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We will be building in the potential for mismatches in DGB's of distinct DP's at various stage in conversation; second certain operations on the DGB will be conditioned by the UNPUB-MS, ... (Ginzburg, chap. IV, p. 4).

#### CONTOUR MEANING AND DIALOGUE STRUCTURE

#### **0. Introduction**

We have elaborated a theory of contour meaning for French :

- based on a group analysis of natural occuring or elicited utterances in conversation (Claire Beyssade, Elizabeth Delais-Roussarie, Michel de Fornel, Jean-Marie Marandin and Annie Rialland).

- which shares the idea that the asymetry between Speaker and Addressee lies at the core of contour meaning (Bartels 1999, Gunlogson 2001, Steedman 2003).

And we want to integrate it in a model of dialogue.

Object of the talk: revise the modelling of Dialogue in order to describe and analyze contour meaning.

Outline :

- 1) We briefly present our theory of contour meaning in French without motivating it here.

- 2) Secondly, we present the modification of the UNPUBLICIZED part of Speaker's mental state we have made in order to make explicit the semantics of contours.

- 3) We then proceed to the public part, the Dialogue Gameboard (DGB).

We discuss the semantics of Asserting *vs* Resquesting confirmation with a declarative utterance; and then we propose to distinguish between aspects of the moves that require an uptake of Addressee to go through and those that do not.

# 1. A theory of contour meaning



The hierarchy (1) only caters for what we call final contours. Final contours occur at the right edge of focal domains:

- either the right edge of utterances in case of all focus utterances

- or the right edge of the narrow focus domain

Illustration:

(2) H- L\* L%

(3) [Lab. data]

*He showed his agenda to the judge while in custody?* 





<sup>&</sup>lt;sup>1</sup> Postfocal portions of text, viz. contituents on the right of focal domains, here the PP *pendant sa garde*, are realized with an appendix intonation similar to the one which spans over right-dislocated constituents.

Four basic contours that we define  $\dot{a} \ la \ AMT$  as sequences of tones (4) :

(4)	a. Falling contour:	H L* (T%)
	b. Rising contour:	L H* (T%)
	c. Rising-falling contour:	L HL* (T%)
	d. Falling from a penultimate peak contour:	LH+L*(T%)

Each level in (1) corresponds to a type of contrast<sup>2</sup>

- a. Contrast between falling vs non-falling contours
  - b. Contrast between rising vs falling from penultimate peak contours

#### **1.2 Meaning**

(5)

French contours signal what kind of reception the Speaker anticipates for her utterance.

(6) Contrast between falling contours and non-falling contours :Dimension of contrast : the speaker presents herself as anticipating a revision or not.

#### **Final contours**

Falling Non-falling

- By using a falling contour, the speaker signals that she does not anticipate any revision of her commitments (either her commitment set or the issue she commits herself to by questioning).
- By using a non-falling contour, the speaker signals that she expects that revision may arise in the current exchange of turns.
- (7) Contrast between rising contours and falling from a penultimate peak contours. Dimension of contrast: Speaker or Hearer

# **Non-falling**

Rising Falling from penultimate peak

- By using a rising contour, the speaker signals that she is not ready to revise her commitment, even though she anticipates that it may be incompatible with what she assumes to be the addressee's belief.
- By using a falling from a penultimate peak contour, the speaker signals that she anticipates that she may have to revise her commitment along the line of the addressee.

In short, our proposal crucially relies on the idea that Speaker attributes attitudes about the current issue to Addressee.

**Illustration** 

• Take an utterance in the declarative form with a rising contour:

- when interpreted as an assertion: it conveys strong Speaker's commitment to its content and relevance for the issue at hand

(8) [Context: A, the grand-son, to his grand-mother B about a school concert ]

A :Vous viendrez ou pas ? *Will you come or not ?* 

 $<sup>^{2}\,</sup>$  Here we leave aside the contrast between Rising and Rising-falling contours.

B : Je peux pas c'est pas possible faut que ce soit un samedi pour que je vienne te voir ou un vendredi soir *I can't it's not possible it has to be a Saturday for me to come and see you or a Friday evening* 



- when interpreted as a confirmation request: it conveys Speaker's bias for p.

(9) a. Marie a téléphoné Mary phoned
 b. Marie n'a pas téléphoné Mary didn't phone

• Take an utterance in the declarative form with a Falling from penultimate peak contour contour:

- when interpreted as an assertion: it conveys Speaker's weak commitment for p

- when interpreted as a confirmation request, it does not convey any bias for p or not p

(10) [Context: after-sales service operator to a customer]

Vous avez essayé l'enregistrement ?

Have you tried the recording function



# 1.3. Analysis

A distinction between two dimensions in the Speaker Mental State:

(11) 
$$\begin{bmatrix} [Public] \\ [Privé] \end{bmatrix}$$
 or  $\begin{bmatrix} [Disourse Gameboard (DGB)] \\ [Unpublicized Info - state (Unpub)] \end{bmatrix}$ 

Two dimensions in UNPUB:

As for contour meaning, our proposal is essentially the following:

(13) Contours make public configurations of Speaker's Unpublicized mental state regarding the current issue in conversation.

In order to express our analysis we had to give more structure to UNPUB:

1) we have to distinguish between what Speaker knows/believes for herself and what she attributes to the Addressee.

2) Moreover, we assume that the current issue *i* selects among the elements of BKGROUND those that are ABOUT *i*. We note ThemS<sub>Speaker</sub> and ThemS<sub>Addressee</sub> the two subsets of elements of content about the issue.

(15) ThemS<sub>Speaker</sub> = { $s \in SP$ , About (i, s)} ThemS<sub>Addressee</sub> = { $s \in ADD$ , About (i, s)}

Now, the choice of a falling or non-falling contour reflects a difference in Speaker's information state that is reminiscent of the difference between defective and non-defective contexts in Stalnacker (1978). From our perspective, it characterizes the unpublicized information state of the speaker:

(16) a. Nondefective context:

The elements making up ThemS<sub>Speaker</sub> and ThemS<sub>Addressee</sub> are compatible.

b. Defective context:

The elements making up  $ThemS_{Speaker}$  and  $ThemS_{Addressee}$  are not, or may not be, compatible.

(17) a. Falling contours are used when the speaker presents the context of her utterance as a non-defective context.b. On the other hand, non-falling contours are used when the speaker presents the

b. On the other hand, non-falling contours are used when the speaker presents the context of her utterance as a defective context.

a. Rising contours are used when the speaker presents the content of her assertion or the issue of her question as a member of ThemS<sub>Speaker</sub>
 b. Falling from a penultimate peak contours are used when the speaker presents the content of her assertion or the issue of her question as being not a member of ThemS<sub>Speaker</sub>

#### **1.4.** In the defense of the architecture of UNPUB in (14)

The structure (14) enables us to give a semantic, dialogical version of a type of accent (called accent T in Büring 1997, our accent C in French).

(19)	German:	Q: Glaubst du, Fritz würde diesen Anzug kaufen? R: [ICH] <sub>T</sub> würde ihn sicher [NICHT] <sub>F</sub> kaufen.
		Q: Was hatten die Popstars an? R: Die [WEIBlichen] <sub>T</sub> Popstars trugen [KAFtane] <sub>F</sub>
		Q: Hat deine Frau fremde Männer geküsst? R: [MEIne] <sub>T</sub> Frau hat [KEIne] <sub>F</sub> fremden Männer geküsst.
(20)	French:	<ul> <li>Q: Que fumaient les chanteurs pops dans les années soixante ?<sup>3</sup></li> <li>R : a. Les chanteurs pops fumaient du haschisch.</li> <li>a'. # Les CHANteurs pops fumaient du haschisch.</li> <li>b. # Les chanteurs pops anglais fumaient du haschisch.</li> <li>b'. Les CHANteurs pops anglais fumaient du haschisch. [Les français fumaient des gauloises].</li> </ul>

The impact of this accent is to invite the addressee to ask more about the same issue. This is particularly clear with the "purely implicational topics", as Büring dubbed them,

(21)	All:	A: Hat deine Frau fremde Männer geküsst? B: [MEIne] <sub>T</sub> Frau hat [KEIne] <sub>F</sub> fremden Männer geküsst.
	Engl:	A : Did your wife kiss other men?
		B : [MY] wife [DIDN'T] kiss other men.

"B literaly answers A's questions. However, that would not require the Topic accent on the possessive. What B expresses by this additional accent is that he considers other wives to be relevant in the given context" (Büring, 1997 : 56).

Büring posits an hierarchy of questions to account for it: the accent occurs in answers to subordinate questions (see Beyssade et al. 2004, Marandin et al. 2002 for French).

Much more simple account: C/ T accents signal that Speaker has more facts about the same issue (Marandin, 2005: 71)

#### 1.5. To sum up

(i)

- whe have set up a theory of contour meaning, for assertions as well as other illocutionary types

- we have added structure to the UNPUB

- we have analyzed contour meaning as a new type of commitment: Speaker makes public an attribution of attitude to Addressee, but does not ask Addressee to endorse it.

<sup>&</sup>lt;sup>3</sup> There are several localizations of the accent possible: along with (20), one observes the realization in (i) below. The C accent also occurs on the "elliptic" NP in (i.c):

a. Les chanteurs pop ANglais fumaient du haschisch.

b. Les CHANteurs ANglais fumaient du haschisch.

c. Les ANglais fumaient du haschisch, les FRANçais en étaient restés aux gauloises.

See Marandin et al. 2002 for prosodic and pragmatic details.

# 2. The structure of the DGB : assertions vs confirmation requests 2.1. Asserting : Ginzburg's theory

		SHARED GROUND
(23)	DGB	QUD
		LATEST MOVE

Ginzburg intends to capture the impact of asserting on the context. His point of departure is close to that of Stalnacker, except that he assumes that for an assertion to go through, it does not suffice that Addressee does not reject it, Addressee has to accept it.

(24) « when an assertion p is made, <u>the asserter is committed to a belief p</u>, but <u>has no</u> guarantee that p will be accepted by her interlocutor ... » (Ginzburg 1997).

In order to capture the fact that assertions go through only if they are accepted by Addressee, Ginzburg proposes that one of its effect is to increment QUD with a polar question derived from the content of the declarative sentence.

(25) « I assume that, in general, both asserter and her addressee do have the issue p? in QUD as a consequence of an assertion p » (ibid.).

Hence, the impact of assertions on the context is maximally close to that of a polar questions. This does not seem empirically correct.

# **2.2. Problematic consequences**

Acknowledgements or rejections of assertions are not conveyed by the same items as answers to polar questions

- 1. Backchannels are enough to signal acknowledgement, but they are not appropriate to answer a polar question:

(26) a. Assertion

A.: Marie n'a pas [téléphoné. Elle exagère [vraiment ....
B.: [Hum]

b. Polar question

A. : Est-ce que Marie a encore téléphoné B. : # Humm

- 2. The formulas used to acknowledge an assertion are distinct from the formulas used to answer positively or negatively.

(27) a. Polar question

A. : Est-ce que Marie n'a pas répondu ?

B. : Si (= Marie a répondu) / non (= Marie n'a pas répondu) / ?? oui b. Assertion

A. : Marie n'a pas répondu.

B. : Oui (= Marie n'a pas répondu) / \* si / \* non<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> Note : A: Marie n'a pas répondu.

B.: Si, si (counter-assertive = Marie a répondu) / na :::n (= Marie n'a pas répondu)

(28) a. Polar question

A. : Est-ce que Marie a répondu ?B. : # Ah bon / # J'savais pas / ..

b. Assertion

A. : Marie n'a pas répondu.B. : Ah bon / j'savais pas / ...

-3. The use of metadiscursive *pourquoi* is different with polar questions and assertions (cf Why<sub>meta</sub> Ginzburg, 2003: 23)<sup>5</sup>

(29) a. Polar question

A. : Est-ce que Marie est venue ?

B : Pourquoi ? (= pourquoi me demandes-tu si Marie est venue)

(≠ pour quelles raisons est-elle venue/n'est-elle pas venue)

(30) b. Assertion  $^{6}$ 

A. : Marie ne viendra pas.

- B.: i. Et pourquoi ? (= pour quelles raisons ne viendra-t-elle pas)
  - ii. # Pourquoi ? (= pourquoi me dis-tu que Marie ne viendra pas)

- The idea that the impact of an assertion is similar to that of a polar question is somewhat counter-intuitive.

(31) The « assertoric polar questions » should behave as rhetorical questions. But, the felicity condition of assertions and rhetorical questions are completely different : the former require that their content be not explicitly shared by the interlocutors, whereas the latter on the contrary require that their content be shared.

# 2.3. Assertions vs confirmation requests

Moreover, we have to distinguish between assertions vs confirmation requests.

a.	A. Marie est arrivée	Mary has arrived
	B.: Tu l'as rencontrée / H	télas ! You have met her / Alas
b.	A: [Context : B knows b [Contour : nonfalling]	etter than A about Marie's whereabouts
	Marie est arrivée	Mary has arrived
	B: Non	No
	a. b.	<ul> <li>a. A. Marie est arrivée</li> <li>B.: Tu l'as rencontrée / H</li> <li>b. A: [Context : B knows be [Contour : nonfalling] Marie est arrivée</li> <li>B: Non</li> </ul>

Both moves are conveyed by declarative sentences as illustrated in (32). But, they do not share the same dialogical and semantic properties.

1) The most important difference between assertions and confirmation requests does not pertain to intonation (both can be associated with the four contours we have recognized in (1) above), but their dialogical impact. A confirmation request is questioning, i.e. it requires a

(i) A : Marie ne viendra pas.

 $<sup>^{5}</sup>$  « But why<sub>meta</sub> associated with a polar query does not always resolve identically to a why<sub>meta</sub> associated with an assertion » (ibid. : 23).

<sup>&</sup>lt;sup>6</sup> Bare *pourquoi* seems difficult when used alone: *et pourquoi* is much better (we owe the remark to Bernard Fradin) :

B : ?# Pourquoi ? (= pour quelles raisons ne viendra-t-elle pas)

public uptake from the Addressee, which is not the case with a prototypical assertion. After confirmation requests, a mark of agreement, disagreement or rejection is compulsory.

2) Declarative sentences used as confirmation requests do not have the properties of interrogatives: in particular, they do not licence the NPIs that are licensed in polar questions.

(33)	<ul> <li>a. Est-ce que Pierre a jamais aidé Marie ? Has</li> <li>a'. * Pierre a jamais aidé Marie ?</li> <li>a''. * Pierre a jamais aidé Marie.</li> </ul>	Pierre ever helped Marie
b. Est-ce que Pierre a levé le petit doigt pou		er? Has Pierre made any effort to help Marie'
	<ul> <li>b'. ≠ Pierre a levé le petit doigt pour l'aider ?</li> <li>b''. ≠ Pierre a levé le petit doigt pour l'aider .</li> </ul>	1

Moreover, they do not behave the same way with 'attitudinal' discourse markers : *bien sûr, sans aucun doute, certainement*, etc.

- (34) a. # Est-ce que Marie, me semble-t-il, a réussi son examen?
  - a'. Marie, me semble-t-il, a réussi son examen ?
  - b. # Est-ce que Marie a bien sûr réussi son examen?
  - a'. Marie a bien sûr réussi son examen ?

It seems to us that the analysis of asserting proposed by J.G., who systematically adds the polar question p? associated to the declarative sentence p in QUD blurs the distinction that we have to do between assertions and confirmation requests.

# 2.4. Assertion

Indeed, Ginzburg's theory of assertion is more intricate. Asserting triggers a double update : a polar question in QUD and a defeasible incrementation of FACTS.

(37) FACTS [STORED] [TOPICAL]

- FACTS/STORED : set of facts

- FACTS/TOPICAL : set of pairs of a =  $\langle$ question<sub>0</sub>, fact<sub>0</sub> $\rangle$  where question (a's address) is an element of QUD, fact<sub>0</sub> is about q<sub>0</sub>. TOPICAL is updated [..] using a defeasible update operation in which later accepted material takes precedence, hence allowing for an account of hasty accommodation" (Ginzburg, 2003 : 12).

The question is why a double update, all the more so that updating a polar question makes wrong predictions. Incrementation of FACTS/TOPICAL seems enough, since it plays the role we want: discriminate the assertion under discussion for ellipsis and pronominal anaphora (the right frontier constraint described in monological modelling of discourse).

Thus, we admit that the impact of asserting is direct incrementation of FACTS/TOPICAL.  $\langle q_0, p_0 \rangle$  is downloaded from FACTS either to increment FACT/STORED when Addressee has accepted the asserted content or is removed from FACTS when Addressee does not accept it.

# **2.5.** Confirmation requests

Confirmation requests are assertions and they require the explicit commitment of Addressee (as questions do). We propose to capture the effect by a double update :

- update of FACTS/TOPICAL

- update of QUD with a question

<u>Illustration</u> : (informal, « + » means 'add')

(38) [Context : B knows better about Marie's agenda]
 [Contour : nonfalling] --> interpreted as a confirmation request
 A. : Marie n'a pas téléphoné ?

(39) [FACTS/TOP : + p "Marie est arrivée"]
[QUD: + q "Marie est - elle arrivée ou pas"]
[L - M: 0]

One can retort to confirmation requests with almost the same set of formulas as answers to polar questions:

(40)	[Cor	text : B knows better about Marie's agenda]
	[Cor	tour : nonfalling]> interpreted as a confirmation request
	a.	A. : Marie n'a pas téléphoné ?
		$\mathbf{P} \cdot \mathbf{s} \cdot \mathbf{p} \cdot \mathbf{s} \cdot \mathbf{p} \cdot \mathbf{s}$

- **B** : si / non /# oui
- b. A. : Marie a téléphoné ?

B: \* si / non / oui

# 3. Speculation : Joint vs non joint commitments

# **3.1.** The nature of contour meaning

Contours signal Speaker's evaluation of Addressee's attitude towards the current issue compared to her own. Addressee is not required to acknowledge or reject or even take notice of the chosen contour. It publicly conveys an attitude of the Speaker that is not supposed to be shared by the participants.

This seems to us quite different from asserting, questioning or requesting confirmation. For example, an assertion or a question goes through only if Addressee accepts it.We could capture this difference by positing two dimensions in Speaker's DGB:

- (41) a. A dimension in which the content of updates requiring an uptake by Addressee is registered. We call it Joint commitment.
  - b. A dimension in which the content of updates not requiring an uptake by Addressee is registered. We call it Non-joint commitment.

This is represented in (42) :

The dimension of JOINT would be further divided into three registers according to the type of update operated by Speaker. For commands, cf. Portner 2004.

		FACTS	[STORED]
(43)	JOINT		[TOPICAL]
(+3)		QUD	
		TO - DO	- LIST

Let us turn to NON-JOINT CMT : it is the register for the content of the contours. For the meantime, are using features :

(44) a. Falling contour [+ Agreed] vs Non-falling contours : [- Agreed]<sup>7</sup>
b. Rising contour [Speaker not ready to revise] vs Falling from penultimate peak contours [Speaker ready to revise].

Illustration :

Take (45) which a regular assertion with falling contour

- (45) B.: Qui Marie a-t-elle rencontré?
  - A. : Elle a rencontré Jean

(4	6)
· ·	- /

(40)			
DGB	JOINT	FACTS	STORED
			TOPICAL : < 'qui Marie a-t-elle rencontré',
			'elle a rencontré Jean'>
		QUD	'qui Marie a-t-elle rencontrée'
		To Do List Ø	•
	NON IONT	[ ]	
	INON JOIN I	[+ agreed]	
	LATEST MOVI	z в asks qui M	arie a-t-elle rencontree.

Take (47) which is a regular confirmation request with Falling form penultimate peak contour. Notice the double update in (48).

(47) A. : Marie st arrivée ?

(+0)			
DGB	JOINT	FACTS	STORED
			TOPICAL <' Has Mary arrived or not?'
			Mary has arrived >
		QUD 'Has	Mary arrived or not?'
		TO DO LIS	ΤØ
	NON JOINT	[+ agreed],	[Speaker ready to revise].
	LATEST MOV	ΈØ	

#### **3.2 Extension**

Further support when one considers the meaning of evaluative parentheticals:

(49) a. Hélas, Pierre est parti à Paris

b. Heureusement, Marie a réussi son examen.

 $<sup>^{7}</sup>$  We use the same feature than Steedman 2003 : (+ agreed/ -agreed). "Information units are distinguished on a dimension +/-agreed according to whether the speaker claims them to be uncontentious or contentious » (Steedman, 2003, p.3).

Utterances in (a) convey two contents

- (49') i. Pierre est parti à Paris
  - ii. 'Il est malheureux que Pierre soit parti à Paris'

Content (ii) is not asserted and it is not submitted to Addressee's acknowledgement or rejection. Such a content is a candidate to increment the NON-JOINT CMT store.

This could be also the tack to cater for exclamatives. (50) conveys two contents: content (i) : the fact that the statue is beautiful and content (ii) the fact that it is beautiful to a great degree. (50) Qu'elle est belle, cette statue !

Content (i) goes to FACTS/TOPICAL whereas content (ii) would feed the NON-JOINT CMT store.

#### 4. Conclusion

a) we have added more structure to BCKGROUND in the UNPUB register

b) we have proposed some arguments against the idea to capture the dialogical impact of assertions with a polar question added in QUD. We sticked to Ginzburg's modification of FACTS, which enables us to increment FACTS defeasibly. In doing so, we are in a position to capture the impact of confirmation requests as bringing about two updates. In fact, this solution could be the solution to analyze all (or many ?) derived moves (rhetorical questions, whimperatives, etc.).

c) we have proposed to structure DGB differently in order to capture the difference between aspects of the utterances which require an uptake by Addressee to go through and those which do not.

General architecture of MS :

DGB	JOINT	FACTS	STORED TOPICAL	
		OUD		
			•	
		10-D0-LISI		
	NON JOINT			
	LATEST MOVE	7		
	COAL			
UNPUB	GOAL			
	BKGROUND	) SP	STORED	
			TOPICAL	
			STOPED	
		ADD	STORED	
			TOPICAL	

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