

The used and the possible.
The use of elicited conversations in the study of Prosody.

Frédéric Laurens, Jean-Marie Marandin, Cédric Patin & Hiyon Yoo
 Laboratoire de linguistique formelle (CNRS & Paris Diderot)

“Contrast the used to alternative prosody” (Selting 2007: 524).

Introduction.

The issue we are addressing is how to study the prosody of conversational moves. The obvious answer is to study utterances in Context. Conversation analysis (CA) has developed a sophisticated framework in which intonation is conceived of as a system of resources used by speakers to contextualize their moves. But, CA does not provide one with a method to draw descriptive generalizations. Here, we present an exploratory device, which could help us ascertain descriptive generalizations in Prosody. It crucially involves the construction of alternatives, which are either variants of the same move or instances of a different move. Then, we develop a case study – the prosody of declarative reprises – in order to illustrate the kind of results we obtain. Finally, we put our approach in perspective.

1. Experimental device

Design. Our point of departure is based on the conclusions of Bresnan’s 2007 analysis of grammatical knowledge. According to Bresnan, speakers make the same choices of constructions given the same contexts because they are endowed with the same grammatical knowledge and because grammatical knowledge conjoins formal knowledge (the making up of constructions) and contextual knowledge (the use of constructions). In order to ground her claims, Bresnan sets up an experimental device in which actual utterances are stripped of what is under study (in Bresnan’s study the choice between double dative *vs* prepositional dative) and presented to subjects within their contexts of occurrence. Subjects are asked to choose the missing part.

Extending Bresnan’s proposal to Prosody and its uses in conversation, we propose an experimental device analogous to Bresnan’s. We assume that speakers, reading the script of a dialogue, should be able to recognize (part of) its conversational organization. Furthermore, they should be able to project such a recognition in their rendering of the dialogue. Banking on that, we set up an experiment consisting in the re-recording of actual dialogues using an orthographic transcription. Thus, we obtain variants of the same dialogue. Given a turn (T) in the original dialogue, its prosodic realization (P₀) and its characterization as a type of move (M₀), we get several variants (depending on the number of repetitions): T_i, T_j, etc. They are characterized by the same lexico-syntactic content, a prosodic realization (P_i) and a move type (M_i). Four cases are possible (Table 1).

Turn	Prosody	Move type
T _i	P _i same as P ₀	M _i same as M ₀
	P _i different from P ₀	M _i same as M ₀
	P _i different from P ₀	M _i different from P ₀
	P _i same as P ₀	M _i different from P ₀

Table 1. Types of variants

We systematically compare the variants with the original and a variant with the other variants. Such a comparison should help us determine which prosodic features are tied to which moves.

Current experiment. We carried out the project by re-recording a conversation about this and that between two young men (Bertrand *et al.* 2008). The original conversation lasts about

1 hour; we have extracted a 12 minutes' stretch of dialogue, which occurs after a break towards the end of the interaction. Two subjects (Parisian, male, postdoc and undergrad in linguistics) were asked to read the orthographic transcript three times: without prior reading for the first time, after having discussed freely for the second and third time. They were instructed to read as if they were actually participating in the conversation and to be easy about possible disfluencies. They were alone in the room and sat in front of each other.

2. Case study: Reprise declaratives

Reprise declaratives. Reprise declaratives (RDs) are declaratives whose content either is the same as that of the preceding turn –literal reprise (1a) or is implied by it – content reprises (1b).

- (1) a. Literal reprise:
 <M> Nan. J'ai pas voulu. *No, I didn't want it*
 → <G> T'as pas voulu *You didn't want it*
- b. Content reprise:
 <M> [...] donc il s'appelle Paul Maé Jacky Jean *Thus he is called P M J J*
 → <G> Ah ouais tu peux avoir 4 euh *Yeah you can have four [first names]*

Moves carried out with RDs. In the literature, RDs are known to be used for signaling a problem, either in the Grounding process (they signal a problem identifying a reference or an understanding problem) or in the uptake of a previous declarative turn (RDs expressing surprise, indignation, etc.). Less recognized is their usage in the generation of on-topic talk. In such a usage, repetition of content is not used to suspend the uptake of the previous move. On the contrary, they are used by the Speaker to display her agreement with the elaboration of the current topic as it is developed by the Addressee. Two cases can be distinguished:

- Acknowledgement by co-asserting: the speaker rejoins the addressee in the elaboration of the current topic.
- Eliciting more on the same topic by questioning: the speaker selects an aspect of the current topic developed by the addressee, and calls for him to elaborate on it. In such a role, RDs are instrumental in stepwise generation of topic “by link[ing] what is being introduced to what has just been talked about” (Sachs, in Jefferson 1984).

Prosodic realization. Both cases are associated with two distinct bundles of prosodic features (P) in the original conversation:

- Acknowledgement is associated to P1: compressed register, Mid final nuclear contour. Most often, they overlap the addressee's talk in the original (Fig. A);
- Topic-eliciting is associated to P2: normal register, High final nuclear contour (Fig. B).

There are 5 RDs in the original conversation; hence 20 tokens. Their prosodic realizations are presented in chart 1 (p. 4). As shown in chart 1, a third prosody (P3) shows up in the variants, while being absent in the original.

P3 is characterized as: normal register, Low final nuclear contour. Most of the turn is uttered as a high plateau with a fall on the last syllables (Fig. C). P3 is questioning and play an eliciting role.

Topic-eliciting RDs. They are produced with two contours in the original and in the variants. The first is rising (P2). It is typical of questioning declaratives in general: its key feature is a rise – more or less dynamic– located on the very last syllable. The second (P3) is falling; it is typical of ‘surprise reprises’: its key feature is that most of the utterance is uttered as a high plateau and the fall is limited to the last two syllables or to the last syllable. P2 is used in the original and in the copies; P3 only in the copies.

There are two other contours possible with questioning declaratives. The first is falling and is typical of verifying questions: the fall spans the end of the utterance. The second is the common H+L* located on the last two syllables and is reputed to be the most frequent

contour used with questioning declaratives in French conversation. Given what is currently assumed for those contours, both should be possible. Nevertheless, they do not occur in the original nor, more crucially, in the variants. We are thus drawn to make the generalization that only P2 and P3 are compatible with the use of questioning RDs for co-generating of topic. If it proves empirically correct, the reason of such restrictions should be addressed. Without doubt, it will shed light on the fine-grained semantics of those intonation contours.

Acknowledgement IRs. One observes in the original that declaratives conveying an implicature of the previous move and associated with P1 play the same acknowledgement role as RDs. We call them inferential reprises (IR). In the variants, they are associated either with P1 or P2. There are three IRs in the original (hence 12 tokens). Chart 2 presents their prosodic realization.

- (2) a. <G>. l'appréhension s'est transformée en... Tu vois, j'arrêtais pas de bâiller.
The apprehension turned into ...You see, I couldn't help yawning
 →<M> **Ouais, ça t'a assommé, quoi** *It knocked you out*
- b. <G> En fait c'est long parce que tu dois... Tu sais C'était tapissé, peint alors c'est l'enfer quoi.
Right, it takes time, because you have to .. You know, it was papered, painted, so it was like hell
 → <M> **Ah ouais t'enlèves les couches, putain** *Yeah, you remove the bloody coats*

Case (2b) above is particularly interesting since Speaker M infers the whole content of G's turn: the coats of paint are overlaid over layers of paper and should be removed (in order to paint the wall).

What do the variants tell us? Speakers are able to recognize the move type of turns; moreover, they know which prosody should be associated with which move type and produce it. The move type of second turn repeating the content of the first turn (sameness ranging from mere repetition of content to complete implicature) crucially involves its prosodic realization: the notion of reprise when it is solely defined in terms of content thus is of little analytical use. The opposition between asserting moves and questioning moves is neutralized when they are used to co-generate a common topic. Not all contours used with questioning declaratives (confirmation request in the semantic literature) are appropriate when they are used in topic co-generation: the analysis of such a restriction requires that the conversational role of moves should be taken into account in order to characterize the semantics of contours.

Conclusion. The experiment we present here should be considered a pilot study. It is still very crude. Nevertheless, the results are promising. Now that we know speakers can put to use their knowledge qua dialogue participants in experimental settings, we are planning more focused experiments (more in the spirit of Bresnan's protocol).

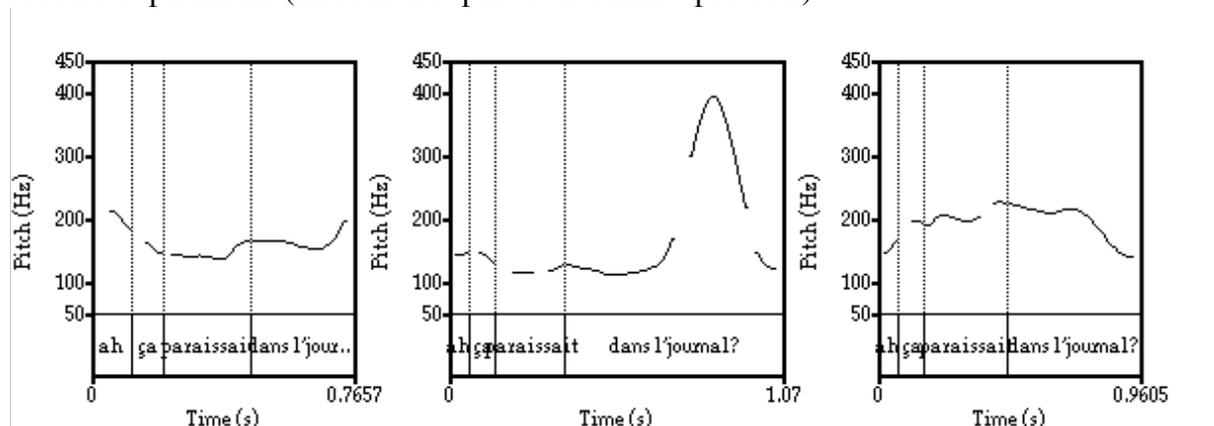


Fig. A: P1: Journal. Original

Fig. B: P2: Journal. P2

Fig. C: P3: Journal. P1

RD	P1: Compression: + Final: Mid	P2: Compr: - Final: Rising	P3: Compr: - Final: Falling
RD1-0		+	
RD1-1			+
RD1-2			+
RD1-3			+
RD2-0		+	
RD2-1		+	
RD2-2	+		
RD2-3	+		
RD3-0		+	
RD3-1		+	
RD3-2		+	
RD3-3		+	
RD6-0		+	
RD6-1		+	
RD6-2		+	
RD6-3		+	
RD7-0	+		
RD7-1			+
RD7-2		+	
RD7-3			+

Chart 1. Prosody of RDs

IR	P1: Compression: + Final: Mid	P2: Compr: - Final: Rising	P3: Compr: - Final: Falling
IR4-0	+		
IR4-1	+		
IR 4-2	+		
IR 4-3		+	
IR5-0	+		
IR5-1		+	
IR5-2		+	
IR5-3		+	
IR1-0	+		
IR1-1	+		
IR1--2	+		
IR1-3	?		

Chart 2. Prosody of IRs

Code for the chart below: RD n = Reprise declarative; IR= Inference Reprises + reference in the script. - 0: original. -1 (first take without prior reading), -2 and -3 (2nd and 3rd take after discussion).

Main references. **Bertrand R.** *et al.* 2008. Le CID - Corpus of Interactional Data - Annotation et Exploitation Multimodale de Parole Conversationnelle. **Bresnan J.** 2006. Is syntactic knowledge probabilistic? Experiments with the English dative alternation. **Jefferson G.** 1984. On stepwise transition from talk about a trouble to inappropriately next-positioned matters. [Atkinson M. & John Heritage, eds] Structures of social actions. **Local J.** 2007. Phonetic detail in talk-in-interaction: on the deployment and interplay of sequential context and phonetic resources. *Nouveaux cahiers de linguistique française* 28. **Selting M.** 2007. Lists as embedded structures and the prosody of list construction as an interactional resource. *Journal of Pragmatics*.