

Prosody and Pragmatics in Parenthetical Insertions in Catalan*

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Abstract

This paper analyses the role of prosody in parenthetical insertions, a type of structure that is extremely common in both speech and writing. The materials under study come from a corpus of spontaneous speech acts in Central Catalan (with varying degrees of spontaneity) from which a corpus of oral parenthetical insertions has been compiled. The prototypical prosodic features of a parenthetical insertion in Catalan are: prosodic autonomy, limited extension, production in between pauses or final pause, tendency towards acceleration, fall in intensity, lower pitch range and, finally, falling or rising melodic pattern. While the final fall is the most frequent pattern in spontaneous conversations with a high degree of confidence between interlocutors, a final rising structure is found in interviews in which the degree of confidence between participants is smaller, their roles are unequal, and the interviewed constructs a narrative discourse. We thus suggest that the pitch contour of parenthetical insertions is related to formality and discourse typology (in this case, narrative vs. dialogue). Bearing in mind the discursive functions performed by these insertions, we propose a typology which classifies them with regards to two main functions: completion of information, and modalisation.

Key words: prosody, intonation, parenthetical insertions, parenthesis, incidental clauses, parenthetical clauses, Catalan.

1. Introduction

We are all familiar with parenthetical insertions; we all use them and intuitively recognize them in both speech and writing. Nonetheless, they have not been extensively studied, and that there is no consensus on a clear definition. This is borne out by the profusion in the terminology used: *parentheticals*, *incidental clauses*,

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comments or *insertions*, among others, reflecting the confusion in the concepts and the terms used to designate them.

In general, parenthetical insertions tend to be studied in grammars and treatises on punctuation, both of which are traditionally devoted to the analysis of the written language. It is therefore surprising to find that grammarians persistently highlight the characteristics of oral language.¹ It is one of the few cases in which studies on written language are obliged to resort to the spoken form in order to characterise a certain structure. This suggests that prosody may play an important role not only in phonetics and phonology (the phenomena that have been most studied to date), but also in questions that have traditionally been reserved to syntax, such as the case discussed here.

2. Parenthetical insertions

In general, parentheticals have been considered sequences inserted in a sentence, which can be deleted without affecting either the semantics or the syntax of the sentence. But the question is not as straightforward as it appears: what does it mean that an insertion is semantically *negligible*? Presumably, if a speaker decides to introduce a parenthetical insertion, s/he probably considers its semantic content to be important. And one more question: is it not common to find cases with a syntactic link between the parenthesis and its host utterance?

2.1. Terminological chaos

The phenomenon we refer to here by the intentionally general term *parenthetical insertion* in fact covers a range of structures with many common features. In general, terms such as *parentheses*, *parenthetical structures / sentences / clauses / insertions*, *comments*, *comment clauses*, *incidental structures*, *incidental clauses* or *digressions*, to mention only the most frequent ones, have been used as synonyms: sometimes indistinctly, at other times with certain nuances. But in the literature they are very often used with different senses: e.g., the term *incidental clause* is sometimes reserved for expressions often in first or third person of *dicendi* and thought verbs (such as *say*, *explain*, *think*, *believe*, etc.), e.g. «— I don't want to go — *Mary said.*» Accordingly, these verbs have the stage direction function in dialogs, like the verbs that introduce a fragment of direct speech in a narration. On the other hand, there are parenthetical clauses, which are used to insert a personal comment, a detailed statement, or additional information, usually in

1. The authors of *Ortotipografia* are clear on that point: «The clearest property of an incidental clause, as we see, is prosody.» (Pujol and Solà 1995: 19). And in the chapter on parenthetical sentences in the *Grande Grammatica italiana di consultazione* by Renzi *et al.*, prosody is the first and the most strongly emphasised characteristic of this sentence type: «A sentence may be interrupted or followed by sequences of words pronounced with «parenthetical intonation». In these cases the phonic segment is separated by virtual pauses from the rest of the sentence and it has a specific suspension intonation: tone falls near the syllable which carries the main stress of the parenthetical and then it increases at its end» (Borgato 1995: 165).

the middle or at the end of the sentence. These are insertions such as: «Estava convençuda —o això feia creure— que se'n sortiria» ('She was sure — or pretended to be sure — that she would get by'), where the verb *creure* is not used with the stage direction function that we have seen above, but as a discourse blender or modaliser. Some authors, on the other hand, use the term *parenthetical* to refer to the stage direction marks, and *incidental clause* to the second kind of insertion. Other authors, finally, use *incidental clause* as a generic term to refer to all these phenomena.²

To sum up, the terms are used more or less as synonyms, since they refer to very similar phenomena which have not been thoroughly studied. Some authors distinguish between the terms, but there is no agreement: nor there is any coincidence in the choice of the labels, or in perspective. For example, Fernández (1993) studies the incidental function in written Spanish from a syntactic point of view; Flament (2000a, b) discerns between *incise* and *incidente* from a phonetic perspective, using sentences that were prepared and read aloud; and Tenani (1996) studies *inserções* in an oral Portuguese corpus from a discursive standpoint. In our view, this terminological profusion is not a problem in itself, but is a reflection of the underlying problem: the confusion in the use of labels and the various relations of synonymy and hyperonymy between them clearly demonstrate us that there is currently no established and accepted description of the different insertion phenomena.

In this paper, we opt for the generic term *parenthetical insertion*, so as to be able to discuss the subject from a wider point of view. The notion of *insertion* provides a clear notion of the phenomenon of interpolating an element in the discourse, and the term *parenthesis* expresses the external and marginal source of the inserted element, both in writing and in speech. And, as neither term is indicative of the syntactic form of the fragment in question — as is the case, for instance, of *sentence* or *clause* — of the function that it exercises in the discourse — as is the case of the term *comment*. Our purpose is to start from a generic term, without connotations, in order to study this phenomenon from a general point of view.

2. In linguistic dictionaries, no significant distinction is usually made between these notions. In fact, the lexical entries are often circular: for instance, the entry *incidente* in the *Trésor de la Langue Française* (vol. 10, p. 10), where [*proposition*] *incise*, *intercalée* are proposed as synonyms of *incidente*; or the entry *parentesi* in the *Dizionario di linguistica e di filologia, metrica, retorica* (p. 544): «[...] Are named *incidental* or *parentetiche* the sentences, usually very short, that are inserted, normally with two commas, inside another sentence» (my italics). One of the examples that are proposed is *almeno così pare* ('at least it looks like this'), and it continues: «Other common cases are *didascalía* in dialogs, *disse Agnese* ('Agnese says'), *egli proruppe* ('he exclaimed'), [...], etc.» The indiscriminate use of the labels is also reflected in the entry for *inciso* in the same dictionary (p. 385), in which parenthetics are described as examples of incidental clauses: «Are examples of *incisi* sentences or parenthetical clauses such as *così almeno pare* [...]» (italics for *incisi* is mine). However, in the most specialized studies on this structure type (most of which are French) several authors distinguish between *incise* and *incidente* (cf. Flament 2000a, b).

2.2. *Prior studies*

As we said above, parenthetical insertions have been studied more in written than in oral speech. Punctuation manuals refer to these sequences in their handling of brackets, dashes, and commas. Pujol and Solà (1995), for instance, provide a detailed distinction between the use of the punctuation marks in their treatment of incidental clauses in Catalan (which are given as an equivalence of parenthetical insertions). They consider that dashes introduce a contrastive element to the sequence, for the most part a sudden one, from the perspective of syntactic structure, which can often be used to introduce ironic elements. Brackets are used to insert a clarification, usually short, to provide complementary information or to refer to a secondary element in the discourse. And, finally, commas introduce incidental clauses with a stronger link to the text by means of an analogy relation or because they are circumstantial elements. Naturally, these are only guidelines; the use varies according to the style of the particular writer.

Borgato and Salvi (1995) consider that in Italian parenthetical sentences can be inserted at any point of the discourse. In contrast, vocatives and dislocated elements can be only inserted in the marginal zones of the utterance, without breaking its prosodic integrity.

Those authors focus principally on the syntactic characteristics of parenthetical structures, though they also mention their prosodic features, as we have seen above.

Delomier and Morel (1986) analyse syntactic and, above all, intonational characteristics of *incises* in French. They describe the phenomenon as the interpolation of an utterance inside another one in progress. They call the first part of the utterance interrupted by the insertion E_1 , the incidental clause E_2 , and the resumption of the main utterance (that is, the continuation of E_1) E_3 . The intonational and prosodic structure of utterances E_1 , E_2 and E_3 are: intonational decrease in the beginning of E_2 , increase at the end, speeding-up in the production of the insertion and pause at E_3 .

Flament (2000b) works with a corpus with *incidentes* (in the sense of comments) and *incises* (in the sense of segments which specify the person who has uttered some words in direct speech) in spoken French, in several positions. He observed certain intonational divergences between these two forms: *incises* appear to present constant intonational traits, such as a melody generally tending towards stability; the breaks of the F0 with pre- or post-posed sequences are often important, creating a sharply effected intonational rift. On the other hand, *incidentes* show a less marked melodic break, the F0 remaining higher than in the case of parenthetical clauses and the breaks with the pre- and post-posed being less important.

Fernández (1993) makes a syntactic approach of *función incidental* in Spanish, without many considerations on the prosody.

Forget (2000) examines the structural properties of *insertions parenthétiques*, emphasising their syntactic autonomy and fall in intonation. The study is based on written French, but there are constant references to oral speech. The phenomenon is analysed from a rhetorical and a pragmatic point of view.

Astruc (this volume) analyses the intonation of sentence external elements in Catalan from a syntactic perspective. Concretely, the author, assuming Jackendoff's X-bar grammar, considers parenthesis as a sub-set of sentence external elements, besides appositions and relatives (N'' complements), quotations (external to the text), and adverbs.

Morel and Danon-Boileau (1998) consider the *incise* in French as a phenomenon of rupture in the discourse. They devote a whole chapter to examine the strategy of intonational highlighting, analysing two cases: the incidental clause, as a strategy of low-level intonational emphasis, and focalisation, as a strategy of high-level intonational emphasis. Among the prosodic properties of the incidental clause, they emphasise: the decrease in F0, the absence of modulation of F0, the frequent acceleration in the production, the common maintenance of the intensity and, finally, the increase in F0 at the end (unless the paragraph finishes at this point).

Tenani (1996 and 1997), following Jubran (1993), studied the phenomenon of parenthetisation in speech, starting from an oral corpus of Brazilian Portuguese. Adopting a textual-interactive perspective, she understands *inserções parentéticas* as short segments which are interpolated in the discourse as momentary deviations from the main theme. She considers that parentheticals are characterised by the co-occurrence of a higher speed and a lower pitch range than normal in the adjacent utterances. She also takes into account pauses (which define the parenthetical boundaries), the intonation (the intonational group defines the parentheticals as prosodic units) and the volume of the voice (the decrease in intensity is produced together with the pitch range, and it has a delimitative function).

3. Corpus and methodology

This paper focuses on the study of parenthetical insertions in oral language, specifically in Central Catalan. We decided not to use readings prepared in the laboratory in spite of the ease with which they can be analysed, in order to examine real language. We considered several recordings from the Oral Corpus of the Universitat de Barcelona (CUB),³ a corpus that contains materials recorded in authentic situations of language use, ranging from spontaneous conversations (in which the speakers are unaware that they are being recorded), to informal interviews from the corpus of dialectal Catalan.

Given our interest in insertions in spontaneous contexts, our research is based on 70 parenthetical insertions extracted from colloquial spontaneous conversations and from informal interviews. The spontaneous conversations are part of the COC and were surreptitiously recorded at speakers' homes. The interviews were taken from the last part of the COD, relating to questions about dialect, in which the

3. The insertions come from Oral Corpus of Colloquial Catalan (COC), Oral Corpus of Registers (COR) and Oral Corpus of Dialectal Varieties (COD). All are included in the CUB, of the Department of Catalan Philology of the Universitat de Barcelona. For a more detailed description of these corpora, cf. Oller *et al.* (2000).

interviewer asked the informant to speak on an open theme for five minutes. We call this genre «informal interviews»; they cannot be considered conversations, because they do not have an interactive structure, but neither are they closed question-answer interviews.

Ten parenthetical insertions from the COR (Corpus Oral de Registres) have been used, coming from other communicative events: an assessment interview at the end of a trial period in a company, a town council plenary session, and the weather forecast in a news bulletin. They were used to complement the analysis, taking into account phenomena which could not be observed with the basic corpus. However, they have not been included in the working corpus so as not to destabilise the homogeneity of the origin of the samples.

Certain materials were rejected for the analysis of prosodic characteristics such as intonation,⁴ but were useful to observe other traits, such as the pauses.

The methodology involved the use of digitalised recordings. The samples of parenthetical insertions were selected. The sound programs used for the data treatment were Sound Forge⁵ and Pitch Works.⁶

4. Analysis

4.1. Some remarks on syntax and semantics

From a syntactic point of view, the structures studied are very heterogeneous, ranging from relative explicative sentences to adverbs: almost all types of construction are represented.⁷ In contrast to previous reports,⁸ we observed that always there is a connection with the theme of the utterance in progress. It is true that this fragment has been removed from its habitual place in the discourse, but the fact that it is presented at a different discursive level does not mean that it has no relation with the utterance in which is inserted. If the insertion is made with structures such as a relative, the phrase will have a linking device (the relative connects the parenthetical utterance with a referent from the preceding utterance). Take the case of the following example, extracted from a spontaneous conversation:

4. Due to background noise or poor quality, not all parenthetical insertions generated a clear F0 curve.
5. Sound Forge, version 4.5.281 (Sonic Foundry, Inc., 1996-1999).
6. Pitch Works, version 4.5 (SCICON R and D, 1999).
7. Astruc (this volume) also observes that «its main problem is that external elements do not form a syntactically homogeneous class».
8. Pujol and Solà (1995) state that «we are facing a phenomenon of *relation between fragments*, though (because of their being “incidental clauses”) it may seem the contrary». According to the authors, for that reason incidental clauses like «Les discussions polítiques —ARA NO M'INTERESSEN LES ALTRES— són molt sovint un diàleg de sords» ('political discussions — I AM NOT INTERESTED IN THE OTHER ONES NOW — are very often a dialogue between deaf people') would be possible and clauses such as: «Les discussions polítiques —ARA EM FA MAL EL PEU— són molt sovint un diàleg de sords» ('political discussions — MY FOOT HURTS NOW — are very often a dialogue between deaf people') would be rare.

(1) jo volia un cotxe d'aquests dir-, dirigibles; d'aquests, bueno, teledirigits (QUE EREN MOLT CARS, SUPOSO), i... i un dia vem passar per..., encara me'n recordo, pel carrer Muntanya, em penso que era...⁹

'I wanted a steer-, steerable car; one from these ones, well, a remote-controlled one (WHICH WERE VERY EXPENSIVE, I SUPPOSE), and... and one day we walked, I still remember, by Muntanya street, I think...'

In a case like this, the relative «que» syntactically connects the comment of the parenthetical insertion with the antecedent «cotxes teledirigits» from the fragment E_1 , in the terms of Delomier and Morel,¹⁰ from the main utterance. In other cases, however, the syntactic structure of the insertion is autonomous. In these cases, linking devices between E_1 and E_3 are very common. The most frequent one is the repetition in E_3 of a word or a phrase from E_1 .

(2) com un parc (NO ÉS TAN GRAN, EVIDENTMENT), però hi ha un parc, hi han gronxadors...

'such as a park (IT IS NOT AS BIG, OBVIOUSLY), but there is a park, there are swings...'

(3) es proposa que les diferents comissions constaran (AQUEST SERIA EL NOU REDACTAT) constaran del nombre de membres que determini el plenari.

'it is proposed that the different commissions will consist (THIS WOULD BE THE NEW TEXT) will consist in the number of members that will be established by the plenary'

(4) però hi va haver aquí, un moviment precisament molt... molt nacionalista que..., que s'estava produint també a Itàlia (BUENO MOLT NACIONAL-, NO EN EL SENTIT NACIONALISTA CATALÀ, PERQUÈ DE FET ELS REPRESENTANTS EREN BASTANT... BASTANT FRANQUISTES, EREN BASTANT FATXES) però... era molt nacionalista en el sentit del territori...

'but here there was a precisely very... very nationalist movement that..., that also had been producing in Italy (well, very nationa-, not in the Catalan sense of nationalist, because in fact the representatives were quite... quite pro-Franco, they were quite fascist'

In example (2), the repetition of the word «parc» helps to connect E_1 and E_3 after the rupture entailed by the insertion. The same is true of example (3), where the speaker is reading a by-law in a plenary session in a town council; as he reads, he decides to introduce a personal comment in the form of a parenthetical insertion: «aquest seria el nou redactat». When the lecture is resumed after the parenthetical insertion, he repeats the last word he had read; furthermore, this word is the verb, and thus has a key role in the sentence. Finally, in example (4) it is impor-

9. Henceforth, and for all this paper, the parenthetical segment in the examples is written in small capital letters. It may appear between brackets, commas or dashes.

10. Henceforth, the terms E_1 , E_2 and E_3 are used: E_1 for the segment of the utterance before the insertion, E_2 for the parenthetical insertion, and E_3 for the resumption of the interrupted utterance E_1 . They are taken from Delomier and Morel (1986).

tant that in E_3 the speaker refers to the first fragment (E_1), since the parenthesis introduced as a clarification is very long and the receptor may easily lose the thread. In this case, the repetition of the term «nacionalisme» is not completely effective: the term refers to E_1 , but it also appears in the parenthetical sequence. For this reason, the speaker pauses for some time before resuming E_3 , and then uses a discursive mark («però»), which he uses to increase the tone and the intensity, and prolongs the vowel. These prosodic marks will be considered later, but for the moment it is important to note that they occur together with other language levels.

The insertion introduces, therefore, an idea different from the one in the enunciation frame. But, for the sake of pragmatic and discursive coherence, there must be a relatively close relation between them, since the insertion must help to explain the utterance. There must always be a semantic link, which may or may not be explicit at the syntactic level.

4.2. *Prosodic analysis*

Below we present a prosodic characterisation of parenthetical insertions, taking a multi-parametric approach. The variables taken into account are the ones that occur most frequently in the samples of oral Catalan we have studied: prosodic autonomy, length, pauses, speed, intensity, pitch register and pitch contour.

4.2.1. *Prosodic autonomy.* Besides syntactic autonomy, prosodic autonomy is the most emphasised feature, even in studies of areas other than prosody. Pujol and Solà (1995: 18) make a surprising statement regarding incidental clauses: «Incidental clauses have prosodic autonomy and therefore they appear between commas (...) or between brackets or dashes». Such a direct, unqualified relation of causality is debatable: in the speech flow, there are many prosodically autonomous structures other than insertions which do not necessarily appear between these punctuation marks. In fact, in the writing it would be impossible to separate with commas, brackets or dashes all the prosodically unified elements. For instance, the subject sometimes has a prosodic cohesion which separates it clearly from the following verb; but standard conventions do not allow to separate them with a comma, and the same is true of a verb and its direct complement. So it cannot be said that insertions are written inside these marks only because of their prosodic autonomy: prosodic autonomy is one of their characteristics; commas, brackets and dashes are used by convention — not as a natural consequence — in order to delimitate insertions in the written mode. But the fact that a punctuation manual emphasises their prosodic autonomy as a distinctive feature that accounts for the use of these graphic signs indicates, in our opinion, that the prosodic independence of these segments may be stronger than the independence of any other syntagm in the sentence. In fact, the confluence of other prosodic marks, as we will see, causes insertions to be perceived phonologically as specially marginal segments.

The prosodic autonomy of parenthetical insertions is reflected in the fact that they always form an intonational group of their own, independent from the utte-

rance which contains them, as Tenani (1997) remarks: «(...) *typical* parenthetical insertions (of short length) are produced as a single intonational group». Du Bois *et al.* (1993: 47) characterises the intonational unit as a speech segment with only one coherent melody, which tends to be marked by clues such as a pause, a rising tone in the beginning and a slow motion in the final syllables. The example below demonstrates these features. In Figure 1,¹¹ the parenthetical insertion is isolated from the utterance which hosts it by means of two visible pauses; in addition, it has a global complete melody, which seems to correspond to what Prieto (1999) identifies as the basic phonological structure of a declarative utterance in Central Catalan: H* L* L-L% (which seems a replica of the pitch contour from the previous utterance («la majoria se'n van»): tone begins low and presents a gradual rising until the first syllable of «vénen», where the maximum prominence is detected; following syllables fall. Also a remarkable decrease of the parenthetical insertion's pitch register is observed; it is below the normal tone of the previous and later sentences. Finally, the syllabic transcription clearly demonstrates that the tempo is faster at the beginning of the intonational group and slows down as it comes to the end.

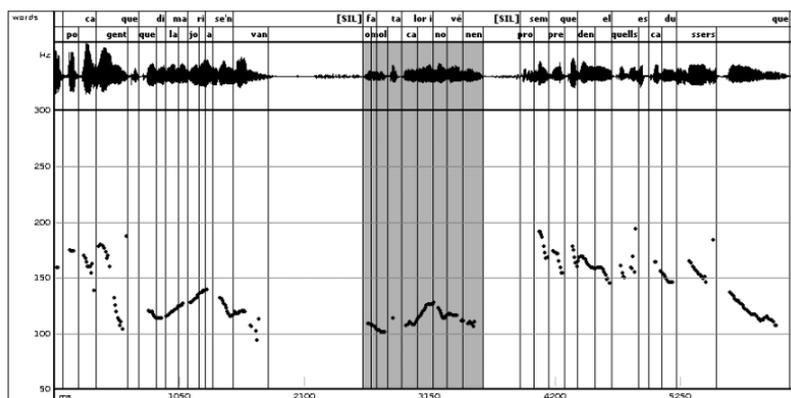


Figure 1. Text: «Hi ha poca gent que quedi: la majoria se'n van (O FA MOLTA CALOR I NO VÉNEN), però sempre queden aquells escadussers que...» ['Not many people are staying: most of them are leaving (OR IT'S TOO HOT AND THEY ARE NOT COMING), but some always stay..., the few people who...'].

Even though they are short, parenthetical insertions are often not composed of only one intonational group: they consist of two or more intonational units. Indeed, the following example contains three: «vull dir, hi havia la..., dallò». The difference in the speed between the last syllable of one group and the first of the fol-

11. Henceforth, in the figures given as illustrations (with the oscillogram and the intensity of the segments in the top and the F0 curve at the bottom), the parenthetical insertions are shaded.

lowing unit is one of the clearest examples: with the transcription syllable by syllable, it can be seen that the final bands of each group (which correspond to its last syllables) are wider because they are produced with final slow motion, normally accompanied by vocal lengthening. They contrast with the compression of the bands at the beginning of the following intonational groups (this denotes that the rhythm is accelerated at the beginning of a new intonational unit).

The criterion of the initial acceleration and the final deceleration can be decisive in cases of short insertions. In Figure 2, for instance, it is difficult to establish whether there is only one complete intonational pattern or more than one, since the curve resulting from the succession of the three patterns is globally harmonic.¹² However, in cases of longer insertions it is usually easier to perceive (cf. Figure 3).

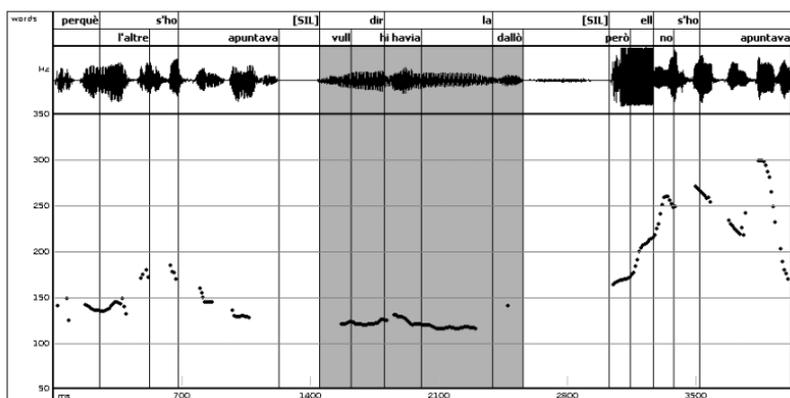


Figure 2. Text: «Perquè l'altre s'ho apuntava (vull dir, hi havia la... dallò), però ell no s'ho apuntava!» ['Because the other one was taking notes (I MEAN, THERE WAS THE... SO AND SO), but he wasn't taking notes!'].

In Figure 2, other two features are remarkable: E_2 has a lower pitch register, and there is a visible pitch reset in E_3 , the utterance after parenthetical insertion.

4.2.2. Length. Authors who have studied this subject agree that parenthetical insertions tend to be short. Though this is indeed the case — insertions tend to last approximately 1 second, and do not tend to exceed 2 seconds — it is also true that their length is a continuum and that some insertions are relatively long. Among other determining factors, the length depends on communicative needs and discourse styles; a parenthesis can range from a single word to a whole sentence. Moreover, in a discourse with a parenthetical insertion introduced to clarify the topic, the first attempt at clarification may well require the speaker to clarify a new

12. Furthermore, due to an inaccurate recording, the sequence of the F0 curve corresponding to the third intonational group is shown only by a point. This makes the intonational analysis difficult.

element that arises in the insertion, and so on. Therefore, insertions may be linked together, and may be interdependent. An example is shown in Figure 3: first, there is a long insertion in the form of a list in order to describe a term presented in the main utterance (the Majorcan girl); and second, there is another insertion in apposition, which explains another term (the other girl): «la seva amiga», which, in turn, precedes a new explicative insertion, also in the form of a list.

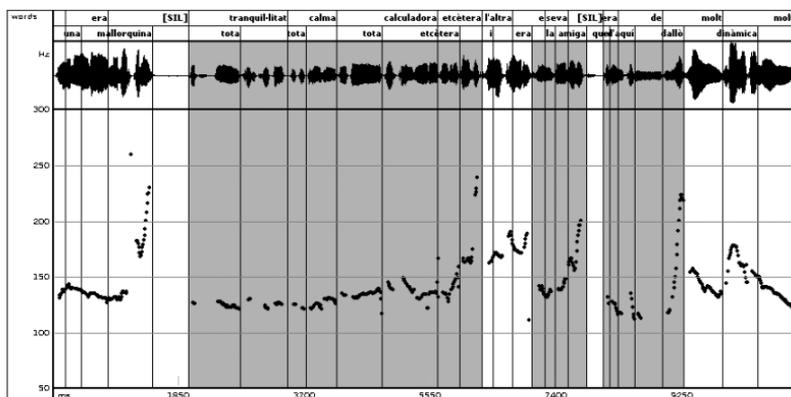


Figure 3. Text: «Una era mallorquina (TOTA TRANQUIL·LITAT, TOTA CALMA, TOTA... CALCULADORA, ETCÈTERA ETCÈTERA,) i l'altra era..., A... LA SEVA AMIGA (QUE ERA D'AQUÍ, DE... DALLÒ), molt... dinàmica, molt...» [‘the first one was a Majorcan girl (SHE WAS ALL STILLNESS, CALMNESS..., SHE WAS CALCULATING, ETC., ETC.) and the other one was..., a..., HER FRIEND (WHO WAS FROM HERE, FROM... SO AND SO), very... dynamic, very...’].

In this case, the parallel syntactic and semantic structure compensates the unusual length of an element which is initially introduced as a short specification in order to guide the listener. Pitch contour of this example is enough characteristic, with a rising in the final tone.

In short: as most of the examples in the section suggest, parenthetical insertions tend to be brief, though some are longer (for example, Figure 3). In cases of long parenthetical insertions (cf. example (4) in §4.1), the theme in progress sometimes changes to a new topic, and the original topic will be taken up again later. However, an insertion cannot be prolonged indefinitely: when it becomes excessively long, it becomes an excursus. As usual, the limits are difficult to define.

4.2.3. Pauses. It has been said that parenthetical sequences are produced in between pauses. The data from our corpus show that the highest rate of medial insertions (46.85%)¹³ occurs between silences. But if we distinguish between the contexts of the insertions, there are some significant differences.

13. Of our 70 insertions, 64 occur in medial position (namely, in the middle of an utterance in progress, which is continued after the parenthesis). The other 6 insertions are in the final position. The non-medial insertions have been omitted.

Table 1 shows that 57.89% of the insertions from informal interviews take place between pauses. But only 30.77% of the parenthetical insertions are from spontaneous conversations: in this case, the most frequent event is a pause after the insertion only (occurring in 69.23% of cases). On the other hand, 21.05% of the medial insertions from informal interviews present a single pause before the insertion; however, there are no cases of this in the parentheses from the spontaneous conversations.

Table 1. Distribution of pauses in parenthetical insertions from the corpus in medial positions.

	spontaneous conversations		informal interviews	
	occurrences num.	%	occurrences num.	%
pause only before	0	0.00	8	21.05
pause only after	18	69.23	8	21.05
between pauses	8	30.77	22	57.89
TOTAL	26	100.00	38	100.00

As regards the insertions between two pauses, the table shows that in both spontaneous conversations and interviews the second pause tends to be longer than the first one. In the spontaneous conversations there are fewer cases in which the first pause is longer than the second one (12.50%, compared with 27.27% from the interviews).

The results of the analysis of insertion pauses in less spontaneous contexts coincide with reports in the literature. In this case, it seems that in an interview-like genre (in which a person speaks, albeit in a supposedly relaxed tone, on a subject proposed by the interviewer), and in which the interlocutors do not know each other well, speakers plan their inserted sequence better. In fact, some of the occurrences observed in language read aloud are also produced between pauses: probably, the maximum level of discourse planning favours a more deliberate pronunciation of the isolated segment; the substitution of commas, brackets or dashes by

Table 2. Relative length of the pauses preceding and following the parenthetical insertions occurring between two silences.

	spontaneous conversations		informal interviews	
	occurrences num.	%	occurrences num.	%
longer before	1	12.50	6	27.27
longer after	5	62.50	12	54.54
w/out significant difference	2	25.00	4	18.18
TOTAL	8	100.00	22	100.00

perceptible pauses are a manifestation of this. However, we must bear in mind that if the insertions are taken from highly spontaneous contexts the results change considerably. We think that the improvisation of an interactive, unplanned speech event, together with a close relation familiarity between speakers, makes it more likely that the utterance in progress will be more suddenly interrupted, without being interpreted as rudeness; so, the absence of the pause before the insertion is more usual.

On the other hand, the fact that the pause after the parenthetical insertion is nearly always present, and is usually longer than the preceding pause (if there is one) does not seem to depend on the context. It appears to respond to a cognitive requirement: at the same time as the cognitive deployment of an utterance in progress, the mind jumps ahead of the interpretation of the hearer and finds a place in the discourse to interpolate a new segment. This cognitive jump may be immediate or may take place after a pause in order to process the change. The insertion usually takes the form of a short speech segment, but it transfers the speaker into a new conceptual area. The cognitive jump that finishes the parenthesis and return to the first mental frame may be slow to process, and for this reason the absence of this second pause is very rare.

4.2.4. *Speed*. Parenthetical insertions are usually produced faster than the rest of the utterance. In Figure 4 this acceleration can be seen with the help of the transcription by syllables. But in most of the cases analysed this feature is not perceived so easily. It seems that there is a tendency to increase the speed of the parenthesis, but this is not the most significant prosodic property.

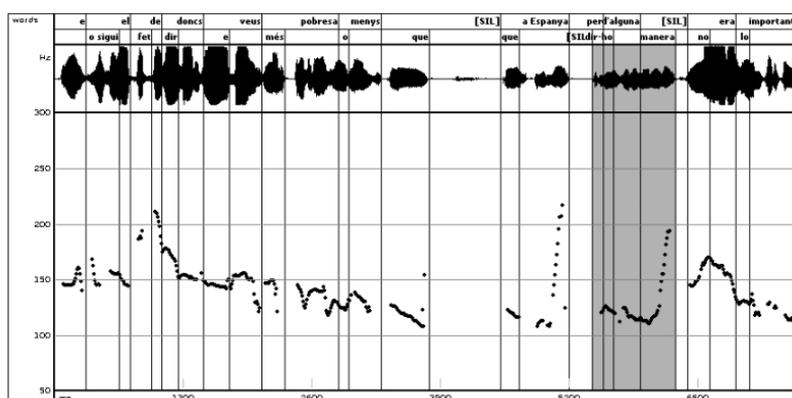


Figure 4. Text: «E, o sigui, el fet de dir doncs a... veus més pobresa o menys que... que a Espanya, PER DIR-HO D'ALGUNA MANERA, no era lo important» ['e..., that is to say, the fact that you say... well... you see more poverty or less than... than in Spain, TO SAY IT THIS WAY, wasn't the most important thing'].

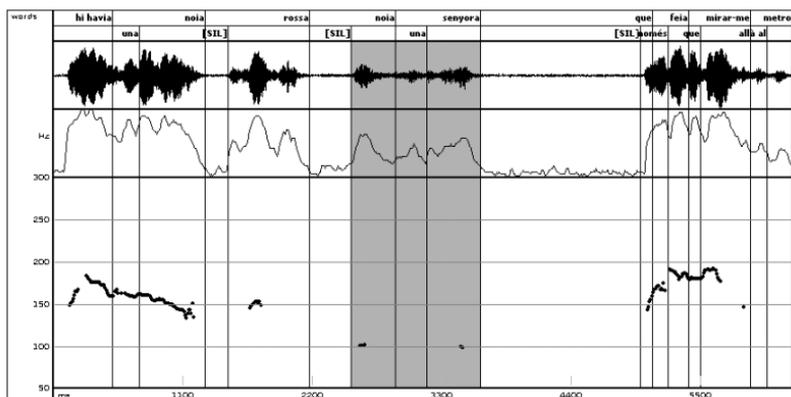


Figure 5. Text: «Hi havia una noia rossa..., NOIA... UNA SENYORA, que només feia que mirar-me, allà al metro» [‘there was a blond girl..., GIRL... A WOMAN, who didn’t do anything else than looking at me, then, on the tube’].

4.2.5. Intensity. Most of the insertions present a considerable fall in intensity compared with the speech segments preceding and following them. In the next example, with the oscillogram and the intensity of the fragment, it is clear that the parenthetical segment is produced with a considerably lower volume than the rest.

After the insertion, the beginning of E_2 , usually after a pause, often presents a substantial increase of intensity. As we will see in the next section, the tone is also higher.

4.2.6. Pitch register. Generally, the parenthetical insertion takes place in a lower pitch range than the speaker habitually uses. Figure 6 illustrates this. The insertion is from a spontaneous conversation. The speaker, a girl with a pitch range between 200 and 350 Hz, produces a parenthetical segment below this range: between 150 and 200 Hz.

Examining the tone in which parentheses are made in the illustrations in section 4.2, we see that the fall in pitch range is one of the most indicative correlates of this phenomenon, though not all the insertions present such a marked tonal difference from the utterance in progress as in Figure 6. Another characteristic phenomenon is the tonal reset between the end of the insertion and the resumption of the main utterance. The beginning of this fragment takes place at a considerably higher tone than the end of the parenthesis. Often, the tone is also higher than the point in which the first part of the utterance was interrupted, just before the insertion. This sudden rise in frequency usually goes hand in hand with a substantial increase of intensity, and often coincides with a word directly related to the interrupted part of the utterance in progress or to a discourse marker such as *però* (‘but’), *i* (‘and’), *perquè* (‘because’), etc. In the case of Figure 6, «l’altre» is the second part of a distributive sequence which was opened before the parenthesis with «un dels jocs».

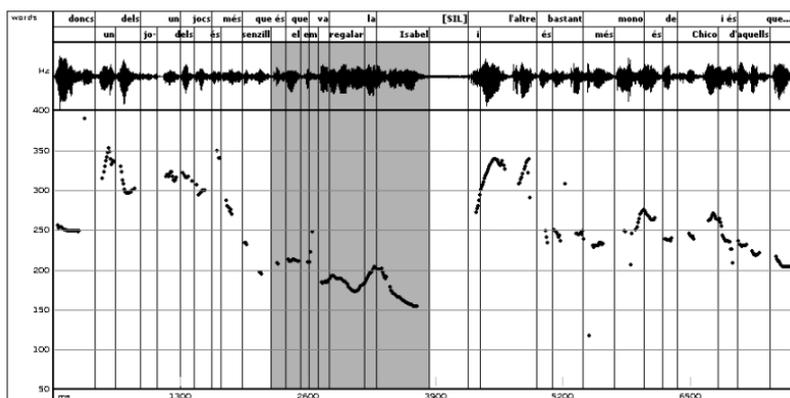


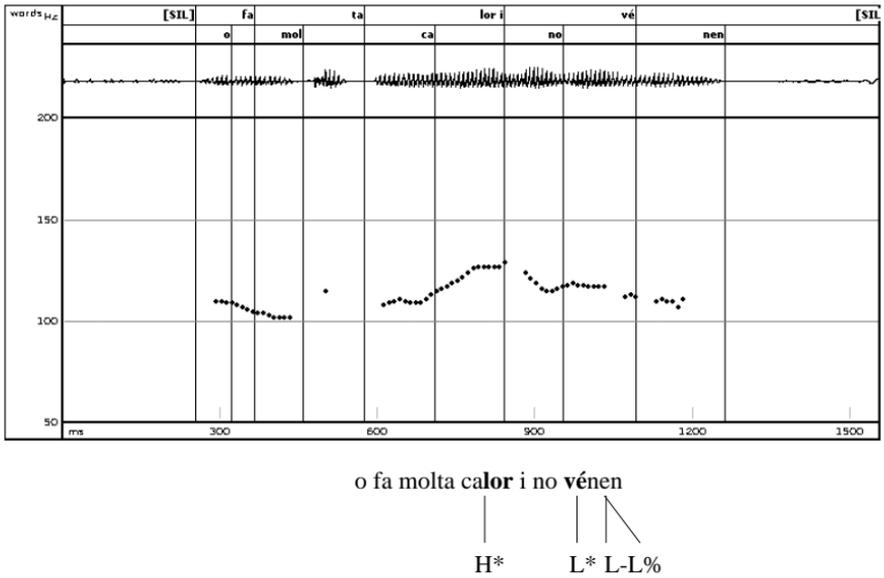
Figure 6. Text: «Doncs, un dels jo-, un dels jocs és més senzill (QUE ÉS EL QUE EM VA REGALAR LA ISABEL), i l'altre és bastant més mono, és de Chico, i és d'aquells que...» [‘So, one of the ga-, one of the games is simpler (IT IS THE ONE ISABEL GAVE ME), and the other one is quite more beautiful, it is from Chico, and it is from those that...’].

This sudden increase in tone tends to occur after a pause, as we have seen above, and is one of the most easily perceptible indicators. It indicates to the hearer that the speaker is returning to the original argumental thread.

4.2.7. Pitch contour. As seen above, the parenthetical insertion can comprise one or more intonational groups, and so has one or more complete pitch contour. The intonational pattern of the insertion may be that of the assertive utterance in Central Catalan, with a final falling tone, as we saw in Figure 1.

However, the boundary accent very often shows a rising tone, as we can see in Figure 7. The pattern begins in a low tone which rises softly during the following unstressed syllables. There is then a final rising movement, which coincides with the stressed syllable. It seems that syllables previous to this one show a deaccenting. This may be another parenthetical insertion's property, together with a probable elocution speeding-up.

A final rising tone seems to be more polite to the interlocutor than a falling one. In the analysis phase, we observed that the insertions with final falling tone tend to be produced in contexts with a high degree of spontaneity. In colloquial conversation between speakers who know each other well, it may be inappropriate to deploy the politeness strategies typical of the contexts in which the interlocutors are not as close. The final rising pattern, however, has been found in situations of induced narration (the interviews) and also in narrative and explicative sequences of the conversations. This pattern may connote a didactic intention, or a desire to keep the listener's attention. It may also connote enthusiasm on the part of the speaker, but this hypothesis must be thoroughly studied before it can be accepted or rejected.



Quite often, the melody of the insertion is a replica of the pattern of the preceding segment (cf. Figures 3, 4 and 7 for illustrations of this phenomenon). Usually, the melodic pattern of E₁ has a final rising tone, used to indicate incompleteness (the utterance will be taken up again in E₂, with an initial high tone in order to indicate that it is the resumption of the sequence preceding the insertion). It seems that the parenthesis is sometimes attracted by the E₁ melody, which causes it to rise, even if the comment introduced is not inconclusive.

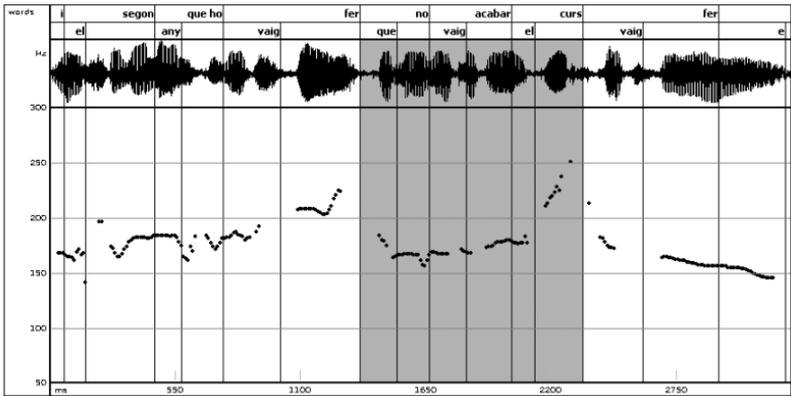


Figure 7. Text: «I el segon any que ho vaig fer..., QUE NO VAIG ACABAR EL CURS, vaig fer a...» [‘and the second year I did it, I DIDN’T FINISH THE COURSE, I did a...’].

This melodic attraction may be due to the similarity between the structure E_1 - E_2 - E_3 (especially if the parenthesis is an apposition of a preceding term, and so there is a syntactic and semantic tie) and a list, in which all the terms except the last one have a final rising tone.

4.3. Functions in the discourse

From a discursive point of view, an insertion can be considered a break in cohesion. But its special characteristics (above all, its prosodic features) work as a cohesive mark of the insertion in the utterance, and in the discourse, inside the enunciation frame in which it takes place. Sometimes, the parenthesis occurs as a result of poor preparation: with the immediacy of an improvised discourse, the function may be to recover some important, forgotten information. However, in highly planned speech events as well (even in writing intended to be read aloud) parentheses are made, sometimes as ironic observations which are emphasised by the speaker by a wink, other times as information given particular relevance and would go unnoticed if they were placed in their canonical position in the utterance. Either inadvertently or deliberately, the insertion gives a special prominence to the fragment which it contains.

It is often said that the parenthesis information is given in a second discursive level because it is of secondary importance. However, our analysis suggests that although their intensity and frequency are lower their content is not necessarily less important. On the contrary, the prosodic contrast (either upwards or downwards) individualises the insertion and thus draws attention to it (cf. Figure 8).

(5) Les temperatures seran un pèl més altes (NO GAIRE MÉS) i començaria a haver-hi ja algunes boirines.

‘temperature will be a little higher (NOT MUCH MORE) and it would begin to form some mistiness’

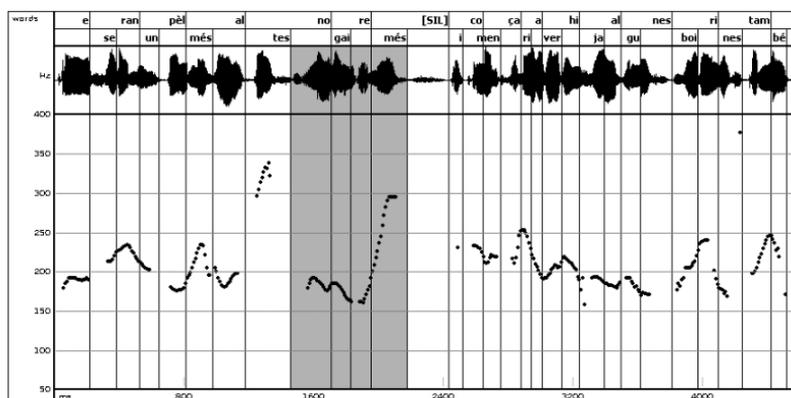


Figure 8. Text: «Les temperatures seran un pèl més altes (NO GAIRE MÉS) i començaria a haver-hi ja algunes boirines» [‘temperature will be a little higher (NOT MUCH MORE) and it would begin to form some mistiness’].

The insertion in example (5) comes from our complementary corpus, and is taken from the weather forecast in a news bulletin. The first assertion (corresponding to E_1) may be wrongly interpreted: for viewers, «pujara» could have more weight than «un pèl», and so they might understand that temperatures would increase enough for the presenter to mention it in the weather forecast. To forestall this possible interpretation, she introduces a parenthesis («no gaire més») thus minimizing the value of «pujara» and strengthening the value of «un pèl». The special prosodic characteristics stress the qualification, and make it prominent. In a supposedly neutral utterance, without a parenthetical insertion, this intention would not exist even if the lexical meaning were exactly the same, and so the utterance would not have the same communicative value.

As regards the role of parenthetical insertions in the discourse, they can be classified under two main functions: completion of information and modalisation. Sometimes, an insertion is introduced mainly to add information, without changing the point of view (which may be neutral in certain discourses and subjective in others). We can find cases of reformulation (for instance, to repair an error, to qualify an excessively categorical affirmation or to remember an item that has been forgotten), of illustration by an example, or of adding information considered important to understanding the sense of the explanation). On the other hand, the parentheses may also respond to the intention of introducing an attitudinal mark in the discourse. This other main function, modalisation, covers cases of ironic comments, subjective elements, evaluative phrasal forms, and polite set expressions.

5. Conclusions

This paper suggests that the parenthetical insertions in oral Catalan have some prosodic characteristics of their own. These features, in co-occurrence and in relation with other features (essentially, syntactic, semantic and discursive), produce the communicative efficacy intended when discourse is interrupted.

After a multi-parametric analysis based on real occurrences of parenthetical insertions extracted from spontaneous conversations and informal interviews in Central Catalan, we conclude that prosody has a fundamental role in the emission and recognition of these structures. So a syntactic or semantic description cannot ignore the prosodic component — which, in fact, is considered in grammars and punctuation manuals designed for written language.

Although insertions have a certain semantic and syntactic autonomy — that is, not only prosodic autonomy — there is necessarily a link between the insertion and the preceding elements (and sometimes with the following elements as well if the parenthesis puts forward an idea in the discourse). This relation has to be strong enough to justify the relevance of interpolating the extraneous information, but at the same time weak enough to show that the information belongs to a different discursive level from the rest of discourse.

We have proposed two main groups to categorise the functions that parenthetical insertions can carry out in discourse: completion of information (adding or reformulating) and modalisation (to introduce an attitude or point of view).

The characteristic prosodic features of parenthetical insertions in Catalan are:

- prosodic autonomy (the insertion is formed by one or more complete intonational units);
- usual brevity (although this factor is very flexible);
- frequent occurrence between pauses, the second one being longer than the first (as they insertions are taken from spontaneous conversations, there is generally only a pause afterwards);
- tendency to acceleration of speed (though this is not a decisive feature);
- considerable fall in intensity;
- production in a lower pitch range;
- melodic pattern H* L* L-L%, like an assertive statement in Central Catalan (with final falling tone), or melodic pattern with final rising tone, more similar to an interrogative.

Lastly, we stress that most studies in this field have based their analysis on formal language. There is little research on spontaneous colloquial language. We think that further research should include cross-sectional studies to analyse more profoundly the role of degrees of formality, spontaneity and preparation in the linguistic production of certain forms.

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