

# The meaning of French H\*L%-contour

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## Abstract

The project presented here aims at developing a fine grained semantic-pragmatic analysis of the contribution of intonational contours to utterance meaning within the framework of Discourse Representation Theory (DRT). We focus on the French contour H\*L% since it conveys the idea of a potential disagreement between the interlocutors.

Assertive and interrogative mode of utterances are complementary in that the speaker aims at conveying information when uttering an assertion and asks for information by means of a question. Recent work on inquisitive semantics has shown that assertions may also bear inquisitive components (Groenendijk and Roelofsen, 2009), and rising intonation in declarative questions expresses the speakers commitment to a proposition but at the same time mark it as contingent on ratification by the addressee (Gunlogson, 2008).

French intonation is particularly rich in contours that provide even more illocutionary facets for interpretation than English (Beyssade and Marandin, 2006; Portes and Reyle, 2013; Portes and Beyssade, to appear). Portes and Reyle (2013) follow Krifka's (to appear) proposal to interpret speech acts by development of spaces of commitments assigned to the discourse participants. The meaning components Portes and Reyle (2013) attribute to the four French contours they are analyzing are (i) preconditions on the hearers previous commitments, (ii) speaker's own commitments, and (iii) expectations concerning the hearer's commitments as a result of the processed utterance. Uttering  $\phi$  with a rising-falling contour (H\*L%), for example, has an assertive component (the speaker commits himself to  $\phi$  and asks the hearer to accept  $\phi$  as well), but it also presupposes that the hearer is publicly committed to the negation

of the utterance, and that in addition the speaker believes that the hearer should know that  $\phi$  holds.

The present contribution aims at a representational format of utterances in DRT that does justice to these subtle distinctions along the following lines.

A pure assertion of  $p = \textit{Lola smokes}$ . (realized with a falling contour) will be represented by a DRS like (1).<sup>1</sup>

$$(1) \quad \boxed{\begin{array}{c} s \ e \\ e:\text{utter}(sp,p) \quad e \subseteq s \\ \text{ISSUE}\{p, \neg p\} \\ s:(sp, \left\{ \begin{array}{l} \langle \text{EVI}, p \rangle \\ \langle \text{DES}, s'' : \text{know}(h,p) \rangle \end{array} \right\}) \end{array}}$$

The first two conditions say that the speaker,  $sp$ , has uttered  $p$  during a state  $s$ . This state is an attitudinal state of the speaker which is described in the last condition. It consists of two parts: (i) that the speaker bears some evidential relation to  $p$ , i.e.  $p$  is positively anchored by some causal relation to the proposition it represents ( $\langle \text{EVI}, p \rangle$ ), and (ii) that he has the desire that the hearer,  $h$ , knows whether  $p$  is true or not ( $\langle \text{DES}, s'' : \text{know}(h, \{p\}) \rangle$ ). The condition  $\langle \text{EVI}, p \rangle$  is underspecified wrt. what particular type of evidential relation is involved. We have  $\langle \text{EVI}, p \rangle \Leftrightarrow (\neg \text{WON}, \{p, \neg p\}) \wedge \neg \text{CONFL}, \{p, \neg p\}$ , i.e.  $S$  is neither in a state of conscious ignorance with respect to  $p$  nor is he in a state of internal conflict wrt. it.<sup>2</sup> Furthermore different dimensions of evidential relations are to be distinguished: (i) in which part of the speaker's articulated context (viz. (Kamp, ))  $p$  is anchored, and (ii) which source and type (witness, hear, surmise, (viz. (Murray, 2013))) of evidence it has. The second condition on (1) presents the issue, i.e. a set of propositions awaiting resolution through

<sup>1</sup>We ignore details about tense.

<sup>2</sup>This means that he does not have both, an anchor for  $p$  and another anchor for  $\neg p$ .

selection of one or more of its members.<sup>3</sup> A sentence settles an issue if it contains a focussed constituent that gives rise to an alternative set which corresponds to this issue. After the assertion of *p* the hearer is under the obligation to settle the raised issue,  $\text{ISSUE}\{p, \neg p\}$  by either accepting or rejecting *p*.

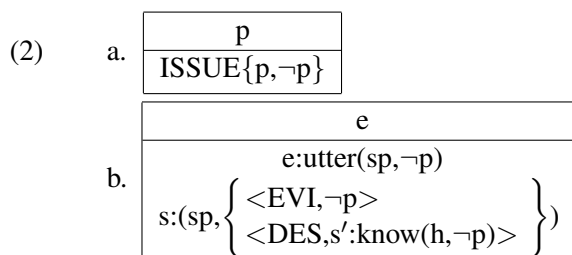
With a rising contour an utterance of *Lola smokes?* is a declarative question. This question is similar to the assertion in that it rises the issue whether *p* or not, and in that it may be assumed that the speaker has evidence for *p*. The difference to the assertive utterance is that, now, the desire of the speaker is to know himself whether *p* or  $\neg p$  holds, i.e.  $\langle \text{DES}, s'' : \text{know}(sp, \{p, \neg p\}) \rangle$  instead of  $\langle \text{DES}, s'' : \text{know}(h, p) \rangle$ . Note that the speaker's evidence may depend on the hearer (e.g., when he echoes a previously made assertion in confirmation questions) or that it may be rooted hearer-independently. Polar questions (with questioning syntax) lack a reference to the speaker's evidence for *p*.

*Yes/no*-answers and *aha*-responses differ wrt. the speaker's evidence for *p*/ $\neg p$ . In the case he answers with *yes* he must himself have some evidence for *p* and with *aha* he signals that he will add *p* to his positive beliefs, together with an internal anchor for the source of the information. The negative answer, *no*, is the speaker's assertion of  $\neg p$ .<sup>4</sup> It presupposes a prior move, an assertion or a question, and answers its ISSUE. In both cases the negative answer must be based on the speaker's evidence for  $\neg p$ . As response to previous assertions a conflict in the commitment space results: the speaker of the answer (*sp*) wants the hearer (*h*) to know  $\neg p$  and *h*, who has risen the presupposed issue, wanted *sp* to know *p*. (2.a) shows the presupposition and (2.b) the assertive part of a negative answer.

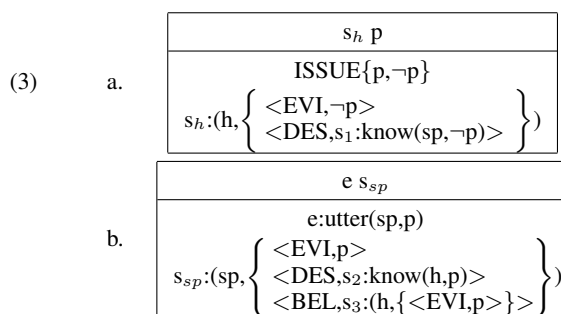
<sup>3</sup>Issues may be raised by assertions or by asking explicit questions, but in many situations they arise implicitly. Following (Roberts, 1996), (Büring, 2003), (Guinzburg, 2012) we may assume that the set of outstanding issues at any given stage in a discourse is arranged in a stack-like structure from which issues are removed when they are settled and to which new issues may be added.

<sup>4</sup>Note that assertions do not introduce a discourse referent for  $\neg p$ . We analyze *yes/no*-answers by structured propositions and in analogy to short answers to constituent questions. To this end polar issues should be represented in the

$$\text{form } \text{ISSUE}(\langle \frac{Q}{Q \in \{\lambda K . K, \lambda K . \neg K\}} \rangle, Q(p) \rangle).$$



French declarative utterances with an  $H^*L\%$ -contour are like full negative responses to ISSUES created by assertions, i.e. they presuppose the issue whether *p* or  $\neg p$ . But in addition they presuppose that the hearer, *h*, has a propositional attitude which corresponds to his assertion of  $\neg p$ . These presuppositions are shown in (3.a). Hence they create the same conflict as *no*-answers. But in addition they indicate a way out of the conflict by addressing the evidential state of *h* conveying in addition: *you should know*, represented by  $s_3:(h, \langle \text{EVI}, p \rangle)$  in the assertive part (3.b) of the representation.



In (3) the presupposed issue is settled by the assertive part of the representation. In addition the attitudinal state of the hearer wrt.  $\neg p$  and the corresponding parts of the attitudinal state of the speaker wrt. *p* form a set of alternatives that allows us to consider the contribution of the  $H^*L\%$ -contour as marking a contrast in the sense of there being a clearly defined set of alternatives to the asserted part. This view is supported by lots of examples we have analyzed in the SID-corpus (Bertrand et al., 2008), as e.g., in *C'est des châtaignes<sup>H\*L%</sup> bien sûr<sup>H\*L%</sup> ouais il y a que ça<sup>H\*L%</sup> qui est comestible.*, where the first contour contrasts with anybody's (except the speaker's) potential assumption that it's not *des châtaignes*, but *des marrons*, the second contrasts the different types of evidential relations and the third reinforces the contrast already expressed by the first. It is important to note that contrast marking co-occurs here with cleft and pseudo-cleft constructions that are necessary in French to mark focus.

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