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Shyamal Das
Ram Nagar Rd.2, West End,
Ram Nagar, Agartala, Tripura,
India

Feature checking, case and word order: A minimalist study of the Bangla case system

Shyamal Das

Abstract

In this paper we have looked at the various aspects of Case checking in Bangla and offered a Minimalist account of it. Special thrust has been on the explanation of two structural Cases – Nominative and Accusative – in the new framework. The discussion has also thrown open the possibility of reinterpreting Oblique Case as structural based on the facts of Bangla. At appropriate junctures of the discourse, we have taken up the issue of interaction between Case checking and word order requirements at PF, which has culminated in the emergence of a picture of the basic clause of Bangla.

Keywords: feature checking, case, word order, minimalist

1. Introduction

‘The notion of Case is intended to account for functional, semantic and deep structure [syntactic] relations between the verb and the noun phrases associated with it’ in a sentence (The Linguistic Encyclopedia, 1991). In all grammars – traditional as well as generative – proper explanation of this relationship has proved to be a challenging endeavor. What gives an NP its Case? With regard to this question the early generative grammar’s – particularly LGB’s – position can be summed up as: Case is either structural or inherent. Structural Cases are Nominative and Accusative, assigned under conditions of government. INFL [+Tense/+AGR] assigns Nominative Case to NP subject while verb and preposition assign Accusative and Oblique Cases respectively, to their complement NPs. Note that ECM verbs assign Accusative Case to an NP that is not its complement. Genitive is inherently Case marked. In the Minimalist approach (Chomsky 1993, 1995) Case assignment is no longer a syntactic operation: every lexical item is viewed as a bundle of abstract features and Ns and Vs are selected from the lexicon in their fully inflected forms. In the syntax, each such feature – for Case, Tense, Agr etc. – is associated with one functional node against which the corresponding features of Ns and Vs – i.e., lexical categories – are checked under certain fixed configurational relations like Spec-head or head-head. Thus, Case feature checking replaces Case assignment as such and all syntactic operations of movements are triggered by the need to ensure legitimate relations between the lexical item (NP, V) and the relevant functional head to facilitate feature checking.

In the present paper, I look at the various aspects of feature checking for Case in Bangla and how far they play a role in determining the basic clause structure of the language. To start with, I shall assume the ‘Spec-Head-Complement’ (S-H-C) of Kayne (1994) as the universal order.

The paper is organized as follows: §1 gives a brief survey of the Bangla Case. §2 deals with feature checking for Nominative Case. In §3 I take up various aspects of feature checking for Accusative Case e.g., monotransitive, ditransitive and ECM constructions. §4 makes a brief discussion on Genitive Case while §5 focuses on Case assignment within the postpositional (or prepositional) phrases. Interaction between Case and word order has been a consistent issue of discussion at appropriate points (in §§ 2 to 5). In section 6 the conclusion is preceded by a diagrammatic representation of the Bangla clause structure.

Corresponding Author:
Shyamal Das
Ram Nagar Rd.2, West End,
Ram Nagar, Agartala, Tripura,
India

2. A brief sketch of Bangla Case System

As noted in (Das 1995), in respect of Case realization Bangla displays an ambivalent nature where word order is as important as inflection is expressing syntactic relations. Thus, the Case mechanism of Bangla can be broadly divided into two:

1. Morphological: i.e., Cases using (overt or null) Case morpheme attached to NPs e.g., Nominative, Accusative, Genitive, and Locative.
2. Cases realized through postpositions: Bangla postpositions govern their NP complements mainly in the Genitive.

2.1 Morphological Cases in Bangla

2.1.1 Nominative: Case marker: Ø

1. *ami jai*
1-NOM go-1-PRES
'I go.'
2. *am-ra jai*
1-PL-NOM go-1-PRES
'We go.'
3. *boi-gulo notun*
Book-3-PL-NOM new
'The books are new.'

2.1.2 Accusative: Case morpheme: Singular -ke[+Human], Ø[-Human]; Plural -der-ke[+Human], Ø[-Human]

4. *ami raju-ke cini*
1-NOM Raju-ACC know-1-PRES
'I know Raju.'
5. *ami hati dekhechi*
1-NOM elephant-ACC(Ø) see-1-PERF
'I have seen elephant.'
6. *shishu-der-ke bhalobasho*
child-PL-ACC love-IMPER
'Love (the) children.'
7. *boi-gulo¹ shajie rakho*
book-PL-ACC(Ø) in order keep- IMPER
'Keep the books in order.'

2.1.3 Genitive: Case morpheme: Singular -(e)r; Plural -der [+Human], -gulo-r [-Human]

8. *pagol-er prolap shunche*
Insane-GEN ravings-ACC(Ø) listen-3-PRES-PROG
'(He) is listening to the ravings of (an) insane.'
9. *chele-r biye-te esho*
son-GEN wedding-LOC come-IMPER
'Come to (my) son's wedding.'

10. *raina-der gaRi jay*
Raina-PL-GEN car-NOM go-3-PRES
'Car belonging to the family of Raina goes.'
11. *kOlom-gulo-r rON lal*
pen-PL-GEN color-NOM red
'The color of the pens is red.'

2.1.4 Locative: Case morpheme: -e, -(a)y, -te (for both singular and plural: in the latter the NP is preceded by a quantifier: [shob] 'all', [prottek] 'each' etc.)

12. *boi-Ta nic-e rakh-o*
book-DEF-ACC(Ø) low-LOC keep-/put-IMPER
'Keep/Put the book below.'
13. *matha-y jOl dao*
head-LOC water-ACC give-IMPER
'Pour water on the head.'
14. *nodi-te jOl thak-e*
river-LOC water-NOM stay-3-PRES
'Water is there in river.'

2.2 Case realized through Postpositions

In Bangla four Cases are realized through adpositions: Instrumental, Dative, Ablative and Locative. (The last also uses inflectional morphology. Cf. 2.1.4). It is empirically documented that barring a few exceptions² Bangla postpositions select their NP complements in the Genitive, which is the default Case in this language (cf. Das, 1995:22). But since these adpositions are insensitive to number features of the NP, any singular-plural distinction is irrelevant for us.

2.2.1 Instrumental Case: Postpositions: *die* 'with', *dara* 'with/by' PP → [NP(GEN/ACC)P]

15. *ami tak-e die boi-Ta kin-a-l-am*
I-NOM he-ACC with book-DEF-ACC buy-CAUS-PAST-1
'I bought the book through him.' Or 'I made him buy the book.'
16. *tom-ar dara kaj-Ta hO-be*
you-GEN by work-DEF-NOM be-modal
'The work will (can) be done by you.'

2.2.2 Dative Case: Postpositions: *proti*, *dike*, *kache*, 'towards/to' PP → [[NP(GEN)] P]

17. *tomar proti amar dOya hOy*
you-GEN towards/to I-GEN pity-NOM be-PRES-3
'I feel pity for you.'
18. *she haT-er dike gEche*
he market-GEN towards/to go-PERF-3
'He has gone towards the market.'

2.2.3 Ablative Case: Postposition: *theke*³ PP → [[NP(GEN)] P]

19. *se amar theke boi-Ta niyeche*
he-NOM I-GEN f from book-DEF-ACC take-3-PERF
'He has taken the book from me.'

² Except the Instrumental [P] *die* 'with/with the help of' all the Ps take Genitive NPs as complements. [-Human] NPs often discard overt Case morpheme and appear in 'bare' forms. It is better, therefore, to concentrate on [+Human] NPs for greater clarity in discourse.

³ Postposition *hote* has a very limited use in Bangla that too only with [-Human] NPs, in 'bare' forms. *skul hote* 'from school' is being progressively replaced by *skul theke*. Case morpheme is often dropped in the [-Human] NPs.

¹ *boi-gulo-ke* is also used just as *shishu-der* can be equally acceptable in place of *shishu-der-ke* in (6).

20. *ei matro gaR-ir theke namlam*
 this just car-GEN from alight-PAST-1
 ‘Just now I got down from the car.’

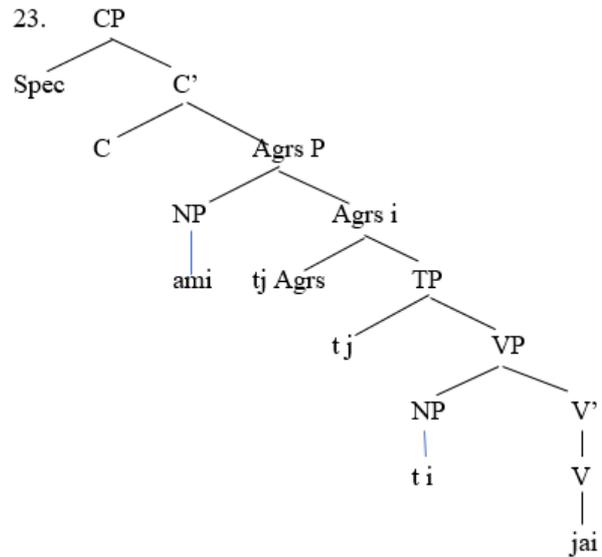
2.2.4 Locative Case⁴: Postposition: any locative word + suffix (LOC). PP → [[NP(GEN) P]

21. *matha-r opor-e rakh-o*
 head-GEN on-LOC keep-IMPER
 ‘Keep on the head.’

22. *skul-er pechon-e baRi*
 school-GEN on-LOC house (NOM)
 ‘The house is at the back of the school.’

3. Feature Checking for Nominative Case

Before demonstrating the feature checking mechanism for Nominative Case in Bangla let us first look at the θ -property of the verb *ja* ‘go’ in (1): *ja* is an intransitive verb that has only one (external) θ -role to assign to an argument which of necessity is base generated in the Spec position within the VP. But since this subject NP or the external argument of the V has (physically null) Case features (Nominative) and \emptyset -features marked on it from the lexicon, it must undergo movement to the appropriate functional category to get these features checked. This is a Spec-to-Spec movement: for the functional head in question (with Tense head T moved/adjoined to it) is Agrs – an X* category while the subject NP (or rather DP) is a maximal category. The Spec-to-Spec movement of the NP away from the VP thus ensures the required Spec-head relation between the lexical element and the functional category for enforcing feature matching. Remember Agrs and T also have \emptyset -features and Case (Nominative) features respectively which are strong and which therefore need to be checked and deleted before the Spell-Out strips off the phonological features of the computation. If a strong feature reaches PF (i.e., unchecked and undeleted) the derivation will crash. The derivation process of a simple intransitive sentence in Bangla is therefore analogous to that of the English paraphrase of it: ‘I go’. In the following derivation (23) for (1) we follow the standard Minimalist practice and make use of the two hypotheses adopted in Minimalist syntax: (a) Split-INFL hypothesis (Pollock 1989) and, (b) VP-internal-subject hypothesis (Koopman and Sportiche 1988 among others).



In (23) the NOM-Case feature on the subject NP and the T head are matched and checked is a Spec-head relation under agreement. The NOM-Case features delete from the functional head T. It however continues to exist on the subject NP. Since all these movements and checking activities take place pre-Spell-Out without causing any harm to the surface word order the derivation in (23) should have been completed or so one thinks.

This is however not the case. (23) is still incomplete because like the NP, the V *jai* is also marked of Tense and Agr- or \emptyset -features (i.e., features for person, number, gender) among others. On the other hand, the functional heads T and Agrs also have V-features. Thus, both the V, and the Agrs and T have reciprocal needs for features checking. Since all movements are only up- and left-wards in the Minimalist syntax (assuming of the LCA of Kayne 1993) no lowering is allowed. Consequently, the only way the derivation can implement feature checking is by V-raising to the complex head [T Agrs] under head-to-head movement. V now gets adjoined to [T Agrs] under adjunction and the corresponding features of the lexical and functional categories are paired and the V-features of the functional categories are presumably deleted.

Now the question arises – ‘If all movements occur before Spell-Out as is assumed above, what activities are left for the computation of Spell-Out? The question can be answered with the help of the Economy principle of Procrastinate (Chomsky 1995) which assumes that overt (i.e., pre-Spell-Out) movements are costlier than covert (i.e., post-Spell-Out) ones and hence postulates that any movement is ideally delayed till post-Spell-Out or if feasible, never resorted to at all. Because, of the three syntactic devices of Select, Merge and Move, Move is the ‘last resort’ if at all availed of.

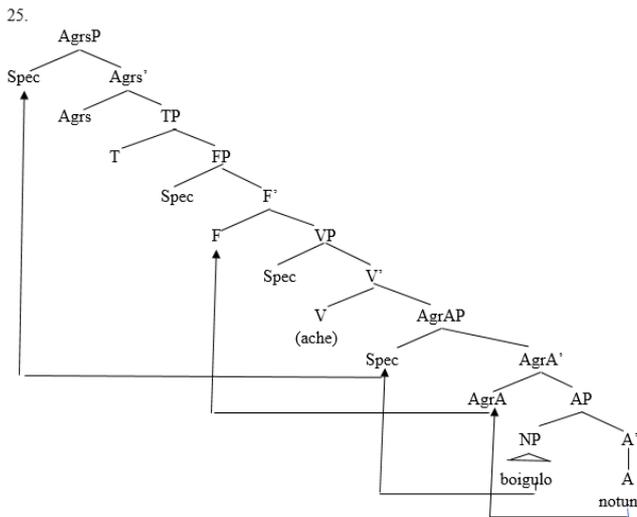
In (23) there is no strong reason to assume that the verb has to move before Spell-Out. For, the surface word order of the sentence will not be violated if the verb remains *in situ*. The same can be said for the subject NP also so far as word order is concerned. But the Subject NP has stronger reasons to move to Spec of Agrs as we shall see presently with respect to transitive clauses. So, for Bangla, V-movement takes place at LF, unlike the NP-movement. This observation will get more and more strengthened as we go along.

⁴ The dual mechanism of Case realization – namely the co-existence of Case morpheme with post-position – is commonplace in Bangla Case system. This is responsible for synonymous construction like
 i. *mathae ~ mathar opore/moddhe* ‘inside/on the head’
 ii. *peTe ~ peTer moddhe/bhetore* ‘inside/in the stomach’
 in the above [[PP[[NP]P] constructions the P is a locative word with overt Locative Case marker [-e] as are the NPs on the left column. This may lead one to conclude that Locative per se has no realization through PP in Bangla. The Locative Case marked Ps are the actual NPs and their relation with the NP complement is captured through the Genitive morpheme on the latter. A strong counter evidence, however, is that an NP like *mathar moddhO* with an internal structure of [NP[NP(GEN)NP] is unattested in the language. Consequently there is every reason to treat example in 2.2.4 as PP constructions with an internal structure of PP → [[NP(GEN)]P].

Let us next derive the sentence (3), which has a copular construction with an adjectival predicate. Bangla drops copular verbs in the present tense. But the (in)finiteness of a Bangla copular construction can be determined by carrying out substitution test. The corresponding PAST form of the predicate in (3) will be

24. *boi-gulo notun chilo*
 Book-(DEF)PL-NOM new be-PAST-3
 ‘The books were new.’

with an overt copula *chilo*. This finding incidentally reaffirms the basic SOV structure of as Bangla clause which is derivable in the following way, for (3).



Compared to (23), (25) has at least three new categories FP, AgrAP, and AP. AgrA is a functional category and is a mnemonic for a collection of \emptyset -features in this case associated with an adjective. Within the predicate phrase the NP *boigulo* raises to Spec and the A *notun* to AgrA. This creates the structure of AP-Adjective agreement in a Spec-head configuration. The resulting structure is an ideal candidate for a small clause complement of verbs like *mone-kOra* ‘to consider’ or *ache* ‘be’ etc. But as far the need for the Case feature checking of the NP *boigulo* is concerned interesting variations take place in the derivation due to intrinsic properties of the two verbs. In case of the former (i.e., the complement of *mone-kOra*) the NP raises further to a functional category [Spec, Agro] to receive Accusative Case after Spell-Out. This we shall discuss in the next section. In the latter construction (i.e., complement of *ach*) the NP raises overtly to [T Agrs] to check its NOM-Case and other \emptyset -features.

But this movement yields a structure ‘*boigulo (ache) notun*’ which is a bad sentence in Bangla, though a perfect one in an SVO language like English: ‘*The books are new*’. To tackle this problem and generate the required word order of SOV for Malayalam (and also, by implication, for other Indo-Aryan languages in India) Jayaseelan (2000) postulates a functional projection Focus Phrase (FP) above VP:

...all we need to do in order to generate the question word’s position next to V, is to postulate a Focus Phrase immediately dominating \underline{vP} ⁵ and say that the Q-word moves into the SPEC of this FP. All other arguments (and adjuncts)

within \underline{vP} would now move “past” this position into the SPECS of higher functional projection by the normal movements which derive the SOV word-order. (ibid: 34). Jayaseelan (2000) proposed IP-internal Focus Phrase specially to account for the preverbal position of the wh-word in Malayalam. But given the Bangla fact that the small clause precedes the matrix verb in consonance the basic SOV clause structure of the language there is sufficient justification to make optimal use of the theoretical postulation of Jayaseelan (2000) for other syntactic manifestation as well. We therefore extend the intuition to account for movements of CPs and IPs into Spec of preverbal FP. This proposition will have stronger support in the latter part of this paper. However, importance of the FP does become obvious in course of our preoccupation of giving a logical account of the derivation of (3). As the diagram (25) shows, the SOV sequence can be ensured only through the raising of the A head via AgrA to the head of FP. Since nothing moves subsequently into the Spec of FP in the overt syntax, whether this operation can be dissociated from any feature checking phenomenon is an open question.

4. Feature Checking and Accusative Case

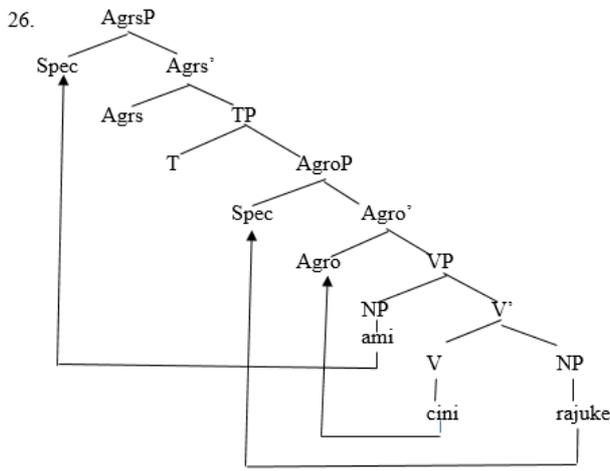
In explaining the Minimalist treatment of the Agreement and Case-phenomenon Chomsky (1995:174) says:

We now regard both agreement and structural Case as manifestation of Spec-head relation (NP, Agr). But Case properties depend on characteristics of T and the V head of VP. We therefore assume that T raises to Agrs, forming (3a) (i.e., [Agr T Agr]), and V-raises to Agro forming (3b) (i.e., [Agr V Agr]); the complex includes the P-features of Agr and Case features provided by T, V...

The basic assumption is that there is a symmetry between the subject and the object inflectional systems. In both positions the relation of NP to V is mediated by Agr, a collection of \emptyset -features of the Agr head of the Agr Complex, and Case by an element that adjoins to Agr (T or V). An NP in the Spec-head relation to this Agr Complex bears the associated Case and agreement features. The Spec-head and head-head relations are therefore the core configuration for inflectional morphology.

In the Minimalist system structural Case is the property of either the Tense in respect of Nominative Case or V in respect of Accusative Case and both are assigned under agreement in a Spec-head relation between the NP and Agr T/V. In the preceding section we have noticed how the NOM-Case feature of a subject NP is checked by [T Agrs] in a Spec-head configuration. In the present section we look at an identical process of the Accusative Case. The Object NP of the transitive verb moves to the Spec of verbal functional head Agro followed (post-Spell-Out) by migration of the V into Agro via a head adjunction. This dual movement results in the required Spec-head construction [NP[V Agro]] for Accusative Case feature checking to take place between the concerned NP and V. The role of Agro is thus of a mediator. Of course, the θ -features of the V and NP also get checked simultaneously. The following diagram shows the entire mechanism at work in respect of the Bangla monotransitive sentence in (4).

⁵ The distinction between \underline{v} and V may be ignored here.



In (26) the Focus Phrase (FP) is not ‘activated’ as it is not necessary; the V-features and N-features of the Agro (including Case features) are checked off and the verb moves towards the [T Agrs] for checking its T and Agrs features. However, these activities being operative only in the covert syntax do not cause any change to the canonical (surface) word order of SOV for a Bangla clause. The derivation also converges at both the interface levels PF and LF (for different reasons of course). All other monotransitive sentences (5-7) including the two imperative ones are derivable in a similar way.

4.1 Case in Double Object Constructions

Across languages there is a set of verbs – like *give, buy, lend* – which subcategorize for two internal arguments: either NP NP and/or NP PP. And this set cuts across all types of languages with different clause structures: SVO (English), VSO (Modern Arabic), and SOV (Bangla). But Bangla is distinct from the other two in allowing only NP NP as complements of V. This is illustrated with the following examples:

English

27a. Bill [gave [Hari] [a pen]]
 VP V NP/IO NP/DO

27b. Bill [gave [a pen] [to Hari]]
 VP V NP/DO PP/IO

Modern Arabic

28a. ?*ātay-tu l-taalib-a l-kitaab-a*
 [[gave -1-S [the-student-ACC] the-book-ACC]]
 VP V NP/IO NP/DO
 ‘I gave the student the book.’

28b. ?*ātay-tu l-kitaab-a li-l-taalib-i*
 [[gave-1-S [the-book-ACC] [to-the-student-GEN]]
 VP V NP/DO PP/IO
 ‘I gave the book to the student.’
 (From Ouhalla in Lightfoot and Hornstein, 1994: 55)

Bangla

29. *ami chatrO-ke boi dilam*
 1-S [[student-ACC] [book-Ø-ACC] gave-1]
 NP/IO NP/DO V VP
 ‘I gave the student (a) book(s).’

The standard Principles and Parameters interpretation of Case in ditransitive predicates is that, of the two Objects the Indirect Objects (IO) is assigned Accusative Case structurally while the Direct Object (DO) is inherently Case marked. The idea of inherent Case marking in such constructions certainly smacks of adhocism as a large body of subsequent researches have proved. A more logical explanation became possible with the emergence of two major hypotheses:

- a. ‘VP-internal-Subject’ hypothesis (Koopman and Sportiche 1988; Kuroda 1988 among others); and
- b. ‘Split Infl’ hypothesis (Pollock 1989; Chomsky 1989)

One of the major offshoots of (a) is the assumption ‘that all languages, irrespective of their surface word-order peculiarities derive from an underlying SOV structure...’ (Ouhalla, *ibid* based on Kayne, 1994) and that the basic clause structures of all types of languages-SVO, VSO and SOV – are derivable by exercising movement options on verbs and its arguments’ and adjuncts which are base generated within the VP. Hypothesis (b) contends that the functional elements previously considered to belong under I project distinct maximal projections like AgrsP, TP, AgroP, Neg P, AspP etc.

Interestingly more and more researchers are coming up with justification for differing hierarchical and precedence relations among these functional categories above VP, as movements (by adjunctions or substitutions) of lexical categories into these heads/or their Specs determine the surface word order in languages. As we have already seen, word order assumes crucial significance in view of the Minimalist assumptions (Chomsky, 1995) that all structural Case features are checked under Spec-head agreement. Since V plays a crucial role in Case checking especially in Accusative Case V-movement away from the VP is also predicted for a unified analysis. (Let us not for the time being complicate the issue by including distinction between strong vs. weak features resulting in overt vs. covert movements).

The cumulative result of these theoretical developments crucially bears on analysis of the phenomenon of Case ‘assignment’ in ditransitive predicates. We keep aside the PP complements, as Bangla does not apparently have them in Double Object Constructions. Since in Bangla Indirect Object bears obvious morphological Case marker for the Accusative, the focal point of discussion, to begin with, should be the Case identity of the ‘bare’ NP functioning as Direct Object. As Ouhalla (1994) and Rendall Hendrick (in Webelhouth 1999) among others point out, a standard diagnostic in this respect is the passivization test. This we carry out with the help of the following Bangla sentence.

30. *bOrobabu ame-ke kaj-Ta dilen*
 boss-NOM 1-S-ACC work-DEF(ACC) give-PAST-3-HON
 ‘Boss gave me the work.’

31. *ami bOrobabu-r dara kaj-Ta prOdOtto holam*⁶
 1-S-NOM boss-GEN by work-DEF(ACC) give
 pp be-1-PAST ‘I was given the work by the boss.’

⁶ In colloquial use *prOdoOtto* is simplified to *pelam* and *prOdOtto holo* as *deya holo*. These simplified forms show the same agreements with their respective subjects as the formal ones do. We use the formal variety here for better clarity in discourse.

32. *kaj-Ta* *bOrobabu-r* *dara* *ama-ke* *prOdOtto* *holo*
 work-DEF-NOM boss-GEN by 1-S-ACC give-pp be-3-PAST
 'The work was given me by the boss.'

The identical behavior of the two Object (i.e., Passive subjects) in the passives in (31) and (32) reflects their underlying featural similarity in respect of Case. Besides, there is independent evidence from the monotransitive constructions with [+Human] NPs in Bangla that the Direct Object is in the Accusative Case (cf. 2.1.2). Again, going by Chomsky (1995), all linguistically valid items come out of the lexicon fully inflected by virtue of the principle of "inclusiveness" which stipulates:

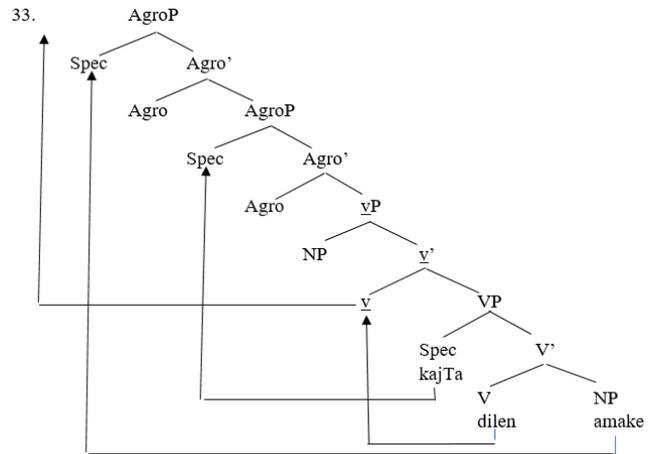
A "perfect language" should meet the condition of inclusiveness: any structure formed by the computation....is constituted of elements already present in the lexical items selected for N [numeration]; no new objects are added in the course of computation apart from rearrangements of lexical properties....(Chomsky, 1995:228).

Consequently, no feature is assigned in the course of syntactic operations – called Computation. Only features are checked against functional heads above VP as all movements are morphology-driven. So, both the NPs in Double Object Constructions bear the abstract Case Accusative and these features are checked under Spec-head configuration with V in the head position. This Minimalist assumption leads us to the following question: since Agro is the relevant functional category that does the job of feature checking between a V and its Objects, how do the two Objects occupy the same Spec position of Agro in whose head-position V has to move?

Faced with a similar challenge with respect to Arabic (Modern) Doble Object Constructions, Ouhalla (1994:59) observes:

....languages where the two accusative objects behave similarly with respect to passivization can be said to instantiate two AGRO categories, whereas languages where there is a difference in behaviour between the two objects instantiate only on AGRO category. This conclusion is consonant with the standard assumption that the objects, which can undergo passivization, are the ones, which are structural accusative....and those, which cannot, are the ones assigned accusative via different mechanism....

Judging by the above criterion Bangla is a fit case where there has to be two Agros⁷ dominating the VP to host the two Objects of the matrix verb following movement. (33) shows the mechanism for the relevant part in Bangla sentence in (30).



(33) gives us a picture of the derivation as Spell-Out with canonical word order for Bangla. In the subsequent narrow syntax, the V raises to the Agros successively and feature checking takes place between the NP and the V under agreement. However, the details of this part of the derivation are invisible as everything happens post-Spell-Out.

4.2 Exceptional Case Marking (ECM)

In many languages a set of verbs called cognitive verbs like *believe*, *know*, *consider* etc. take a clausal complement with non-finite inflection. Normally, these sentential complements cannot be introduced with an overt Complementizer. Hence, they have the status of an infinitival IP⁸.

⁸ The controversial status of the verbal element [bole] as Complementizer is yet to be settled. For Oriya Bal (1990) established it as a Complementizer. But in Bangla we notice [bole] can function as a Complementizer for both a finite and a non-finite IP.

- i. *ami take shOt chilo bole jani*
 1-S-NOM he-ACC honest was COMP know-PRES-1
 Lit: I know him was honest
 'I know he was honest.'
- ii. *ami take shOt honest bole jani*
 1-S-NOM he-ACC honest COMP know-PRES-1
 Lit: I know him (to be) honest.'
- iii. *ami take shOt ache bole jani*
 1-S-NOM he-ACC honest is COMP know-PRES-1
 Lit: I know him is honest (till now)
 'I know him (to be) honest.'
- iv. *ami she shOt bole jani*
 1-S-NOM he-NOM honest COMP know-PRES-1
 Lit: I he honest that know
 'I know that he is honest.'
- v. *ami she shOt ache bole jani*
 1-S-NOM he-NOM honest is COMP know-PRES-1
 Lit: I he is honest (till now) that know
 'I know that he is still honest.'
- vi. *ami she shOt chilobole jani*
 1-S-NOM he-NOM honest was COMP know-PRES-1
 Lit: I he is honest was that know
 'I know that he was honest.'

Bangla is pro-drop language like many Indian languages. In addition, it also adopts the copular verb in the present tense. The embedded clause allows overt copula in the past tense and also in the present tense (with, of course, a specific sense). The presence or absence of the 'COMP' *bole* does not make any difference in respect of the (in)finiteness of the clause. Again, the embedded clause allows a subject both in the Accusative *take* and the Nominative *she*. Even here the role of *bole* is immaterial. Interestingly, in all the instances with Accusative subject the embedded verb shows Agr features with a third person NOM subject *she* which is absent (cf. 4-6) where *she* is present). This fact, considered with the information that Bangla is a pro-drop language points towards a construction like -- I him

⁷ Dealing with the Multiple Subject Constructions in languages like Icelandic Chomsky (1995) introduces the provision for two Spec positions for Agros. For a unified approach one could think of an analogue for Double (Multiple) Object Constructions too. However, such a unified exercise is yet to be attested in the literature in spite of the fact that Double Object Constructions are much more commonplace across languages than Multiple Subject Constructions. This alternative approach is certainly worth exploring.

Such embedded IPs have a subject NP which is in the Accusative rather than Nominative. However, in the Principles and Parameters model this feature was treated as ‘expected’ because [-Tense] Agr was looked upon as unable to assign Nominative Case to a subject NP under government. Hence to satisfy the Case Filter the matrix verb was viewed as capable of assigning Accusative Case to the subject NP of its complement clause, across CP boundary. This CP boundary ‘deletion’ was further facilitated by the obligatory absence of a phonetic Complementizer in such construction. Hence is the term Exceptional Case Marking (ECM).

In the Minimalist Programme (or MP) analysis ECM is treated differently in consonance with the basic tenets of the revised theory:

Exceptional Case Marking by V is now interpreted as raising of NP to the Spec of the AgrP dominating V. It is raising to [Spec, AgrO], the analogous of familiar raising to [Spec, AgrS] (Chomsky 1995: 174).

In an SVO language like English this Object raising to a preverbal place is postponed till post-Spell-Out due to the constraint of “Procrastinate”. However, with regard to an SOV language like Bangla an exact replication of the procedure will fail to yield the grammatical output. This is because in an SOV language, the entire embedded small clause – which is a complement of the matrix verb – must precede the main verb. So mere Object raising to preverbal Agro will not fulfil the word order requirements at PF.

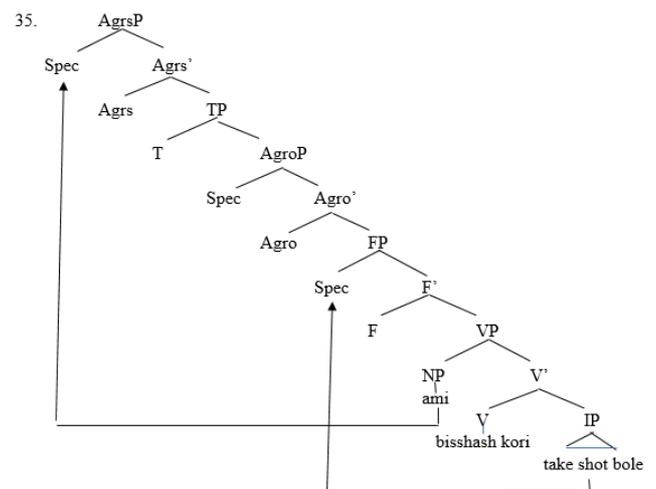
To account for a similar phenomenon in a different context where an adjectival complement occupies a preverbal position, we have postulated the need for a Focus Phrase (FP) following Jayaseelan (2000), in (25). In ECM constructions we come across another piece of strong evidence for creating such a functional node above the VP. For, we propose that at the pre-Spell-Out computation, following subject NP raising to the [Spec, Agrs] the entire clausal complement –rather than the embedded subject NP – of the matrix verb raises to the Spec of FP. Subsequently, at post-Spell-Out the verb moves to the Agro and the Case and Ø-features of the embedded subject NP and Agro get checked and deleted (in case of the latter). This feature checking takes place covertly under head-head relation via left-adjunction. The Bangla is pro-drop language like many Indian languages. In addition, it also adopts the copular verb in the present tense. The embedded clause allows overt copula in the past tense and also in the present tense (with, of course, a specific sense). The presence or absence of the ‘COMP’ *bole* does not make any difference in respect of the (in)finiteness of the clause. Again, the embedded clause allows a subject both in the Accusative *take* and the Nominative *she*. Even here the role of *bole* is immaterial. Interestingly, in all the instances with Accusative subject the embedded verb shows Agr features with a third person NOM subject *she* which is absent (cf. 4-6) where *she* is present). This fact, considered with the information that

Bangla is a pro-drop language points towards a construction like -- I him [pro honest is] know -- which can be literally paraphrased into English as [I know him [he is honest]]. Yet in isolation a construction like

- vii. *ami take shOt bole bisshash kori*
 1-S-NOM he-ACC honest COMP belief-do-PRES-1
 ‘I believe him to be honest.’
 can be treated as an example of ECM construction.

following diagram (35) offers a picture of the state-of-affairs of the derivation at Spell-Out (with the V *in situ*) for the Bangla ECM construction in (34).

34. *ami take shOt bole bisshash kori*
 1-S-NOM he-ACC honest COMP belief-do-PRES-1
 ‘I believe him to be honest.’



There is no empirical motivation for overt V-raising in (35). Moreover, V-raising in overt syntax will yield a wrong word order at the surface. The subject NP and the complement IP raising are always a post-Spell-Out phenomenon in Bangla.

5. Genitive Case

In the generative enterprise, research in syntactic relations realized through structural Cases – Nominative and Accusative – has always been more rewarding than in those represented through inherent Cases. The reason for this is also not difficult to find. Take for example the typical inherent Case – Genitive. Across languages if functions to formalize a relation of possessiveness between two NPs: *John’s book*, *Mary’s husband* etc. But there is an intriguing contradiction in the semantic versus syntactic relation between the NPs. Semantically *John possesses a book* just as *Mary possesses a husband*. Translated into syntactic terms, *book* and *husband* should be the complements of the respective heads *John* and *Mary*. But in actuality the semantic heads function as Spec(ifiers) while semantic complements usurp the place of heads. This paradox results in semantic-syntactic (mis)interpretation that says *Book possesses John* as *Husband possesses Mary*. That formal representation does not always parallel semantic relations among NPs is also proved by the constructions like *John’s funeral!* or *Funeral possesses John!* However, given the undeniable presence of an overt morpheme [-’s] representing an underlying relation – whatever be its nature – between the two NPs, researchers over the years found it sensible to treat such phenomena as inherent Case. Beside

[pro honest is] know -- which can be literally paraphrased into English as [I know him [he is honest]]. Yet in isolation a construction like
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this, the absence of role of verb in inherent Case-relations can be a major factor in pushing the latter to the periphery of critical investigation in syntax. Interestingly, so far as Bangla is concerned, Genitive occupies a central position in the overall pattern of nominal inflections. As noted in Das (1995) Genitive is in fact the default Case of this language. All the non-structural Cases – Instrumental, Dative, Ablative and Locative (in addition to Possessive itself) – are realized through Genitive morphology attached to the concerned NP contained within a PP. There are a few marginal exceptions specific to some adpositions like *die* (cf. 2.2.1). This predominant use of Genitive NPs as complements of Case-specific adpositions may be the outcome of some major restructuring characterizing the transition of the Bangla Case system for being rigidly morphological to a configurational one. Marks of these simplifications can also be seen in the use of Genitive constructions in Bangla for which other major Indo-Aryan languages use Dative. For example, look at the Hindi, Oriya and Bangla paraphrases of the English sentence *I feel thirsty*.

36. Hindi

<i>ham-ko</i>	<i>piyas</i>	<i>lagi</i>
1-S-DAT	thirst-NOM	attach-PAST-3

37. Oriya

<i>Mote</i>	<i>sosO</i>	<i>laguchi</i>
1-S-DAT	thirst-NOM	attach-PRES-PERF-3

38. Bangla

<i>Amar</i>	<i>teshTa</i>	<i>peyeche</i>
1-S-GEN	thirst-NOM	get-PRES-PERF-3

Differently speaking, it is easy to see that Genitive is the phonetic realization of an underlying Dative relation. This argument is in fact extensible to all the PP constructions in (16-22). Let us therefore make a distinction between the “genuine” Genitive (8-11) and the “pseudo” Genitive constructions in (16-22) and (38). We however, treat both types as inherent and therefore do not subject them for checking.

6. Case checking in Postpositional Phrases and Word Order

In the Principles and Parameters model Case assignment to the NP complement of a preposition was treated as a phrase-internal phenomenon. The head P assigns some kind of abstract Case to the complement NP whose morphological realizations may coincide with one or some of the Case morphemes of the language concerned. Thus, the PP-internal NP in English is in the Accusative: *for him*, *by her* but **by she*. In Bangla it is mainly in the Genitive, and marginally Accusative, while in Oriya it is in the Nominative.

Bangla

39.	<i>Tar</i>	<i>jonno</i>
	he-GEN	for
	‘for him’	

Oriya

41.	<i>ta</i>	<i>paĩ</i>
	he-NOM	for
	‘for him’	

40.	<i>tomake</i>	<i>die</i>
	you-ACC	by
	‘by you’	

42.	<i>ramO</i>	<i>paĩ</i>
	Ram-NOM	for
	‘for Ram’	

As is shown in Das (1995) the nature of the Case of PP-internal NP is a major diagnostic for determining the default Case of a language. In spite of this inter- as well as intra-linguistic inflectional variations among the NP complements, given the identical nature of the maximal phrase within which they occur i.e., PP→[P[NP]] or [[NP]P]⁹, in the LGB a blanket term ‘Oblique Case’ was used to refer to the Case of any PP-internal complement. So, it was assumed in LGB that a P assigns Oblique Case to its NP complement under government: government being the precondition for Case assignment.

In the minimalist framework the picture has not changed much except that the Case relation between the head P and the NP complement is defined under a different structural configuration: Spec-head or head-head (if at LF). The entire operation is PP-internal. But does any Case checking take place between the P and its complement? Going by the standard opinion in the literature that Oblique Case is inherent by nature, the question appears irrelevant. This is because inherent Case unlike structural Case is not assigned under any relation of government or agreement, nor does it trigger any inflection-driven movement for Case checking. But with respect to a language like Bangla the following points are in order.

a. Unlike English Bangla Ps do not take their NPs uniformly in one Case: *die* (in Instrumental Case) always takes the NPs in the Accusative not in the Genitive; *hote* (in Ablative) takes the NPs in the Nominative.

b. The Locative P carries an overt Locative morpheme (while the NP complement is in the Genitive) unlike in English.

Should these phenomena reflect some underlying agreement – involving some abstract feature – between the P and NPs, the ‘inherent Case’ definition for PP-internal NPs in Bangla will be anything but tenable.

6.1 PP and Word Order

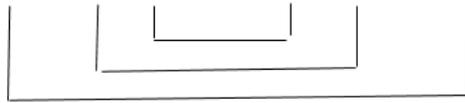
Interestingly any assumption, based on the stray evidence thrown up by Bangla above, that Oblique Case is also structural in nature, can be said to receive indirect support from the word order phenomenon of the language. Bangla being a head-last language, there is no need for movement of the object NP to the pre-head position. In terms of S-H-C configuration the NP is base generated as the complement of the head P in PP. But it must move left-wards to the Spec-position creating a ‘gratuitous’ Spec-Out computation. However, for a head-initial language like English the Case assignment under Spec-head configuration will mean the presence of the NP complement of the left of the preposition yielding an unacceptable word order at PF: **John by* in place of *by John*. Consequently, this PP-internal Case assignment or checking can be suggested to take place after Spell-Out which is also consonant with the fact that all movement other than that of subject NP to the Spec of AGRs is postponed till post-Spell-Out in English – an SOV language. But for a PF-friendly derivation in an SOV

⁹ In generative grammar there is no fundamental difference between preposition and postposition excepting that one takes the NP complement on the right and the other on the left side. This order between head and complement is predictable in terms of head-last and head-first parameters.

language the entire PP has to occupy a position preceding the matrix verb with whose maximal projection all arguments and adjuncts of the V are generated. As Jayaseelan (2000:35) observes:

In what is usually taken to be “the VP” of SOV languages, the canonical order of elements is: Adjunct – IO – DO – V...the mirror image of English

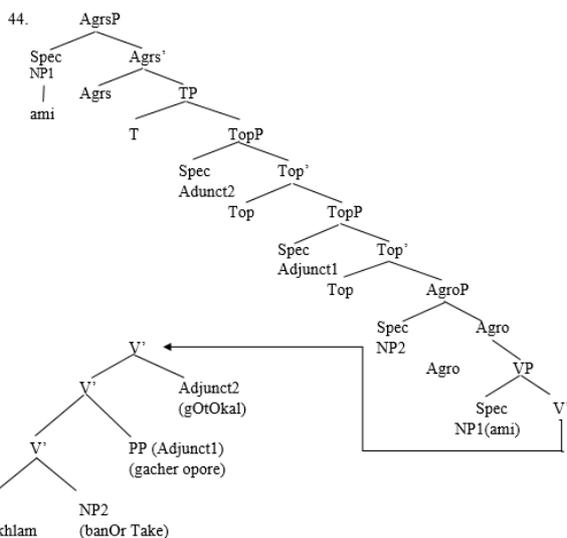
Adjunct – IO – DO – V – DO –IO – Adjunct



PP movement to some preverbal position is therefore a must in Bangla and other SOV languages. But what are the functional heads, which can host these PPs (Remember there can be more than one PP)? Faced with a singular problem – namely scrambling – that requires preverbal positioning of VP-internal arguments and adjuncts in Malayalam, Jayaseelan (ibid.), following Rizzi (1995) – who ‘claimed for COMP system that there are any number of Topic phrases possible above FP’ – proposes that ‘The normal movements of the arguments (and adjuncts) of SOV languages are to SPEC, TopP’. This proposition for iterable Topicalization of VP internal elements that undergo Move operations can be made a judicious use of with the proviso that TopP zone for Bangla is below the TP and above the AgroP. This we demonstrate in (44) for the sentence in (43).

43. *ami gOtOkal gach-er opor-e banOr-Ta-ke dekhlam*
 1-S-NOM yesterday tree-GEN on-LOC monkey-DEF-ACC see-PAST-1
 ‘I saw the monkey on the tree yesterday.’

We leave out FP as *inert* or *unactivated* in this derivation as the numeration has presumably made no selection for any element, which is marked for Focus features.

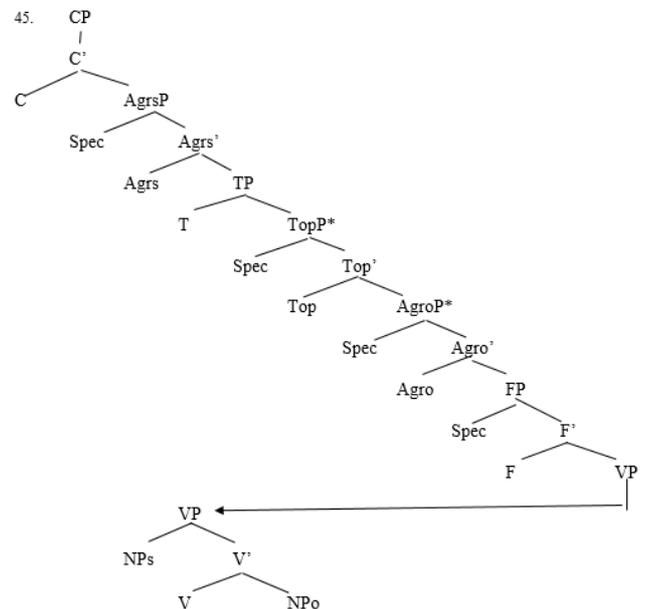


In (44) movements of all non-verbal elements (subject NP, DO, Adjuncts (including PP)) take place before Spell-Out and thus fulfil, among others, the word order requirements at PF. This is in perfect harmony with our general stand with respect to Bangla and SOV languages in general that V-raising takes place only in the covert syntax. This is tempting at the this point to make a sweeping observation that in Bangla and perhaps in all SOV languages the Case and Ø-features of non-verbal items are strong requiring

overt movement. But the matter needs intensive study before any such conclusion can be arrived at.

7. Conclusion

Before we wind up the discussion let us give a general picture of the basic clause structure of Bangla. We identify an iterable node with a (*) and leave out the details of VP-internal structure. The diagram is in (45).



In this paper we have looked at the various aspects of Case checking in Bangla and offered a Minimalist account of it. Special thrust has been on the explanation of two structural Cases – Nominated and Accusative – in the new framework. The discussion has also thrown open the possibility of reinterpreting Oblique Case as structural based on the facts of Bangla. At appropriate junctures of the discourse, we have taken up the issue of interaction between Case checking and word order requirements at PF, which has culminated in the emergence of a picture of the basic clause of Bangla. However, this is in no way a comprehensive analysis of the phenomenon. Areas requiring further investigations have been pointed out at relevant points.

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