

The Subjunctive in Bangla*

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This paper provides syntactic evidence of subjunctive mood distinction in Bangla (Bengali). However, I argue against long-distance licensing of the subjunctive of Manzini (1994) on the basis of certain island facts. Instead, I analyse it as a matter of local checking of a mood feature at an M head within the simplex clause in the case of *functional* triggers and at a modalised C in the case of *lexical* triggers. Given that strict locality is implied in the notion of PHASE in Chomsky (1998), local determination of the subjunctive is a theoretically desirable result.

1.0 Mood in Bangla

Old Indo-Aryan had five moods: Indicative, Imperative, Optative, Subjunctive and Injunctive out of which Sanskrit lost the last two and according to traditional grammarians (Majumdar 1979) Bangla further lost the Optative. My claim that this is untrue is based on examples like the following:

- (1) ami **cai** je tumi aj rate ama-r baRi aSo¹
I want that you today night-at my-gen house come-subjn
'I want that you come to my house tonight'

The V-form in (1) is similar on the surface to the Imperative. This is expected since in Sanskrit the Subjunctive in the 1st person (1P) was incorporated in the Imperative paradigm. Later grammarians interpreted 1P Imperative as the Subjunctive. Comparing (1) with (2), where the matrix predicate selects an indicative, certain differences between the two verbal forms become apparent:

- (2) ami Sunechi je tumi aj rate ama-r baRi aS-be/aS- cho/ eSe-chile/ etc
I heard that you today night-at my-gen house come-fut/ -pres/-pres/-past/ etc
'I heard that you will come/have come/had come/etc. to my house tonight'

Based on the fact that the Subjunctive form in (1) displays a reduction in tense choices available in the indicative in (2), it is reasonable to assume that the v-form in (1) is Subjunctive.

The following is an example of a lexical predicate other than *want* that may exhibit similar tense curtailment:

- (3) ama-r **iccha** je O aj aSuk/ *aSe²/ *aSche/ *aSbe
my-gen desire that s/he today come-subjn/ comes/ come-has/ come-will
'(It is) my desire that he comes today'

There is yet another class of subjunctive triggers which I call j-triggers, *jate* 'so that', *jEno* 'as if' and *jodi* 'if', for no particular syntactic reason but merely as a descriptive label (see also Bhattacharya (1998)):

- (4) ami eSechi **jate** modhu phire aSe
I come-have so that Madhu return come-subjn

* I am grateful to R. Amritavalli, Misi Brody, Probal Dasgupta, Alice Davison, James Higginbotham, Rita Manzini and the participants at the Bergamo conference on Tense and Mood Selection for comments on earlier versions of this paper.

¹ The transcription works as follows: T D R= Retroflex ʈ ɖ ɽ ; S = Palato-alveolar ʃ ; N= Velar ŋ; M= nasalisation; E O= Mid-vowels æ ɔ.

² The form of the verb here is, strictly speaking, Optative but *aSe* is acceptable in certain dialects and contexts. To keep the discussion simple, I will assume Optative as part of the Subjunctive. It is likely that weak intensional verbs (in the sense of Farkas (1992)) may induce Optative, but this is purely a conjecture at this stage and I will not dwell upon this issue any further in this paper.

- 'I have come so that Madhu comes back'
- (5) O **jEno** bhOy na pay
 s/he so that/as if fear neg get-subjn
 'so that/as if s/he doesn't get frightened'

The third j-word *jodi* is also a subjunctive trigger. Notice that the *If* Operator (Op) is shown to introduce a Subjunctive in Italian (Manzini (1994)) as in (6); the Bangla example follows in (7):

- (6) Se sai che lui è/sia andato, ...
 if know that he has/ has-subjn gone
 'If you know that he has/ has-subjn gone, ...'
- (7) mohon **jodi** aj na aSe ...
 Mohan if today neg come-subjn
 'If Mohan doesn't come today, ...'

I discuss the j-triggers as functional triggers of the subjunctive in section 3.4 since they can be either Ps (*jate*) or Cs (*jEno* and *jodi*).

Sentence adverbials like *possibly*, *probably*, *certainly*, etc. have semantic functions similar to a modalised sentence (Brennan (1993)). Indeed, these are considered to be cases of logical modalities. Therefore, for an utterance like *It is possible that John will come tomorrow*, the speaker knows that the proposition is true in at least one possible world. However, these predicates do not induce modality in Bangla:

- (8) eTa **jOruri** je tumi kal baRi-te eSechile/ eSecho/ etc
 this necessary that you yesterday house-loc came/ have come/ etc
 'It is necessary that you came home yesterday'

In sum, the subjunctive in Bangla is triggered either by lexical predicates like *want* or by a functional triggers like the j-triggers.

2.0 Diagnostics

I take up two of the three observations in Dasgupta (1996) that can be used as diagnostics for the subjunctive. I return to these in section 4 in order to explain them on the basis of the analysis of section 3. The first observation as in (12) is already in view in (5) and (7) for *jEno* and *jodi* above. Consider the following additional data: (8-11 are from Dasgupta (1996)):

- (8) aSiS cay je ekhane beSi lok **na** **aSe** / *aSe na
 Ashish wants that here many people not come-subjn/ come-subjn not
 'Ashish wants that not many people come here'

The unmarked order in Bangla is V NEG as in the following indicative examples:

- (9) aSiS Suneche je ekhane beSi lok **aSe na**
 'Ashish heard that not many people come here'

Similar facts obtain with *jate*:

- (10) purna aste kOtha bolche jate nupurer ghum **na** **bhaNe** / *na bhaNe
 Purna softly speech talking so-that Nupur's sleep not break-subjn/ not break-subjn
 'Purna is talking softly so that Nupur doesn't wake up'
- (11) purna Eto aste kOtha bolche je nupurer ghum **bhaNbe na**
 'Purna is talking so softly that Nupur will not wake up'

The first observation, therefore, is:

- (12) The Bangla Subjunctive exhibits pre-verbal Neg

The 2nd observation concerns the status of Aux -- the habitual *thak* and the stative *ach*. In (13), the subjunctive in (13a) takes only the habitual form of the Aux, whereas the indicative in (13b) and (13c) can take either form:

- (13)a. rakhal taRataRi phirlo jate Somoy hate **thake**/ *ache
 Rakhal early returned so that time hand-loc aux-hab/ aux-stat
 'Rakhal returned early so that some time is left in hand'
- b. rakhal Eto taRataRi phireche je hate Somoy **ache**
 Rakhal so early has returned that hand-loc time aux-stat
 'Rakhal has returned so early that some time is left in hand'
- c. Rakhal Eto taRataRi phere je hate Somoy **thake**
 Rakhal so early returns that hand-loc time aux-hab
 'Rakhal returns so early that some time is left in hand'

In (13a) *jate* triggers a subjunctive in the embedded clause which takes the habitual aux *thake* whereas in (13b,c) the indicative can take both the habitual and the stative form of the auxiliary. This also shows that the subjunctive curtails the range of tense choice available. Dasgupta takes this to mean that the subjunctive in Bangla deviates from the Indicative in a non-finite direction or that the subjunctive instantiates weak finiteness.

Similar results obtain with other subjunctive triggers:

- (14) rakhal cay je mohan aj baRi thakuk/ *achuk
 Rakhal wants that Mohan today home aux-hab-subjn
 'Rakhal wants Mohan to stay home today'
- (15) ami jodi rotul-ke boi-Ta diye thaki/ *achi
 I if Rotul-dat book-cla given aux-hab
 'If I had given the book to Rotul ...'
- (16) rakhal jEno ghOrer bhitor thake/ *ache
 Rakhal prt room-gen inside aux-hab-subjn
 'Rakhal should be inside the room (reminder)'

Notice that *ach* is both irregular (*ach* in present, *ch-* in past, and present negative *nei*) and defective (being restricted to two tenses, past and present)³. If these are symptoms of true Aux-hood or irregular and defective copulas are true auxiliaries then the Subjunctive excludes the short-term mode of expression or the stative interpretation of the Aux.

This gives us the 2nd observation:

- (17) The Bangla Subjunctive excludes true auxiliaries

Thus the second diagnostic is the exclusion of true Aux. The negative paradigm in auxiliaries gives similar results apart from the added complexity of the morphological irregularity associated with Neg-formation (see note 3):

- (18) rotul Sabdhane ghOr Sajieche jate kono bhul na thake/ *ache
 Rotul carefully room arranged so-that any mistake neg aux-hab
 'Rotul arranged the room carefully so that there's no mistake left'
- (19)a. rotul Eto Sabdhane ghOr Sajieche je bhul nei

³ This is shown in (i):

(i)		Present	Neg	Past	Neg
	1	achi	nei	chilam	chilam na
	2	acho	nOo	chile	chile na
	2 [+Hon]	achen	nOn	chilen	chilen na
	2 [-Hon]	achiS	noS	chili	chili na
	3	ache	nei	chilo	chilo na

(The future is formed by the *thak* Aux, as in *thakbo* etc)

- Rotul so carefully room arranging that mistake neg+aux
 ‘Rotul arranged the room so carefully that there’s no mistake’
- b. rotul Eto Sabdhane ghOr Sajay je kono bhul thake na
 Rotl so carefully room arranges that any mistake aux-hab neg
 ‘Rotul arranges rooms so carefully that there’s never a mistake’

Thus, we get the following pattern:

- (20)a. Subjunctive: na thake
 neg aux
- b. Indicative: (i) nei (ii) thake na
 neg+aux-stat aux-hab neg

In (bii) of the indicative, instead of the expected *ache na* form, the amalgamated form *nei* is obtained. However, as far as the semantics is concerned, both the choices for the Indicative express the short-term or stative present.

3.0 Analysis of the Bangla Subjunctive

In Romance, a set of operators like Neg, Q/Wh, *If*, may optionally induce subjunctive in the embedded clause. According to Manzini (1994), semantically this class of operators appears to belong to a larger class of intensional operators. The necessity and possibility operators also belong to this class. These Ops are thus responsible for subjunctive licensing in her theory. In Italian, apart from certain predicates like *want* etc, the subjunctive in the following sentences is licensed by one of these operators. (21-23 are taken from Manzini (1994))

- (21) Non sa che io sono/ sia andato [Neg]
 Neg know that I have/ have-subjn gone
 ‘He doesn’t know that you I have/ have-subjn gone’
- (22)a. Sai che lui è/sia andato [Q]
 Know that he has/has-subjn gone
 ‘Do you know that he has/ has-subjn gone?’
- b. Chi sai che è/sia andato [Wh]
 who know that has/ has-subjn gone
 ‘Who do you know that has/ has-subjn gone?’
- (23) Se sai che lui è/sia andato, ... [If]
 if know that he has/ has-subjn gone
 ‘If you know that he has/ has-subjn gone, ...’

Excluding the *If* case for the moment, the following shows that the other Ops do not by themselves license the subjunctive in Bangla:

- (24) rakhal jane na je madhu aSbe/ aSche/ eSeche/ aSe/ *aSuk
 Rakhal know neg that Madhu come-fut/ -prs/ -past/ -hab/ -subjn
 ‘Rakhal doesn’t know that Madhu will come/ etc’.

Bangla being a Wh in-situ language, I consider the interrogative clitic *ki* as a Q in the following:

- (25) tumi-ki jano je Se jabe/ jacche/ gEche/ jay/ *jak
 you-Q know that s/he go-Fut/ go- prs prog/ gone/ goes/ go-subjn
 ‘do you know that s/he will go/ etc?’

Manzini also notes that *necessity* and *possibility* operators are part of this larger class of intensional operators, semantically. I have shown in (8) (repeated here as 26) that at least the *necessity* Op does not select a subjunctive, additionally, (27) shows that if *possibility* is an Op, it does not either:

- (26) eTa jOruri je tumi kal baRi-te eSechile/ eSecho/ etc

- this necessary that you yesterday house-loc came have come/
 ‘It is necessary that you came home yesterday’
 (27) eTa **Sombhov** je tumi aSbe/ eSechile/ etc
 this possible that you come-Fut/ came/ etc
 ‘It is possible that you will come/ came/ etc’

Rather than concluding that these are not intensional operators (for which there is enough evidence in the literature), I suggest that these Ops do not license the subjunctive in Bangla. Licensing of the subjunctive by a class of intensional operators is therefore by no means universal.

Concerning the *If* operator, we have seen in (7) that it introduces the subjunctive in Bangla. But notice that it does so in the same clause. Manzini’s proposal specifically concerns subjunctive licensing across S-boundaries. In fact, this serves as an evidence for her to consider subjunctive-licensing as a two-step process. However, in most current theories of conditionals, every conditional is considered to be either overtly or covertly modalised. The Bangla *jodi* ‘If’, in this respect is a modalised conditional. In the following I provide further evidence that *jodi* is clause bound.

I label the following phrases as Phrasal Conditionals (PC) where the conditional is present in the inflectional packaging of the verb (and not in the form of a particle or a COMP like *jodi*). PCs display Subjunctival behaviour similar to full clauses in terms of the position of the negative as well as the preference for *thak* over *ach*:

- (28)a. rotul na khe-le
 Rotul Neg eat-cond
 ‘if Rotul does not eat’
 b. * rotul khe-le na
 (29)a. rotul-er khata thak-le/ *ach-le
 Rotul-gen notebook is-cond
 ‘If Rotul’s notebook was there’

It is therefore reasonable to assume that these PCs also exhibit subjunctive behaviour. However, it is beyond the scope of the present paper to investigate the nature of the phrasal subjunctive, if any, but it is quite likely that at the clausal level too, the conditional itself is a matter of a simplex construction -- either a phrase or a clause.

I conclude that the Operators identified by Manzini that license the Subjunctive in Italian are not responsible for the Subjunctive in Bangla. As a consequence there is reason to doubt the two-step process licensing of the Subjunctive.

3.1 NPIs

Another argument of Manzini that fails to go through for Bangla is to do with NPIs. Manzini considers the Subjunctive to be indefinite (and therefore the need to be bound by an Op) based on the similarity between NPI and subjunctive-licensing, i.e., the same Ops Neg, Q, Wh and *If* also license NPIs in Italian:

- (30)a. Non vedo nessuno
 ‘I don’t see anyone’
 b. Vedi nessuno?
 ‘Do you see anyone?’
 c. Se vedi nessuno, ...⁴
 ‘If you see anyone, ...’

In Bangla, emphaziers (EMP) turn quantifiers into NPIs (Roy (in prep.)) which are by definition licensed by Neg (31a) but not by either Q or If (31b,c):

⁴ Some native speakers of Italian disagree with the judgement here but since Manzini clearly marks it as grammatical, I present my case on the basis of her judgement and show that the argument does not hold for Bangla.

- (31)a. ami kichu-i khai-ni
 I some-emp eat-Neg
 ‘I didn’t eat anything at all’
 b.* jodi ami kichu-i khai
 ‘If I eat anything at all’
 c.* ami-ki kichu-i khai?
 ‘Did I eat anything at all?’

So, it is problematic to assume that subjunctives pattern like polarity items in Bangla, and they are definitely far from being „exactly parallel to“ PIs. The nexus between the subjunctive being indefinite *because* NPIs are indefinite too, fails.

These two reasons from sections 3 and 3.1 conspire to suggest that subjunctive licensing may be due to a local head which is distinctly modal.

3.2 Island Facts

The strongest motivation for a (O,..., T) dependency spell out of the subjunctive, as Manzini (1994) calls it, comes from investigating the island facts. An Op in the matrix clause, according to this theory, cannot license a subjunctive in an island, e.g., an adjunct. In this section I show that these islands facts do not hold for Bangla, strongly suggesting that subjunctive licensing may be local.

To start with, notice that Manzini herself points out that although (32) in Italian is an example of island violation, it is rescued (by sisterhood of the Neg with the adjunct) by the fact that the subjunctive interpretation of the Neg is a case of abstract constituent negation.

- (32) Non è andato perchè è/ sia staco
 ‘He isn’t gone because he is/ is-subjn tired’

In my view, the case of the abstract constituent negation in (32) is nothing but a case of a local Op or head licensing the subjunctive. Since I have already shown that Ops do not license the subjunctive in Bangla by themselves the island question is not very relevant. However, a lexical predicate like *want* without a complement CP fails to display the required modality since a following adjunct cannot satisfy a local constraint across the island:

- (33) modhu chuTi caY karon Se jOre bhoge / bhugche/ bhugbe
 Madhu leave wants because s/he fever suffers/suffering/ suffer-will
 ‘Madhu wants to leave because s/he suffers/ suffering/ will suffer from fever’

The fact that the lower predicate exhibits a choice of tense patterns shows that *bhoge* here is the habitual rather than the subjunctive form of the verb (although it shares an identical morphology). This is further confirmed by applying the subjunctive diagnostic based on (12) to this form⁵:

- (34) modhu chuTi caY karon Se jOre (*na) bhoge na
 Madhu leave wants because s/he fever (*neg) suffers not
 ‘Madhu wants to leave because s/he does not suffer from fever’

Furthermore, the following model where a subjunctive in the complement introduces a subjunctive in the adjunct, is out in Bangla:

- (35) *want...* [CP ...subjn...[ADJUNCT ...subjn..]]

That is, the possibility of a subjunctive in the complement introducing another subjunctive in the adjunct is not available in Bangla. In other words, the first subjunctive cannot act as an Op for the licensing of the second subjunctive:

⁵ However, I show in section 3.4 that these type of adjuncts (i.e. the ones introduced by a causal P *karon*) can optionally take a final complementiser *bole* which is a form of the verb *say*. *Bole*, I will claim, satisfies the local modality requirement of the lexical predicate *want*.

- (36) jodi tumi cao je mohon kal aSuk
 if you want that Mohan tomorrow come-subjn
 karon o SO-cokkhe dekhbe/ *dEkhe ...
 because s/he own-eyes-with see-will/ *see-subjn
 'If you want that Mohan come-subjn tomorrow because he will see/ *see-subjn with
 his own eyes'

From (37) it is clear that it is not the *If* Op which introduces the subjunctive in the complement CP in (36) but the lexical predicate *cao*:

- (37) jodi tumi dEkho je mohon kal *aSuk ...
 if you see that Mohan tomorrow come-subjn

However, the model in (35) is grammatical in Italian and according to the explanation offered in Manzini, it is due to a „branching dependency“ of the kind noticed in Parasitic Gap (PG) constructions. It is not clear what branching dependency would correspond to in the Minimalist Program (MP). Assuming that it is possible to incorporate such a concept within the mainstream minimalism, it is surprising therefore to find (36) not admitting the subjunctive in the adjunct since according to Kidwai (1995), PGs do indeed occur in Hindi-Urdu, another modern Indo-Aryan language similar to Bangla.

However, consider the following where we do indeed get a PG „like“ effect:

- (38) jodi tumi cao je mohon kal aSuk
 if you want that Mohan tomorrow come-subjn
 jate o SO-cokkhe *dekhbe/ dEkhe ...
 so-that s/he own-eyes-with *see-will/ see-subjn
 'If you want that Mohan come-subjn tomorrow so that he sees (subjn) with his own eyes'

Note, however, that the adjunct clause in (38) is introduced by one of the conventional subjunctive-triggers *jate*. This strongly supports the claim being made in this paper that subjunctive licensing is a local phenomenon. In the next section I will briefly discuss the advantages of local licensing given the turn that minimalism seems to be taking.

3.3 Reduction of Complexity

Chomsky (1998) is a sophistication of the programme towards making the Faculty of language (FL) a device designed optimally as a reflection of the bare output conditions or the legibility conditions. The architecture of the model is designed to reduce complexity. Thus a language L maps a subset of features [F] constructed out of the universal feature set F to a set of expression EXP by *one time selection*. Complexity is further reduced if L involves a one-time operation that „assembles“ elements of [F] into a lexicon LEX. A language L therefore maps ([F], LEX) to EXP. Chomsky then proceeds to further reduce access to this domain by suggesting that [F] is not accessed at all in the computation to LF, only LEX is accessed. Furthermore, he assumes that derivations make one-time selection of lexical arrays LA from LEX.

Chomsky attempts one final reduction (p19-20) and suggests that in terms of access to the LEX, at each stage of the derivation, a subset LA_i is extracted out of LA and is placed in active memory (or the work space⁶). When LA_i is exhausted the computation may proceed if possible or it may return to LA and extract LA_j to continue⁶.

Next Chomsky considers the notion of a natural syntactic object. The syntactic equivalent of a proposition in the „meaning side“ is either a full clause or a verb phrase with all theta-roles assigned, i.e., a CP or a vP. Selection of an LA_i must therefore involve selection of a C or a v. Chomsky calls this unit a PHASE and proposes the following cyclicity condition:

⁶ Note that this is different from the other reductions since it alone involves multiple access to LA. Chomsky notes that (p20) „operative complexity *in some natural sense* is reduced“ (emphasis mine). Although Chomsky does not mention it, this asymmetry implies that the language faculty must incorporate a version of look-ahead at some point to allow for the property of recursion in human language.

- (39) The head of a PHASE is „inert“ after the PHASE is completed, triggering no further operations.
(Chomsky 1998:20)

This notion of a PHASE suggest a system similar in essence to the one proposed in Uriagareka (1997, 1999). The condition (40) virtually ensures that fragments of syntactic objects (CPs and ν Ps) are inaccessible once the computation is locally complete. Chomsky concludes that „Spell-Out therefore applies cyclically in the course of the (narrow syntactic) derivation“ (Chomsky 1998: 48).

3.4 Modal Head as a Functional Trigger

Given the advantages of local constraints in reducing the derivational cost of a computation, the local licensing approach seems to be an encouraging goal to pursue. The independence of the subjunctive in the adjunct from the rest of the sentence is predicted by the fact that the absence of a subjunctive-trigger in the main clause does not affect the subjunctive in the adjunct:

- (40) ami Sunechi je rakhāl gaibe jate modhu aSe
 I heard that Rakhāl sing-Fut Prt Madhu come-subjn
 ‘I heard that Rakhāl will sing so that Madhu comes’

In (40) neither is the matrix V a subjunctive-triggering lexical predicate like *want* nor does the complement CP contain any subjunctive. The subjunctive obtained in the adjunct is purely a result of the j-trigger *jate*. I will extend this locality restriction of the subjunctive in the adjunct to the subjunctive in complement CPs as well. But let us first complete the adjunct story.

The following minimal pair supports the theory proposed here. In (41a), the indicative verb *go* is followed by a ‘causal’ adjunct introduced by *because* and by a ‘subjunctive’ adjunct introduced by the subjunctive trigger *jate* in (41b):

- (41)a. ami jay [_{pp} karon Se aSe (bole)]
 I go because s/he come comp
 ‘I go because s/he comes’
 b. ami jay [_{pp} jate Se aSe (*bole)]
 I go so-that s/he come-subjn (*comp)
 ‘I go so that s/he comes’

The *because* adjunct can crucially take the final *bole* which is traditionally analysed as a COMP for tensed *that*-clauses or for adjunct *because*-clauses. Notice that the adjunct in (41b) cannot have the S-final COMP and the verb carries the subjunctive. What is the connection between the appearance of *bole* and the impossibility of the subjunctive on the verb? I claim that in (41a) a full CP is selected by the matrix predicate whereas it selects an MP in case of (41b). Since there is no CP in (41b), there is no COMP in it either. For (41b), I claim that the structure is as in (42), given that subjunctive is a matter of a local M head:

- (42) [_{pp} jate [_{MP} M [_{VP} Se aSe]]]

The VP later moves up to a higher Spec due to the attraction of the [Mood] feature of the head of the MP selected by the P *jate*. The subjunctive-inflection gets checked at [Spec,MP]. The M head itself is never overt (which is consistent with the fact that Bangla does not show morphological subjunctivity) but the feature responsible for the leftward IP movement is strong enough to attract it to its Spec. The leftward movement is consistent with LCA as applied to Head final languages.

In case of (41a), there is no MP but rather a full CP selected by the causal P, the right word order is obtained by moving the IP leftward to a higher Spec as follows:

- (43) [_{pp} karon [_{CP} Se aSe [_C bole [_{IP} ~~Se aSe~~]]]]

A feature of [causality], I suggest, is associated with *bole* which forces the pied-piping of the IP to its Spec. Movement of the IP to [Spec,CP], apart from deriving final complementizers in V-final languages, explains the lack of *that-t* effect in these languages (Kayne 1994). The claim that *because-*

clauses select a CP is based on the temporal operator in time adverbials in Larson (1990)⁷. In the Bangla adjuncts in (41), I claim, they embed a Modal head which is responsible for the modality of the adjunct and the Subjunctive V-morphology. The functional j-triggers are therefore licensed locally by the M head.

3.5 The Mood Feature

In this section, I advance the proposal that the modal head M carries a feature of **mood** which is similar to the **Gen** feature of Chierchia's (1995) analysis of i-level predicates licensed locally by a **Gen** operator, as opposed to their being marked so in the lexicon. Chierchia shows that the Generic Operator, **Gen**, is like a Q-adverb with a special modal character. It is a phonologically null Q-adverb plus the modal dimensions which represent property of lasting value and other felicity conditions that make Generics generic.

In connection with the Auxiliary selection diagnostic for the Bangla subjunctive, it was shown that the subjunctive selects the habitual Aux *thak*. Furthermore, *thak* has the property of expressing long-term expression. This Aux, I assume, reflects the modal property of the subjunctive, in a way similar to Chierchia's assumption that genericity manifests in the aspectual system (especially in the form of the habitual morpheme) of languages in general through the Op **Gen**. I assume that the modality of a clause is expressed by the **Mood** feature which projects a phrase of its own. Chierchia remains neutral between the possibility of a separate Gen projection and the Asp or the V (in case of i-level predicates) carrying the Op.

This analysis of the subjunctive within the adjunct may seem similar to Manzini's on the surface since she too considers certain Ps as embedding a „relevant“ Op inside the adjunct to license the subjunctive. For example, *without* selects the Neg Op for this purpose. In other cases, she admits that the relevant Op may be less straightforward to identify but may be assumed to be „modal“ in character. The current proposal implies that the relevant Op is the M head and that licensing is a matter of checking as in standard MP.

3.6 Modal-C as a Lexical Trigger

I would like to draw another lesson from Chierchia's study of Genericity. He proposes that i-level predicates are inherently generic and thus must have the **Gen** Op as part of their lexical entry. That is, the habitual morpheme is lexicalised in the verb in case of i-level predicates. For my purpose, I will extend this proposal to mean that certain lexical predicates and certain COMPs in Bangla are similarly lexically specified for the feature of **Mood** and must select an appropriately modalised complement⁸. In this section I claim that COMPs of such complements are modalised COMPs as a result of M to C movement in the syntax.

In connection with the English *that*, Zanuttini (1997) considers Cs with embedded subjunctives as the locus where modality is expressed. She attributes modality to the presence of some obligatory feature in the COMP. However, she is forced to distinguish between a modal/ subjunctive *that* and a non-subjunctive *that* in English. If instead, as per the suggestions made in this paper, a COMP is considered modalised as a result of head movement of M into it, then a non-subjunctive *that* can be seen simply as a COMP where M movement has failed to occur. I will now produce two instances of Modal-C.

(I) Since for Manzini subjunctive-licensing is a two-step process, in the case of matrix subjunctives, she conjectures that some covert modals take their COMPs in their scope. The data in support of this is as follows:

⁷ In (i) the adjuncts are headed by a temporal preposition like *before* or *after*. For Larson, such clauses contain a null temporal operator which binds a variable within the adjunct clause:

(i)a. Liz left [_{pp} before [OP_i you said she had] e_i]]
 b. Liz left [_{pp} before [OP_i [you said [she had e_i]]]]

The two interpretations are as follows:

(ii)a. Liz left before the time of your saying she left
 b. Liz left before the time which you said she left at

(ia,b) account for the two interpretations obtained in such adverbials. In (ia) the temporal operator binds a variable in the *said* clause whereas in (ib) the bound variable is in the more deeply embedded clause.

⁸ The observation in Manzini (1994) that „lexical predicates like *to want* appear to involve in general modal properties“ can now be accommodated within this condition.

(44)a. Che sia malato?
 that he is-subjn sick
 ('Could he be sick?')

b.* Sia malato?

Note that (44) by itself does not show the presence of a covert modal element. One possible interpretation of this data is that the presence of the C is obligatory for the matrix subjunctive to show up. Instead of a covert modal, if Cs in subjunctives are considered to be modalised Cs due to M to C movement, the above data is explained.

(II) Extending the observation in Tsoulas (1996) that subjunctives express weak T to mean that the modal-C in subjunctives is also weak, takes care of the data in (45). The standard C *je* in (45a) allows movement of the pre-verbal material *ekhane lok* to its Spec but the weak C in (45b) is unable to attract anything to it Spec:

(45)a. ekhane lok-**je** aSe na, rakhhal Suneche
 'That people do not come here, Rakhhal has heard'

b.* ekhane lok-**je** na aSe, rakhhal cay
 'That people not come here, Rakhhal wants'

The C *Je* in (45b) is weak because the topicalised complement CP, [*ekhane lok-je na aSe*], is a modal complement selected by the lexical predicate *cay*. But if it is replaced by a P-Comp like *jate*⁹ a modalised C like *jEno* 'as if' or *jodi* 'if', the pre-verbal material *ekhane* can move to [Spec,CP]. This is visible in (46a) where the C *jEno* instead of the regular *je* makes (45b) acceptable. (46b) shows that the complement C is modalised by M to C movement which makes *jEno* a „heavy“ C and allows movement of the pre-verbal material to [Spec,CP].

(46) [ekhane lok]_i **jEno** t_i na aSe, rakhhal cay
 'That people not come here, Rakhhal wants'

b. [CP ekhane lok [_C M+jEno [~~ekhane lok~~ [_{MP} na [_M **M** [_{VP} aSe]]]]]]

The data in (45-46) shows that although a weak modal C is not strong enough, a modalised C, obtained by virtue of M to C movement, can attract material to its Spec. The evidence that *jEno* is somehow modalised, can be found in other uses of this COMP where it expresses a qualification on the truth value of the proposition, a classic semantic definition of subjunctive.

(47) rakhhal jEno pagol
 '(as if) Rakhhal is mad!'

In terms of this analysis an empty M head moves into *Che* in (44a) to give the modalised meaning absent in the case of (44b).

In sum, I have proposed that subjunctivity in Bangla is a result of either a functional head selecting a modal complement (section 3.4) or a lexical modal-C driving M to C movement (section 3.6)

4.0 Explaining the Diagnostics

In this section I will try and explain the two observations of section 2 which serve as subjunctive diagnostics in terms of the analysis offered in the previous section. I will claim that as a consequence of the analysis, the 'unexpected' word-order of Neg-V in Bangla is explained for free. In the case of non-finites in Bangla we notice a typologically unpredictable Neg V order (as in (48b)) that has proved to be problematic for a uniform analysis of negation in Bangla.

(48)a. tumi jeo na

⁹ I extend the modal-C analysis to Ps them since Ps are similar to Cs in many ways. These Ps therefore have an M head incorporated into them.

- you go-2 neg
 ‘You don’t go’
 b. tomar na jawa
 your neg go-ger
 ‘your not going’

Subjunctives, with ‘weak’ tense, pattern towards the non-finite category. I explain the difference in terms of two different types of Neg in Bangla, similar to proposals by Zanuttini (1997) regarding English *not* and the contracted *n’t*. The non-finite *na* in Bangla is adverbial and is merged at the Spec of NegP whereas the Neg in finites is a Neg head. I propose that the Neg head carries a Tense feature absent in the adverbial *na* which nonetheless carries a [mood] feature. Sanskrit provides evidence of Neg expressing mood¹⁰. In Sanskrit, *na* is the default Neg and *maa*, which also expresses negation, is the particle accompanying imperatives and ‘injunctives’. The adverbial Neg in Bangla raises to [Spec,M] to check the [mood] feature and is followed by V raising to M. The Neg as a head, on the other hand, carries a [tense] feature which attracts the T (to which the V has raised independently) to give the V NEG order. Both the derivations are shown in (49):

- (49)a. [_{MP} na aSe [_{NegP} t_{na} Neg [_{VP} t_{aSe}]]] Subjunctive
 b. [_{NegP} aSe+TENSE-na [_{TP} t_{aSe-TENSE} [_{VP} t_{aSe}]]] Indicative

The absence of a TP in the subjunctive (as shown in (49a) above) additionally explains the behaviour of Aux selection in section 2. The true Aux *ach-* is selected (as a head of a AuxP) since it is a true Aux only when a TP is selected. Since subjunctives instantiate weak tense, non-selection of TP now explains the data in (13-16).

The behaviour of Aux in this case is similar to Slavic auxiliaries like *sum* and *bjax* in Bulgarian (similar patterns obtain in Rumanian). Krapova (1996) distinguishes between L(exical)-aux and F(unctional)-aux. A similar distinction is made in Rivero (1994) where the L-aux licences Long Head Movement or VP preposing. Since L-auxs are listed in the lexicon, they do not have agents and are marked for [+aux]. F-aux are inserted directly under some functional projection (here T) to provide it with morphological content. The following is an example of the F-aux *sum*:

- (50) Az *sum* *bil* *puSil* tri kutii na den
 I be-1s be-ppl-ms smoked three packs a day
 ‘[They say] I used to smoke three packs a day’

This is a modal construction and is labelled ‘renarrated present perfect’. Here *bil* is the true head of AuxP. Consequently, *sum* is inserted directly under T and will block any further V or Aux raising to that position. This type of modal reading is not available with *bjax*, therefore there is no expression like **bjax bil*, with the meaning ‘[They say] I read the book’.

In connection with the subjunctive selecting the *thak* or habitual Aux in Bangla, I mentioned that it carries the modal meaning of long-term expression. In line with the analysis of Bulgarian Aux, *thak* can therefore be considered as the modal Aux and an F-Aux inserted directly under the M head. Whereas *ach*, selected for the Indicative, is like the L-Aux and is the head of AuxP.

5.0 Chatga Bangla

There is some evidence that this distinction is of the right sort if we consider the negation facts of Chittagong Bangla (CB). (51a) below shows postverbal negation which is not the normal order in CB, as opposed to Standard Bangla (SB). The normal order is shown in (52b). This data is from Roy (in prep.).

- (51)a. aMi khai-t-am na (marked order V Neg)
 I eat-fut-1 neg
 ‘I will not eat’
 b. aMi nO khai-u-m t_{nO} (unmarked order Neg V)

¹⁰ Thanks to Probal Dasgupta (p.c) for pointing this out.

I neg eat-fut-1
'I will not eat'

Furthermore, the form of the verb in (51b) is said to induce a modal force on the sentence. Although the unmarked order of Neg and V are different in these two varieties, as a consequence of our analysis of the negation facts in SB, the strong modality feature of M in case of (51b) enforces a V to M movement in the syntax giving us the right word order and interpretation.

References

- Bhattacharya, T. 1998. Modality Operators in Bangla, *PILC Journal of Dravidic Studies* 8.2. 153-166.
- Brennan, V.M. 1993. Root and epistemic modal auxiliary verbs. Amherst, MA: University of Massachusetts diss.
- Chierchia, G. 1995. Individual-Level Predicates as Inherent Generics. *The Generic Book*, ed. by G.N. Carlson and F. J. Pelletier, 176-223. Chicago: Chicago Univ Press.
- Chomsky, N. 1998. *Minimalist Inquiries: The Framework*. Cambridge, MA: MIT, ms.
- Dasgupta, P. 1996. Remarks on Subjunctivity. *Perspectives on Language in Society* 1. (Papers in memory of Prof R. N. Srivastav) ed. by S.K. Verma and D. Singh, 72-89. Kalinga Publications: Delhi.
- Farkas, D. 1992. On the semantics of subjunctive complements. *Romance Languages and Modern Linguistics*, ed. by P. Hirschbuhler and K. Koerner. Amsterdam: John Benjamins.
- Kayne, R. 1994. *The Antisymmetry of Syntax*. MA: MIT Press.
- Krapova, I. 1996. Auxiliaries and Compound Tenses in Bulgarian. ed. by M. Dimitrova-Vulchanova and L. Hellan, *University of Trondheim Working Papers in Linguistics*, 28, 145-162.
- Kidwai, A. 1995. Binding and Free Word Order Phenomena in Hindi and Urdu. New Delhi: Jawaharlal Nehru Univ diss.
- Larson, R. 1990. Extraction and multiple selection in PPs. *The Linguistic Review* 7. 169-182.
- Majumdar, P. 1979. *Bangla Bhasa Parikrama (Outline of the Bengali Language)*, vol 2. Calcutta: Saraswat Library.
- Manzini, M.R. 1994. Sentential Complementation: The Subjunctive. *Lexical Selection and Lexical Insertions*, ed. by P. Coopmans, M. Everaert and J. Grimshaw, 185-209. LEA: Hillsdale, NJ.
- Rivero, M. L. 1994. Clause structure and V-movement in the languages of the Balkans. *Natural Language and Linguistic Theory* 12, 63-120.
- Roy, I. (in preparation). Negation in Bangla vis-a-vis clausal functional heads. Hyderabad: University of Hyderabad diss.
- Tsoulas, G. 1996. The nature of the subjunctive and the formal grammar of obviation. *Grammatical Theory and Romance Languages*, ed. Karen Zagona, 293-306. Amsterdam/Philadelphia, PA: John Benjamins Publishing Co.
- Uriagareka, J. 1997. Formal and Substantive Elegance in the Minimalist Program (On the Emergence of Some Linguistic Forms). *The Role of Economy Principles in Linguistic Theory*, ed. by M. Bierwisch, H. M. Gaertner and C. Wilder, 170-204. Berlin: Akademie Verlag.
- Uriagareka, J. 1999. Multiple Spell-Out. *Working Minimalism*, ed. by N. Hornstein and S. Epstein, Cambridge, MA: MIT Press.
- Zanuttini, R. 1997. *Negation and Clausal Structure. A Comparative Study of Romance Languages*. Oxford: Oxford University Press.