Syntax and Pragmatics of Conversation: A Case of Bangla

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Abstract

Conversation is often considered as the most problematic area in the field of formal linguistics, primarily because of its dynamic emerging nature. The degree of complexity is also high in comparison to traditional sentential analysis. The challenge for developing a formal account for conversational analysis is bipartite: Since the smallest structural unit at the level of conversational analysis is utterance, existing theoretical framework has to be developed in such a manner so that it can take an account of the utterance. In addition to this, a system should be developed to explain the interconnections of the utterances in a conversation. This paper tries to address these two tasks within the transformational and generative framework of Minimalism, proposed by Chomsky, with an emphasis on the Bengali particle to - traditionally classified as indeclinable.

1 Introduction

Formal modeling of conversation is still considered as daunting task in the fields of both computational and cognitive linguistics. In spite of the emphasis by Chomsky (1986) on the questions of (a) what constitutes the knowledge of language, (b) how is knowledge of language acquired, and (c) how is knowledge of language put to use, a few approaches has really dealt with the last questions of the above mentioned series. Though formal theories are proposed to deal with the very nature of knowledge of language in linguistics, very less has been done to understand how₅ framework of Transformational and Generative Grammar (henceforth, T-G Grammar). Under this situation, the paper seeks to investigate how knowledge of language is put to use. More specifically, the paper intends to explore how efficiently the semantics and pragmatics of conversation can be explained within the existing theoretical framework of T-G Grammar. Consider the following example:

1.	Speaker_1	suśīl-φ		ās-ф-b-е	to
	Speaker_2	<i>hyā</i> yes	íom hil come' s <i>uśīl-φ</i> Sushil-Ne hil will c	<i>ās-φ-b-e</i> om come-φ-fut-	prt 3.fut

In this piece of communication, Speaker 1 asks a question about the arrival of Sushil. In response to Speaker 1's query Speaker_2 confirms Sushil's arrival. The current status of linguistic enquiry in the field of syntax and semantics does not deal with this type of connected speech which we encounter often in our daily life. In most of the cases, idealized sentential representation is discussed to unveil the grammatical intricacies. Interestingly, what falls outside of the scope of these sorts of investigation is a systematic exploration into what we would call the grammar of conversation. The importance of studying the grammar of conversation also lies with the fact that conversation embodies many principles of complex dynamic system. Under this situation, this paper attempts to address those problems involved in the formal modeling of the conversational discourse with in framework of Minimalist Program (Chomsky, 1995) with a specific emphasis on the behavior to Bengali particle to - traditionally classified as indeclinable.

this shuma, Resenged and AR singh. Proc. of the seneral Conference on Natural Language Processing, pages 65–70, Varanasi, India. December 2016. ©2016 NLP Association of India (NLPAI)

Unlike the major lexical expressions, to as a discourse particle hardly contributes in the content of the sentence; rather, it is used to induce some effect of emotional coloring on the content itself. By emotional coloring we do mean various states of minds involved in the act of questioning, doubting, confirming, requesting etc. From the perspective of conversation analysis, the expressions like to are extremely crucial primarily because of their role in ongoing epistemic negotiations happening between the interlocutors, i.e. the negotiation holding between Speaker_1 and Speaker 2. In virtue of contributing in the epistemic negotiation in terms of various emotional colors as is mentioned above, it expects other sentential discourses. As a consequence, it becomes quite essential to investigate how this capacity of meaning making can be talked about in terms of the pragmatic, semantic and syntactic behaviors of to.

To attain the above stated goal, the paper will explore the sentential level semantics and pragmatics of *to* in Bengali in Section 2. In Section 3, this discussion will be further augmented with a discussion of some pragmatic observations regarding the linguistic behavior of *to* to elucidate how current understanding of Pragmatics can provide some important clues about the formalization of the problem stated above. Finally in Section 4, we have proposed a theoretical framework which is crucial in providing a systemic formal account of conversation.

2 Indeclinable to in Bengali

Traditionally, to is classified as indeclinable for the reason of not being affected by the inflections. It is not being expected by the major lexical categories of a sentence. Its significance lies with its capacity to change the overall sense of a sentence. In addition to this it is also noticed that the incorporation of to has its direct bearing on the pitch contour of the sentence itself. Compare the sentences cited in (2) and (3):

2.	suśīl-ø kāl-ø Sushil-Nom yesterday-L giy-ech-il-o		ay-Loc _{temp}	<i>bājār-e</i> market-Loc _{spatial}		
	go-perf-past-3.past Sushil had gone to the market yesterday					
3.	<i>suśīl-φ</i> Sushil-Nom	<i>to</i> prt	<i>kāl-φ</i> yesterday-Lo	Ctemn	<i>bājār-e</i> market-Loc _{spatial}	
	<i>giy-ech-il-o</i> go-perf-past-3 Sushil had goi	1	market yestero		spana	

As per the traditional practice, articulations of declarative sentences seem to be the objective rendition of the *real* world phenomena. For the interpretation of a declarative sentence like (2), one has no need to invoke the knowledge of preceding and following sentences, as if (2) is selfsufficient. In contrast, the sentences like the one cited in (3) is considered as unreal in virtue of being stated in a mood other than declarative. What distinguishes (3) as *unreal* is the presence of to in it. Incorporation of to in (2) results into an articulation stated in irrealis mood. Irrealis mood covers a wide range of emotional involvements like questioning, affirming etc. In other words, (3) is not an objective rendition about any worldly phenomena but involves a wide range of subjective necessities to satiate its meaning construing capacity. At least in case of to, it is also possible to show that change of its position in (3) confirms different types of requirements raised by the context of communication within which the sentence is embedded in. Consider the following sentences:

4.	suśīl-ø	kāl-ø	to				
	Sushil-Nom	yesterday-Loctemp	prt				
	bājār-e	giy-ech-il-o	*				
	market-Loc _{spatial} go-perf-past-3.past						
		e to the market yester	lay				
5.	suśīl-φ	kāl-φ	bājār-e				
	Sushil-Nom	yesterday-Loctemp	market-Loc _{spatial}				
	to giy-ech-il-o						
	prt go-perf-past-3.past						
	Sushil had gone to the market yesterday						
6.	suśīl-φ	kāl-φ	bājār-e				
	Sushil-Nom	yesterday-Loc _{temp}	market-Loc _{spatial}				
	giy-ech-il-o	to	-				
	go-perf-past-3.past prt						
	Sushil had gone to the market yesterday						

The other point which needs to be brought into the notice is the capacity of *to* of putting emphasis on the different constituents of a sentence. To represent emphasis, bold letters are used. Change in position changes the pattern of emphasizing while keeping the emotional content intact. Change in emotional content can only be initiated by ensuring the change in the pitch contour: From Fig. 1, it is visible that in case of *affirming* the stress is put on the syllables quite differently than it is put in case of *questioning*. Moreover the point we want to make here is that emotional conditioning has the power to supersede the lexical conditioning while emphasizing the communicative intention.



Fig. 1. suśil kāl bājāre giyechilo to

It is not hard to show that the ambiguity in the emotional content is always relative to pitch contour carried by an utterance. For example the ambiguity between affirming and questioning/doubting in case of (7) can be solved by taking an account of the associated pitch contour.

 suśīl-φ ās-φ-b-e to Sushil-Nom come-φ-fut-3.fut prt Will Sushil come?

However, when the sense of request is prevailing, no such ambiguity in terms of emotional content is noticed:

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    ekbār es-φ-φ-ο to
once come-φ-pres-2.pres prt
Come once.
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Beside this, *to* can also appear with *tāi* and *hay*. The resultant forms *tāito* and *hay-to*, can mean several things depending on the context:

9 tāi to bal-ch-ø-i because prt tell-cont-pres-1pres That is why, I am telling (this). 10 ha-φ-φ-y tā-i bal-ech-ø-i to that-emph tell-perf-pres-1pres be-\$-\$-3pres.Imp prt Probably, I have said so.

Though $t\bar{a}ito$ and hayto are composed of two different morphemes, they are often treated as single forms. Because of the anaphoric nature of $t\bar{a}i$, $t\bar{a}ito$ establishes a relation between the current articulation and the previous articulations.

In a conditional construction like (11), inclusion of *to* as in (12) brings different shades of interpretation which is equivalent to $\bar{a}dau \ jadi \ balte$ $d\bar{a}o$ "if at all you allow me to speak". 67

11.	bal-te	di-le	bal-φ-φ-i
	tell-prt	give-prt	tellpres-1.pres
	If you all	low then only	y I speak.

12. bal-te di-le to $bal-\phi-\phi-i$ tell-prt give-prt prt tell- ϕ -pres-1.pres If you at all allow me to speak.

to can also be used in a negative sense:

13	bal-te	di-le	to		
	tell-prt	give-prt	prt		
	We are not allowed to speak				

When *to* is used in conjunction with the future tense, it results into the sense of doubt and/or questioning. Consider (14):

14. *bal-te de-φ-b-e to* tell-prt give-φ-fut-3.fut prt Will they allow us to speak?

On the basis of this discussion, what we can argue that to is primarily an expression not containing anything which is propositional in nature. As a consequence, the meaning construing capacity of it cannot be discussed in terms of the truth conditions. Under this situation what will be of interest is the way we understand the meaning construing capacity of to: to as an emphatic indeclinable has the power to change the meaning of the propositional content of the sentence within which it is embedded. The appearance of to in a sentence has distinct phonological bearing which is directly connected with the emotional coloring effect. Therefore, a theoretical account of the meaning construing capacity of to should have some component to deal with the phonological aspect involved with it.

3 Bengali particle to in the light of Pragmatics

On the basis of discussion of Section 2, at least two different aspects of *to* can be talked about: *Firstly*, during conversation, the indeclinable *to* plays a crucial role in imposing the illocutionary force on the propositional content of the articulation. As a consequence the syntax and semantics of *to* is not interpreted within the scope of IP (= Inflectional Phrase); rather we do feel IP is dominated by the dis-course particles like *to*. A similar observation is also made by Searle (1969) while explaining the interrelation holding between illocutionary force (= F) and the propositional content (= p). To represent the interaction, Searle proposes the following scheme: F(p). Vanderveken (1990) has also supported this proposal.

Secondly, a point to be noted here regarding the linguistic behavior of discourse particles like *to*: The meaning construing behavior of discourse particle *to* is not restricted within the scope of the utterance where it is embedded. Its meaning construing behavior often invokes the context for other utterances. This has already been noticed in the discussions of Section 1 and 2. Therefore, to exhaust its meaning construing capacity, an analytical framework should have some provisions.

Under this situation, then, what we want to look for in this paper is an unified theoretical account which can take care of aforementioned bilayered meaning construction: In one layer, *to* as an emphatic particle will determine the illocutionary aspect of the utterance; and, in other layer it will motivate a move to satisfy the requirements possed by the perlocutionary act of the following utterance. Note the concepts of locution, illocution and perlocution are first proposed by Austin (1975).

4 Discussion

While dealing with the problem of *to*, Bayer *et al.* (2014) considers Rizzi's model, proposed in the year of 1997, where the syntactic representation of force is proposed as the highest functional projection: Rizzi argues CP (= Complimentizer Phrase) is composed of ForceP (= Force Phrase), FocP (= Focus Phrase) and TopP (= Topic Phrase) just like the way IP contains information about TP (= Tense Phrase) and AgrP (= Agreement Phrase). Rizzi's proposal in this regard can be summarized in the following figure:



Fig. 2. Rizz's proposal: Pragmatization of Syntax

Rizzi's proposal provides some solution to the incorporation of pragmatic content in the existing framework of syntax. In other words, syntax is now capable enough in taking an account of the utterance.

4.1 Incorporating Illocution

To incorporate the illocutionary aspect of an utterance, the existing theoretical framework has to undergo certain types of modifications. These modifications will be elaborated now in this section. Consider the following examples:

15.	suśīl-φ	to	ās-ф-b-е			
	Sushil-Nom	prt	come-\$-fut-?	3fut		
	Sushil will come.					
	[Confirming: keu nā eleo, suśīl to āsbe					
	"even if nobody comes, (I do believe),					
	Sushil will come"]					
16.	suśīl-φ	ās-ф-l		to		
	Sushil-Nom	come	-φ-fut-3fut	prt		
	Will Sushil come?					

Following Rizzi's proposal, for (15) we get the syntactic representation of Figure 3. As per this representation, *to* originates at the Head-FocP position. As an emphatic particle *to* contains [+emph] feature which belongs to the [+F] class. The DP moves from Spec-AgrSP (= Specifier position of Subject-Agreement-Phrase) to Spec-FocP (= Specifier position of Focus Phrase) in order to get the focus feature checked:



Fig. 3. Syntactic representation of 15

In other words, [+emph] feature belonging to [+F] class feature is attributed to phrase migrated from Spec-AgrSP position to Spec-FocP. The syntactic representation for (16) is can also be provided following the same line of reasoning:



Fig. 4. Syntactic representation of 16

As per these representations, *to* originates in the Head-FocP (= Head position of the Focus Phrase) position with head feature +F. Solution to this specific problem can be generalized over a class of linguistic constructions involving the phenomenon of focusing. The generalization, then, would provide an interpretation (Fig. 5) that Head-FocP attracts the emphasized XP towards itself in order to get the +F feature checked; and this in turn remains the sole motivation for the movement of emphasized XP to the Spec-FocP position.



Fig. 5. Motivation for the movement of the emphasized phrase in the Spec-FocP position

In other words, the proposal creates a motivation for the phrase marked with +F to move out from its original position to a higher node to satisfy the need of interpretation: What remains uninterpreted in its original position becomes completely interpretable due to its movement to the Spec-ForceP position. Till now, the first layer of the bilayered representation discussed in Section 3 is outlined. Rest of this article will now deal with the second layer of the bilayered representation.

To address the problem of capturing illocutionary aspect of an utterance, we will adopt a way similar to the one we have discussed above following the proposal developed in Karmakar *et al.* (2016). As per this proposal the FocP moved to Spec-ForceP position to check the head feature of the ForceP. Note that in (15) the head feature is [+R]; and, in (16) it is [+Dr].



To propose an effective way to capture illocution we would like to accommodate the taxonomy of speech acts as is proposed by Searle (1976): As per this proposal, speech acts can be reduced into five main types namely (a) representatives (= [+R] = asserting, concluding etc.), (b) directives (= [+Dr] = requesting, questioning etc.), (c) commissives (= [+C] = promising, threatening, offering etc.), (d) expressive (= [+E] = thanking, apologizing, welcoming, congratulating etc.), and (e) declarations (= [+DI] = excommunicating, declaring, christening etc.)

4.2 Conversation in terms of illocution and perlocution

Conversation differs from the isolated utterances in several respects: In conversation, utterances often stand in some relation to the other utterances in order to satisfy different degrees of expectancies. Conversation is not something static rather it is a dynamic network of different intentions. Following Austin, these intentions can be best talked about in terms of different acts – namely locutionary act, illocutionary act and perlocutionary act. Locutionary act is primarily concerned about those facts which are central in making sense in language; Illocutionary act is performed by the speaker to express that intention which is not directly associated with the discrete lexicalized content of the articulation; And, perlocutionary act is all about what follows an utterance in a conversation.

Following *Karmakar et al.* (2016), we propose a further split of ForceP into perlocutionary phrase (= PerlocP) and illocutionary phrase (= IllocP) to capture the way different types of speech acts interacts with each other during conversation. In our earlier discussion, we have shown how illocutionary act can be handled within the syntactic framework of minimalist program; and, now we are proposing the following scheme of representation for (1) as an exemplar to show how syntax of conversation can be modeled to take an account of the emerging network of intentions during different turns:





As per this representation IllocP dominating \dots [XP]_{+Dr} \dots connected with the IllocP dominating \dots [XP]_{+Dr} \dots not under any influence of the illocutionary acts (marked with subscripts +Dr and +Dl respectively) but definitely due to the act of perlocution expected by the utterance of Speaker_1. Also note that, $hy\tilde{a}$ appears in the Head-IllocP position and moves to the Head-PerlocP position to satisfy the expectancy of the speech act performed by Speaker_1. This position is a bit different from what Karmakar *et al.* (2016) has claimed in their paper.

5 Conclusion

Since conversation is the most prevalent form of human communication, a formal study of conversation as an embodiment of complex adaptive system may reveal various intricacies involved in the process of conversing. We have attempted one such intricacy to explore which *principles* and *parameters* are in work to make a communication meaningful. A little attention will reveal the fact that the approach we have argued for encompasses the questions of both "what constitutes the knowledge of language" as well as "how this knowledge is put to use". Future research along this line demands a more rigorous characterization of various concepts which remain crucial in defining their role in construing the structure of conversation in general.

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