How Alternative Question and Conjunctive Question Generate Contrastive Focus and Contrastive Topic, respectively

Chungmin Lee, Seoul National University

This paper proposes a reasonable distinction between Contrastive Focus (CF) and Contrastive Topic (CT), based on a dialogue/discourse model of question and answer. It basically argues that CF follows (/accommodates) an alternative disjunctive question, whereas CT responds to a conjunct of a previous/accommodated conjunctive question with a potential Topic (Lee 1999). This explains why CF is exhaustive and why CT conveys a negative (higher) predicate meaning. This distinction will help remove much confusion about the categories CF and CT in the field of information structure (e.g. Choi 1999 and many others) and help understand how far semantics works and from what point pragmatics intervenes. Recently much has been done on CT in English (Steedman 2000), in German (Buring 2000) and in Korean (1999) but the nature of CF has not been well explored and the two categories have not been clearly characterized in a question and answer dialogue model, although Carlson (1983) and Roberts (1996) touch on the model with respect to CT. This paper will use Korean and English data for arguments, but will utilize some other languages whenever necessary.

   If some matters of concern are poised as disjunctive, e.g., as in an alternative disjunctive question (ADQ), and the speaker responds with a disjunct of the Q, making a choice, then it becomes a CF. Consider the (accommodated) question (1) and a reply (2) or (2):

   (1) Did the baby pick the money first/H% or the pen first\L%?:
   (2) She picked the MONEY$_{CF}$ first.
       (ACC required, not a CT marker in Korean/Japanese)
    (2) (aki-ka) TON$_{CF}$-ul/?*ton-un   mence cip-ess-e. (Korean)
   baby-NOM money-ACC/money-CT first pick-PAST-DEC
      The baby picked the money first(?*$_{CT}$).

Because of the alternative question intonation /H% \L%? in (1), the speaker presupposes not both and the choice item in reply (2) is exhaustive. The other alternative is excluded. Therefore, if the reply is given in a context corresponding to And she also picked the pen first, then the reply sentence turns out to be false. In (2), we can see the object taking the ACC marker, not the CT marker. Case-marking is compatible with focus no matter whether it is informational or contrastive.
   Extending Schwarzschild s.(1999) F-marking for not given, we mobilize CF-marking as follows:

  (3) {Mary s old convertible is no longer available. What is Sam going to do?}
        A: He ll [**rent**H*$_F$ her **new**H*$_{CF}$ convertible]$_F$
   (4) Is he going to do something about the **old**H* convertible or do something about
      the **new**H* convertible?

From (3) we can come up with an alternative question (4) between the alternative elements *old* and *new*. Then, we can CF-mark *new* in answer (3A). CF is likewise derived from linguistic contexts as well as situational contexts such as the following:

(5) **Nay**$_{CF}$-ka nayl-kkey
 I-NOM   pay-will
  I$_{CF}$ will pay.
(6) Will **you**$_{CF}$ pay, or shall **I**$_{CF}$ pay?

In (5) the competition shown in (6) occurs, with a pair of alternatives. It is obvious from the context. Note that the CF-marked subject in (5) is NOM-case-marked, never TOP-marked. This is also true of Japanese (with —*ga*). It can be said to be exclusive or exhaustive.

But if -*man* only is attached to make ***na—man***- I-only-NOM in (5), it becomes inappropriate. (5) is exclusive but the expression with the exhaustive operator —*man* only entails a negative P about the alternatives not taken (here the hearer), i.e.,

(7) If C (set of   comparable   alternative members) = {a, b, c} and P(x _ C), then
  ´P((y _ C) › a)) (the exhaustiveness effect of only a)

Note that only functions as a negative polarity item licensor in English and Korean. Negative force with only is unmistakable, whereas positive force with CF alone is evident. For CF there is open rivalry among the alternatives and one single element is chosen in a positive identificational manner. Other alternatives are poised to have equal chances for being chosen and that seems to be why Horn (1981) and Vallduvi (1992) are reluctant to take an interpretive position for CF and attribute the exhaustiveness feeling from CF to a conversational implicature. Brunetti (2003) also denies a semantic interpretive effect or prosodic distinction in Italian CF.

A yes/no (=verum) question is also a case of alternative question semantically and generates CF. The question *Did Sam leave*? is equivalent to the alternative question *Did Sam leave or* (*did he*) *not* (*leave*)? and generates *Yes, he **did**$_{CF}$ or No, he **didn t**$_{CF}$*. An answer such as *He did and didn t* is not appropriate.

Correctives are also instances of CF. Consider the corrective responses:

(8) A: Sam borrowed the book that Max had purchased.
  a. No, **Mary**$_{CF}$ borrowed it. <- Did Sam/H% or Max\L% borrow it?
  b. No, Max **borrowed**$_{CF}$ it. <-Did Sam **purchase**/H% or **borrow**\L% the book?

There are cases of more complex Reciprocally Contrastive Focus, as in (9), which is generated by an alternative disjunctive question like (10):

(9) I told you: **Sam** $_{CF}$ sued the **compan**$_{CF}$.
  (10) ADQ: Did Sam sue the company or did the company sue Sam?

In (10) we can notice the reciprocal relation between the subject and the object. Then, the subject and the object in (9) are CF-marked reciprocally.

Locally viewed, CF may look non-distinct from information focus. For instance, (9), without CF-marking, may be generated by the question: *Who sued whom*? But globally viewed, (9) itself is generated by (10), the alternative question, not by an information *wh*-question. In this case, CF and information focus may not have interpretive differences, although there is a sharp distinction in contextually determined information structure. The distinction gives rise to CF-fronting in various languages (English, German, Italian and Korean) (including negative inversion) with no intonational break because CF is IP/VP-internal, unlike CT.

Now let us turn to Contrastive Topic (CT), which I argue is generated by a previous or accommodated conjunctive question. Consider:

(11) What about Frank? Did he eat the beans and (did he eat) the peanuts?
(12) He ate the **beans**L+H*LH%.
(13)　　khong-UN/?*-ul　mek-ess-e
　　　　beans —CT /?*ACC eat-PAST-DEC
　(He) ate the beans$_{CT}$.

CT typically responds to one conjunct and conveys a contrasted polarity-reversed proposition, as in (12) and (13). The referents of one common noun can be divided into parts to form a conjunction (e.g., *money* coins and bills, *parents* mother and father, *the kids* Mia and Ken). Predicates also take CT crosslinguistically (as in *o-ki-NUN hae-ss-e* or *ki-WA shit-ta* (She) CAME$_{CT}$. [L+H*LH%] => but - didn t work =denial of a higher predicate on scale; common nouns also often forms a scale, e.g., <bills, coins>; (14) *I have COINS$_{CT}$*=> but I don t have bills. The answer given in (14) cannot appropriately be followed by an additive I also have bills (?*--- *kuriko cicen-to iss-e* in Korean) which makes the discourse contradictory. Epistemic hedges such as maybe must intervene to save the connection, contra Buring s (2000) and Rooth s (1996) claim that the conveyed meaning is a conversational implicature . The unrealized conveyed meanings are conventional and may be more than implicatures, in line with argumentation logic (Krabbe 2000), according to which the conveyed proposition is more assertive than the realized concessive admission part of the utterance, and also in line with multi-propositional theory claims by Bach (1998) and Neale (2000), which claim that conventionally conveyed propositions must be true to make the entire given utterance true.

An utterance of a predicate in CT generates a polarity-reversed predicate meaning inversely (Lee 2003):

(15) If CT(p) is given, then contrastively (but) not q (q: a higher stronger predicate) is conveyed and if CT(not-q) is given, then contrastively p (a lower weaker predicate) is conveyed.

Buring s (2000) D-trees must be conjunctive and sensitive to sister subquestion answers to get a proper CT reading for a branch subquestion answer with an appropriate polarity-reversed conveyed proposition. Otherwise, the answers are simply list CT s with no conveyed meaning left. Buring does not make distinctions clear.   .

Steedman (2000) misleadingly labels CT with its contrastive contour as "Theme" and gives a structurally unjustified Combinatory CG analysis as if it were a Topic in a

single S but L+H* compositionally signals a complex S, expecting a conveyed/expressed (in a list CT) proposition.

In CT, the current speaker initially deviates by responding to a part or conjunct from the previous speaker's presupposition regarding the potential total (conjunctive) topic, unlike in CF. In CF the current speaker accepts the previous speaker's presupposition regarding the alternative question/choice, coping with her expectation of answering the question with one disjunct. There occurs exclusion of other alternatives and we view the choice as exhaustive. CF is still a narrow focus and takes a case marker and/or a focus stress. The Focus value is a set of propositions, whereas the CT value is a more complex set of sets of propositions (Buring 2000). The speech act question is not Boolean (Krifka 2001) in the sense that it is conjoined but not usually disjoined, which is derived from the fact that all speech acts are positive and not negative or uncertain (see Lee 1973). An answer to a disjunctive question is subsumed under choice readings (Groenendijk & Stokhof 1984).

An alternative question in Korean consists of two or more full question sentences because of word order and intonation, superficially unlike in English, where ellipsis occurs (disjunction takes wide scope over question anyway). This is distinct from a disjoined NP under the scope of a question, which forms a normal yes/no question.

There are cases in which a positive *wh*-question (of blaming) is answered by a negative CT utterance. The speaker of the *wh*-question in (17) below does not expect (18), a CT-marked utterance, as a direct reply.

(16) nu-ka   col-ass -ni?
     who-NOM doze.off-PAST Q   Who dozed off ?
(17) ce-**nun** an   col-ass-eyo
     I- CT   not doze.off-PAST   **I**$_{CT}$ didn t doze off.
(18) a.   Someone dozed off.
     b.   Did you doze off?
     c.   Did you and your friends doze off? (the answerer s presupposition)

(17) serves as an answer to (16) through the process of accommodation. (18a&b) are implied by (16). The underlying question is assumed to be something like (18c). A non-blaming question can be answered by a positive CT sentence.

The boundary between CF and (information) focus is not as clear as the distinction between (non-contrastive) topic and CT. CF, generated by D-linked *which* interrogatives or alternative question, requires a closed set of disjunctive alternatives determined by the discourse, causing exhaustiveness semantic interpretive effects, whereas focus requires a looser set of alternatives. Contrastive Focus is a focus, as its head noun indicates. Naturally, it is case-marked in Korean and Japanese just like an information focus, whereas CT is -*nun*-marked just like a non-contrastive topic.

The idea of alternative disjunctive questions proposed here as a testing device for CF, however, clearly distinguishes it from CT, although CT and CF do have a notion of *contrast* in common with a contextually closed set of alternatives. The distinction also demonstrates that we need scale semantics incorporated into the phenomenon of Contrastive (Predicate) Topic.

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