Contrastive Topic and directionality: A comparative analysis of CT markers in Persian

Keywords: *Semantics*, *Persian*, *Contrastive Topic*, *Question Under Discussion*

Introduction. This paper discusses the semantic and pragmatic aspects of the Persian particles *ke* and *ham*. Among various functions of these particles, I focus on the usage (in declaratives) shown in (1).

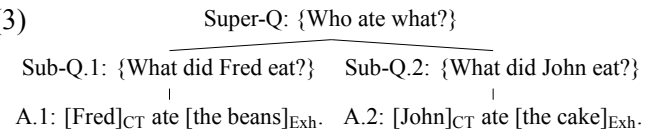
(1) a. *man=**ke** dust=eš dāram.*
1SG=KE like.it.PRES.1SG
'(At least) I like it.'

b. *ānhā harf mizadand, man=**ham** dar sokut guš mikardam.*
3PL talk.IPFV.PST.3PL 1SG=HAM in silence listen.IPFV.PST.1SG
'They were talking, [and] I was listening in silence.' (Yousef 2018:121)

I propose that both particles and another expression *hamke* can be analyzed as Contrastive Topic (CT) markers in the sense of Constant (2014). Moreover, I show how they differ in the precedence relations to its contrasts in discourse, namely, the **DIRECTIONALITY** of contrast (cf. Constant 2014, AnderBois 2016).

Contrastive Topic. The rising intonation (also known as B-accent, Jackendoff 1972) used for *Fred* in (2) indicates that there are other entities that can be an alternative to *Fred*. (The notation *CT* stands for 'what the question being addressed is about', *Exh* for 'the answer to the question'. (Constant 2014:17))

(2) Q: What about Fred? What did he eat?
A: [Fred]$_{CT}$ ate [the beans]$_{Exh}$.
L+H* L-H% H* L-L%

(3)


In Rooth's (1992) theory, there are two dimensions of semantic values, i.e., ordinary semantic value (proposition) and focus semantic value (a set of propositions). CT-marked constituents have a nested focus semantic value by topic abstraction (Constant 2014). Under the framework of Question Under Discussion (QUD; Roberts 2012) and discourse tree (Büring 2003), it is represented as in (3). An assertion that involves a CT-marking such as the rising intonation indicates that it is addressing a **SUB-QUESTION**, where a sub-question is such that the answer to that question is entailed by the answer to another question, a **SUPER-QUESTION**. In other words, a CT-marked assertion gives a partial answer to a super-question. The focus semantic value of the sentence containing CT-marked constituent can be represented as in (4–5). ('+': pointwise composition.)

(4) $[\![[\text{ CT-}\lambda_1\ [t_1 \text{ brought [the beans]}_F]]]\!]^f$ (Topic abstraction)
= {λx.{x brought the beans, x brought the pasta, ...}}

(5) $[\![[\text{Fred}]_F\ [\text{ CT-}\lambda_1\ [t_1 \text{ brought [the beans]}_F]]]\!]^f$

a. = {Fred, Mary, ...}+{λx.{x brought the beans, x brought the pasta, ...}}

b. = {{Fred brought the beans, Fred brought the pasta, ...}, {Mary brought the beans, Mary brought the pasta, ...}, ...}

c. = {What did Fred bring?, What did Mary bring?, ...}

d. = For each person, what did they bring? (cf. Constant 2014:94–108)

CT in Persian. *Ham* and *ke* satisfy the diagnostics in (6), as shown in (7). Hence, they are CT markers. These uses can be accounted for by adopting the CT analysis as suggested in (8).

(6) General diagnostics of CT (Constant 2014:48)

a. CT can't appear in exhaustive answers to the entire issue at hand

b. CT resists marking maximal elements (e.g. all, none)

(7) a. 'Who was it that ate the cake?' — *man*{#=***ke***/#=***ham***} *xordam=eš*. 'I ate it.'

b. *hame*(#=***ke***) *umadand*. 'All/Everyone came (e.g., to the party).'

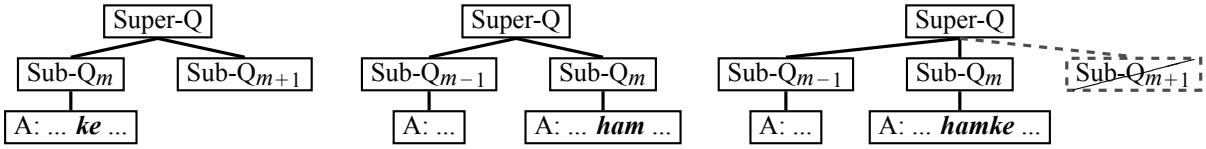
(8) [[I=***ham*** was listening]] (= (1b)) has the focus semantic value $[\![[\text{I}]_F\ [\text{ CT-}\lambda_1\ [t_1 \text{ was [listening]}_F]]]\!]^f$

a. = {{They were talking, they were listening, ...}, {I was talking, I was listening, ...}, ...}

b. = {What were they doing?, What were you doing?, ...}

c. = For each person, what were they doing?

The two particles and *hamke* differ in at least one aspect, namely, the directionality. *Ke* is **FORWARD**-looking, meaning that other sister sub-questions may follow. *Ham* and *hamke* are **BACKWARD**-looking. So, the clause containing *ham* or *hamke* addresses a sub-question of the super-question whose earlier sub-question(s) has previously been addressed. On top of that, *hamke* indicates that no subsequent sub-questions may follow. Using the QUD-based representations, such differences in the directionality can be shown as follows:



Discourse structure of *ke* | Discourse structure of *ham* | Discourse structure of *hamke*

Ke. *Ke* is forward-looking; it tends to appear when addressing an earlier sub-question. (1a) gives only a partial answer to the super-question 'For each person, do they like it?' and leaves an expectation that the rest of the sub-questions are to be addressed. [1] This leads to the 'at least' reading, an implication that there are some alternatives that may or may not have the same property as what the *ke*-marked sentence denotes. [2] Furthermore, *ke* does not interfere with the status (absent/resolved/unresolved) of the sister sub-questions. If the sub-questions are not addressed, the 'at least' reading arises. In other cases, certain expressions often follow: 'I=***ke*** like it, {'How about X?', 'As for X, I don't know.', 'X (should) likes it, too.', etc.}', suggesting that *ke* does not require the sister sub-questions to be addressed.

Ham. *Ham* is backward-looking. So, (9a) is infelicitous for the CT reading if *ham* is present in the preceding clause. [1] This condition of anaphoricity is also observable in the additive use (9b) as the additive *ham* requires a salient antecedent which holds the same property. [2] The CT marker analysis is compatible with the previous observations that *ham* indicates a sense of topic shift/a change of subject (cf. Lazard 1992:215).

(9) a. *ānhā*(#=***ham***) *harf mizadand, man=**ham** dar sokut guš mikardam.* (Contrastive Topic)
3PL=HAM talk.IPFV.PST.3PL 1SG=HAM in silence listen.IPFV.PST.1SG
'They were talking [and] I was listening in silence.'

b. *ānhā*(#=***ham***) *harf mizadand, man=**ham** harf mizadam.* (Additive)
3PL=HAM talk.IPFV.PST.3PL 1SG=HAM talk.IPFV.PST.1SG
'They were talking and I was talking, too.'

Hamke. The expression *hamke*, which strikes as a stacking of *ham* and *ke*, is a distinct CT marker that appears when a partial answer addresses the super-question. In other words, it marks the end of a sequence of answering sub-questions by indicating that no sub-questions may follow after it. In (10), *hamke* indicates that by giving the answer 'Avash left', not only does it answer the sub-question 'Did Avash leave?', it also gives a complete answer to the super-question 'For each person, did they leave?'. Thus, along with *ke* and *ham*, *hamke* serves as a marker for an important transition in discourse structure.

(10) Context: Making guesses on who will be the next person to leave in a competitive music TV program where some participants drop out each season. [web examble]
*šimā=**ke** raft... āvaš=**hamke** raft... nafar-e ba'd=i...?*
Shima=KE go.PST.3SG Avash=HAMKE go.PST.3SG person-LNK next=INDF
'Shima left... Avash left... Next person...? (Who do you think will be the next person to leave?)'

Conclusion. I proposed that *ke*, *ham*, and *hamke* mark CT, but in their own ways. The discussions in this paper demonstrate that the QUD-based discourse model helps to analyze the discourse sensitive expressions such as CT markers. Furthermore, I have shown that the different characteristics of the Persian CT markers can be explained by employing the concept of directionality. This analysis contributes to show the sensitivity of languages to discourse structure and the diversity of the CT markers.

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