

## A unifying understanding of RFR, topics and non-at-issue meaning

**1. Aim** It is commonly assumed that final rises/falls (H%/L%) in English indicate whether the speaker thinks that the utterance is *pragmatically complete* (Pierrehumbert and Hirschberg 1990; Westera 2013; Malamud and Stephenson 2015, among many). We follow Hobbs 1990 in treating rising/falling accents (L\*H/H\*L) analogously. Since Rise-Fall-Rise (RFR) is a falling accent (H\*L) plus a rise (H%), this predicts that an utterance with RFR must be pragmatically complete in one way and incomplete in another. (The falling accent of RFR is in fact *delayed*, but we remain agnostic about the effect of delay; for a compatible proposal see Gussenhoven 1983.) We make this prediction more precise in terms of *questions under discussion* (QUDs) and show that it gives us a unifying understanding of RFR, and in particular of the relation between *non-at-issue meaning* and (utterance-initial) *topics*.

**2. The account** We equate pragmatic completeness with compliance with the maxims:

- (1) **Maxims:** An utterance up to a certain point complies with the maxims relative to a QUD  $Q$  iff it has an intent  $p$  (speaker meaning) s.t.:
  - **Manner:**  $p$  is clearly communicated by the utterance up to that point;
  - **Quality:** the speaker takes  $p$  to be true;
  - **Relation:**  $p$  is a direct (“semantic”) answer to  $Q$ ;
  - **Quantity:**  $p$  is as strong as Quality and Relation allow.

(Relation is stricter than in Roberts 1996, but not in a way that bears on the current topic. It keeps Quantity simpler, but requires that we treat indirect answers in terms of implicature.)

Since an utterance cannot both comply and not comply with the maxims relative to the same QUD, an utterance with RFR must relate to multiple QUDs. This was independently noted in Wagner 2012 (contrary to Constant 2012): RFR conveys non-exhaustivity with regard to some overarching QUD, while conveying exhaustivity with regard to a set of focus alternatives. This suggests that we should distinguish two types of QUDs:

- (2)
  - **Main QUD:** the primary discourse goal intended to be served by the utterance;
  - **Congruent QUD:** a discourse goal reflected by accent placement on some part of the utterance (e.g., via Focus Alternatives; the details do not matter here).

These are not mutually exclusive: the main QUD can also be a (or *the*) congruent QUD. Now, a natural division of labor gives rise to our main theoretical proposal, the “ICM account”:

- (3) **Intonational Compliance Marking (ICM):**
  - **Boundary tones:** the utterance up to the current boundary is taken to comply with the maxims (L%) / violate a maxim (H%), relative to the *main QUD*.
  - **Accents:** the utterance up to the first subsequent boundary tone is taken to comply with the maxims (H\*L) / violate a maxim (L\*H), relative to a *congruent QUD* responsible for this particular accent.

**3. Core prediction & applications** Elsewhere we have applied ICM to plain rising declaratives and list intonation. Here we focus on RFR, starting with the following:

- (4) **Core prediction:** an utterance part up to a RFR must be taken to comply with the maxims relative to the congruent QUD, but not relative to the main QUD.

Assuming that the multiple QUDs of a single utterance must be related, and since the main QUD is the most important goal, the congruent QUD must play a subordinate role. Indeed, in (5) the congruent QUD (say, which places B visited that may be West of the Mississippi) seems part of a *strategy* for the main QUD posed by A (we will underline the word with the falling

accent, and let the H% of RFR occur on the first subsequent punctuation):

- (5) A: Have you ever been West of the Mississippi? (Ward and Hirschberg, 1985)  
B: I've been to Missouri...

In (6) the congruent QUD could be who/how many *didn't* come (plausibly, given theories of Focus Congruence), which likewise has a supporting role, serving only to clear the road for a proper answer to the main QUD of who/how many *did* come:

- (6) All my friends didn't come... (possible continuation: *Some* did!) (Constant, 2012)

A similar treatment is available for constructions that convey non-at-issue intents:

- (7) John, who likes beans, envies Fred.  
(8) John, and I know this because he told me, envies Fred.

Here the falling accents indicate that the part up to the second comma suffices to convey an intent that compliantly addresses a congruent QUD. Because the falling accents indicate compliance up to the second comma, the intent must be clearly conveyed at that point, thus predicting that they appear to escape the compositional semantics (Simons et al. 2010) – but ICM predicts only *that* this is so, not *how*, which is an ill-understood aspect of Manner and interpretation. In (7) and (8), the congruent QUDs addressed by the intents thus conveyed appear to serve to explain/support the main intent. (Every intent must address some QUD, so “non-at-issueness” of intents pertains only to this not being the main QUD; this contrasts with non-at-issue content that is not part of what is meant but presupposed.) A similarly supportive role for non-main QUDs is, lastly, to clarify the relevance/topic of the main intent:

- (9) {As for Fred / on an unrelated note}, he ate the beans.  
(10) Fred, ate the beans. (Büring, 2003)

In (10), the ICM account predicts that the name “Fred” on its own conveys a compliant intent. Since in general the only intent a mere “Fred” could reliably convey is that the utterance is about Fred, we predict a *topic-marking* use for utterance-initial RFR. ICM doesn't say what topics *are*; for that, existing theories of topic must be plugged in, e.g., Büring's. What we have gained, rather, is an understanding of why topichood would be expressed by RFR in the first place: it derives from the fact that RFR-marked material has to convey its own non-at-issue intent, projected out of the compositional semantics; and this in turn derives from a novel explication of a common understanding of intonational meaning.

**4. References** • Büring, D. (2003). “On D-trees, Beans, and B-Accents”. *Ling&Phil* 26, pp. 511–545. • Constant, N. (2012). “English Rise-Fall-Rise”. *Ling&Phil* 35, pp. 407–442. • Gussenhoven, C. (1983). *A semantic analysis of the nuclear tones of English*. Indiana Uni. Ling. Club. • Hobbs, J. R. (1990). “The Pierrehumbert-Hirschberg Theory of Intonational Meaning Made Simple”. *Intentions in Communication*. Ed. by P. Cohen, et al. MIT Press, pp. 313–324. • Malamud, S. A. and T. Stephenson (2015). “Three ways to avoid commitments”. *Semantics* 32.2, pp. 275–311. • Pierrehumbert, J. B. and J. Hirschberg (1990). “The meaning of intonational contours in the interpretation of discourse”. *Intentions in communication*. Ed. by P.R. Cohen, et al. MIT Press, pp. 271–311. • Roberts, C. (1996). “Information Structure in Discourse”. *OSU WPL* 49. Ed. by J. Yoon et al., pp. 91–136. • Simons, M., J. Tonhauser, D. Beaver, and C. Roberts (2010). “What projects and why”. *SALT* 10, pp. 309–327. • Wagner, M. (2012). “Contrastive topics decomposed”. *Sem&Prag* 5, pp. 8.1–54. • Ward, G. and J. Hirschberg (1985). “Implicating uncertainty”. *Language* 61.4, pp. 747–776. • Westera, M. (2013). “Attention, I'm violating a maxim!” *SemDial* 17.