

Auxiliary Selection and Aspect in Bangla¹

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ABSTRACT

The possibility of relating auxiliary selection (have or be) and Case (e.g. the Ergative/Absolutive parameter) suggested in Mahajan (1994) is critically examined and an alternative based on the aspectual structure of the clause is suggested. Specifically, the paper argues against the position taken in Mahajan by showing that Bangla can be shown to be underlyingly SVO, which in addition, accounts for cases where inanimate possessives in “have” sentences contain an optional P (obligatory in Hindi) appearing over and above the subject case, a construction, Mahajan’s theory fails to account for. Further, it is shown that the failure of P-incorporation can be maintained even in an SVO order if there is an intervening head between the verbal and the auxiliary heads. Finally, such a head is shown to be motivated by aspect and genericity.

1 Introduction

Most research in auxiliary selection is concerned with the equation have = be + empty P. The empty P originates as a sister to the subject and can incorporate into the adjacent auxiliary in SVO languages but not in SOV/ VSO languages. In verb peripheral languages, this results in the retention of an unincorporated be form of the verb, the P surfacing, Mahajan (1994) suggests for Hindi, as the Ergative Case in the perfective or oblique Cases for other non Case-assigning predicates. Such an account fails to account for at least the following: (i) non-ergative SOV languages selecting have (German and Dutch) or be (Non-ergative South Asian languages) (ii) SVO languages with be but no ergativity (Slavic and Hungarian) (iii) VSO with be but no ergativity (Celtic), etc.

Apart from these problems, it is shown in this paper that syntactically this account is not applicable if verb final languages are underlyingly SVO. The syntactic claim made in this analysis reconfirms the view that the possession relation is encoded in the syntax (rather than

¹ A shorter version of the paper was read at the conference on Perfectivity at the University of Manchester in June, 2000. I thank Mirium Butt and Richard Kayne for comments and questions.

lexically). The P-incorporation analysis is further made irrelevant for inanimate possessives in “have” sentences which contain P (‘near’ in (1), optional in (1a), obligatory in (1b)):

- (1) a. John-er (kache) tin-Te gaRi ache (Bangla)
 John-GEN near three-CLA car be
 ‘John has three cars’
- b. John-ke paas tin gaaRi hai (Hindi)
 John-GEN near three car be.PRS.3
 ‘John has three cars.’

Here, I will suggest that a prepositional PP shell structure, similar to a vP structure, derives (1) with a series of leftward XP movement in keeping with the leading idea that head-final languages are perhaps underlyingly head-medial.

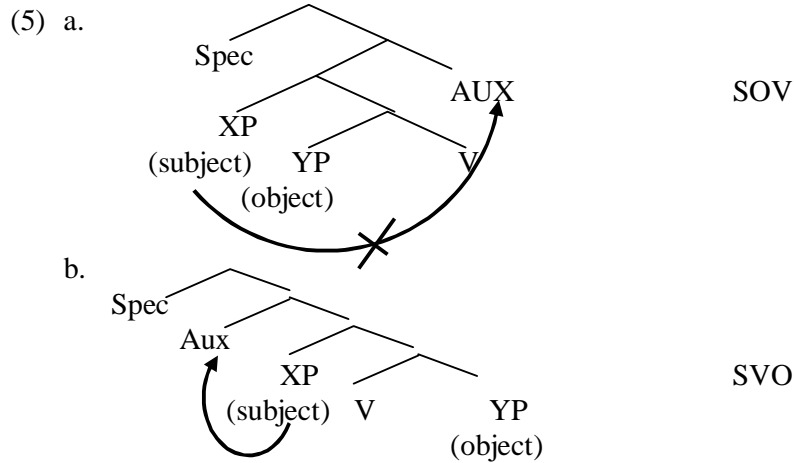
2 Mahajan’s system and its problems

Let us first look at Mahajan’s (1994) account of auxiliary selection in SA languages, making them be rather than have languages. Mahajan wants to relate (2) and (3) below through his account.

- (2) Ergative Case marking patterns are found only in verb peripheral languages (SOV and VSO). Verb medial languages are not Ergative
- (3) The auxiliary have is (usually) not available in Ergative languages

His solution is based on Kayne (1993), among others, which proposes that have = be + empty P/D. The empty P in Mahajan, as in Kayne, originates as a sister of the subject. The difference between the two language types is explained by the directionality parameter as shown in (5) for the Hindi and French examples in (4).

- (4) a. raam-ne voh kitaabeM paRhi thii
 Ram-ERG those book.FEM.PL read.FEM.PRF be.FEM.PST
 ‘Ram had read those books’
- b. Paul les a repeintes
 Paul them has repainted
 ‘Paul has repainted them’



Given that adjacency is crucial for incorporation, P to Aux incorporation will fail for Hindi as in (5a). The P, which fails to thus incorporate, shows up as a Case marker on the subject. Ergativity in Hindi is thus a matter of Hindi being SOV. The absence of have in SOV languages also follows from this since it is only P-incorporated be that shows up as have. Realization of P is limited to the context of the verb being of a non-Case-assigning type. Apart from the perfect participle, in Hindi, dative subject construction (with a psych predicate) and possessive constructions also include a non-Case-assigning predicate:

- (6) a. raam-ko sar dard hai (Dative subject)
 Ram-DAT head ache be.PRS
 'Ram has a headache'
- b. siitaa-ki do bEhnẽ haĩ (Genitive subject)
 Sita-GEN two sisters be.PRS.PL
 'Sita has two sisters'

This, essentially, is the main point of Mahajan's theory.

2.1 Problems with Mahajan's account

However, there are problems with this account. The neat typological results obtained in through presence versus absence of P-incorporation, in reality, is not so neat as Mahajan himself points out. The following is a list of some of the problems:

(7) Exceptions to the P-incorporation theory

- (i) There are some non-ergative SOV languages like German and Dutch which nonetheless select the auxiliary have rather than be. Likewise there are Non-ergative SA languages like Bangla among many IA languages, Dravidian and most Tibeto-Burman languages which select be. That is, there is no clear typological bifurcation in terms of word order and ergativity.
- (ii) There are a few SVO languages like all the Slavic languages and Hungarian which select the auxiliary be but do not show any ergativity.
- (iii) At the other spectrum of verb peripheral languages, there are VSO languages like Celtic which select be but do not show any ergativity.
- (iv) The P-incorporation account also does not have anything to say about V2 languages, some of which display ergativity, like Kashmiri.
- (v) Finally there are Ergative languages like Basque which select the have auxiliary.

Most of the problems of this account are due to the fact that it is based on directionality of movement, i.e., verb final languages show rightward Head movement whereas verb non-final languages must move the head to the left. However, if the LCA (Linear Correspondence Axiom) of Kayne (1994) shown to hold then an analysis based on directionality will have problems. Is it then possible to develop an alternative account?

3 Leftward XP Movement in Bangla

First, I would like to submit that by now there is enough evidence to show that Bangla may really be underlyingly verb medial. Here, I will report only two special cases to make this point, one from the realm of nominal structures (DP) and the other from clausal structures.

(I) Evidence from DPs

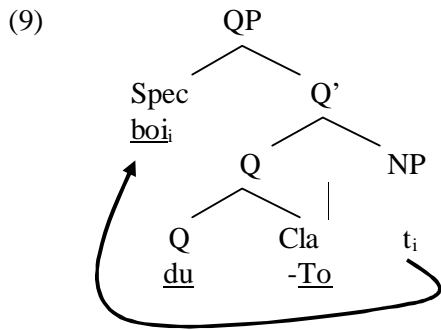
Within the Bangla DP, it can be shown that there are several instances of phrase-internal phrasal (i.e., XP) movement. I will briefly review evidence involving specificity, Kinship Inversion and Gerunds for this purpose.

(i) Specificity related movement

It has been shown convincingly in Bhattacharya (1998 et seq) that a specific NP with the Bangla DP moves left across the Numeral-Classifier/ Quantifier-Classifier head (italicised below) as in (8b). Consider the following examples in this connection.

- (81)a. ami du-To boi dekhechi Non-specific Order: [NUM-CLA NP]
I two-CLA book seen.1
'I have seen two books'
b. ami boi du-To dekhechi Specific Order: [NP NUM-CLA]
'I have seen the (specific) two books'

The leftward movement of the specific NP boi in (8b) can be shown in the simplified tree diagram as in (9).



(ii) Kinship Inversion

Kinship Inversion is displayed by some kinship terms moving leftward to obtain a specific meaning (to do with affection, for example) in these NPs:

- (10)a. amar bhai unmarked order: POSS NP
mine brother
'My brother.'
b. bhai amar marked order: NP POSS
'Brother mine.'

Furthermore, in (14), the lowest CP must have undergone long Wh-CP movement to the matrix clause since it is not an argument of the matrix verb think and therefore can only have reached the post-subject position via movement:

- (14) tumi [ke cole gEche]_i bhabcho meri bollo t_i
 You [who left gone] think.2 Mary said
 ‘Who do you think Mary said left?’

(ii) Clause-internal COMP

Finally, in Bhattacharya (2000b,c, 2001a and 2002) it is shown that je-internal clauses (i.e., where the complementiser je is not in the initial position of the embedded clause) cannot remain in the post-verbal position and must move to a pre-verbal position within the matrix clause:

- (15)a. amra jantam [je jOn-er ma asbe] Unmarked order
 we knew that John’s mother come-will
 b. [jOner je ma (je) aSbe]_i, amra jantam t_i
 c. amra [jOner je ma (je) aSbe]_i, jantam t_i
 ‘(as for) the fact that John’s mother will come, we knew it’

Note also the fact that (15b,c) necessarily get a topicalised meaning as a result of this movement. Thus like Wh sentences, je-internal sentences move leftward to a pre-verbal position for a reason.

Having shown that Bangla does not behave like a typical verb-final language and is in fact underlyingly verb-medial, note that Mahajan’s account of the difference between these two typologically differing languages in terms of selection of the auxiliary (be or have) as shown in (5a,b) does not hold anymore. In the following section, I show that there are empirical reasons for abandoning the P-incorporation story.

4 pP

The P-incorporation analysis is further made irrelevant for inanimate possessives in “have” sentences which contain an optional P (‘near’ in (16a) is optional but obligatory in (16b))

essentially showing that possessions are existentials with human location, an intuition captured in Freeze (1992).

- (16)a. JOn-er (kache) tinte boi ache (Bangla)
 John-GEN near three book be
 b. JOn-ke paas tiin kitaabē hai (Hindi)
 John-GEN near three books be
 ‘John has three books’ (English)

Further, for existentials, whereas French uses have, English, Bangla and Hindi use be. This too is problematic for the P-incorporation account as English is typologically different from Bangla/ Hindi.

- (17)a. Il y a un livre sur la table (existential) (French)
 It there has a book on the table
 ‘there is a book on the table’ (English)
 b. tebal-ke upor ek kitaab hai (Hindi)
 table-GEN on one book be
 c. tebil-er upore ek-Ta boi ache (Bangla)
 table-GEN on one-CLA book be

However, with a head-medial account of PPs, these sets of data can be easily accounted for in a uniform manner. A prepositional pP shell structure (proposed in Dasgupta (1999) in a different context), similar to a vP structure, derives (16 and 17) with a series of leftward XP movement in keeping with the leading idea that head-final languages are perhaps underlyingly head-medial. The simplified template for (16a) is shown below:

(18) [[PP jOn_i -er t_i] kache t_{PP}]

This approach when applied to have languages for deriving the Benveniste connection may perhaps ascertain that “SVO” languages involve more Head movement, a consequence of LCA that has been around since Cinque (1996) and Bhattacharya (1999a) but somewhat ignored.

5 Asp in Bangla

The preceding two sections have shown that not only the P-incorporation theory of auxiliary selection as expounded in Mahajan (1994) is untenable, but the head-medial nature of Bangla

forces us to look for an alternative theory of auxiliary selection. In this section, I discuss the possibility of actually maintaining the P-incorporation theory within a head-medial structure, only if P-incorporation can be blocked, not through non-adjacency as in Mahajan, but through some other means. Positing an Asp head between the Aux and VP, I will claim, is one such course to take. In what follows, I will only look at Gerunds and Conjunctive Participle in Bangla to motivate the Aspectual head above the Bangla VP.

5.1 Gerunds in Bangla

Following Grimshaw (1990), gerunds can be thought of as denoting complex event nominals (CEN). CENs have an obligatory argument structure and the event structure they project can be broken down into aspectual sub-parts. For example, an accomplishment event like John breaks X can be broken down into an activity such as John's breaking X and a resulting state such as X is broken. Thus gerunds can be seen as composed of aspectual subparts.

Now the structure of gerund DP proposed in Bhattacharya (2000a), has exactly one such Asp head between the nominal (=D) and verbal (VP) part of the gryphons-like gerund structure which houses the gerund morpheme (w)a/no.

5.2 Conjunctive Participle

Although the Conjunctive Participle (CP) affix seems to be widely used in IA languages, it has not received much attention in the literature. Some examples follow:

- (19)a. radha-ke por-e bollam (Bangla)
 Radha-DAT read-CP said.1
 'I told Radha after reading (it)'
- b. raadhaa bahaar aa-ke (Hindi)
 Radha outside come-CP
 'Radha, having come outside'
- c. tithe jaa-uun (Marathi)
 there go-CP
 'having gone there'

Thus the light verb seems to be sheltered by the CP. Hook (1973) argues that the relation of compound to a simple verb is an aspectual one, with the compound expressing completion of

6 Genericity and Auxiliary Selection

In this section, I will look at the connection between genericity expressed in the sentence and the position/ status of the auxiliary selected. By doing this, I hope to show that genericity reconfirms the existence of the Asp head above the VP and the derivation of a certain marked position of the auxiliary is then better accounted for by such a structure.

Lawler (1973) proposes that sentences like Fido chases cars are to be represented as involving quantification over events, the events in this case being Fido chasing cars. This sentence is true only if Fido has chased cars on x number of occasions. Alternatively, one can think of a system where set membership gives the quantification reading, that is, if Fido belongs to the set of things that chase cars, then the sentence is true. Habituals can thus be thought of as generic (as they can be paraphrased with always, Chierchia 1995). Thus an aspectual force ensues a certain kind of modality.

In Bangla a be-less sentence (without ache/ thake in 24) can be either existential or generic (i.e., it obtains a habitual reading):

- (24) jOn kolkata-y (ache/ thake)
John calcutta-LOC be/ stays
(i) 'John is in Calcutta'
(ii) 'John lives in Calcutta'

The generic modality can be understood in terms of the Asp head encoding modality. The following section, furthermore, shows that "obligational" modality is also aspectual.

6.1 Obligation is Aspectual

Bhatt (1998) pointed out that have has an Obligational Construction:

- (25) John has to drive tonight

In South Asian languages it takes the form: V+ing be_{FUT/PRS}

- | | | | | |
|--------|--------------|---------|---------------------------|--------------|
| (26)a. | JOn-ko | jaa-naa | hai | (Hindi) |
| b. | JOn-ke/-er | je-te | hObe | (Bangla) |
| | John-DAT/GEN | go-INF | be.PRS(Hindi)/FUT(Bangla) | Bhatt (1998) |

Bangla obligatorily uses Genitive on the subject and a gerund predicate in the case of overt modal. Also, the meaning obtained is like a “future” habitual, that is, the sentence states that Radha must eat fruit in future on a regular basis. Both these notions are captured in a structure with an aspectual shell and a generic interpretation of aspect. The overt modal lacks a [AFFECTED] feature and therefore is stranded in the lower VP. The difference may be attributed to the difference in event types as in nouns. The matter of the subject case is determined by the nature of the predicate. Generally, the Genitive is obtained in nominal contexts (as in the gerundial in (31b)) and the dative in an infinitival context.

6.2 Left dislocation (LD)

Finally, in this section, it is shown that the aspectual shell structure above the VP also accounts for certain marked word orders obtained in Bangla as in the following where the SVO structure with the Aux is actually available on surface:

- (32)a. Jon-er ache boi
 John-GEN be book
 ‘As for John, it is a book that he has’
 b. chele du-To-r ache boi
 boy two-CLA-GEN be book
 ‘As for the two boys, it is a book that they have’
 c. *du-To chele-r ache boi
 two-CLA boy-GEN be book

Notice that the meaning obtained has both a topicalised as well as a clefted component. An account of this data implies the assumption that definite subjects in Bangla are left-dislocated.

Let us see how this can be worked out.

The typology of the resumptive pronoun on which is based various Left-Dislocated (LD) structures is as follows (Riemsdijk & Zwarts 1997):

- (33)a. The man I admire him (HTLD) (English)
 b. De Hollanders, die zijn te flegmatiek (CLD) (Dutch)
 ‘The Dutch, they are too phlegmatic’
 c. Al mare, ci siamo già stati (CLLD) (Italian)
 to the-seaside there have.1 already been
 ‘To the seaside, we have already been there.’

This typology can easily accommodate LD null pro languages like Bangla:

- (34) chele-Ta_i, pro_i Radha-ke dekhlo
 boy-CLA, Radha-ACC saw
 ‘the boy, saw Radha’

A'-minimality effect test ascertains the status more clearly:

- (35)a. [kon boi-Ta]_i chele du-To t_i poRlo +def/specific
 which book-CLA boy two-CLA read
 ‘Which book the two boys read?’
 b. ??[kon boi-Ta]_i du-To chele t_i poRlo -def/specific

Since definite subjects are left dislocated (and indefinites by definition are bad topics which explains (32c)), for (32a), the suggestion here is that first the object moves out of AspP to a preverbal focus position followed by movement of the remnant AspP to a sentence topic position as in the case of (31) earlier:

- (2) [TopP [AspP jOner ache t_{boi}] ... boi t_{AspP}]]
-

The derivation also implies that so-called verb-final languages employ a heavy use of XP and Remnant movement to derive the surface V-final order, a conclusion also reached in Bhattacharya (1999a) and Mahajan (2000).

7 Conclusion

Based on evidence from syntax (gerunds and conjunctive participle) and semantics (generic and obligational modality), it is suggested that an aspectual shell is projected over the VP in Bangla. The aspectual phrase in turn provides the only possibility of prohibiting a (zero) P from incorporating into the auxiliary resulting thus in a be auxiliary and quirky case on the subject of non-case-assigning predicates.

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