Topic, Contrastive Topic and Focus: What's on Our Minds

Chungmin Lee
Seoul National University

1. Introduction

This talk attempts to characterize how various interesting phenomena of information structure reflect our plan/design or control in our minds.1) Our minds work differently for Topic, Contrastive Topic and Focus, in designing the discourse relational pragmatics/semantics, grammatical and functional relations, and prosodic intonation patterns involved in the phenomena. The working of our minds is particularly well attested in the phenomenon of Contrastive Topic and this phenomenon has been given special attention by linguists anew lately. It is both topical and in a sense focal, as recently claimed (Kritka 1991) and advocated with Korean, Japanese, English, German and Hungarian data (Lee 1973 & 1996 & 1999, Buring 1994, von Fintel 1994, Roberts 1996, Choi 1997, Cho 1997,

1) This is an invited plenary paper at the 2nd Internat'l Conference on Cognitive Science, July 27, 1999, Waseda, Tokyo. I express my gratitude to the audience including Anna Maria di Sciullo for their questions and comments. I am also grateful to Sun-Ah Jun and Roger Billerrey for their comments on an earlier version and to other UCLA colleagues for consultation.
Wee 1997, Molnar 1998, Han 1998, Uechi 1999). The talk essentially tries to show how 'Contrastive' occurs and how it is distinguished from typical Topic and from wide and narrow ('Exclusive') Focuses at various levels of linguistic analysis. Contrastive Topic in its narrow sense is also distinct, in its design, from list/enumerated/additive topics, contra Krifka (1998) and Kuno (1998).

2. Topic and Contrastive Topic

Typically, Topic is given, presupposed, or anchored in the speech situation. It is something that is talked about by the predicate and lacks contrastiveness and is located at the front of a sentence, with -nun (Korean) or -wa (Japanese) marking, though a null Topic or bare nominal Topic is possible, unaccented. The notion of Topic is psychologically and theoretically real and Roberts' (1997) pessimism about the theoretical status of Topic in information structure, largely based on English, is not tenable. Topic is either referential, based on common ground, or generic, inherently conditional and intensional (e.g., inswaeki-nun hankukin-i palmyenghae-ss-ta 'The printer was invented by a Korean'). It is a generalized quantifier (<<e, t>, t>) type, taking a property (<e, t>) from among all the possible properties to yield a sentence (<t>). It is distinct from an <e> type. Topic, non-focal, also involved in the head-formation of relativization, and licensed largely by the assertive mood, cannot occur within relative and subordinate clauses (e.g. *Mary-nun cal puru-nun norae 'a song which Mary sings well'—no good as Topic but OK as CT), whereas Contrastive Topic can (contra Jacobs 1997 and Krifka 1999, but in line with Molnar 1998) (In English, a subject but not an object in the relative clause can become a CT). Prototipically it is
definite, but even an indefinite NP can become a Topic, if it is modified by some familiarizing expression so that it can be anchored in the speech situation and accommodated (e.g. *nae-ka cal a-nun noin han pun-un 100 sal-kkaci sa-si-es-ta ‘An old man I know well lived to be 100 years’).

The centering theory of anaphoric relations has to do with Topic and topicality, subsuming quantificational scopal relations including subordinate and coordinate relations in the resolution of backward-looking centers (C_b) (van den Berg and Polanyi 1999). It is not a simple matter of subject/object or Agent/Theme.

A potential Topic in the discourse can be partitioned into parts and Contrastive Topic is about one particular part in contrast with the rest of the parts and the speaker has the alternatives in contrast or contrast set in mind. By its cancellative function, Contrastive Topic gives rise to an implicature or a denied stronger proposition concerning the alternative in contrast, typically opposite to the given in its polarity or at least uncertain. It is marked by something like B accent (Bolinger 1965, Jackendoff 1972) or roughly L+H*LH% in English (Pierrehumbert & Hirschberg 1990) and by a similar high tone on the Contrastive Topic marker morpheme in Korean and Japanese (higher than a default high Accentual Phrase final syllable in Seoul Korean). The reason why the expression *[All]_S came,’ with both the universal quantifier and B accent is impossible in Korean, English and other languages is naturally explained(*modu-NUN w-ass-ta<K>, *minna-WA kita<J> ‘Everyone-CT came’); the total set is exhausted and nothing remains to be contrasted with within the given set.
Consider examples of Topic and Contrastive Topic (CT):

(1) What about Bill's sisters? What did they do?

(2) [They]$_T$ kicked the boys.
   ([They]$_T$ corresponds to -nun or -wa Topic)

(3) [Bill's [youngest]$_F$ sister]$_T$ [kissed John].
   L+H*LN%  
   (This corresponds to -nun or -wa CT)

(4) [Bill's [brothers]$_F$]$_T$ [kicked other boys].
   L*+HLN%  
   ('siblings' accommodated)

(5) a. I ate [the beans]$_F$
   L+H*LN%

b. na [khong-un]$_T$ mek -ess -e
   I beans -CT eat -Past -Dec
   'I ate the beans -CT.'

c. watashi mame-wa tabemashita
   I beans-CT ate
   'I ate the beans -CT.'

Every proposition answering the super-question (e.g. about siblings for (1) and (4)) answers the sub-question, a la Groenendijk and Stokhof (1984). The accommodated focal element stressed of the Contrastive Topic in (4), brothers, is delayed, prolonged and stressed, in contrast with (3), reflecting our minds in the sense that it is more marked and takes a little more time to induce accommodation.

3. Contrastive Topic Contour and Prosodic Structure

Whereas Topic is unaccented, as a constituent of given information, naturally flowing from the previous context, Contrastive Topic has a focal part and shows a prominent intonation pattern
cross-linguistically, e.g., B accent (or L+H* LH%) in English, L*H(H%) in German (Feri 1989), and high tone on CT marker in Korean (higher than an AP final syllable) and Japanese. It normally creates an independent Intonational Phrase (IntP). It is true that function words are not prosodic words in Indo-European languages. But in Korean and Japanese function markers are important CT and Focus tone bearers, as seen in (5b, c). They are stressed, differently from Indo-European function words, even though the nominal elements associated with them trigger relevant contrast sets semantically. Selkirk (1984) suggested that function words (in English) are not really words at all. On the other hand, the nucleus Focus accent contour is A accent (or H*L(L%)) almost universally. A typical information structure is the order [Topic Focus]. Prosodic structure consists of prosodic constituents arranged in a hierarchy of

[Utterance[IntP][IntP[PhonolPhr][PhonolPhr[PhonolWord][PhonolWord]]]]

(Selkirk 1996). Taking simple IntP examples:

(6) a. [The girl left the room][垣P]
   ([Topic   Focus])

     b. [The GIRL[垣P] left the room] [垣P]

The hierarchical prosodic structure is pre-planned, without knowledge of words' phonemic content, influencing phrase-final word lengthening and pausing (Ferreira 1993). It is globally designed and controlled. One consequence of this is reflected in the following exchange error showing overall prosody preserving (Garrett 1999):

(7) I left my briefcase in the cigar.

   Nuclear Focus Stress

In an exchange the Nuclear Focus stress (pitch accent) does not
move along to briefcase but remains at the pre-designed final part of
the utterance. This evidently shows that prosodic representation is
driven by Topic and Focus information structure, not by syntactic or
lexical-phonemic structure.

In view of the above findings and acquisition findings (e.g., a
response-demanding intonation pattern vs. a non-response-demanding
one is observed to be comprehended as early as three months after
birth in a Korean child and some Topic marker acquisition facts in
Lee 2001), we propose the following spoken language production
(processing) model, extending Levelt (1989) and Garrett's (1989)
models:

\[(8) \quad \text{proto-conceptualizer} \]
\[
\begin{array}{c}
\text{proto-} \\
\text{illocutionary goals} \rightarrow \text{intonation patterning} \\
\text{(information structure)} \rightarrow \text{(prosodic structure)} \\
\text{semantic structure (message)} \rightarrow \text{truth-value} \\
\text{syntactic structure} \\
\text{phonological structure} \\
\text{articulator} \rightarrow \text{phonetic manifestation}
\end{array}
\]

This extended model has the new \text{proto-conceptualizer} component
that accommodates proto-illocutionary acts concerned with their
success-value and information structure accompanied by prosodic
structure. This is distinct from the \text{conceptualizer} component that
treats semantic structure concerned with truth-value. The
proto-conceptualizer is, I claim, essential in our general processing as
well as in development. These aspects with hopefully be supported by ERP and fMRI experiments.

4. Event-contrasts

A Contrastive Topic applied to a verb/adjective is event-contrastive, implicating the denial of a higher or stronger event/state than the given event/state in contrast on the triggered scale relevant in the discourse context. Similar effects occur in English, with B accent in predicates or VP preposing constructions (Ward 1985). It is so focal that it cannot be scrambled to a VP-external position in Korean and Japanese. Buring's work (1994, 1998) is limited in the sense that it can handle only individual referents, not Event-contrastive Topics such as (6a).

Rooth's (1996, 1992) example of an answer to the roommates-quiz question (another friend's question about how the quiz went) must be viewed from an entirely new perspective: contrastiveness. Let us consider his representations of the possible answers in (9):

(9) a. Well, I [passed]$_F$
   b. Well, [I]$_F$ passed.

(10) a. Well, I [[[passed] $\top$]$_F$

(11) 1. na(-nun) hapkyek -un hae-ss-e (Korean)
     I -Top pass -CT do-Past-Dec

2. watashi-wa gookaku-wa shita (Japanese)
     I -Top pass -CT did
(1-2) 'I-Top pass-CT did.'
Rooth rightly argues that, in answering with (9a), disregarding his representation, the speaker suggests that he did no better than passing, wasn’t an ace and that, with (9b), the speaker may implicate that his roommates did not pass. However, in the given context of the roommates known to both interlocutors, Rooth’s intended interpretation of (9b) must be CT, with B accent, not F. Similarly, to get the scalar implicature evoked by the first answer (9a), the speaker who asked the question is concerned with pass/fail [on the scale of ‘ace>pass>fail’] and it can become topical. Event-related contrasts are more dependent on quantificational scales. The event-contrast of (10a) in English, which is a revised representation from Rooth’s (9a), corresponds to (11) in Korean and Japanese. The individual contrast of (10b) corresponds to (12). In English, Contrastive Topics are prosodically marked, thus largely limited to one B accent per utterance, forming a separate IntP, whereas in Korean and Japanese, they are morphologically as well as prosodically marked and thus two (or three) but not more CTs per sentence are possible, as witnessed in (13.1) & (13.2). This fact is opposed to cross-linguistic multi-Focus possibilities which impose virtually no limit to the number of focus per clause.
An event-nominal derived from a verb can function as a casual Topic in a special context, via a subtle process of accommodation. Uechi (1999) supplied an interesting example, though without explanation. Observe the following question, addressed to a high school classmate who turned out to be single:

(14) kekkon -wa mada si-na -i no?
    marriage -Top yet do-not Q
    'Speaking of marriage, aren't you thinking of it?'

Originally, *kekkon* 'wedding', with a *suru* 'do' function verb, starts out as a Contrastive Topic, combined with -wa, but based on common ground it comes to be used as a newly introduced casual Topic, giving the flavor of picking up the particular topic rather cautiously from among possible things (as an original CT), so that it can be accommodated without being challenged by the hearer.

### 5. Listing and Contrast

There are cases where contrast elements are enumerated or listed in parallel in one sentence. In such cases, the speaker intends to make his/her utterance a complete list utterance and there cannot be any implicatures evoked, against Kuno's (1998) conclusion. The list intonation pattern includes a mid-H% (with a slight lengthening), which is not available as a unit label in the ToBI system, (although some phrase accent involving H', may do the function, as Sun-Ah Jun reminded me) which is different from our CT intonation pattern (sharp H* tone involved). The list pitch accent, occurring in serial positions, is linked with the following phrase. Such listed or
continued partial topics from the whole Topic must be supported by distinct predications and can be infinitely many, whereas real CTs (with contrasts and reversed polarity proposition in mind) per constituent sentence are so limited in number. Consider:

(15) a. ai -tal -i myet haknyen-i-eyo?  
child-Pl-Nom how many grade-be-Q  
‘What grades are your children in?’

b. kyun ai -nun sa haknyen-i-ko cakun  
big child PT 4 grade-be-and little  
ai -nun i haknyen-i-eyo  
child-PT 2 grade-be-Dec  
‘The elder is in 4\textsuperscript{th} grade and the little one is in 2\textsuperscript{nd} grade.’

In (15b), the continued partial topics can have a lengthened vowel on the PT (partial topic) marker, whereas Topic or real Contrastive Topic in an independent sentence cannot have a lengthened vowel on the marker. Kuno and Takami’s (1989) following pair of utterances are not natural and their claim that there is no reversed polarity implicature involved in the so-called Topicalization construction cannot hold:

(16) A. Do you dislike all of your roommates?

   B. Well, Bill, I don’t like; Tom, I don’t like; John, I don’t like; and Tim, I don’t like, either. So, I guess I dislike all of my roommates.

(17) *Bill -un nae-ka silheha-ko Tom-un  
    -CT I -ka dislike-and -CT  
    nae-ka silheha-n-ta  
    I -ka dislike-Pres-Dec  
    ‘Bill, I don’t like and Tom, I don’t like.’
At least the last conjunct of (16B) is typically expected in reversed polarity (or some members must be left not mentioned). The Topic is all of your roommates, and if speaker B intends the utterance to be a universal negation, he does not start out with Contrastive Topic statements. For the utterance to become natural with a listed series of partial topics in conjuncts, there must be some items in contrast in the rest of constituent sentences, as in (15b). A conjoined Contrastive Topic sentences with identical predication in Korean (17) and in Japanese are completely ungrammatical, in a pondering or whatever situation (Lee 1999). We need the following constraint on conjunction of sentences with partial topics for contrastiveness as an information structure principle:

(18) Coherence Constraint: Do not conjoin sentences that are identical except for their partial topics, i.e., there must be at least one element except a partial topic in a conjunct that is distinct from or contrasted with another one in a different conjunct.

An utterance of simple listing must have the normal order of elements in English and additive particles such as -to 'also' in Korean and -mo 'also' in Japanese.

6. Are Additives Contrastive, Too?

The function of additive particles such as too, auch, -to (in Korean) and -mo (in Japanese) is to add some alternative element(s) to the given property or set of individuals. It is natural augmentation but not contrastive rendition, contra Krifka (1998). Let's take his example:
(19) Peter invited Pia for dinner, too/as well.

(stressed)

The stressed additive particle is associated with *Pia* and *Pia* is argued to be a Contrastive Topic because it is an alternative that is congruent to a question. However, (19) is normally uttered without the hearer's knowing about *Pia*, with *Pia* as a newly introduced item. Alternatively, let's suppose the hearer is concerned with *Pia*, e.g., including *Pia* in the previous question. Still, it is a way of cancelling contrastiveness by means of identity-reinforcing additive expression. Contrary to what you might expect ('not inviting Pia'), 'he invited x (her),' just as he invited someone else. In the latter sense only, *Pia* could have started out as a Contrastive Topic candidate. But because of the cancellation of contrastiveness on the basis of identical predication, there remains no particular sense in calling it Contrastive Topic. Take a further example:

(20) a. Have a nice day!
   
   b. You, too!

The speaker of (20a) does not have to consider himself in contrast with the speaker of (20b). In (20b), *you* is harmoniously, not contrastively, added to the one who will have a nice day by (20a). When you are asked what Peter and Pia ate, your most natural response in Korean is:

(21) Peter-to pasta-rul mek-ko Pia-to pasta-rul
   -too -Acc eat-and -too -Acc
   mek-ess -ta
eat -Past-Dec
   'Peter-too ate pasta and Pia-too ate pasta.'

A CT contour on (20b) is a disaster! The reason why the CT contour
is not required or not possible for this kind of *too*-associated items must be because of their nature of identity-reinforcing and/or cancellation of contrastiveness. The speaker's meaning and its prosodic and other correlates are intended, planned and controlled for utterances.

7. Focus and the Rest

Focus, either wide or narrow, is exclusively highlighted, selected from among alternative members in the focus set, if any. Wide Focus or default nuclear scope Focus falls on the pre-verbal position in most SOV languages. It gives new information about the Topic by picking up an element from among widely open alternatives, which simply amounts to a paradigmatic choice. Narrow Focus, on the other hand, either *wh*- answer/verum Focus or contrastive Focus, has a narrow alternatives choice set, normally closed by the discourse context. Contrastive Focus (and other narrow Focus) is still distinct from Contrastive Topic, which also involves a narrow kind of focus, in the sense that it exclusively highlights the chosen element, ignoring the rest, and that it is not topical in any sense. The distinction between denotational and metalinguistic levels in negation and other operators is considered. Simple alternatives in alternative semantics and 'contrasts' must be sharply distinguished.

8. Concluding Remarks

For communication, we talk about something. It is based on our background common knowledge. That is how topics are possible.
However, often we over-/under-estimate the other party's knowledge and we need topic management. Focusing is to pay attention to some particular item in our expression because of our limited cognitive resources. Contrastive Topic involves both aspects in the semantics/pragmatics interface, with presupposition/implicature effects. If we can set up a schema of focal information extraction, which sounds tougher than extracting a central discourse Topic, then some automatic Topic and Focus extractor for an extended text will be possible (cf. Hajicova, Sgall & Skoumalova 1995).

REFERENCES


_______ (1996b) Topic, Focus/Contrast and Grammatical Relations. Panel Paper at the 5th Int’l Conference on Pragmatics, Mexico
City.


Semantics, 75-116.


▶ 이 정민
서울대 언어학과 및 인지과학 협동과정 겸임
clee@snu.ac.kr