fons, a la boca de la cala immensa, encara el veia,  
el caparrot del gegant.  
*Ho, ERA, un gegant.*  
obj 3s-impf-be a giant  
'I looked intently, and, down by the mouth of the huge cove, I was still able  
to see the giant's big head. He was a giant indeed.'
- (50b) 'the giant  $Y/N$  was a giant'.

Let us assume, for ease of exposition, that the site of information entry for (50a) is the file card for 'the giant' (specified in the previous discourse). The tail in (50a) instructs readers to search for a particular record of the form of (50b) on their file card for 'the giant' ( $Y/N$  is an instantiated or uninstantiated value in the affirmation/negation polarity). The focus in (50a), realized through the verb, is affirmation. The ENTER-SUBSTITUTE instruction encoded in (50a) is (51a), paraphrased as (51b):

- (51a) ENTER-SUBSTITUTE( $Y, \{Y/N \mid X \text{ } Y/N \text{ was a giant}\}$ )  
(51b) (On current  $fc$ ) enter the information of the sentence by substituting 'yes' for  $Y/N$  in the record 'x  $Y/N$  was a giant'.

Right-detachment does not give rise to contrastive readings because the informational role of tails, unlike that of links, is not to instruct hearers to shift the site of information entry to a different file card. Tails simply help retrieve or reconstruct an existing record (on the current  $fc$ ) in relation to which the informational update is to be carried out.

The informational role of tails also accounts for the fact that their referents tend to be familiar, something the topicality and topic-comment approaches capitalize on. Tails designate an *existing* record in the hearer's knowledge-store. This means that this record is hearer-known and that, in turn, referents contained within that record tend to be hearer-known too. Crucially, though, they need not be [+activated], as examples like (21b) and (46) show. Furthermore, tails need not even be referential, since qua information-packaging elements, their referential force is irrelevant. Unlike the file card denoted by links, the file card tails plays no role in the interpretation of instructions. For instance, the phrase *un gegant* 'a giant' in the predicative context in (50a) is devoid of any referential force. All that is required in (50a) is that readers be able to retrieve the record (50b), i.e. that they have a record of the giant-ness of the giant.

### 5.2.3. Pronominalization

What is the difference between plain pronominalization and right-detachment within the framework described in section 5.1? In other words, why are both (52a) and (52b) available?

(52a)  $Hi_1$  prenem el GOS, a Eivissa<sub>1</sub>.

(52b)  $Hi$  prenem el GOS.

'We (generally) take our dog there (to Iviza).'

The topicality approach addresses this issue by claiming that (52a) is licensed by a decrease in the topicality of 'Iviza' in the presence of potential referential interference. In contrast, the topic–comment approach claims that while in (52a) 'Iviza' is necessarily an S-topic in a topic–comment construction, (52b) is ambiguous between (at least) an S-topicless reading and a reading where 'Iviza' is the topic.

In the instruction-based approach taken here, the difference between (52a) and (52b) is that the former is an instruction cum tail and the latter is a tailless instruction. The instruction in (52a) designates the particular record 'we \_\_ to Iviza' on the current site of information entry. The information of (52a) alters or completes this record in some way. In contrast, tailless instructions do not designate an existing record. Sentence (52b) would be used in contexts where there is no need to instruct the hearer to search for a particular record.

The need for the use of an instruction cum tail is illustrated by several examples above, where the use of a right-detachment was shown to be necessary. Take, for instance, example (20b), repeated here as (53b) (part of the context is also reproduced). (53b) would be infelicitous without the right-detached phrase.

(53a)  $S_2$ . Les ametlles també en<sub>1</sub> TENEN, de closca<sub>1</sub>.

the almonds also obj 3p-have of shell

'Almonds also have a shell.'

(53b)  $S_1$ . Ah! Jo no n'he menjat MAI, amb closca.

i no obj.1s-pst-eat ever with shell

'Really? I've never had them with a shell.'

(53c)  $S_3$ . No, jo acostumo a TREURE'l<sub>1</sub>-zi/, la closca<sub>1</sub>.

i 1s-be-used-to take-off.obj.iobj the shell

'No, I myself usually take the shell off (them).'

In (53b)  $S_1$  instructs her hearers,  $S_2$  and  $S_3$ , to search for a record R of form 'i \_\_ almonds with a shell' on the current site of information entry (the file card for  $S_1$  (= 'I')). The information in (53b) is that \_\_ is *have never eaten*.  $S_1$  assumes that R is known to her hearers because they can obviously infer from the previous linguistic context that  $S_1$  stands in some relationship with, or has some attitude towards, almonds with a shell. However, given this same context,  $S_1$  must assume too that  $S_2$  and  $S_3$  know that she stands in some relationship with, or has some attitude towards, almonds in general (shelled or unshelled) as well. In (53b), in the absence of the tail *amb closca* 'with a shell' designating the record R, the information *have never eaten*

could have been taken to relate to almonds in general rather than only to almonds with a shell. The presence of the tail makes it clear that R is the record to update.

The same is true of (41b), repeated in (54). The record R the hearer is instructed to retrieve is ‘the president \_\_ chocolate’:

(54a) S<sub>1</sub>: I went to Switzerland and brought back a chocolate bar for the president.

(54b) S<sub>2</sub>: Bad move! The president [<sub>F</sub> HATES ] chocolate.

Given the previous context, S<sub>2</sub> has enough grounds to assume that R is accessible to S<sub>1</sub>. The instruction in (54b) directs S<sub>1</sub> both to a new site of information entry (the file card ‘the president’) and to record R on this card and specifies that the information is that \_\_ is *hates*. In contrast, a reply with a tailless instruction, *the president HATES it*, would not have been sufficient for S<sub>1</sub> to know that the information of (54b) related to record R and not to some other record (e.g. ‘the president \_\_ the chocolate bar’). Compare (54b) to (55b) where a tailless sentence is indeed felicitous:

(55a) Never leave any chocolate lying around in the meeting room.

(55b) The president [<sub>F</sub> HATES it ].

The fact that instructions cum tail are necessary in cases like (53) or (54) may account for the analysis of right-detached phrases as a clarifying or disambiguating device. The use of a tail is necessary when (the speaker assumes) the hearer is unable to access a record R without it. In some sense, the presence of the tail has a disambiguating effect. Not on the identity of a particular referent, but rather on the identity of a particular record R, i.e. the record the information of the sentence relates to.<sup>15</sup>

A similar example, albeit with somewhat different conditions on the establishment of the ground, is (15), repeated here as (56):

(56) Vet aquí la veu de l'autoritat, això cal, això no cal: aquesta és la realitat [...].

Ah, carall,

*que n<sub>2</sub>'ÉS, de dura<sub>2</sub>, de vegades, la realitat ...*

that obj.3s-be tough sometimes the reality

‘Here’s the voice of authority: this is necessary, that isn’t. Reality is like this [...]. Oh, shit, reality is tough sometimes.’

<sup>15</sup> An anonymous reviewer correctly points out that sentence (i) is felicitous in lieu of (54b) and that *that stuff* is not much more informative than *it*:

(i) The president HATES that stuff.

While *that stuff* is, as an epithet, not much more informative than a pronoun, it has enough content to rule out reference to a singular referent like ‘the chocolate bar’ in this context, thus making it clear that what the president hates is not the chocolate bar S<sub>1</sub> brought back from Switzerland per se but something else. In this cases, the obvious candidate is ‘chocolate’, which is precisely a kind or a *stuff* (notice, though, that it could refer to ‘chocolate bars’ in general too).

In (56) the previous context warrants the assumption that readers have some beliefs about reality. However, it does not warrant the assumption that readers have access to a record R of the form ‘sometimes reality Y/N is tough’. Nevertheless, the writer assumes R is accessible to his readers from world knowledge and treats it as if it were preexistent in the hearers’ knowledge-stores. If (56) did not include a ground, it would be total gibberish. Readers would not know what the information ‘Y/N is Y’ relates to. The expression of a tail is necessary to insure that the information of the sentence is entered in relation to R. Pronominalization could not have achieved the same result.<sup>16</sup>

Cases like this could be described as distilling a certain feeling of ‘camaraderie’ between interlocutors, as pointed out by Lambrecht (1991). This stylistic effect in (56) can be expressed as, ‘‘I know all of us have thought about the toughness of reality, that we all have had our good times and bad times, but this story that I just told you does confirm in my eyes that reality is indeed tough sometimes’’. But this effect is not a fundamental function of right-detachment. Speakers, who have at their disposal a number of information-packaging mechanisms, exploit them for other derivative or secondary stylistic and rhetorical functions, as ‘camaraderie’ or the ‘sarcastic nuance’ effect mentioned by Lambrecht.<sup>17</sup>

#### 4. Conclusion

The claims found in the literature about right-detachment are not adequate to capture the phenomena associated with this construction in Catalan. This paper proposes that right-detachment in Catalan is the structural reflection of one type of information-packaging instruction. In particular, it encodes instructions cum tail, which specify a particular record (on the current site of entry) that the information of the sentence alters or completes in some way. In section 4.1 it is shown that Catalan right-detachment is not the reflection of a sentence production breakdown. Section 4.2 shows that the construction does not signal any particular referential or topicality standing of the detached phrase, as evidenced by the diversity of the right-detached phrases in the examples there. It also shows that marking S-topic status is not the primary function of right-detachment in Catalan. While it is true that the record designated by a tail must be recoverable or reconstructable by the speaker, this says nothing about the referential nature of the tail itself (beyond the statistical level).

In section 5.1 it was shown that the function carried out by right-detachment in Catalan may be carried out exclusively by phonological means in English. While

<sup>16</sup> Ziv (this issue) also considers that right-detachment is used in contexts where a mere pronominalization is not enough. However, she proposes that its role is not to retrieve a particular record R but rather to reintroduce an already evoked referent not accessible to pronominalization. Relating Catalan right-detachment to the marking of referential status is, as shown, problematic.

<sup>17</sup> This situation is analogous to the one described in Ward and Hirschberg (1985) about the fall-rise intonation contour. The primary function of the contour is to express speaker uncertainty and some of its secondary functions are irony and politeness.

Catalan tails must be realized by a right-detached phrase, in English they may be realized by a deaccented phrase in situ. Catalan (57a) and English (57b) are informationally equivalent:

(57a) El Lluc se l<sub>1</sub>'ESTIMA, el gos<sub>1</sub>.

(57b) Luke LOVES his dog.

Both (57a) and (57b) encode the same kind of instruction, namely, a GOTO(*fc*) (ENTER-SUBSTITUTE(INFORMATION)) instruction. One single function is associated with different structural realizations in different languages: a syntactic detachment configuration in Catalan and a prosodic shift in English.

Once the identity of (57a) and (57b) is established, the question arises of what the function of English right-detachment is. In other words, what is the discourse function of (58)?

(58) Lukes LOVES him<sub>1</sub>, his dog<sub>1</sub>.

At least two answers suggest themselves. One answer is to say that all English right-detachments are indeed cases of afterthought, unlike Catalan right-detachments (Geluykens, 1987). A second answer is to say that (58) is functionally equivalent to the prosodic shift in (57b), and that their difference is a difference in register or dialect (see Ziv (this issue) for the view that in English there is both afterthought and real right-detachment).

Whatever the answer, the fact is that Catalan right-detachment informationally corresponds to English sentences showing no special syntactic marking, but which display a particular prosodic pattern instead. This shows that the association between form and function must allow for some degree of arbitrariness. In fact, given the contrast between English and Catalan, there is no reason not to expect different languages to deal with the realization encoding of tailful instructions in quite different ways.

Catalan right-detachment, then, performs an important communicative function. Catalan speakers must learn how to express information-packaging relations much in the same way they acquire a command of other aspects of the language. Hyman (1975: 119–120) reasons that right-detachment is unavoidable, since ‘speakers, in the course of using a language, sometimes find it necessary to break the syntax and add grammatical elements in positions where they usually should not appear’. The evidence that results from the analysis of Catalan right-detachment suggests that speakers do not ‘break’ syntax, but rather use it very skillfully to ‘package’ propositional content according to their assumptions about their interlocutors’ beliefs and attentional state.

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