

A Unified Analysis of the Hindi & Bangla discourse particle *-to*

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ABSTRACT

Discourse particles are commonly found in a variety of languages. These particles often mark topichood, focus, contrastivity and other discourse sensitive features. Indic languages have a discourse particle *-to*, which has been analyzed in the existing literature as a marker of topichood (Bayer et. al. 2014) or contrast (Montaut 2015). In this paper, we examine the properties of *-to* in Hindi and Bangla. Based on our observations about the necessary pragmatic conditions that license the use of *-to* we conclude that *-to* is neither a topic marker nor a contrast marker. It is rather a particle that plays a particular role in common ground management. By the use of *-to* in a sentence a speaker indicates that the sentence fails to resolve the *Issue at hand*, i.e., the Issue raised by its preajcent in the given discourse (following the Table Model of discourse structure, Farkas and Bruce 2010). This establishes *-to* as an independent discourse category, thereby also broadening the range of functions discourse particles are known to perform cross-linguistically.

1 Introduction

Languages employ various strategies to mark special pragmatic functions of a phrase or a sentence. One common strategy is the use of discourse particles to mark discourse features like topichood, focus, contrastivity etc. Japanese *-wa*, Korean *-(n)un*, German *doch*, Chinese *ne*, Vietnamese *thì* are all examples of particles commonly described as having such discourse functions. Many Indic languages make use of a discourse particle *-to*, which has been argued to be a topic marker (Bayer et. al. 2014) or a contrast marker (Montaut 2015). *-to* presents a distribution which appears to be similar to Japanese *-wa* and Korean *-(n)un*, which have similarly been characterized as having two functions - the marking of (a) topics, and (b) contrast (Kuno 1973, Lee and Ramsey 2000, Lee 2003, Vermeulen 2008). In the current paper, we examine the properties of *-to* in Hindi and Bangla (henceforth HB) and argue that HB *-to* resists characterization in terms of the existing discourse labels of topichood or contrast. *-to* rather constitutes an independent discourse category that plays a particular role in common ground management. We propose that the real generalization about the pragmatic function of *-to* is that *-to*-marked utterances fail to resolve the *Issue at hand* (Farkas & Bruce 2010) in a discourse, preventing the content of the utterance from being added to the common ground. Thus, this work not only provides a new perspective on the Indic *-to*, but it also adds to the range of functions that discourse particles are known to perform cross-linguistically, adding a new category to the existing repertoire of discourse particles.

The paper is organized as follows. Section 2 describes the distribution and properties of HB *-to*. Section 3 develops the proposal of the paper and offers a formal analysis of the complex patterns found with *-to*. Section 4 summarizes the observations and concludes.

2 Data and Observations

This section discusses the distribution of *-to* in HB and lays out the differences between HB *-to* and Japanese *-wa*. The section further pins down the pragmatic properties of *-to*-marked sentences in HB.

2.1 Distribution of *-to*

HB *-to* is often found attached to sentence-initial phrases that are interpreted as ‘aboutness’ topics (Reinhart 1981), as illustrated in (1), where *this country* is interpreted as the topic of the sentence, and the material following *this country* adds a comment about the topic.

- (1) [is desh-me] = to hadd ho rahi hai. Hindi
This country-in TO limit happen PROG AUX.PRES

- (5) A: raam-ka bataa? kya vo sangita aur minii-se milaa?
 Ram-GEN say.PST Q he sangita and mini-INSTR meet.PST
- A': ram-er kOtha bOl. O ki Sangeeta ar mini-r shathe
 ram-GEN talk say.IMP pron Q Sangeeta and Mini-GEN with
 dEkha kor-1-o?
 meet do.PST-3
 'Tell me about Ram. Did he meet Sangita and Mini?'
- B: raam **sangitaa-se = to** milaa, par minii-ka pataa nahi.
 Ram Sangita-INSTR TO meet.PST, but mini-GEN know NEG
- B': Ram [**Sangeeta-r shathe**] = to dEkha korech-e, mini-r kOtha
 Ram Sangeeta-GEN with TO meet do.PR.PERF-3 Mini-GEN talk
 jan-i-na.
 know-1-NEG
 'Ram met Sangita, but I don't know if he met Mini.'

Japanese *-wa* is again attested in similar cases, as shown in (6) below.

- (6) John-ga **pie-wa** tabeta ga, **keeki-wa** tabenakatta.
 John-NOM pie-CT ate but cake-CT eat-NEG-PAST
 'John ate the pie, but he didn't eat the cake.' (Fiengo and McClure 2002: 30)

From what has been shown above, it looks like HB *-to* is similar to Japanese *-wa* in its distribution and functions. However, a closer look at *-to* and *-wa* makes it clearer that the similarity is rather superficial. There are a number of cases where one is licensed and the other is not, making it obvious that the two are governed by different licensing conditions. The following subsection lays out the differences between Japanese *-wa* and HB *-to*.

2.2 Differences between HB *-to* and Japanese *-wa*

(7) shows that marking the topic *Mini* with *-to* in B makes the sentence unnatural if the sentence is to be interpreted as a plain and neutral answer to A. Japanese *-wa* on the other hand would be very natural in these contexts.

- (7) A: mini-ke kyaa haal chaal? B: **mini = (#to)** achchi hai
 Mini-GEN what news Mini TO fine AUX.PRES
- A': mini-r ki khabor? B': **mini = (#to)** bhalo ach-e.
 Mini-GEN what news Mini TO fine be.PRES-3
 'Tell me about Mini.' 'Mini is fine.'

Similarly, *-to* is not always natural on contrastive topics in a neutral response, as shown in (8) below where *Ukulele* and *Accordion* can be understood as contrastive topics.²

- (8) A: tum-ne ukulele aur accordion kaise sikhii?
 you-ERG ukulele and accordion how learn.PST.2FSG
 kahin bahar-se yaa khud-se?
 somewhere outside-from or self-from
- A': tumi ukulele ar accordion kibhabe shikhech-o?
 You ukulele and accordion how learn.PR.PERF-2
 mastarmOshai-er kache naki nije nije?
 teacher-GEN from or self self
 'How did you learn Ukulele and Accordion? On your own or through formal training?'

² These elements both bear a B-accent in the corresponding English sentences.

B: **ukulele = (#to)** mei-ne master-se sikha hai, **accordion=(#to)**
 Ukulele (TO) I-ERG teacher-from learn AUX.PRES, accordion(#TO)
 khud-se sikhaa hai
 self-from learn AUX.PRES

B': **ukulele=(#to)** ami mastarmOshai-er kache shikhech-i
 Ukulele TO I teacher-GEN from learn.PR.PERF-1
accordion =(#to) nije shikhech-i.
 Accordion TO self learn.PR.PERF-1
 'Ukulele I've learned from a teacher, accordion I've learned on my own.'

-to is also not necessarily licensed on all contrast-bearing elements, as shown by the case in (9) involving corrective focus.

(9) A: raam-ne kal Alien-3 dekhi hai
 raam-ERG yesterday Alien-3 see.PERF.3FSG AUX.PRES

A': ram kal Alien-3 dekhech-e.
 ram yesterday Alien-3 see.PR.PERF-3
 'Ram saw Alien 3 yesterday.'

B: nahi, raam-ne kal **Jaws-2 = (#to)** dekhi hai
 No raam-ERG yesterday Jaws-2 (TO) see.PERF.3FSG AUX.PRES

B': na, Ram kal **Jaws-2 = (#to)** dekhech-e.
 No, Ram yesterday Jaws-2 TO see.PR.PERF-3
 'No, Ram saw Jaws 2 yesterday.'

Additionally, unlike Japanese *-wa*, *-to* can be attached to universally-quantified phrases that cannot serve as topics, as in (10).

(10) **sabhi=to** aaye the
 everyone-TO come AUX.PST.3MPL
 'Everyone came.'

shObai=to eshechil-o.
 everyone TO come.PST.PERF-3

(11) shows that the Japanese counterpart of (10) is ill-formed.

(11) ***Minna-wa** kita.
 everyone WA came
 'Everyone came.'

(Vermeulen 2008:10)

The data above clearly shows that *-to* is not systematically used to mark topics, nor is it used to mark contrastive topics or contrast. In fact, *-to* can be attached to elements which cannot be topical and/or are non-contrastive for instance in example (10) where we see that *-to* can attach to universally quantified phrases. As established, universally quantified phrases cannot be topics in a sentence.

2.3 Pragmatic Flavors of *-to*

It has been observed so far that *-to* cannot be considered to be a straightforward marker of topichood or contrast. Therefore, in order to understand the function of *-to*, it is important to fully understand the pragmatic properties of *-to*-marked sentences in HB and the range of special interpretations which results from the use of *-to* – the various 'pragmatic flavors' of *-to*. These are now described and illustrated in 2.3.1-2.3.4.

2.3.1 Incompatibility between speaker's assertion and addressee's beliefs

In a conversation a speaker makes assertions based on her own beliefs and commitments. The asserted proposition might be compatible with the addressee's beliefs and commitments, in which case no contradiction arises. However, there can be scenarios where a speaker's assertion is incompatible with the addressee's personal beliefs or commitments. *-to* is licensed in such cases where the speaker's assertion and the addressee's beliefs are incompatible with each other, as shown in (12), which is identical to ex. (8) above. It should be noted here that *-to* is actually not ungrammatical if it occurs in the earlier example (8). However, if present (as in 12B), it is licensed only under specific pragmatic conditions.

- (12) A: tum-ne ukulele khud-se sikhii hai na.
 you-ERG ukulele self-from learn.PERF.2FSG AUX.PRES PRT
 mujhe bataa sakte ho kaise?
 I-DAT tell able AUX how
- A': tumi ukulele nije nije shikhech-o na
 You ukulele self self learn.PR.PERF-3 PRT
 kikore ekTu bol-b-e?
 how little say-FUT-2
 'You have learned Ukulele by yourself. Could you give me some tips about that?'
- B: **ukulele = to** mei-ne master-se sikha hai, accordion=(#to³)
 Ukulele = TO I-ERG teacher-from learn AUX.PRES, accordion (#TO)
 khud-se sikhaa hai
 self-from learn AUX.PRES
- B': **ukulele = to** ami mastarmOshai-er kache shikhech-i
 Ukulele TO I teacher-GEN from learn.PR.PERF-1
 Accordion=(#to) nije shikhech-i.
 Accordion TO self learn.PR.PERF-1
 'As far as Ukulele is concerned, I learned it from a master, it was accordion that I learned by myself.'⁴

Here A's assertion that B learned Ukulele on his own is incompatible with B's knowledge that he learned Ukulele formally from a teacher. B signals this difference in beliefs with the use of *-to*. Example (13) illustrates this commonly occurring use of *-to* again:

- (13) A: mein apni party-me raam-ko nyotaa bhejungaa
 I self party-LOC raam-DAT invitation send.FUT.1MSG
- A': ami ama-r party-te ram-ke nimOntrOn kor-b-o.
 I I-GEN party-LOC Ram-DAT invite do-FUT-1
 'I'll invite Ram to my party.'
- B: **raam=to** pichle hafte ghar chala gayaa
 Ram TO last week home walk.PERF.3MSG go.PERF.3MSG
- B': **raam=to** gOto shOptah-e bari chole gEch-e.
 Ram TO last week-LOC home walk go.PR.PERF-3

³ In HB, *-to* cannot occur more than once in the immediate discourse. Unlike English, where B-accent marks contrastive topics and can occur in both the contrastive elements.

Ukelele, I studied formally. Accordion, I learned on my own. (Constant 2014)

⁴ Even with the added implication *-to* is not licensed on both the contrasting elements unlike the B-accent in English which occurs on both the alternatives Ukulele and Accordion.

‘But Ram left for home yesterday!’

In (13), A’s assertion about inviting Ram to the party is incompatible with B’s knowledge of Ram being away at home. B emphasizes this mismatch in the interlocutors’ knowledge states by adding *-to* to Ram.

2.3.2 Speaker’s expectation of addressee’s belief

-to is also licensed in cases where the speaker believes that the addressee should already know/ believe/ expect a certain proposition to be true (cf. Bayer et. al. 2014). So, when the speaker makes an assertion that the speaker already expects the addressee to know/ believe/ expect, a *-to* is used to communicate this expectation of the speaker, as illustrated by example (14).

- (14) A: muraakaami kaun hai?
 murakami who AUX.PRES
- A’: murakami ke?
 murakami who
 ‘Who is Murakami?’
- B: **muraakami=to** itna prasidh lekhak hai yaar
 murakami-TO so famous author AUX.PRES VOC
- B’: **muraakami=to** Eto bOro Ek-jon lekhOk.
 murakami TO so big one-CL author
 ‘Murakami is a very famous author.’

Given that Murakami is a famous author, B expects A to already know Murakami. B communicates this with the use of *-to* in her response. Similarly, in (15), the addition of *-to* in B’s reply adds information about B’s assumptions of common knowledge – given that London is famous for its rainy weather, the speaker expects the hearer to know that it always rains in London.

- (15) A: yahaan-pe bahut garmii hai.
 here-LOC very hot AUX.PRES
- London mein mausam kaisaa hai?
 London LOC weather how AUX.PRES
- A’: ekhane khub gOrom porech-e. London-e weather kEmon?
 here very hot fall.PR.PERF-3 London-LOC weather how
 ‘It’s really hot here. How’s the weather in London?’
- B: [**London mein**]=to hameshabarish hotii hai.
 London LOC TO always rain happen AUX.PRES
- B’: **London-e = to** shObshomoy brishTi pOr-e.
 London-LOC TO always rain fall.PR.HAB-3
 ‘It always rains in London.’

2.3.3 Partial Resolution of a Question

Another pragmatic condition that *-to* marks is where the speaker provides partial answer to a question that has been raised by an interlocutor in the discourse. This is exemplified in (16) and (17), where B’s responses only partially answer the questions asked by A.

- (16) A: raam-ki behnenoN-ne kyaa kiyaa?
 raam-GEN sister.PL-ERG what do.PST
- A': raam-er bonera ki korchil-o?
 raam-GEN girl.PL what do.PST-3
 'What did Ram's sisters do?'
- B: [raam-ki choTi behen-ne] = to rohit-se baat kari
 raam-GEN younger sister-ERG TO rohit-with talk do.PST.FSG
 (uski baDii behen-ka pataa nahii)
 his older sister-GEN know NEG
- B': raam-er choto bon to rohit-er shathe kOtha bolchil-o
 raam-GEN younger sister TO rohit-GEN with talk say.PST-3
 bOro boner kOtha jan-i-na.
 elder sister-GEN talk know-1-NEG
 'Raam's youngest sister talked to Rohit. (I don't know about the elder sister.)'

Here, B only provides an answer relating to Ram's younger sister and offers no information about Ram's elder sister, thereby leaving a part of the question unanswered.

- (17) A: raam-ka bataa? kya vo sangita aur minii-se milaa?
 Ram-GEN say.PST Q he sangita and mini-INSTR meet.PST
- A': ram-er kOtha bOl. O ki Sangeeta ar mini-r shathe dEkha kor-l-o?
 ram-GEN talk say.IMP pron Q Sangeeta and Mini-GEN with meet do.PST-3
 'Tell me about Ram. Did he meet Sangita and Mini?'
- B: raam sangitaa-se = to milaa, par minii-ka pataa nahi.
 Ram sangita-INSTR TO meet.PST, but mini-GEN know NEG
- B': Ram Sangeeta-r shathe to dEkha korech-e, mini-r kOtha
 Ram Sangeeta-GEN with TO meet do.PR.PERF-3 Mini-GEN talk
 jan-i-na.
 know-1-NEG
 'Ram met Sangita, but I don't know if he met Mini.'

Here again, B provides no information about Mini and only answers about Sangita, thereby leaving the question partially answered. This partial answering is stressed by the *-to* in the above cases. Crucially, if the questions were fully answered, a *-to* would be infelicitous.

2.3.4 Difference between an asserted state of affairs and the speaker's expectation

In the examples here, the speaker asserts the occurrence/existence of a state of affairs which contrast with the speaker's expectation of what should be the case given speaker's beliefs. The speaker indicates her incredulity by using *-to*.

- (18) [is desh-me] = to hadd ho rahi hai!
 This country-in TO limit happen PROG AUX.PRES
- desh-Ta = to ucchOnne gEch-e.
 country-CL TO chaos go.PR.PERF-3
 'This country has gone to the dogs.'
- (19) arey, sangitaa=to ghar-se bhaag gayiii yaar!
 VOC sangita TO home-from run go.PST.3FSG VOC

arey, **Sangita =to** bari theke paliye gEch-e!
 VOC Sangita TO home from run go.PR.PERF-3
 ‘Sangita ran away from home!’

In (18) and (19), the speakers’ belief states are incompatible with speakers’ assertions. The speaker is thus expressing incredulity in the current state of affairs and with the use of *-to* thus inviting further conversation as to how the current states of affairs came to be.

In this section we have shown that *-to* marked utterances come with certain pragmatic flavors and that *-to* seems to have an effect in common ground management. It usually marks a discourse set up wherein due to some reason the conversation is not complete and has not reached its natural end state most possibly due to some incompatibility between the interlocutors’ beliefs and assertions.

3 Proposal and formal analysis

In the previous section we provided empirical evidence for the claim that *-to* cannot be analyzed purely as a topic or a contrast marker, although it can attach to topic and contrast-bearing elements. *-to* is instead a discourse particle with a specific pragmatic function contributing to common ground management. In the following subsections we lay out our proposal about the function of HB *-to* and provide a unified formal analysis by adopting Farkas and Bruce (2010)’s Table Model of discourse structure.

3.1 Proposal

We suggest that the pragmatic function of *-to* is to situate the utterance it marks in the larger discourse context by stating that the propositional content of the utterance it marks fails to resolve the Issue at hand. Additional conversational moves are required before the Issue is fully resolved and the conversation reaches a natural end state. We adopt Stalnaker’s (1978) idea that the goal of a discourse is to discover and share with all interlocutors information about the state of the world. This can be done by either making assertions, which, if accepted by all the interlocutors, get added to their repertoire of shared knowledge. Another mode of information sharing is when one interlocutor asks a question and another answers it. If the answer is accepted by all the interlocutors, it gets added to their shared repertoire of information. What we have been informally calling shared repertoire of information has elsewhere been referred to as common ground (of knowledge). Using Stalnaker’s (1978) notion of common ground and context set, the goal then is to reduce the context set to a singleton set such that all the interlocutors believe that all the propositions stated and agreed upon in the discourse are true i.e., they are a part of the common ground. This objective of reaching a shared information state is achieved through raising Issues through speech acts performed by the interlocutors. The Issues raised will then need to be resolved, i.e., the assertions need to be agreed upon and the questions need to be answered and agreed upon before the next Issue can be raised in a conversation. What *-to* does is state that the current Issue raised cannot be fully resolved by the utterance that it marks.

3.2 Components of the analysis

We adopt Farkas & Bruce’s (2010) Table Model to couch our proposal in a dynamic discourse model. The components necessary to build our discourse structure are defined below:

Components of the Farkas & Bruce (2010) Model (from Rudin 2020:14)

- a. Common Ground (CG): The set of all propositions that all discourse participants are publicly committed to.
- b. Context Set (CS): The set of all worlds that are compatible with all propositions in the Common Ground ($= \cap CG$)
- c. Discourse Commitments: For all discourse participants $a \in A$, there is a set DCA of propositions a has publicly committed to.
- d. The Table: A push-down stack of Issues (sets of propositions), the uppermost element of which $\max(T)$ represents the current local Question Under Discussion (QUD — Roberts 1996, Ginzburg 1996)
- e. Projected Set (PS): The set of all Common Grounds that could result by adding an element of $\max(T)$ to CG (i.e., that could result from resolving the current QUD).

We further define raising and resolving an Issue following Rudin (2020):

Issues: An Issue is a set of propositions. To add an Issue to the Table is called raising an Issue.

Resolving an Issue: An Issue is resolved if the Context Set entails a member of the Issue, which happens by adding the member to the common ground and removing the Issue from the Table.

As a final component of our analysis, we follow Farkas & Roelofsen (2017) and Rudin (2020) in formally defining the discourse effects of a conversational move made by an interlocutor in a conversation. They define a conversational move as a function from an input context to an output context with the following discourse effects (Farkas & Bruce 2010):

- The assertion of a sentence denoting a proposition p does two things:
 - First, it adds p to DC_a , representing the fact that A has publicly committed to p .
 - Second, it raises the Issue $\{p\}$, giving rise to a Projected Set that contains a future Common Ground that includes p .
- The act of questioning raises the Issue denoted by the question (P) and makes no change to the speaker's discourse commitments but raises the Issue P to the common ground and also gives rise to a projected set with alternative common grounds containing an answer to the question denoted by P .

3.3 Analysis:

We propose that a *-to* marked utterance is an utterance that fails to resolve the Issue-at-hand. The Issue might have been raised by a previous conversational move or might have been raised by the same conversational move which has the *-to* marked utterance. Based on this difference we divide the *-to* marked cases into two types. However, in both types *-to* simply states that the current Issue has not been resolved and needs further conversational move to resolve it before it can be removed from the table. Below we review specific examples from section 2 and provide a formal analysis of those cases.

Type 1: Cases in which two or more interlocutors are involved. The Issue at hand is raised by the conversational move made by A, whether it be an assertion or a question. The *-to* marked utterance is made by B suggesting that the conversational move made by B does not resolve the Issue raised by the conversational move made by A.

A: p (assertion as a conversational move) / P (question as a conversational move)

B: q (responding conversational move with *-to*)

	before A's conversational move	After A's conversational move/ Before B's conversational move	After B's conversational move
DC_a	$\{\}$	$p/_$	$\{\}$
DC_b	$\{\}$		q
T	$\langle \rangle$	$\langle \{p\} \rangle / \langle P \rangle$	$\langle \{q,p\} \rangle / \langle \{q,P\} \rangle$
CG	$\{\}$	$\{\}$	$\{\}$
PS	$\{\}$	$\{CG + p\} / \{CG + p : p \in P\}$	$\{CG + p + q\} / \{CG + p : p \in P + q\}$

Table 1: Formal Representation of the different stages of the conversation for Type 1 cases

Some examples of this type are given below:

Incompatibility between speaker's assertion and addressee's beliefs

(20) A: mein apni party-me raam-ko nyotaa bhejungaa
 I self party-LOC raam-DAT invitation send.FUT.1MSG

A': ami ama-r party-te ram-ke nimOntrOn kor-b-o.
 I I-GEN party-LOC Ram-DAT invite do-FUT-1
 'I'll invite Ram to my party.'

B: **raam=to** pichle hafte ghar chalaay gayaa
 Ram TO last week home walk.PERF.3MSG go.PERF.3MSG

B': **raam=to** gOto shOptah-e bari chole gEch-e.
 Ram TO last week-LOC home walk go.PR.PERF-3
 'But Ram left for home yesterday!'

(same as 13)

In example (20) above the first conversational move is an assertion by speaker A to which B responds with another assertion which is incompatible with A's assertion. Hence A's assertion cannot yet be accepted and the Issue resolved.

The Issue raised to the table by A's assertion is the propositional content of 'I will invite Ram to our party.' It remains unresolved because B indicates that A's statement is incompatible with B's beliefs. Hence further clarification is required before A's statement can be accepted by all interlocutors and the proposition p be added to the common ground. *-to* would not have been licensed in any of B's utterances which would have fully resolved the Issue raised by A. For instance, if B had responded with:

B': Okay. (B accepts and resolves the Issue)

B'': You can't, he left for India today. (B overtly rejects the proposition and directly stops it from being added to the common ground).

Speaker's expectation of addressee's knowledge

(21) A: muraakaami kaun hai?
 Murakami who AUX.PRES

A': murakami ke?
 Murakami who
 'Who is Murakami?'

B: **muraakami=to** itna prasidh lekhak hai yaar
 murakami-TO so famous author AUX.PRES VOC

B': **muraakami=to** Eto bOro Ek-jon lekhOk.
 Murakami TO so big one-CL author
 'Murakami is a very famous author.'

(same as 14)

In (21), the Issue raised to the table is a set consisting of alternative answers to - 'Who is Murakami?' as the conversational move made by A is a question. It remains unresolved because the *-to* marked utterance by B has a flavor that the answer to the question should have been obvious. However, the fact that A still asks the question makes B wonder if something remains unresolved here and if there is potential for further continuation. So even though B answers the question, the Issue raised by A is considered to be still unresolved as B needs further clarification as to why A is asking such an obvious question. *-to* would not have been licensed in a scenario in which A not knowing *Murakami* would have been compatible with B's beliefs (in a world where Murakami is not famous and B would not expect A to know who he is) and B simply would have answered the question put forth by A. For instance, a neutral answer 'Murakami is my colleague' would not have licensed *-to*.

Partial Resolution of a Question

(22) A: raam-ki behnenoN-ne kyaa kiyaa?
 raam-GEN sister.PL-ERG what do.PST

A': raam-er bonera ki korchil-o?
 raam-GEN girl.PL what do.PST-3
 'What did Ram's sisters do?'

B: [raam-ki choTi behen-ne] = to rohit-se baat kari,

raam-GEN younger sister-ERG TO rohit-with talk do.PST.FSG

(uski baDii behen-ka pataa nahii)

his older sister-GEN know NEG

B':[raam-er choto bon] = to rohit-er shathe kOtha bolchil-o

raam-GEN younger sister TO rohit-GEN with talk say.PST-3

bOro boner kOtha jan-i-na.

Elder sister-GEN talk know-1-NEG

'Raam's youngest sister talked to Rohit, I don't know about the older sister.' (same as 16)

In (22), the Issue raised to the table is again a set consisting of alternative answers to the question 'What did Ram's sisters do?' This Issue raised by the conversational move made by A remains unresolved after B utters the *-to* marked response because B only partially answers A's question. To fully resolve the Issue B would have needed to fully answer A's question. So, an answer which would not license *-to* in the utterance by B would be of the form: 'Ram's younger sister talked to Rohit. Ram's older sister is still angry with him and didn't talk to him.'

Type 2: *-to* is also licensed in utterances which are not in response to a previous conversational move and may in fact be conversation starters. In this case the *-to* marked utterance raises an Issue and the *-to* marking suggests that the Issue has not been resolved and needs further conversational moves. One such example is the following.

Incompatibility between speaker's assertion and speaker's expectation

A: p (assertion expressing speaker incredulity as a conversational move)

	before A's conversational move	After A's conversational move
DC _a	{}	p
T	◊	<{p}>
CG	{}	{}
PS	{}	{CG + p}

Table 2: Formal Representation of the different stages of the conversation for Type 2 cases

(23) arey, **sangita=to** ghar-se bhaag gayiii yaar

VOC sangita TO home-from run go.PST.3FSG VOC

arey, **sangita=to** bari theke paliye gEch-e.

VOC Sangita TO home from run go.PR.PERF-3

'Sangita ran away from home!' (same as 19)

In (23), the Issue raised to the table by A is the propositional content of 'Sangita ran away from home.' It expresses speaker incredulity because p is incompatible with A's individual discourse commitments. It remains unresolved and cannot yet be added to the common ground because the speaker herself needs further evidence for the assessment of the truth of the proposition uttered. The *-to* would not be licensed in a scenario where the speaker incredulity is absent or where the incredulity is eliminated by means of an explicit explanation preceding the main assertion, such as in the following sentence – 'Sangita's family did not want her to become an actress and hence she ran away from home.'

Having underlined the specific licensing condition for *-to* we now go back to those case where *-to* was not attested and confirm that in all those cases the Issue had been resolved and hence *-to* could not be licensed. For instance, (7), repeated here as (24):

- (24) A: mini-ke kyaa haal chaal? B: **mini = (#TO)** achchi hai
 Mini-GEN what news Mini TO fine AUX.PRES
 A': mini-r ki khabor? B': **mini (#TO)** bhalo ach-e.
 Mini-GEN what news Mini. TO fine be.PRES-3
 'Tell me about Mini.' 'Mini is fine.'

The Issue raised to the table by the question asked by A is a set consisting of alternative answers to – ‘How is Mini?’ The question is answered by the conversational move made by B and the Issue raised by A is fully resolved, hence *-to* is inappropriate and very unnatural in this context. Similarly, in example (8) repeated as (25) below, the question asked by A is fully answered by B and the propositional content of B can be added to the common ground leaving nothing unresolved. Consequently, *-to* is again not licensed in this case.

- (25) A: tum-ne ukulele aur accordion kaise sikhii?
 you-ERG ukulele and accordion how learn.PST.2FSG
 kahin bahar-se yaa khud-se?
 somewhere outside-from or self-from
 A': tumi ukulele ar accordion kibhabe shikhech-o?
 You ukulele and accordion how learn.PR.PERF-2
 mastarmOshai-er kache naki nije nije?
 teacher-GEN from or self self
 'How did you learn Ukulele and Accordion? On your own or through formal training?'
 B: **ukulele = (#TO)** mei-ne master-se sikha hai, **accordion=(#TO)**
 Ukulele (TO) I-ERG teacher-from learn AUX.PRES, accordion(#TO)
 khud-se sikhaa hai
 self-from learn AUX.PRES
 B': **ukulele = (#TO)** ami mastarmOshai-er kache shikhech-i
 Ukulele. TO I teacher-GEN from learn.PR.PERF-1
accordion = (#TO) nije shikhech-i.
 Accordion TO self learn.PR.PERF-1
 'Ukulele I've learned from a teacher, accordion I've learned on my own.'

4 Conclusion

In this paper we have argued that the HB discourse particle *-to*, contrary to claims made in the previous analyses, is neither a topic and nor a contrast marker and rather performs a different pragmatic function. Though *-to* may appear on certain elements which are topics or contrastive it does not mark either topichood or contrast and can occur on non-topical and non-contrastive elements such as quantifiers, indefinites or verbal elements. We have suggested that *-to* marks a discourse condition through which the speaker indicates that the *-to* marked utterance fails to resolve the Issue that has been raised, i.e., the proposition denoting the Issue fails to be entailed by the common ground. Simply put, a *-to* marked utterance suggests that the conversation has not reached its end state and further conversational moves need to be made. This failure of resolution can be caused in many different ways. One possibility is incompatibility between the commitment made by the *-to* marked assertion and the addressee's commitments. Another possibility is that the commitment made by the *-to* marked assertion only partially resolves the Issue raised in the immediate discourse. Yet another case is where the speaker's incredulity itself stops the commitment made by the *-to* marked assertion from entering/being added to the common ground. Whatever the case may be, *-to* signifies the non-resolution and the need for further discourse moves before the conversation can reach a stable state.

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