FOCUS AND NOMINAL ELLIPSIS IN THE BANGLA DP*

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1 Introduction

The paper addresses the leftward movement of adjectives, with or without the raising of NP, in the Bangla DP. This leads to the proposal that there is a second focus position, below demonstrative and above numeral-classifier, in the Bangla DP. I provide two empirical evidences that support the claim for a second focus phrase: one is exhaustive identification and the other is nominal ellipsis.

The paper is organized into two broad sections. The first section summarizes Cinque's (2005) DP-internal 'parameters of movement.' Then, I discuss the various semantic interpretations of phrasal movement inside the Bangla DP, as noted in the Bangla DP literature (Bhattacharya 1999, Chacón 2011, Dayal 2012, Biswas 2012, Syed 2016). In that section, I also show that the Bangla DP-internal word orders are derived following Cinque's DP-internal 'parameters of movement.' The second section of the paper introduces certain instances of the raising of adjective, leaving the NP in its merge position, in the Bangla DP. This raising of adjective shows that there are two focus positions: one above demonstrative (as shown by Syed 2014), and the other below demonstrative and above numeral-classifier. The focus positions in the Bangla DP are being argued in the background of cross-linguistic evidence of focus positions in DP languages, like Gungbe, Albanian, Russian, and Greek.

2 DP-internal 'Parameters of Movement': Cinque (2005)

Revisiting Greenberg's (1963) Universal 20, Cinque (2005) proposes that the various 'attested' orders of the four elements Dem(onstrative), Num(eral), A(djective), and N(oun) are derived

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from the universal order of merge Dem>Num>A>N. He suggests that when none of the four elements (Dem, Num, A, N) moves, the merge order surfaces and the varied orders of these elements are derived only by the raising of the NP or of an XP containing the NP. In order to account for the 'attested' and 'unattested' orders of the above mentioned four elements, Cinque (2005: 321) set down the following 'parameters of movement.'

- (1) Merge order: $[W_P Dem [X_P Num [Y_P A [N_P N]]]]$
- (2) Parameters of movement:
 - a. No movement (unmarked)
 - b. Movement of the NP without pied-piping (marked)
 - c. Movement of the NP plus pied-piping of the *whose picture* type (unmarked)
 - d. Movement of the NP plus pied-piping of the *picture of who* type (more marked)
 - e. Total unmarked versus partial marked movement of the NP with or without piedpiping (in other words, NP raises all the way up, or just partially around its modifiers)
 - f. Neither head movement nor movement of a phrase not containing the (overt) NP is possible (except perhaps for focus related movements of phrases to a DP initial position).

If NP raises alone (option (2b)) from specifier to specifier of each agreement projection found right above the functional projections hosting adjective, numeral, and demonstrative, the order that is derived is N>Dem>Num>A (as in (3)).

(3) Movement of the NP without pied-piping

In option (2c), the NP first moves to AgrYP, 'vacuously' pied-piping the adjective in a whose picture type way. Then, the AgrYP moves to AgrXP. Finally the AgrXP (containing the moved AgrYP and XP) moves to AgrWP, that gives rise to the order N>A>Num>Dem (as in (4)).

(4) Movement of the NP with whose picture type pied-piping

$$[\operatorname{\mathsf{AgrWP}}[\operatorname{\mathsf{WP}} \operatorname{\mathbf{DemP}}[\operatorname{\mathsf{AgrXP}}[\operatorname{\mathsf{XP}} \operatorname{\mathbf{NumP}}[\operatorname{\mathsf{AgrYP}}[\operatorname{\mathsf{YP}} \operatorname{\mathbf{AP}}[\operatorname{\mathsf{NP}}]]]]]]]$$

The option (2d) involves the "partial (marked) raising of NP plus pied-piping of the picture of who type of [A N] (marked) around Num" (Cinque 2005: 323; (6n)) and then the [A N Num] raises around Dem to give the order A>N>Num>Dem (as can be seen in (5)). Here, I assume that NP first moves to AgrYP, pied-piping the adjective in a picture of who way and that this movement is string vacuous.

(5) Movement of the NP with picture of who type pied-piping

In addition to this, languages vary in whether NP moves all the way up, or only partially around its modifiers (either without pied-piping or with pied-piping of picture of who type), as mentioned in (2e).

2.1 The Bangla DP

Bangla is a numeral-classifier language of the Eastern Indo-Aryan language family. Its DP merge order (cf. (6)) conforms to the universal order of merge, i.e., Dem>Num>A>N.

```
(6) Dem
          Num
                  -Cla
                                N
                         A
   ei
           du
                  -To
                         lal
                                jama
   this
           two
                  -Cla
                         red
                                 dress
   'these two red dresses'
```

As discussed in the Bangla DP literature (Bhattacharya 1999, Chacón 2011, Dayal 2012, Biswas 2012, Syed 2016), the merge order in (6) gives an indefinite interpretation. There is an alternative order (cf. (7)) in the Bangla DP, i.e., Dem>A>N>Num, which Cinque (2005: 320; n.13) also notes. The order in (7) is reported to have a specific reading (Bhattacharya 1999), or a definite reading (Chacón 2011, Dayal 2012, Biswas 2012), or an inclusive reading (Syed 2016).

```
(7) Dem
          Α
                 N
                         Num
                                -Cla
   ei
          lal
                         du
                                -To
                 iama
   this
          red
                 dress
                        two
                                -Cla
   'these two red dresses'
```

To account for the order in (7), Bhattacharya proposes that there is a specificity feature in the Num⁰ which gets realized in the morphologically present classifier. He suggests that the specificity feature on the Cla⁰ attracts the [A N] sequence to the Spec, NumP in order to give a specific reading. Thus, Bhattacharya (1999: 95, 96) shows that the morphological absence of classifier and the absence of the raising of NP are correlated (cf. (8) and (9)).

```
(8) a.
           tin
                   bOchor
           three vear
            'three years'
   b.
          * bOchor
                           tin
           year
                           three
                    'years three'
           Lit.
(9) a.
            car
                   paS
                   side
            four
            'four sides'
          * paS
   b.
                   car
            side
                   four
                    'sides four'
           Lit.
```

However, Chacón (2011) argues that the occurrence of classifier in an indefinite DP (as in (6)) suggests that the classifier cannot be the attractor of NP in definite DPs (as in (7)). Thus, contra Bhattacharya's analysis for the order in (7), Chacón proposes that [A N] moves above Num-Cla in (7) in order to check definiteness and not specificity. He claims that a nominalizer n merges with the lexical nominal root to form nP and suggests that the nP (and not the nominal root) moves to Spec, DP to check definiteness. His analysis for the ungrammaticality of (8b) and

(9b) is that nominalizer n does not merge with certain nominal roots (like measure nouns), and thus there is no nP which can move to check definiteness.

Biswas (2012) states that the Dem>A>N>Num-Cla order gives a definite reading and she shows that the definite reading arises from anaphoricity. Dayal (2012), also, shows that the raised [A N] order above Num-Cla gives a definite interpretation and not the specific one. In fact, she states that the Num-Cla>A>N order is ambiguous between regular indefinite and specific indefinite reading. Dayal (2012: 23) notes that there are three possibilities in which the definiteness in the Bangla DP is achieved: "One, through the lexical meaning of the demonstrative taking the predicative cardinality/classifier phrase as its argument, or through NP raising to spec of DP to value the +def feature on D and undergoing *iota* type shift, or through a combination of the two."

Syed (2016) addresses a puzzle that shows that definiteness can be achieved without the [A N] movement in the overt presence of demonstrative. Thus, according to his argument both the orders in (6) and (7) should have a definite reading. This has already been observed in Dayal (2012: 14), where she states that for definiteness the non-preposed version of [A N] is possible when the demonstrative is present, but not when there is no demonstrative. As per her analysis it is maximality (Dayal associates maximality with definite descriptions) that drives the movement of [A N] around Num-Cla in the presence of demonstrative. Dayal (2012: 14) points out "The raised version is only possible when the NP refers to the full set of entities that the description applies to. In contrast, the base structure can be used to pick out a subset of a larger group of entities to which the description applies." Syed, following Lyons (1999), splits definiteness into two concepts: identifiability and inclusiveness. Syed (2016: 391) explains inclusiveness in reference to Hawkins (1978) "the referent of definite noun phrase must be a part of a shared set, where shared set means entities known by speaker and hearer to constitute either the previous discourse, the immediate or the larger situation, or an association set." He suggests that it is the inclusiveness (Syed (2016: 391; fn.2) relates inclusiveness to maximality) that attracts the [A N] above Num-Cla in the presence of demonstrative (as in (7)). He posits an Inclu(siveness) Phrase above NumP where the raised [A N] lands in order to check the inclusive feature of the Inclu⁰. Based on the above set of arguments (by Dayal 2012 and Syed 2016), it can be suggested that it is the maximality which drives the [A N] above Num-Cla and below Dem.

It is important to note that the various arguments for the order in (7) are ruled by a common factor, i.e., the raised [A N] refers to the entity that has a prior discourse reference. I suggest that the raising of [A N] above Num-Cla and below Dem is a topicalised movement. Definiteness, inclusiveness and topicalisation all of these signify the shared set of knowledge between the discourse participants. It has also been claimed in É. Kiss (2007: 70-71) that "names, definite noun phrases, and specific indefinite noun phrases (or PP subsuming such a noun phrase) are all possible topics, irrespective of their subject, object, or prepositional object status." Thus, I argue that the raised [A N] in the Dem>A>N>Num-Cla order moves to a topic position below demonstrative and above numeral-classifier, and not to the Spec, NumP, or Spec, DP, or Spec, IncluP.

I suppose that the mechanism behind the raising of [A N] around Num-Cla follows from Cinque's (2005) analysis for the derivation of the order Dem>A>N>Num. He suggests that the order Dem>A>N>Num is derived by the partial (marked) movement of NP plus pied-piping the AP in a *picture of who* type way (marked) around Num-Cla. Here, I will mention that in the Bangla DP the only way the NP can move, when the adjective is present, is by pied-piping the

adjective. When there is no overt adjective, the NP can raise to the left of Num-Cla (cf. (10)). But in the presence of adjective, the NP cannot move, leaving the AP stranded (cf. (11)).

- (10) ei jama_i du -To t_i this dress two Cla 'these two dresses'
- (11) * ei du -To jama_i Sundor t_i this two Cla dress beautiful Lit. 'these two dresses beautiful'

The ungrammaticality of (11) suggests that the Bangla DP does not allow the raising of the NP without pied-piping. Hence, the *whose picture* type pied-piping is blocked in the Bangla DP as for this type of pied-piping, the NP has to first move to the left of AP, which is not possible (as shown in (11)). In the Bangla DP the only way NP can raise is by obligatorily pied-piping the AP in a *picture of who* way (as in (7)).

Bhattacharya (1999), on the other hand, argues that the raising of [A N] is an instance of only NP movement. He shows that [A N] sequence behaves as an 'independent unit' and cannot be separated, as can be understood from the ungrammaticality of (12) and (13).

Following (12) and (13), Bhattacharya claims that in the Bangla DP the adjective is base generated at the Spec, NP and any leftward movement of the adjective, i.e., the extraction of the specifier of NP, is not allowed. I suggest that there is an alternative explanation for the ungrammaticality of (12) and (13). As per Cinque's (2005: 323; 6q, 6n) analysis the orders in (12) and (13) cannot be derived as the NP has not moved and the modifiers to its left are in the wrong merge order. However, in this paper we will witness certain instances which will show the raising of the AP without the raising of the NP in the Bangla DP. In a way, that will support the condition (2f) of Cinque's 'parameters of movement.'

3 Focus Movement in the Bangla DP

As Cinque (2005) observes, an exception to the condition for the DP-internal movement indicates that the phrasal movement, without the raising of NP, to the DP initial position (for focus purpose) is possible. Syed (2014: 5), also, shows a similar exception in the Bangla DP. He proposes a word order (cf. (14)) where the [A N] raises to the left of Num-Cla and below Dem, and then the adjective moves above Dem from the raised [A N]. Syed argues that the movement

of the extracted adjective above demonstrative is an instance of focus movement, as evident from the ungrammaticality of (15).

(14)	[LAL	_j ei	$[t_j$	boi] _i	-Ta	t_i	amar	pochondo
	red	this		book	-Cla		my	liking
	'This	red bo	ok is of	f my likir	ıg.'			
(15)	*[lal _i	ei	$[t_i$	boi] _i	-Ta	t_i	amar	pochondo
	red	this	- 3	book	-Cla	_	my	liking

It is not the case that the adjective can only be extracted when the [A N] has raised to the left of numeral-classifier and below demonstrative. Syed (2015: 337) shows that the adjective can also move all the way up, i.e., above demonstrative, leaving the NP in its merge position (cf. (16)).

(16)[joghonyo_k oi du -To biskut] kheye, ama.r biscuit eat-PART disgusting -Cla those two I GEN sorir kharap lag.te laglo body bad feel.Inf start.Pst.3 'I started feeling sick eating those disgusting two biscuits.'

Thus, what we can follow from Syed's argument is that in the Bangla DP the adjective can move to the focus position above demonstrative in either of the two ways: first, by the raising of the NP, pied-piping the adjective in a *picture of who* type manner above numeral-classifier, following which the adjective moves above demonstrative out of the raised [A N]; second, by the raising of the adjective from its merge position without the movement of the NP.

3.1 A Post-demonstrative and Pre-numeral Position of Adjectives

In this paper I propose that there exists a second focus position in the Bangla DP, which is below demonstrative and above numeral-classifier. I suggest that the adjective, when bears focus, can also move to the second focus position, leaving the NP in its merge position (as shown in (17).

(17)	Dem	A	Num-Cla		N		
	ei	$NEEL_i$	du -to	t_i	kalam		
	this	BLUE	two-Cla		pen		
	'these	two blue pe	ens'				

Cinque (2005: 315; fn.2) states that in some languages where the alternative order Dem>A>Num>N is possible, the adjective is not an attributive one (which occurs below numeral), but the source of it is from relative clause (which is above numeral). However, without getting into detail of the two sources of adjectives, I suggest that the occurrence of adjective in a non-merge position (in (17)) is focus-driven as it is evident from (18), which shows that the adjective in a non-merge position is not allowed if it does not bear stress.

I should mention here that Syed (2015: 334) also seems to have noticed a "pre-numeral" position of a focused adjective, as in (19).

(19) [LAL ek -Ta bari] dekhlam red one -Cl house saw 'I saw a RED house.'

We can observe that in (19) there is no demonstrative. In fact a demonstrative cannot cooccur with 'ek' (one), as shown in (20), because 'ek' behaves as an indefinite determiner.

(20) * [ei LAL ek-ta bari] dekhlam this red one-Cla house saw

Thus, it is obvious from (20) that Syed's 'pre-numeral' occurrence of adjective in (19) is not below demonstrative. However, in the Bangla DP the adjective can move above numeral-classifier and below demonstrative only with numerals which are higher than 'ek' (one). This has already been shown in (17) and repeated below in (21).

Let us call the post-demonstrative and pre-numeral position of adjective Focus2 and the one above demonstrative Focus1.

- (22) Focus 1 position

 [FocP APi [Dem [Num-Cla [XP ti [NP]]]]]
- (23) Focus2 position
 [Dem [FocP APi [Num-Cla [XP ti [NP]]]]]

3.1.1 Cross-linguistic Evidence of the DP-internal Focus Positions

Drawing parallelism to Rizzi's (1997) clausal left periphery, Aboh (2004) proposes a nominal left periphery in Gungbe. He suggests that the Gungbe DP involves both topic and focus phrases, whose heads are morphologically realized. Interestingly, in light of my proposal, i.e., a focus position below demonstrative and above numeral-classifier, Aboh (2004: 4; (6)) posits the topic phrase and the focus phrase between the DP and the NumP in Gungbe (as shown in (24)).

Guisti (1996) also argues for DP-internal focus and topic phrases in Albanian and Russian. In Albanian the adjectives are postnominal (25), and Guisti shows that the order of postnominal adjectives in Albanian is fixed. Thus, the inverted order of adjectives in (26) is not acceptable.

The A(djective) O(rdering) R(estriction) in Albanian follows from Cinque's (1994)¹ hierarchy of adjectives.

(25) Një grua tjetër e bukur (Guisti 1996: 111; (14a)) a woman other the nice 'another nice woman'

However, it is possible to have a prenominal adjective in Albanian, where the adjective bears stress but not necessarily contrastive (as in (27)). Guisti (1996: 113, 114) shows that the prenominal position is available for both the adjectives, irrespective of their hierarchy (as in (28) and (29)).

(Guisti 1996: 113; (20b)) (27)Një bukur grua е the nice woman 'a nice woman' (28)bukur tietra grua e other-the woman the nice 'another nice woman' (29)bukura tjetër grua the nice-the other woman

Guisti (1996: 115, 116), also, shows that in Russian it is possible to find different orders of adjectives only if the preposed adjectives are emphasized (as shown in (30), (31), and (32)).

- (30) eta staraja amerikanskaja knjiga o linguistike this old american book on linguistics 'this old American book on linguistics'
- (31) * eta amerikanskaja staraja knjiga o linguistike this american old book on linguistics Lit. 'this American old book on linguistics'
- (32) eta *amerikanskaja* staraja knjiga o linguistike this american old book on linguistics Lit. 'this American old book on linguistics'

A similar kind of AOR violation can be observed in Bangla, which I will show in the subsection (3.1.1.1). Guisti (1996: 114, 116), further, notices that in the Albanian and Russian DPs, the focused adjectives must follow and cannot precede the demonstrative (as in (33) and (34)).

(33) * e bukur(a) kejo grua the nice (-the) this woman

¹ Cinque (1994) suggests that every adjective occupies the specifier position of different functional projections and the hierarchical organisation of the functional projections follows from the universal adjective ordering restriction. He suggests the following ordering restriction: Possessive >Speaker-oriented >Subject-oriented >Manner/Thematic.

(34) * amerikanskaja eta staraja knjiga o linguistike american this old book on linguistics

The above discussion shows that in languages like Russian, Gungbe and Albanian, there is a DP-internal focus position, which is below DP. Correspondingly, we have observed that in the Bangla DP there is a second focus position which is below demonstrative. Also, we have noticed that there is a focus position above demonstrative in the Bangla DP, which is not possible in other DP languages, like Albanian and Russian.

3.1.1.1 AOR (Adjective Ordering Restriction) Violation and Exhaustive Identification

In Bangla the ordering restriction of adjectives can be disturbed only when the adjectives are contrastively focused (CF) and not when they bear information focus (IF). I suggest that the adjective, when bears IF, stays in situ and when it bears CF it necessarily moves either to the Focus2 or Focus1 position. This can be understood in respect to the difference between two kinds of focus: IF and CF. There is a considerable literature (Rooth 1992, É. Kiss 1998, Horvath 2010, among others) that discusses the difference between the two types of focus, stating that IF and CF occur in different kinds of discourse contexts and exhibit distinct semantic and syntactic properties. Horvath (2010: 1350) states that "(F)ocus is taken to be the non-presupposed, new information part of the sentence, i.e., information not shared by the speaker and the hearer at the point in the discourse where the sentence is uttered. This notion of focus is often referred to as information focus." Whereas contrastive focus "represents a subset of the set of contextually or situationally given elements for which the predicate phrase can potentially hold; it is identified as the exhaustive subset of this set for which the predicate phrase actually holds" (É. Kiss 1998: 249). É. Kiss, based on Hungarian and English data, shows that the element bearing CF moves to a designated A'-position and the element expressing IF always remains in situ. É. Kiss, further, defines CF as expressing exhaustive identification (EI) and IF as non-exhaustive identification. EI means that by selecting some members of the set, all other members are excluded.

Bangla also shows the distinction between the two types of foci. Here I will claim that the adjective in the Bangla DP obligatorily violates the AOR in order to express exhaustive identification. Thus, the data in (35a) and (36a) where the adjective has moved to the Focus2 and Focus1 position respectively, and not the one in (37), give CF reading. In order to verify that the moved adjective in (35a) and (36a) bear CF or express EI, we can apply a diagnosis (earlier proposed by Donka Farkas) that is mentioned in É. Kiss (1998). Let us have a situation, where only red tables (and not other colored ones) of small size belong to X. Now, if we negate the sentences (35a) and (36a) in (35b) and (36b) respectively, we will see that the negation holds. But the negation of the sentence (37a), where the adjective stays in situ, as in (37b), is not possible.

- $(35) \qquad \text{a. } X \colon [\text{ei} \qquad LAL_j \quad [\text{choto } t_j \qquad \text{tebil}]_i \quad \text{-gulo} \quad t_i] \qquad \text{amar} \\ \text{this} \quad \text{red} \quad \text{small} \qquad \text{table} \quad \text{-Cla} \qquad \text{mine} \\ \text{`These small red tables are mine.'}$
 - b. na, [ei $NEEL_j$ [choto t_j tebil]_i -gulo t_i o] tomar no, this blue small table -Cla also your 'No, these small blue tables are also yours.'

(36)	a.	X:	$\begin{array}{c} [LAL_j \\ red \end{array}$	ei this	[choto small	t_j	tebil] _i table	_	t_i	amar mine			
		'These small red tables are mine.'											
	b.		na,	[NEEL	-j	ei	[choto	t_{j}	tebil]i	-gulo	t_{i}	o]	tomar
			no	blue		this	small		table	-Cla		also	your
			'No, th	ese sma	all blue	tables a	re also	yours.'					
(37)	a.	X:	[ei	[choto	lal	tebil]i	-gulo	t_i]	amar				
			this	small	red	table	-Cla		mine				
'These small red tables are mine.'													
	b.	#	‡ na,	[ei	[choto	neel	tebil]i	-gulo	t_i	0]	toı	mar	
			no,	this	small	blue	table	-Cla		also	yo	ur	
'No, these small blue tables are also yours.'													

In (35a) and (36a) the moved adjective 'lal' (red) represents that it is only the red colored (and not any other colored) tables that belong to X. In (37a) where 'lal' is focused in-situ, indicates that there is a possibility that apart from red tables other colored tables also belong to X. Thus, the negation of (37a) in (37b) is not possible. Whereas, the negation of (35a) in (35b) and (36a) in (36b) is felicitous as they follow the sentences that assert that it is only the red tables that belong to X.

The discussion so far shows that there are two focus positions in the Bangla DP, where the adjectives move to when they bear contrastive focus or exhaustively identified. The last subsection of this paper provides further evidence for the existence of second focus phrase in the Bangla nominal domain.

3.1.1.1.1 Nominal Ellipsis in the Bangla DP

Let us, first, observe the following set of data and gradually I will lay out my argument which is supported by these data.

(38)	[kon		tin	-Te	chele]	eSechi	lo?			
	which		three	-Cla	boy	came				
(39)		'Which	n three l	oys car	me?'[ei	tin	-Te	lamba	chele]	eSechilo
	this	three	-Cla	tall	boy	came				
	'These	three ta	all boys	came.'						
(40)	* [ei	tin	-Te	lamba	chele]	eSechi	lo			
	this	three	-Cla	tall	boys	came				
	Lit.	'These	three ta	all came	,					
(41)	[ei	lamba	chele	tin	-Te]	eSechi	lo			
	this	tall	boy	three	-Cla	came				
	Lit.	'These	tall boy	ys three	came.'					
(42)	[ei	LAME	BA	chele	tin	-Te]	eSechil	lo		
	this	tall		boy	three	-Cla	came			
	Lit.	'These	tall thr	ee came	·.'					
(43)	* [ei	lamba	chele	tin	-Te]	eSechi	lo			
	this	tall	boy	three	-Cla	came				

There are three things that we can notice from the above set of data. First, the NP cannot be elided in its merge position (as shown in (40)). Second, the NP can and has been elided (in (42)). Third, there are two conditions for the elision of NP that can be seen in (42). One, the NP has to move from its merge position and second, the adjective has to be focused. If we compare (41), where the NP has not been elided, and (42), we can observe that in (42) the elided NP has moved below demonstrative and above numeral-classifier, pied-piping the AP in a *picture of who* type way. Again, if we compare (42) and (43) we can see that the AP has to be focused for the NP to be elided.

To explain the pattern of the above set of data, I will follow Ntelitheos' (2004) and Cinque's (2012) argument for nominal ellipsis. Ntelitheos, based on Greek data, proposes that DP-internal nominal ellipsis involves two movement operations: NP topicalisation and modifier focalisation in the nominal left periphery. Following Johnson (2001) who proposes that VP ellipsis is licensed by VP topicalisation, Ntelitheos suggests that nominal ellipsis is also preceded by nominal topicalisation in the Greek DP. He states that this NP topicalisation is a discourse driven syntactic process that involves movement of the NP to the nominal left-peripheral position, which he calls TopP. He further mentions that NP topicalisation is followed by the movement of the remnant modifier into a focus position above the topic position where the NP has moved to. He argues that this focus movement of the remnant modifier licenses the phonological deletion of the NP. Ntelitheos (2004: 14) illustrates his argument through the following set of data (44a–44e).

```
(44)
                       Giannis
                                                                       vivlia kai
                                                                                                    Petros
              a. o
                                           agorase
                                                              tria
                                                                                           o
                       Giannis
                                           bought-3SG
                                                              three
                                                                       books and
                                                                                          the
                                                                                                    Petros
                the
                                           vivlio
                agorase
                                 ena
                bought
                                           book
                                 one
                'John bought three books and Petros bought one book.'
              b. [XP
                       TopP
                                 FocP
                                           TopP
                                                    [_{\text{DefP}}\dots [_{\text{FP}} \text{ ena} \dots ]
                                                                                 [NP vivlio]]]]]]
                                                    [NP vivlio]
                                                                       [_{DefP}...[_{FP} ena ...t_{NP}]]]]]]
              c. TXP
                       TopP
                                           TopP
                                 FocP
              d. [XP
                       TopP
                                           [_{FP} ena ...t_{NP}] [_{TopP}
                                                                       [NP vivlio]
                                 FocP
                                                                                           [_{\text{DefP}}\dots t_{\text{FP}}]]]]
              e. [XP TopP
                                 FocP
                                           [_{FP} ena ...t_{NP}] [_{TopP}
                                                                       [NP vivlio]
                                                                                           [_{\text{DefP}}...t_{\text{FP}}]]]]]
```

In (44c) the NP 'vivlio' has moved to the topic position as it has already been mentioned in the discourse in (44a). In (44d) the modifier 'ena' which occupies the specifier position of some functional projection FP, pied-pipes the trace of the NP and moves to the focus projection above the topic position where the NP has moved to. The movement of the remnant modifier to the focus position licenses the phonological deletion of the NP (as can be seen in (44e)).

Following Ntelitheos, I suggest that nominal ellipsis in the Bangla DP also involves two movement operations. First, the NP moves, pied-piping the AP in a *picture of who* type way to a topic position above Num-Cla and below Dem (as in (45)). I have already mentioned in Section (2.1) that I consider NP movement to the left of Num-Cla a topicalised movement as the entity the moved NP refers to has a prior discourse reference. Second, the adjective moves out of the raised [A N] to the Focus2 position which is below demonstrative and thus licenses the deletion of the NP (as shown in (46)).

[DemP]
$$ei[TopP]$$
 [lamba chele]_i [NumP] tin -te [t_i]]]] eSechilo this tall boy three -Cla came

'These three tall boys came.'

From the set of data in (40)-(42) and their structural analysis in (45) and (46), it can be suggested that nominal ellipsis in the Bangla DP follows Ntelitheos' (2004: 15; (9)) generalization on ellipsis: "Phonological deletion targets elements that have moved to some sort of discourse-related projection, usually a topic phrase." Our claim that NP must move in order to be elided is consistent with a well known set of observations in the literature. Kayne (2006) suggests that "silent elements can never be in the same position as their pronounced counterparts." Cinque (2012), referring to the works of Ross (1982) and Koopman (2000), shows that in German and Dutch the phonological deletion of elements is necessarily preceded by the movement of those elements from their merge position. He begins by observing that "(i)n a number of works, deletion of a constituent (or its non-pronunciation) has been taken to depend on the prior movement of that constituent to a left-peripheral position (references omitted)."

Cinque (2012: 1) proposes two notions on DP-internal ellipsis. First, "nominal modifiers can be silent (present but unpronounced) only if the NP and the extended projection of the NP below them are also." Second, the first notion "follows from a condition on DP-internal movement proposed in Cinque (2005), to the effect that only constituents containing the (unmoved) NP can licitly move (and in the case at hand be unpronounced as a consequence of that)." Though the nominal modifier elision is beyond the scope of this paper, the second principle of Cinque's argument for DP-internal ellipsis is relevant to our discussion of nominal ellipsis. The Bangla DP-internal nominal ellipsis follows the raising of the NP pied-piping the AP. Thus, it can be suggested that nominal ellipsis in the Bangla DP follows Cinque's (2005) condition on DP-internal movement.

Further, I should mention that the focused adjective has to be adjacent to the elided nominal in the Bangla DP, otherwise the NP cannot be elided even in the moved position. This can be seen in (47), where the adjective moves to the Focus1 position which is above demonstrative and thus does not license the NP deletion.

4 Conclusion

Restating the main arguments of the paper, we have observed that there are two focus positions in the Bangla DP. One is above the demonstrative (Focus1 position), and the other is below the demonstrative and above numeral-classifier (Focus2 position). Both these focus positions are identified as the contrastive focus positions, as evident from the AOR violation. Syed (2014) draws parallelism of the Focus1 position with Rizzi's (1997) focus position in the clausal left periphery. Here, I suggest that the Focus2 position is analogous to Jayaseelan's (2001) IP-internal focus position in Malayalam. I also argue for a topic position right above numeral-classifier and below demonstrative in the Bangla DP. The NP pied-piping the AP moves to that

topic position, which, further, shows that the raising of NP is a discourse related notion. Thus, I propose the following structure of the nominal left periphery in the Bangla DP.

 $[FocP1 \quad [DemP \quad [FocP2 \quad [TopP \quad [NumP \quad [XP \quad AP \quad [NP]]]]]]]]$

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