The Prosody of Left Detached Constituents in French

Jenny Doetjes*, Elisabeth Delais-Roussarie[◦] & Petra Sleeman

Jenny.Doetjes@let.uu.nl; Elisabeth.Roussarie@wanadoo.fr; p.sleeman@hum.uva.nl

Abstract

It is widely accepted that the prosodic realization of an utterance is sensitive to syntactic and pragmatic information. A one to one mapping between intonational patterns and the syntactic and pragmatic dimensions may be more questionable. In this paper, we investigate the intonation patterns associated with nonfocal left detached constituents in French in order to determine the weight of syntax and discourse information in selecting the intonation of these constituents.

1. Introduction

It is a well known fact that, in many languages of the world, the intonation pattern associated with an utterance is usually determined by three distinct factors (that may "apply" in parallel):

- its syntactic structure;
- its metrical organization (in terms of length or number of syllables).
- the semantic and pragmatic content the utterance and its constituents express;

In French, the intonation pattern associated with left detached constituents is generally described as being determined by semantic and pragmatic factors (see, among others, [9], [18], [20], [21], and [22]. This can be illustrated on the basis of the following examples:

- (1) a. Qu'est-ce que vous avez mangé?
 - b. Du poulet rôti, on a mangé.
- (2) a. Qu'est-ce que tu as dit à Marie?
 - b. A Marie, je lui ai dit d'arriver vers 15 heures.

In (1b), a conclusive fall (a L% boundary tone in our notation) is realized on the last stressed syllable of the IP composed on the basis of the left detached syntactic constituent 'du poulet rôti'. In (2b), by contrast, the IP composed on the basis of the left detached syntactic phrase "A Marie" is right-bounded by a continuation rise (H%).

The difference in realization can be explained by the informational dimension. In (1b), the left detached constituent corresponds to the focus of the sentence. Since, in French, a boundary tone determined by the illocutionary force of the utterance is realized at the end of the focus constituent, a L% tone (or conclusive fall) must be realized at the end of the IP [Du poulet rôti], this utterance being an assertion (see, among others, [3], [9], [13]). In (2b), the initial IP [à Marie] is right-bounded by a H% boundary tone since the constituent 'A Marie' is not a focused constituent, but a topic in the sense of Lambrecht (cf. [15] and [16]).

However, it is important to note that non-focus left detached constituents are not all of the same nature. From a syntactic point of view, for instance, a distinction has been made in the syntactic literature between three distinct constructions (see, among others, [7], [8], [10] and [14]):

- Topicalization (see [14]).
 - (3) Marie a réuni les élèves. Aux filles, elle a donné des exercices d'algèbre et aux garçons, elle a dicté un problème de géométrie.
- Hanging topic left dislocation (see among others [7] and [8]).
 - (4) Tiens, j'ai un truc à te dire. Marie, je connais le flic qui lui a retiré son permis.
- Clitic left dislocation (see, among others, [7] and [8]).
 - (5) a. Qu'est-ce que tu as dit à Marie?
 - b. A Marie, je lui ai dit d'arriver à l'heure.

From a prosodic point of view, two distinct boundary tones (or '*intonèmes*' in Rossi's terminology) may be realized at the end of the initial IP, i.e. the left detached constituent (see, among others, [20]):

- a H% [cont] boundary tone that is characterized by a F0 rise and an important lengthening of the final syllable. The H target is usually reached at the end of the syllable. This tone can be compared to Rossi's CTr 'intonème' (see [20]).
- a boundary tone equivalent to the one realized at the end of an echo question or a confirmation request. It is characterized by an important F0 rise on the last syllable, the H target being reached at the end of the nucleus and a slight fall being sometimes realized on the syllable coda. This tone will be noted H(L) % [int] in the paper. This tone can be compared to Rossi' CTi 'intonème' (see [20]).

The aim of this paper is to see whether the two distinct tones are in free variation or follow from the syntactic differences discussed above. For this, two different types of data have been taken into consideration:

- sentences that had been elaborated on the basis of the different syntactic categories. These sentences were presented to three speakers that were asked to read them. The utterances were then digitised at 22kHz and analysed with the PRAAT program.
- intuitions and judgements of several speakers regarding the possible realizations of different sentences elaborated on the basis of syntactic and pragmatic categorizations.

In section 2, we will show how the three constructions given in (3), (4) and (5) may be distinguished on syntactic grounds. In section 3, a description of the prosodic realization associated with each construction will be given. Discussion and generalizations will be proposed in section 4.

2. Syntactic characteristics

2.1. Topicalization

Examining the examples given in the presentation of the three syntactic constructions, it is possible to make a distinction between sentence (3) and the two other ones ((4) and (5)). In (3), the constituents at the left periphery ("aux filles" and "aux garçons") are extracted from the clause and what remains is an incomplete sentence. This syntactic construction, which is called topicalization, is frequently used when the speaker wants to modify the current discourse topic by elaborating a partial topic (see [2], [5], [6] and [14]). In this construction, the left detached constituent is not resumed by a pronoun in the main clause. In (4) and (5), on the contrary, the left detached constituent is resumed by an element in the clause. What remains when the detached constituent is left out is thus a fully grammatical sentence. These two constructions, which are both instances of left dislocation, may also be distinguished from one another on syntactic grounds.

2.2. Left dislocation: hanging topic and clitic left dislocation

Left dislocation involves the prosodic detachment of a constituent at the left edge of the clause, in which the dislocated constituent is resumed by a placeholder coreferent with the detached NP. Various kinds of left dislocation have been distinguished in the literature, depending on the categorial status of the left dislocated constituent, the nature of the resuming element and the syntactic relation between these two.

In left dislocation, the left detached constituent can be an NP, a PP, an AP, an infinitive or a clause. It can also be a pronoun or a proper name:

- (6) a. Cette femme, je n'ai pas confiance en elle.
 - b. A la campagne, Paul n'y reste jamais longtemps.
 - c. Heureuse, elle ne l'a jamais été.
 - d. Partir, c'est mourir un peu.
 - e. Qu'il se soit trompé, c'est évident.
 - f. Moi, je suis contre.
 - g. Pierre, je n'aime pas cet idiot.

The resuming element can be a clitic (6b,c,f), a strong pronoun (6a), a demonstrative pronoun (6d,e) or an epithet such as 'cet idiot' in (6g). With verbs such as *aimer*, 'to love' or *connaître* 'to know', the accusative clitic can be left out. This is, however, not typically related to dislocation constructions. Even in non-dislocation constructions the clitic can be left out with these verbs (see [11]):

(7) Le bon yogourt, il aime bien.

Furthermore, a dislocated constituent can be loosely related to the clause, without its relation to the clause explicitly being expressed by a pronoun or an epithet:

(8) Le métro, avec la carte orange on va n'importe où.

In the generative literature, two types of left dislocation constructions have been distinguished on the basis of their syntactic properties (see among others [7] and [8]):

- Clitic Left Dislocation (henceforth ClLD)
- Hanging Topic Left Dislocation (henceforth HTLD).

The differences between both constructions and their properties as given by Cinque for Italian in [7] are summarized in table 1.

HTLD	CILD
(a) The left-hand phrase can be of category NP only.	(a) The left-hand phrase can be of category NP, PP, AP, CP (essentially any XP).
(b) The 'resumptive element' can be an epithet or an ordinary pronoun, either tonic or clitic.	(b) The 'resumptive element' can be a clitic pronoun only.
(c) There is no Case matching.	(c) There is Case matching.
(d) The relation between the left-hand phrase and the resumptive element is not sensitive to island constraints.	(d) The relation between the left- hand phrase and the resumptive element is sensitive to island constraints.
(e) There may be at most one left-hand phrase.	(e) There is no (theoretical) limit to the number of left-hand phrases.
(f) The left-hand phrase occurs typically to the left of a 'root' sentence.	(f) The left-hand phrase can occur to the left of 'root' and 'non-root' sentences.

Table I: syntactic properties of HTLD and ClLD

This distinction has been adopted for French (see [10]). According to criterion (a), sentences (2b-e) are cases of CILDs. Criterion (b) distinguishes (2a) and (2g) as cases of HTLDs. Case matching (c) only shows up in the case of prepositional phrases (cf. (6b)), where the PP and the clitic y share a locative case feature. NPs and full pronouns (moi, toi) are note visibly case marked in French. Therefore (c) only applies in contexts where one of the clitics y, en or lui is used: these require visible case matching on the dislocated element in CILD while this marking is prohibited in HTLD. Thus, in (6b) we are dealing with CILD, while in (9), where the PP is replaced by an NP, we are dealing with a HTLD (see also [4]).

(9) La campagne, Paul n'y reste jamais longtemps.

Cases such as (6f) and (10) are ambiguous:

(10) Pierre, je ne l'aime pas.

Just as in Italian, the clitic left dislocated constituent in French is sensitive to island constraints whereas a hanging topic is not (see (d)).

- (11) a. *A Marie, je connais le flic qui lui a retiré son permis.
 - b. Marie, je connais le flic qui lui a retiré son permis.

With respect to the criteria (e-f), there are differences between Italian and French. It seems that in French there is no theoretical restriction on the number of left dislocated constituents, neither in HTLD (12) nor in CILD (13).

- (12) Pierre, Marie, cet idiot ne s'intéresse pas vraiment à
- (13) A Marie, de ce crime, je crois que je ne lui en parlerai pas.

A combination of the two types of dislocated constituents is also possible, but only with the hanging topic first:

- (14) a. Marie, de ce crime, je crois que je ne lui en parlerai jamais.
 - b. *A Marie, ce crime, je crois que je ne lui en parlerai jamais.

With respect to criterion (f) Larsson ([17]: 76-78), observes that in French CILD seems to be less acceptable in root sentences and HTLD seems to be acceptable in non-root sentences.

The conclusion of this section is that in French the distinction between ClLD and HTLD obtains. On the basis of these criteria we can often distinguish between ClLD and HTLD, but not always. As we will see below, the prosody of

the dislocated element will in some cases provide an extra criterion.

3. Prosodic realizations observed

In section 1, it was said that two distinct realizations may be associated with these constructions:

- A H% [cont] boundary tone may be realized on the last syllable of the IP that contains the left detached constituent.
- A H(L) % [int] may also be realized at this position.

In this section, the results of our study will be exposed. We analyzed the intonation associated with the left detached constituent in several utterances (assertions) in order to investigate whether the choice of the boundary tone is determined by the syntax of the left detached constituents.

3.1. Intonation and topicalization

In our data, topicalized constituents (see \S 2.1) are phrased as independent Intonational Phrases. The IP is right-bounded by a H% [cont] boundary tone, the last stressed syllable having thus the following acoustic characteristics:

- Relatively important F0 rise, the H target being generally reached at the end of the syllable;
- Important lengthening of the syllable duration (more than 50% of its duration in non-stressed position).

The realization obtained for the sentences given in (15) are shown in fig. 1.

(15) (A Bernard)_{AP} H%]_{IP} (j'ai donné)_{AP} (un livre)_{AP} H%]_{IP} (et à Marie)_{AP} H%]_{IP} (j'ai prêté)_{AP} (une cassette)_{AP} L%]_{IP}

In our data, the H(L)% [int] boundary tone has never been found at the end of the topicalized constituent. Further research on larger corpora is, however, necessary to confirm this result.

3.2. Intonation and Hanging Topic Left Dislocation

In our data, hanging topic left dislocated constituents have usually been realized in an independent IP right-bounded by a H(L)% [int] tone (see fig. 2):

(16) (Marie)_{AP} H(L)%]_{IP} (c'est clair)_{AP} (qu'elle sera fâchée)_{AP} (contre ton frère)_{AP} L%]_{IP}

The IP-final syllable has thus the following characteristics:

- Very important F0 rise, the H target being reached at the end of the nucleus, sometimes followed by a slight fall.
- Important lengthening on the final syllable.

In questions, the H(L) [int] % tone is not realized at the end of the HTLD constituent: what is observed is a L% tone (see [20] on this point). The L% boundary tone may also be realized at the end of the 'hanging topic' in an assertion, as described in [20] (see also fig. [3]).

From a pragmatic point of view, the hanging topic has several characteristics that may explain its prosodic realization, i.e. the fact that the left detached phrase is right bounded by a boundary tone also found at the end of a confirmation request. Following Lambrecht, we make a distinction between three distinct statuses for any discourse referent (DR) (see in particular [16]):

- A DR is active if it is a current center of attention of the speech participants;
- A DR is accessible if it is textually/ situationally evoked or inferable from the preceding discourse;

• A DR is inactive if it is discourse new. It belongs only to the speaker's knowledge.

In our data, the DR associated with the hanging topic is always [- active, + accessible].

3.3. Intonation and Clitic Left Dislocation

In the case of Clitic Left Dislocation, the dislocated phrase has also been phrased in a single IP. However, two boundary tones (H [cont] % and H(L) [int] %) have been realized at the end of the IP in our data (see (17) and (18) and fig. 4 and 5 respectively):

- (17) (à mon prof)_{AP} (de linguistique)_{AP} H% [cont]] (je lui ai donné)_{AP} (un livre)_{AP} L%]
- (18) (à Jean-Marie) $_{AP}$ H(L)% [int] $_{IP}$ (il lui a offert) $_{AP}$ (un compact-disque) $_{AP}$ L% $_{IP}$

The fact that both intonational patterns have been observed for this syntactic construction proves that the syntactic distinction is not sufficient to account for the intonation of the left detached constituent. An analysis of the different CILD constructions obtained in our data has shown that pragmatic information comes into play. The status of the discourse referent (DR) as exposed in section 3.2 is apparently decisive in the selection of the boundary tone realized at the end of the left detached phrase. The generalization is proposed in (19):

- (19) a. When the DR is [+ active], the H% [cont] boundary tone is selected.
 - b. When the DR is [- active, + accessible], the selected boundary tone is H(L) % [int].

This generalization allows to make several predictions. Consider (18). When (18) is an answer to the question (20), the expected realization is the one proposed in (18).

(20) Qu'est-ce qu'il a offert à ton fils?

To the contrary, (21) is the only possible answer to the question given in (22).

- (21) (à Jean-Marie)_{AP} H% [cont]]_{IP} (il lui a offert)_{AP} (un compact-disque)_{AP} L%]_{IP}
- (22) Qu'est-ce qu'il a offert à Jean-Marie?

The two boundary tones (H% and H(L)%) are also used in sequences of left detached constituents. In this case, the selection and the distribution of the tones is depending on the characteristics associated with the left detached constituent (HTLD or CILD). Moreover some constraints apply on the use of these tones (cf. among others, [20]). The successive tones may be either identical or different. In case there are identical, a succession of two HL% or two H% may be observed. In case they are different, the first boundary tone has to be H(L)% and the second one H%. The sequence H% H(L)% is thus forbidden. The observed realizations confirm the fact that the hanging topic comes first in any combination of the two types of dislocated constituents (cf. (14)).

4. Conclusions

To summarize, it appears that two dimensions come into play in the realization of non-focus left detached constituents:

- The syntactic dimension: this dimension allows to distinguish topicalization from left dislocations. This distinction being made, the H% boundary tone can be assigned to the left detached element in the case of topicalization.
- The status of the discourse referent: when the syntactic construction at play is a left dislocation (HTLD or ClLD), the H% is chosen when the DR is [+ active] (only ClLD),

and H(L)% when it is [- active, + accessible] (both types).

Further research on larger corpora that include various data types (reading text, spontaneous speech, task-oriented dialogue, and so on) is necessary to confirm the generalization proposed here.

5. References

- [1] Ashby, W., 1988. The syntax, pragmatics and sociolinguistics of left and right dislocation in French. Lingua, N° 75, pp. 204-226.
- [2] Beyssade et. al., To appear. Information in French: Introduction. *Handbook of French semantics*, F. Corblin & H. de Swart (eds). CSLI.
- [3] Beyssade et. al., To appear. Prosody an Information in French. *Handbook of French semantics*, F. Corblin & H. de Swart (eds). CSLI.
- [4] Blasco, M., 1999. Les Dislocations en français contemporain. Etude syntaxique. Paris: Champion..
- [5] Büring, D., 1997. The Meaning of Topic and Focus: The 59th Street Bridge Accent. London: Routledge.
- [6] Büring, D., 1999. Topic. Focus: Linguistic, Cognitive, and Computational Perspectives. Bosch, Peter & Rob van der Sandt (eds). CUP. 142-165.
- [7] Cinque, G., 1990. *Types of A bar-dependencies*. Linguistic Inquiry Monograph. Cambridge (Mass.): MIT Press.
- [8] Delais-Roussarie, E., et al., To appear. Left Dislocation. *Handbook of French semantics*, F. Corblin & H. de Swart (eds). CSLI.
- [9] Di Cristo. A., 1998 Intonation in French in Hirst & Di Cristo (eds), 195-218.
- [10] Fradin, B., 1990. Approches des constructions à détachement : inventaire. Revue Romane 25.
- [11] Fónagy, I., 1985. J'aime

 je connais

 : Verbes transitifs à objet latent. Revue Romane 20, 3-35.
- [12] Hirst & Di Cristo (eds.), 1998. *Intonation Systems: a survey of twenty languages*. Cambridge University Press.
- [13] Jun, S-A. & C. Fougeron, 2000. A Phonological Model of French Intonation. *Intonation: Analysis, Modelling and Technology*, A. Botinis (ed). pp. 209-242. Dordrecht: Kluwer Academic Publishers.
- [14] Kerleroux, F. & J. M Marandin., 2001. L'ordre des mots. Cahier Jean-Claude Milner. Marandin (ed). Paris: Verdier.
- [15] Lambrecht, K., 1981. *Topic, Antitopic and verb agreement in non-standard French.* Pragmatics and Beyond vol. II:6. Amsterdam: John Benjamins.
- [16] Lambrecht, K., 1994. Information structure and sentence form: Topic, focus and the mental representations of discourse referents. Cambridge studies in Linguistics 71, Cambridge University Press.
- [17] Larsson, E., 1979. La dislocation en français: Etude de syntaxe générative. Etudes Romanes de Lund. Vol. XXVIII. Lund.
- [18] Mertens, P., 1990. L'intonation. Le français parlé: Etudes grammaticales. C. Blanche-Benveniste, M. Bilger, C Rouget, C & K. van den Eynde (eds). Paris. Editions du CNRS.
- [19] Ronat, M., 1984. Logical Forms and prosodic islands. Intonation, accent and Rhythm. D. Gibbon and H. Richter (eds). Berlin: Walter de Gruyter.

- [20] Rossi, M., 1999. L'Intonation, le système du français : description et modélisation. Paris. Ophrys.
- [21] Sabio, F., 1992. Les compléments antéposés en français : analyse de deux types syntaxiques et prosodiques. *Recherches sur le français parlé*, N° 11.
- [22] Sabio, F., 1995. Micro-syntaxe et macro-syntaxe: l'exemple des «compléments antéposés» en français. *Recherches sur le français parlé*. N°13.

Figure 1: Topicalization (example (15))

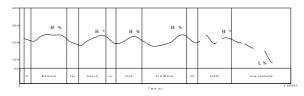


Figure 2 : Hanging Topic with H(L) % (example (16))

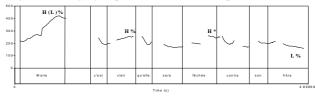


Figure 3: HTLD with L% (La Bretagne, j'y vais souvent)



Figure 4 : ClLD with H% (example (17))



Figure 5 : ClLD with H(L) % [int] (example (18))

