COMPLEX PREDICATES IN BANGLA

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SHARBANI BANERJI

CENTRE OF LINGUISTICS AND ENGLISH
SCHOOL OF LANGUAGES
JAWAHARLAL NEHRU UNIVERSITY
NEW DELHI-110067,
INDIA
1994

Professor H. S. Gill
Chairperson
Centre of Linguistics & English
School of Languages

जवाहरलाल नेहरु विश्वविद्यालय
JAWAHARLAL NEHRU UNIVERSITY
NEW DELHI-110067

NEW DELHI

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CERTIFICATE

This thesis entitled "COMPLEX PREDICATES IN BANGLA" submitted by Ms. SHARBANI BANERJI, CENTRE OF LINGUISTICS & ENGLISH, SCHOOL OF LANGUAGES, JAWAHARLAL NEHRU UNIVERSITY, NEW DELHI, for the award of the Degree Of MASTER OF PHILOSOPHY, is an original work and has not been submitted so far, in part or full, for any other degree or diploma of any University. This may be placed before the examiners for evaluation for the award of the MASTER OF PHILOSOPHY.

Prof. H.S. GILL

CHAIRPERSON

Dr. ANVITA ABBI

THESIS SUPERVISOR

Dedicated to

"All those who question and dare"..........

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Changing' on which this dissertation is primarily based.

And lastly, I have no words to express what and how much I owe to my thesis supervisor Dr. Anvita Abbi. Her extreme open mindedness in the sphere of academics and even otherwise, is unparallel. It is my firm conviction that no good academics can ever be done without freedom and she gave me every opportunity to exercise that freedom. I doubted her, argued with her, chose my own path but ultimately discovered that in almost all the cases, she had been right all along. It has been a very great privilege to work with her.

I don't like thanking my family for their support on paper. Hence I leave that part unsaid.

SUBJECT INDEX

CHAPTER I

I.1 INTRODUCTION

Complex Predicates(CP) of South Asian languages have posed a challenge to the linguists. Though Complex Predicates are found in other languages of the world too, CPs in South Asian languages, especially Conjunct Verbs, seem to have an identity crisis. On one hand they show the properties of a single predicate, that of a single lexical entry, on the other hand, they don't. The problem is created primarily for the lexicon. While many other world's languages (for example English), express the same action with the help of one word, here we have two words which sometimes behave like one word and sometimes don't. Are they to be listed in the lexicon, or to be derived syntactically? How are the argument structure, the theta assignment, the case assignment properties and agreement phenomena shown by the predicates to be explained? Bangla Complex Predicates pose more or less the same problems that the Complex Predicates in other South Asian languages do. It doesn't show agreement however. The issue of agreement has been addressed in the Experiencer Subject Constructions

This work is a small attempt to face the challenges posed by these predicates. The backdrop of the work is that, to solve the problems of the lexicon, one should solve the problems in the syntax. Computationally, a lexicon can be built only by knowing what it is going to be made for. For that, syntactic problems need to be adressed first. My line of reasoning more or less follows Baker's (1985, 1988) thought that all morphology is primarily syntactic.

In this chapter, we have first defined a Complex Predicate. After giving a historical overview of Complex Predicates, Literature review of Conjunct Verbs and Experiential Verbs have been given in detail, especially with reference to the work being persued here.

Theoretical Framework of this work has been given next. All the relevant theories and assumptions which have been incorporated in this work have been given elaborately, to make the analysis explicit and reading easier.

I.2 DEFINITIONAL

Complex Predicates (CP) are typical phenomena of South-Asian languages. Traditionally the term Complex Predicates has been used for all those verb forms whose first member is either a verbal noun (or a predicative noun), Adjective, or a Non-Finite Verb and the second member is a light verb, which in many cases has lost part of it's semantic content. The Noun-Verb (NV), Adjective-Verb (AV) combinations have traditionally been called Conjunct Verbs and the Verb1-Verb2 (V1V2) combinations where V2 is an explicator or a light verb, have been called the Compound Verb. Hence by Complex Predicates generally are meant the Conjunct Verbs and Compound Verbs. These predicates, though consist of two words, semantically represent one action or one verb. With the extension of the scope of Complex Predicates, Experiential Constructions, which too are NV Predicates, and Expressives, which are Noun Verb (NV) predicates as well (as will be proved in the course of this work), and also Adposition-Verb (Postposition Verb (PV) predicates in Bangla), can be included in the cover term Complex Predicates.

With the advent of Standard Incorporation Theory (STINT) of Baker (1985,1988), Grammatical Function Changing Processes like Passives, Causatives, Applicatives etc., have all been replaced by one underlying process, ie., 'Incorporation'. Today, CP Verb formation includes a wide range of grammatical function changing processes.

Hence Miller(1993) defines a 'Complex Verb' as one that has undergone some sort of derivation to alter the form, meaning or

3

argument structure of the base verb (or verb root).

My work on Complex Predicates in Bangla is limited to Conjunct Verbs (which include the NV, AV, Expressives(ExpV),and Experiential Verbs(EV)) and Postposition Verb Combinations (PV). Basing my work on Baker's Standard Theory of Incorporation(STINT), I have tried to show that they are all incorporated structures obtained by N-O movement except the PV structures which are obtained by PƬ movement. The success of this approach would mean that the scope of Complex Predicates in Bangla and other Indian Languages should be much wider and should include many other Verb formation Processes like Causatives, Passives,Antipassives etc., including the traditional Compound Verbs. Hence, though my work here is dealing with only the Conjunct Verbs and Postposition Verbs in Bangla, I admit of a wide range of processes under the cover term 'Complex Predicates'. A complete work on Complex Predicates in Bangla should include all that.

Hereafter, in this work, by Complex Predicates I shall refer to the Conjunct Verbs and Postposition Verbs.

Examples of Complex Predicates in Bangla are:

1. ami eY boYTar   onubad   korechi.
    I   this book-Gen translation done
    . I have translated this book.

   Onubad kOr (translate) is a NV predicate.

2. ami ghOr poriSkar korchi.
   I   room clean doing.
   I am cleaning the room.

   poriSkar kOr (clean(V)) is an AV predicate.

3. megh guRguR korche.
   cloud thunder doing.
   Cloud is thundering.

guRguR kOr (thunder) is an ExpV predicate.

4. amar _ghum peyeche._
   I-Gen sleep got.
   I am sleepy.

ghum pa (feel sleepy) is an $\underline{EV}$ predicate of an Experiential

Construction.

5. ram Sitar   _pechone lagache._
   Ram Sita-Gen after   striking.
   Ram is teasing Sita.

   pechone lag (tease) is a $\underline{PV}$ predicate.

It will be proved during the course of this work that the

Nominal of the NV predicate, the Adjective of the AV predicate,

the Expressive of the Expv predicate, and the Nominal of the EV

predicate all share the property that they behave like Abstract

Nominals or Result Nominals. Result Nominals are those nominals,

which have participants in their lexical conceptual structure,

but are unable to express them in their argument structure. Due

to this similarity of behaviour shown by the first part of the

various Conjunct Verbs, I often call all of them Nominals. This

is also a diagnostic for distinguishing any Noun Verb combination

from a Complex Predicate. The nominal of a Complex Predicate must

necessarily be an Abstract Noun and not a concrete noun.

There are some exceptional constructions in Bangla, in which

the Nominal is a concrete Noun and occurs in the locative. They

are construction of the following type.

1.   chobiTa age (amay) cokh-e pORe ni
      picture-cl before (my) eye-loc fall not.
      The picture did not catch my attention before.

2.   kOthaTa mon-e rekho.
      word-cl mind-loc keep.
      Remember the thing.

These are certainly idiomatic expressions, such that the

meaning of the NV, though is that of a single verb, is a

metaphorical extension of the meaning of NV combined. These are however, not derived in the syntax by incorporation, but are listed in the lexicon like any other complex Predicate.

I.3   HISTORICAL OVERVIEW

Examples of Complex Verb Phrases (CVP) are found perhaps in all the natural languages of the world, though they are not as widespread in the world's languages as in Indo Aryan languages and Modern Persian.

According to Gambhir (1993), they are an indégenous Indo Aryan phenomenon found at various stages of the Indo Aryan begining with Vedic Sanskrit. The phenomenon was limited in early Sanskrit but it gradually gained frequency at later stages due to an ongoing simplification process within the language. Complex Verbs however, received a big impetus in Modern Indo Aryan languages when they came into contact with Perso-Arabic and English.The process is still on, and today, the Modern Indo Aryan languages are replete with Complex Verbs and have become the major vehicle of borrowing.

Periphrastic verbs were found in the Rig-Veda too. They were mostly the onomatopoetic phrases where the roots 'kr' (to do), and 'bhu' (to be/to become), are suffixed to the preceding forms ending on 'aa' or 'ii'. These constructions have survived till today in various Indo Aryan languages or rather South Asian languages, and are called the Expressives (Abbi 1980). The Expressives are also Complex Predicates.

The increased use of CVPs from Vedic Sanskrit to Modern Indo

Aryan languages can be ascribed to the simplification process in the language - a move from the inflectional to the analytical structure.

In Modern Indo Aryan languages, viz., Bangla and Hindi, CVPs are found in all tenses, aspects, moods, numbers and genders. When Modern Indo Aryan languages came into contact with Persian, which too shows a CVP phenomenon, the bilinguals exploited this common denominator to borrow foreign verbal concepts, especially in the areas of military and law to make communications easier. The process continued later in English, a phenomenon which is widespread today.

I.4   LITERATURE REVIEW

I.4.1   (CONJUNCT VERBS)

Both the syntax and semantics of Complex Predicates have posed a challenge to the linguists. There have been previous attempts in the literature to explain the Theta marking and Case marking properties of Complex Predicates and which were based mainly on English (Cattell 1969, 1983, 1984; Jackendoff 1972, 1974; Higgins 1974; Oehrle 1975). Jayaseelan (1988) compares both English and Malayalam data to propose a new Theory of Theta Marking in Complex Predicates. ....'Jackendoff (1974) appeals to a special rule of interpretation which he calls the Complex Predicate Rule (CPR). CPR combines the host verb and the direct object (containing the deverbal nominal into a Complex Predicate. It produces a subcategorization frame for the Complex Predicate by eliminating the direct object position of the host verb; for the semantics, it combines the readings of

7

the main verb and the nominal by superimposing parallel semantic functions.'(qቧated from Jayaseelan 1988).

According to Jayaseelan (1988), Catell (1984), on the other hand, creates Complex Predicates in lexicon by means of lexical redundancy rules. These rules are triggered by the lexical features attached to the deverbal nominals, which specify the host verbs with which they may be combined.

Jayaseelan (1988) on the other hand,proposes a ' Theory of Promotion' to explain the Theta Marking properties of the Complex Predicates of the form:

1. John gave permission to Mary to leave.

He identifies three problems in the Theta Marking of Complex Predicates:

a) Arguments of the deverbal nominal are not always (or often) realized within the NP of which it is the head.

b) Arguments of the deverbal nominal may be realized as the subject of the host verb or as complements in the VP. For example, in (1) above, n one of the arguments of permission is realized within the NP of which permission is the head. 'John' , 'Mary' and 'permission' are all arguments of 'give'. Then he argues that 'to leave' is also not a complement of 'permission'.

Hence the question arises, 'How does the nominal Theta Mark arguments outside it's maximal projection ? Normally, the head of a phrase theta marks only it's complements (Chomsky 1981). The subject of the sentence is the only recognized exception. The subject appears to be theta marked by the verb, although it is

not a complement of the verb. (Chomsky 1981 claims that it is only indirectly theta marked by the verb).

c) In what sense can it be said that both the host verb and the nominal theta mark these arguments ?

Jayaseelan suggests the following theory:

PROMOTION: Some or all arguments of the deverbal nominal may be realized outside the NP of which it is the head. This he calls 'Promotion'. Noun's arguments are promoted to argument positions of higher maximal projections. Where the promoted arguments will appear is determined by the thematic structure of the host verb.

General Conditions On Promotion: A promoted argument which bears the thematic relation Theta to the nominal must appear as the Theta Argument of the host verb.

Thus, instead of treating compositional theta marking as a special mechanism that comes into operation only for the Theta marking of the subject, he takes it to be a general property of Theta marking. So he proposes:

A. Theta Marking is strictly local. This entails that, except at the lowest level (eg., the level of V and it's sister), Theta marking is done by a Phrasal node.

B. The Theta frame of the phrasal node is the union of the sets of Theta roles promoted from the daughter nodes, where,

i. The daughter nodes are thematically coindexed.

ii. The two sets are comparable.

Otherwise, it is the set of Theta roles promoted from

predicative daughter node. (Two sets A and B are comparable if either A is a subset of B or B is a subset of A).

These principles explain the Theta marking in the sentence: 'John felt hatred towards Mary'. However, trying to analyze the sentence : ' John did a dance at the inauguration of the conference.', he concludes that promotion shouldnot be permitted from the prepositional object. Promotion from a non predicative daughter node is possible only from the direct position.

In trying to account for this, he notes that subject and direct object are the only thematically unrestricted grammatical relations. It is possible to say that the NP of to-NP is a goal, or that the NP of on-NP is a location, independently of the context in which it occurs. The Theta role of the direct object can be determined only with respect to the meaning of the VP, assuming that the verb Theta marks only the dirct object and the VP Theta marks the subject, and that PPs containing thematically restricted prepositions (or in wholly case marking languages, NPs marked with thematically restricted cases), are not Theta marked but are integrated into the thematic frame of their predicative sister nodes by a different mechanism. Locative indicates direct Theta marking by a lexical category (Theta government in the sense of Chomsky (1986)), by thematic co-indexing. He extends strict locality condition to this new mechanism which he calls R, so that principle A should read : A'. Theta marking and R are strictly local.

Note that PPs with thematically unrestricted prepositions may be Theta marked by their predicative sister nodes.

So far as work on Complex Predicates (Conjunct Verbs) in

Bangla is concerned, Dasgupta (1984) lists the properties of the Bangla Conjunct Verbs and suggests that they should be treated as single lexical entry, and in view of the idiosyncracies exhibited by them, they be listed in the lexicon. He distinguishes between the nominal part of the NV predicates which he calls 'Quasi Gerunds',from the'Gerunds'. Though they share many properties, he proves that it is the Gerund which has the real verbal properties or which has an internal V node, which the Quasi Gerunds lack.

The diagnostics for Verbhood proposed by him are:

a) Negatibility

b) Being able to take Nominative Subjects

c) Taking a Vector

Whereas Quasi Gerunds fail all these tests, Gerunds don't.

A detailed study of the syntactic behaviour of Bangla Conjunct Verbs comes from Dasgupta.M.(1990). She studies Compound Verbs as well as Conjunct Verbs(which she calls Composite Verbs). According to her, whereas each Composite Verb with idiosyncratic meaning and behaviour especially with regard to movement within the finite clause should be listed in the lexicon, others which obey syntactic processes, must therefore be derived in the syntax. Her analysis is based on the Complement Verb Reanalysis (CVR) of Dasgupta , Dhonge and Rajendra 1981. It reanalyses a structure like (1) into a structure like (2).

(1)   [s[np ram] [vp[vp am khete] [v bhalobaSe]]].
      Ram likes to eat mangoes.

(2)   [s[np ram] [vp am[v[v khete] [v bhalobaSe]]]].
      Ram likes to eat mangoes.

She extends the scope of CVR to cover Conjunct Verbs. This seems to be the 'Theory of Incorporation' in a different parlance.

Works on Complex Predicates in other languages include : in Hindi (Verma 1993, Mohanan. T. 1993, Davison$_{\wedge}$); in Telegu
(Krishnamurti 1993) etc. Gambhir (1993) deals with the historical aspect of Complex Predicates. Masica (1993) deals with the areal features of Conjunct Verbs.

Verma (1993) identifies the problems posed by Complex Predicates regarding the Theta marking and Case marking of the arguments of the Complex Predicates and proposes solution of lexical incorporation or syntactic incorporation for NV predicates, while for the AV predicates he suggests that the Theta marking is done by predication.

But Mohanan.T. (1993) and Davison (1991) address the problem of agreement in Complex Predicates in Hindi. Whereas Davison uses feature percolation to explain the phenomenon, Mohanan (1993) concludes :

Agreement: "We explained the presence or absence of agreement in terms of it's systematic correlation with the logical transitivity of the nominal host. If the host is logically transitive, it's logical object is the grammatical object, and the verb cannot agree with the host. If on the other hand, it is not logically transitive, the host itself is the grammatical object and the light verb agrees with it."

Bangla doesn't show any agreement except the person agreement. Yet, a theory of Complex Predicates if built, must be

able to accomodate the agreement phenomena like the ones shown in Hindi. Hence the relevance.

I.4.2   (EXPERIENTIAL SUBJECT CONSTRUCTIONS)

As far as South Asian languages go, there have been a lot of debate on the 'Subjecthood' of dative/oblique nominals of the Experiential Subject Constructions. Considerable work has been done on the semantics of these constructions too. There have been work in this area in most of the language families of South Asia. Amongst the Indo Aryan languages, studies have been made in Sanskrit (Hock 1990), Bangla (Dasgupta 1989), Hindi (Abbi (1990, 1991), Kachru (1990)), Marathi (Pandharipande 1990), Punjabi & Lahanda (Bhatia 1990), Maithili (Mishra 1990), & others. Abbi's (1990) work deals with the typology of Indian Datives, the only work of it's kind. Amongst the Dravidian languages, there have been work on Malayalam(Mohanan & Mohanan(1990), Jayaseelan(1990)), ,in Kannada(Ulriche(1990), Amritavalli(1990))etc. Besides, there have been work on Manipuri (Tibeto Burman), Sinhala & Munda languages. Most of these papers have been compiled in the book 'Experiential Subjects in South Asian languages', edited by Manindra K. Verma and K.P.Mohanan, Stanford University, 1990.

In the literature on South Asian languages, ie., mainly European languages, such verbs have been traditionally called Psyche Verbs. Belletti & Rizzi's (1988) work on Italian Psyche Verbs deals with Theta assigning properties of Psyche Verbs in Italian.
While arguing for the subjecthood of Experiential Constructions in South Asian languages, Abbi (1991) has the

following remarks to make (since experiential subjects donot show verb agreement in most of the languages, and since verb agreement has traditionally been taken to be a typical test for subjecthood):

1. Verb agreement is not a reliable criterion to determine subjectivity

2. Not all Indian languages have verb coindexing features of subject, ie., verb doesnot show agreement for gender, number and person.

3. those languages which allow coindexing allow so only partially ie., in one of the tenses, or in few of the pronominally marked sentences.

4. In postpositional sentences, verbs agree with the subject noun or with the last nominal of the sentence (exception is Nepali (M.K. Verma 1976) where, the subject doesnot lose it's control over verb even in the perfective. However, it loses it's control over experiential and obligational constructions.

5. The existence of Explicator Compound Verbs in a sentence disturbs the normal verb agreement pattern.

She uses other criteria to decide about subjectivity of oblique marked nominals. They are:

1. Anaphoric Control (Reflexive, Conjunctive Participle and Reduplicated Adverbs)

2. Conjunction Reduction

3. Position in a sentence (sentence initial - like subjects)

4. Topicality
After showing that the Experiential subjects of Hindi, in all these constructions pass these tests, she concludes that :

14

depending on what is 'Topic' and what is the 'Focus' in a construction,

Topic generally assumes the subject position and Focus controls the agreement in a verb. examples where subject nominals are unmarked for any case, Topic and Focus coincide into the subject nominal, *and verb agrees with the subject nominal* not because of it's Topicality, but because of it's *being the* Focus.

Dasgupta (1989), while accounting for experiential constructions in Bangla,(where the Experiencer takes the Genitive marking), proposes:

"*Here an N or A seems to head – to – head move to a V site,* fuse with a V stem, and then move with it to the I site."

This is nothing but a story of Incorporation, which we too adopt here. Quoting examples of the following kind:

i) amar ete   <u>biroktc laglo</u>.
   my this-loc irritated felt.
   I felt annoyed at this.

ii) amar or opor <u>hiNSe hOy</u>.
    my his/her on envy feels.
    I feel jealous of her.

he further adds:

"*In these cases it is the movement of the +N head to V* that gives the required 'nominal' quality to the V. Presumably the +N item imposes it's index on the entire V – a marked option, lexically specified."

This helps to explain the genitive on the experiencer nominal.

We shall be investigating these cases in the light of the 'Theory of Incorporation'.

Somewhat along the footsteps of Miller (1993), following major theories and assumptions go into the making of this work. These theories do not contradict each other. They only complement each other. They form part of the whole which is constantly being searched, in linguistics.

(1) Mark Baker's (1985,1988) 'Incorporation : A Theory Of Grammatical Function Changing'. It is also called the 'Standard Incorporation Theory' or STINT.

(2) Jane Grimshaw's (1991) theory of 'Argument Structure'.

(3) The Determiner Phrase or 'DP Hypothesis' or Functional Phrase or 'FP Hypothesis' which postulates that Functional Phrases (FPs) select lexical phrases (LPs) and that a noun phrase is essentially a DP. This was primarily elaborated by Abney (1987) and Leffel (1988).

(4) It is assumed that all arguments of V are generated VP internally and that 'logical subjects' are base generated in <Spec,VP> (Specifier of VP) position, which is the substance of much recent work (cf. Sportiche 1988, Larsen 1988, Fukui & Speas 1986, Dissing 1989 etc.) All theta roles of V are assigned VP internally.

(5) The framework adopted is that of Principles and Parameters(P&P) (Chomsky and Lasnik 1991). Though some version of Chomsky (1992) Case theory is adopted here, this certainly is not a work based on the Minimalist Theory. The core notions of government etc. are retained as per the P&P Theory. Adoption of this work into the Minimalist framework would need some

readjustments but not of a major kind. I leave that for future.

I.5.1 STANDARD INCORPORATION THEORY (STINT) OF BAKER.(1985,1988)

I present below a resumé of Baker's INCORPORATION THEORY, as was presented by him. Extension of it's scope and modification in the light of the latest theories of syntax, shall be suggested later, if necessary.

According to Baker (1985:10): "All Grammatical Function Changing (GFC) Rules such as Passive, Causative and Applicative can be eliminated from the grammar. Their effects can be derived entirely from an independently known process of grammar: namely Incorporation, the process by which one semantically independent word comes to be found 'inside' another word. This in turn is no more than the result of Standard Movement Rules applying to words rather than entire phrases. Grammatical Function changing, in turn, is a side effect of this primary movement."

Thus, Grammatical Function Changing is a consequence of the movement of a lexical category and hence he calls it X-0 (or Head) movement. It is a subcase of an invariant UG Principle: 'Move Alpha', where the movement is of a zero-bar level category, instead of the mostly witnessed double bar level or a phrasal category.

I.5.1.(a) Grammatical Function (GFs) or Grammatical Relation (GRs) are :

(i)   Subject

(ii) (Direct) Object

(iii) Indirect Object

(iv)   Object of a Prepostion

(v)   Variety of Obliques (Relation between a PP (or it's object)
to the clause).

I.5.1.(b)   And, <u>Basic GFC processes are :</u>

(i)   Passive : Subject -> Oblique(or null); Obj -> Subject

(ii)   Antipassive : Obj -> Obl (or null)

(iii) Applicative : Obl/ind obj/null -> obj; obj -> '2nd obj'/~~old~~ oblique

(iv)   Causative : a) null -> subj; subj -> null
(Add a new subject and delete the old one)

      b) null -> subj; subj -> obj(obl. if obj
exists)

      c) null -> subj; subj -> obj

        obj(if present) -> '2nd obj'/obl

(v)   Possessor Raising : Possessor of obj -> obj,

         obj ->'2nd obj'

No language has GFC phenomenon that would be described as :
subj -> obj; obj -> subj.

For example, in the following pair of sentences of English,
(b) is a passive of active (a).

 1(a) Rover bit Linda.

  (b) Linda was bitten by Rover.

They are Thematic Paraphrases though these thematic
relationships are expressed in very different surface forms. The
agent 'Rover', is the Subject NP in (1a), but is an oblique in
(1b). The patient 'Linda' is the object NP in (1a), which
'becomes' the subject NP in (1b). The Grammatical Functions have
changed from (1a) to (1b).

Citing another example from arithmetic, viz consider the following notation :-

2(a) (2 + 2) * 3 (Standard notation)

(b) x + 223 (Polish notation)

Baker says: "A language which contained both of these expressions and associated them with the same meaning, would be analogous to a human language that includes GFC phenomena like passive."

This would imply that to claim that a language shows GFC phenomena which is obtained by applying the process of incorporation to the unincorporated structure, a language must contain both of the expressions, incorporated as well as unincorporated.

However, he also adds : "Yet formal languages characteristically lack such alternations; they are superfluous. Similarly, it may be that some human languages completely lack such phenomena." (Baker 1985:20).

He therefore acknowledges the fact that some languages may have either only the incorporated expression, or only the unincorporated one, or both, or none at all.

I.5.1.(c) WHY SYNTACTIC THEORY OF STINT TO EXPLAIN GFC PHENOMENA ?

(1) It explains why no language shows subject incorporation, i.e. GFC phenomenon of the type: subj $\rightarrow$ obj; obj -$>$subj.

(2) It explains why the verb form after incorporation is related to the verb form before incorporation by (productive) affixation. Any functional explanation would have failed to account for the fact that the characteristic morphology almost invariably appears

on the pivotal verb.

(3) In many languages, more than one GFC processes can take place in a single structure. Baker(1985) observes that, when this happens, the morphological changes show evidence of having taken place in exactly the same order as their associated syntactic changes. This is expressed by Baker's _Mirror Principle_ (a consequence of UG) :-

I.5.1.(d) THE MIRROR PRINCIPLE

Morphological Derivations must reflect Syntactic Derivations (& vice versa).

The validity of the Mirror Principle shows that the morphology and the syntax of GFC processes are two aspects of what is fundamentally, a single process.

The same phenomenon is explained by Bresnan (1982) at the level of the lexicon, by writing Redundancy Rules, which map the subcategorization and selection requirements of lexical items into different configurations of subcategorization and selectional restrictions. Treating GFC phenomenon at the level of the lexicon would not however account for all the properties of these phenomena.

I.5.1.(e) INCORPORATION - A CASE OF X-0 MOVEMENT

GFC processes are uniformly associated with the characteristic morphology appearing on the verb. Suppose that characteristic morpheme is generated as an independent lexical item at underlying D-structure, and then undergoes movement in

(4a)

```
                    S
               ╱         ╲
             NP            VP
             │          ╱      ╲
             e         V         NP
                       │       ╱    ╲
                   be-white   NP     N
                              │      │
                            John   house
```

(4b)

```
                    S
               ╱         ╲
             NP            VP
             │          ╱      ╲
             e         V         NP
                     ╱   ╲     ╱    ╲
                    N     V   NP     ti
                    │     │   │
                  housei  be- John
                         white
```
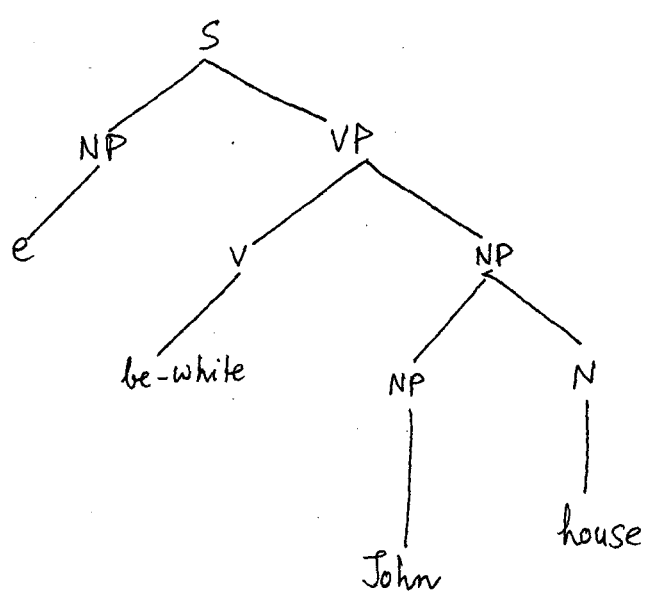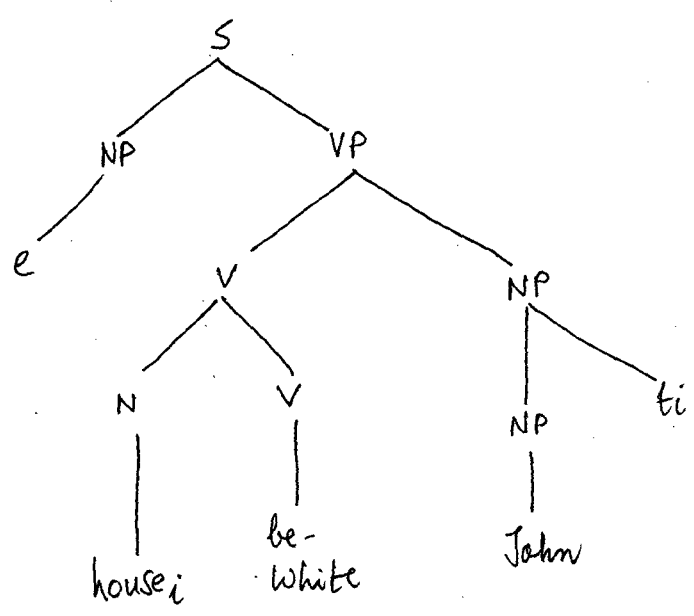
the syntax, leaving its base position and combining with the verb. This movement will automatically change the government relations in the structure, thus creating the primary effect of the apparent GFC process. If the lexical item in question, which moves into the verb and combines with it is a Noun, we are led to the process of <u>Noun Incorporation.</u>

E.g., (from Mohawk) : Consider the two Thematic Praphrases (3a) & (3b) :- (Baker 1985:38)

3(a) ka-rakv ne sawatis hrao-nuha-a? (Iroqoian, Postal (1962))
     3N-be-white   John   3M-house-suf.
     John's house is white'

(b)   hrao-nuha-rakv   ne   sawatis
       3M-house-be-white   John
       'John's house is white'

It is assumed that 3(a) and 3(b) have parallel underlying structures, but in 3(b), the head noun of the direct object moves in the syntax to combine with the governing verb. Hence 4(a) is the underlying (D-Structure) of both 3(a) and 3(b) and 4(b) is the surface structure of 3(b). English equivalents have been used in (4a) and (4b) to make reading easier : (see opp. page)

(Note that in Baker's trees, subject is generated in the <NP,S> position, which is empty in the this case. We shall however assume that subject is generated VP internally in the <Spec,VP> position and later moves to <Spec,IP> position. The necessary modification in Baker's Theory will be done accordingly.

The above examples are examples of NOUN INCORPORATION which is moving one lexical item into another in Syntax, thus leading to a GFC process. Between (4a) and (4b), a kind of POSSESSOR RAISING also takes place. The possessed noun 'house' incorporates with the verb, thus stranding the possessor 'John'.

TH-5952

VERB INCORPORATION

(Case of Morphological Causatives)

E.g., (From Chichewa). Consider the following Thematic

Paraphrases: (Bantu)   (Baker 1985:39)

5a) mtsikana   a-na-chit-its-a   kuti   mtsuko   u-na-gw-e
    girl   do-cause   that   waterpot   fall
    The girl   made the waterpot fall.

 b) mtsikana   a-na-gw-ets-a   mtsuko
    girl   fall - cause   Waterpot
    'The girl made the waterpot fall.'

Assuming parallel underlying (D-Structures) for both (5a) & (5b),

and obtaining (5b) by moving the verb '-gw' (fall) to incorporate

with the matrix verb (cause) in the Syntax, we get the following

'trees'.   (6a) is the D-structure of both (5a) and (5b) and   (6b)

is the S-Structure of 5(b). English equivalents are used to   make

readings easier.
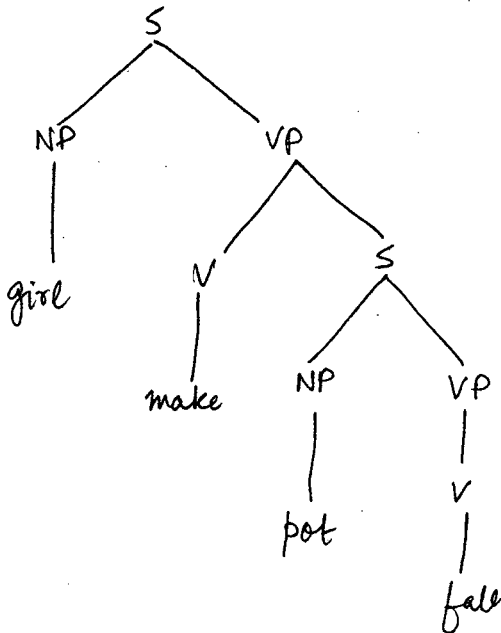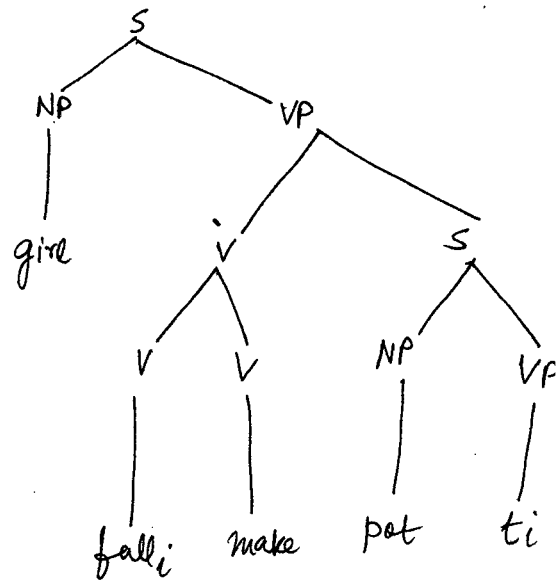
This was an example of VERB INCORPORATION .

22

PREPOSITION INCORPORATION

(Case of Applicatives)

Consider the following Thematic Paraphrases from the Chichewa
(data from Mchombo) : (Baker 1985 : 341) :

(7a) mbidzi   Zi-na-perek-a   msampha   kwa   nkhandwe
     Zebras   Sp-past-hand-asp   trap   to   fox
     'The zebras handed the trap to the fox'.

(7b) mbidzi   zi-na-perek-er-a   nkhandwe   msampha
     zebras   Sp-past-hand-'to'-asp fox   trap
     'The zebras handed the fox the trap.

Assuming that (7a) and (7b) have parallel D-Structures,
represented by the tree (8a), (7b) will be obtained from (8a) by
moving the preposition 'kwa' (to) in the syntax, to
join/incorporate with the verb. The tree (8b) gives the S-
Structure representation of (7b). English equivalents are used as
before, to make the reading easier :
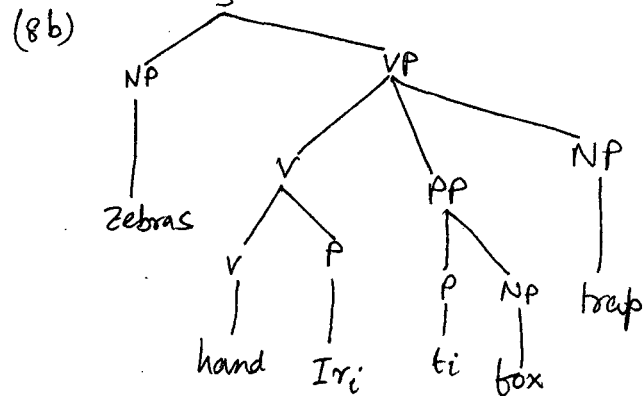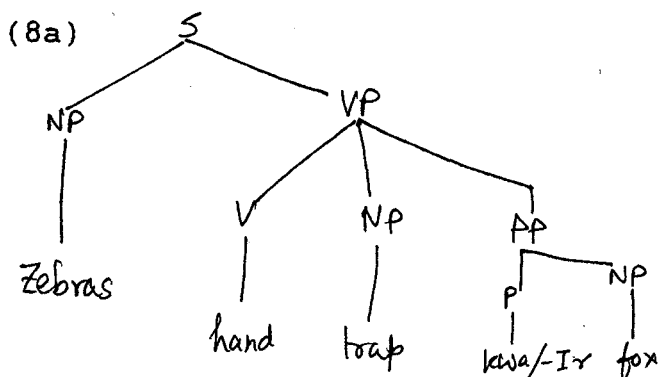
(Note that Baker is using very simplified tree-structure which is
only for convenience),

Baker assumes that in Chichewa, two different elements can
fulfill the role of the preposition in assigning the goal
thematic role to 'fox' in this structure, viz : 'kwa' and '-
Ir'.'kwa' is a standard prepostion ; if it is inserted, (7a) is
obtained. 'Ir' is an affix, and must move in the S-Structure, to

23

attach to the verb root. It leaves a trace while moving, as shown in (8b).

This was thus, an example of PREPOSITION INCORPORATION. Hence, Passives, Antipassives and Possessor Raising are all sub cases of Noun Incorporation.

Causative is a case of Verb Incorporation,

And an Applicative is a case of Preposition Incorporation.

I.5.1.(f)   PROPERTIES OF INCORPORATION

The process of Incorporation has two consequences in a linguistic structure :
(i) It creates a Complex Category of the X-o Level, thus producing a Morphological change.

(ii) It creates a syntactic link between two positions in the phrase marker, thus producing a syntactic change. The derived structure obtained after incorporation,is not identical to the surface structure of simple transitive sentences, due to the traces left by the X-o movement. This implies that these structures will not be subject to other processes in exactly the same way that simple structures, or unincorporated structures are.

I.5.1.(g)   THEORETICAL FRAMEWORK OF BAKER'S STINT

Baker(1985,1988) adopts the Government-Binding Theory(GB), as developed by Chomsky (1981,1982,1984) and others, as his framework. I enumerate below only the principles fundamentally necessary for the theory of incorporation and which I shall be adopting for my work.

<u>GOVERNMENT THEORY</u>

This module of GB defines the notion of government which is a strong locality condition on various structures.

(9) A governs B if and only if A c¬commands B and there is no category C such that C is a barrier between A and B (cf. Chomsky (1985)).

Baker assumes that at D-structure all languages contain a VP node, which is a maximal projection.

I.5.1.(h) <u>EMPTY CATEGORY PRINCIPLE (ECP)</u>: It is a sub theory of Government Theory. It enumerates the conditions on traces left by 'Move Alpha' (and perhaps other categories), which must be satisfied at LF :

(10)a) Traces must be properly governed.

b) A property governs B if and only if A governs B and A and B are co-indexed. ('Coindexing' includes both Theta indexing and Identification indexing introduced by 'Move Alpha').

I.5.1.(i) <u>D-STRUCTURE AND UNIFORMITY OF THETA ASSIGNMENT</u>

According to Baker (1985:56), Chomsky(1981:43f) characterizes D-Structure as 'a pure representation of thematically relevant Grammatical Functions (GF-Theta)'. This implies that at D-Structure, all phrases must appear in the position to which the theta role they receive is assigned. Though there have been attempts to essentially eliminate D-Structure from the grammar as a level with independent status, in terms of chain formation algorithms etc. (viz. Rizzi 1983b, Sportiche

1983) etc. Baker proposes strengthening of the notion of D-Structure. Chomsky(1992) has once again proposed abolition of D-Structure (more on that on pg$_\wedge$). Baker proposes 'The Uniformity of Theta Assignment Hypothesis (UTAH)' as the guiding principle of grammar, which characterizes the level of the D-Structure :-

THE UNIFORMITY OF THETA ASSIGNMENT HYPOTHESIS (UTAH)

Identical thematic relationships between items are represented by identical structural relationships between those items at the level of D-Structure.

I.5.1.(j)   UTAH and GFC PROCESSES

We have already, implicitly assumed the validity of UTAH and incorporated its consequences while citing examples of Noun, Verb and Preposition Incorporation (cf. pg$_\wedge$). What follows here is an exemplification of the direct connection between UTAH and GFC processes (as assumed by Baker(1985,1988)).

Consider again the thematic paraphrases involving causatives in Chichewa (Bantu). Examples 5(a) & 5(b) are repeated here for convenience :

(11a) mtsikana   a-na-chit-its-a   kuti mtsuko   u-na-gw-e
      girl   do-cause   that waterpot   fall
      'The girl made the waterpot fall'.

  (b) mtsikana   a-na-gw-ets-a   mtsuko
      girl   fall-cause   waterpot
      'The girl made the waterpot fall'.

In both the sentences, 'mtsuko' (waterpot), bears the same thematic relationship to the verbal root '-gw' (fall); UTAH now

(11c)

```
                    S
              ╱          ╲
            NP            VP
            │          ╱      ╲
          girl        N          S
                      │        ╱    ╲
                    make     NP      VP
                             │        │
                         waterpot     V
                                      │
                                    fall
```

intervenes to direct that same structural relationships should hold between these two items in the D-Structure of both the sentences. That implies, that the verb root '-gw' (fall) must be an independent constituent in an embedded clause in the D-Structure of (11b), just as in the D-Structure of (11a), as demonstrated by (11c) ~~below~~ *(See opp)*. [As before, English equivalents are used to make the reading easier]. *(See opp. pg)*

Similar conclusions should follow in cases of Noun Incorporation and Preposition Incorporation, examples of which have already been given on (pgs 21 & 23)

Hence, whenever a <u>part of a word</u> shows syntactic signs of either assigning or receiving a thematic role in the same way that morphologically independent constituents do, the UTAH will claim that, that <u>part of the word</u> appears in an independent structural position at D-Structure, to represent that thematic relationship in a canonical way. Thus, UTAH points away from a base generation analysis of causative, applicative and noun incorporation structures, and provides theoretical motivation for an analysis of such processes in terms of syntactic X-o movement.

In the course of the analysis of Complex Predicates, one might have to face the question 'What are the syntactic signs of assigning or receiving a thematic role ?' This becomes very relevant in languages which do not have parallel structures of the form demonstrated above, i.e, one incorporated and one unincorporated. We shall be addressing this issue while analysing the Complex Predicates in Bangla.

I.5.1.(k)   Movement, Government & ECP

It has already been stated earlier, that Incorporation is a subcase of the generalized transformation 'Move Alpha', where Alpha is a lexical Category.

Chomsky (1981:55ff) enumerates the following properties of 'Move-Alpha' - Relations that hold between a trace and its c-commanding antecedent.

(12)(i) The trace is properly governed.

       (i.e. it is subject to ECP)

    (ii) The antecedent of the trace is not in theta position

    (iii) The antecedent - trace relation satisfies the subjacency condition.

If incorporation is indeed a movement in the technical sense, it should obey these three conditions.

Following Koopman's (1983) discussion on Verb Movement, Baker observes that the movement of theta role assigners must obey the same constraint as the movement of theta role receivers. The notion of theta position is to be interpreted as the 'position from which a theta role is assigned', as well as 'a position to which a theta role is assigned'.

A glance at the incorporated structures (examples given earlier) shows that they satisfy the above stated properties of movement : the antecedent of the trace is in a position which is (Chomsky) adjoined to a lexical item - which is neither position of theta role assignment, nor of theta role reception. Given that X'-theory holds at D-Structure, adjoined positions in general will not exist at this level, where thematically relevant

positions is defined (Jackendoff (1977), Stowell (1981)).

Following Travis (1984 : 131), Baker suggests a <u>Locality Condition on Incorporation,</u> which is expressed by the following :

I.5.1.(1)   <u>HEAD MOVEMENT CONSTRAINT (HMC)</u>

(13) An X-o may only move into the Y-0 which properly governs it.

The pé**&**tative incorporation cases introduced so far obey this condition. In (3b), a noun moves into a verb that governs it (Noun Incorporation); in (5b) a verb moves into a verb that governs it (causative); in (7b) a preposition moves into a verb that governs it.

What follows is a proof of the above claim.

<u>HMC can be Derived from ECP</u> :

Assume that the trace$_{\wedge}$ an X-o must be properly governed (ECP). This would require that the trace must be governed by an element which is either theta-indexed with it (i.e. a head) or by an element which is identification-indexed with it (i.e. an antecedent). Now suppose that the X-o level categories are never theta marked by an argument taker; only the XP level categories (maximal projections) which they head are. According to Baker, by X'-Theory, only XP level categories can be sisters of (complements of) a lexical head, and by Theta Theory (direct) theta marking takes place under sisterhood. Thus, XPs are theta marked and not X-0's. Since it is the category NP which is typically used to refer, and not the category N, V theta marks the NP and not the N. Stipulating that theta-index does not

29

percolate to the head X-o of the XP to which theta index is initially assigned, we are led to the conclusion that the trace of an X-o can never be properly governed by a lexical head since it will never bear a theta index. It follows from ECP that it ought to be governed by it's antecedent.

(14) **An X-o must govern its trace.**

According to Baker, X-o will govern the former position if and only if it appears in a position where it is united with a Y-0 which governs the XP that X headed at D-structure.

According to the definition of government given in (9), for an X-o (or any category) to govern it's trace;

(i) It must C-command its trace

(ii) There must be no barrier intervening between the X-o and its trace.

(i) <u>C-Command</u> : The first branching node that dominates the C-Commander, must also dominate the node to be C-Commanded.

Consider the following abstract incorporation structure;

(15)
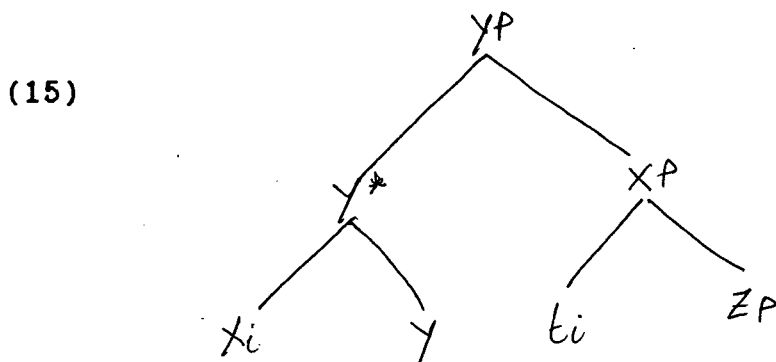
It is assumed that the zero-level node Y* does not count as a branching node since only then can Xi C-Command its trace. This

can be formally stated as :

(16) The indexes of the parts of an X-o category count as indexes of the X-o category itself.

This requires that the identification index of X would be considered an index of Y* as well, and then Y* C-Commands the trace of X. That is, it is the complex category Y* = X+Y which will be the C-commander and proper governor of trace, but crucially by virtue of the fact that it contains an antecedent (as if the antecedent itself that governed the trace).

(ii) BARRIERHOOD :-

Chomsky proposes that it is maximal projections which are not theta-marked arguments which create barriers.

BAKER'S PROPOSAL OF BARRIERHOOD :

(17) The maximal projection C is a (government) barrier between A and B if and only if C contains B,C does not contain A, and C is Not theta-indexed with A.

Now, HMC on X-o movement can be derived from ECP as follows :-

Suppose an X-o 'X' moves into a X-o'Y' that theta marks (or properly governs) XP. Then the complex category X+Y will govern the trace of X, since the only intervening maximal projection is XP. XP is not a barrier between X+Y and t (trace of X) since it is theta-indexed with Y and hence with X+Y. X+Y is also identification-indexed with 't' since X is, by (16). Thus X+Y

governs 't' and is coindexed with 't'. Hence it properly governs 't' and the ECP is satisfied.

It follows that it is forbidden for the X-o to move anywhere but to the Y-o that properly governs it's projection. It also follows that the relation between the trace and its antecedent satisfies the condition 12(i) and 12(ii) of 'Move-Alpha', in incorporated structures.

Incorporation also satisfies the final property of Move Alpha, i.e. 12(iii). However, this requirement is redundant, because, subjacency says that a movement cannot cross more than one barrier (cf. Chomsky 1985), but if an X-o moves over even one barrier its trace will never be properly governed. Thus, we can assume that Incorporation is infact subject to subjacency - a redundant condition.

The conclusion is that, Incorporation is a special case of General Transformation Rule, 'Move Alpha'.

Note : It is predicted that the pattern of movement of X-0's and the pattern of movement of XPs should be parallel in certain respects, since both are ruled by the same principle, ECP. Argument XPs will anyway satisfy ECP because, they, unlike X-0's, will be properly governed by the local head that theta marks them, and into which they move.

Adjunct XPs however, have no theta marker by hypothesis. Hence, their traces, like those of X-0's must be governed by the antecedent, and the prediction is that, the two will have similar distribution in certain ways,. Whereas adjuncts can be moved from VP internal position to VP adjoined position, it is impossible to

(19a)

YP
├── Y$_j$
└── XP$_j$
    ├── X$_i$
    └── ZP$_i$
        └── Z

(19b)

YP
├── Y*
│   ├── X$_i$
│   └── Y$_j$
└── XP$_j$
    ├── t$_i$
    └── ZP$_i$
        └── Z
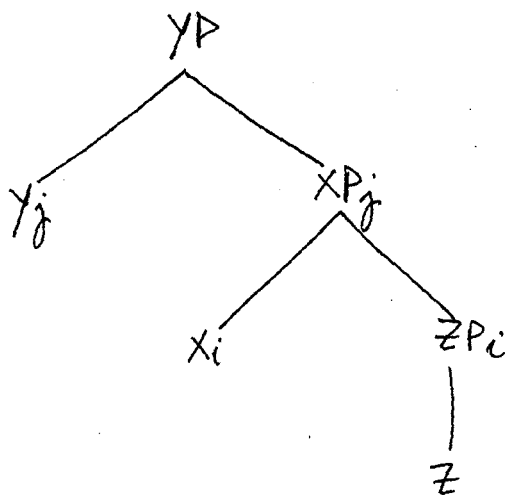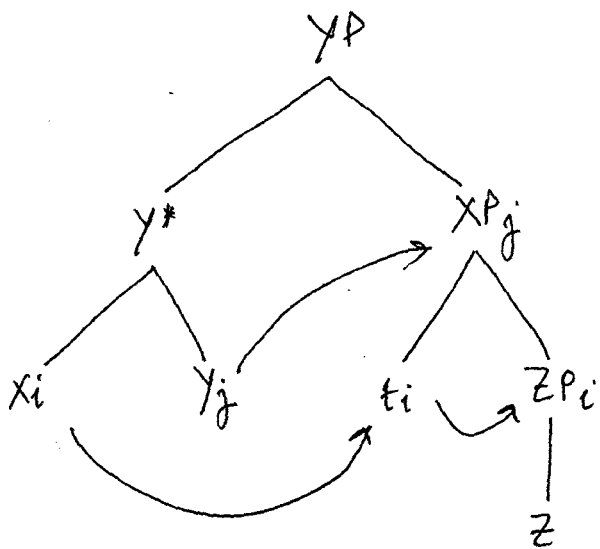
move X-0's out of adjuncts.

I.5.1.(m)   Baker (1985): proposes the   Government Transparency
Corollary (GTC) which says :

(18) THE GOVERNMENT TRANSPARENCY COROLLARY (GTC) :

A lexical category which has an item incorporated into it
governs everything that the incorporated item governed in its
original structural position.

Consider the following abstract trees : (19a) is a tree in a
pre-incorporation state and (19b) is a post-incorporation tree.
(See the opp. page .

In (19a), Y governs into XP to govern X, but it   does   not
govern ZP. ZP, not being theta-indexed with Y, is   a   government
barrier for itself. But, in (19b), Y* governs the head of XP,
properly governing the trace in that position. But, Y* also
governs ZP in this configuration. This follows from GTC, as
explained below.

It is assumed, that when a category moves, it both carries
its indexes with it and also leaves them on its trace. Thus in
(19b), when X moves into Y, it carries the theta-index that it
shares with ZP, with it. Now by convention (16), this theta-index
of X will be considered to be the theta-index of the containing
lexical category Y* = X + Y, just as theta-index of Y is. This
implies that neither of the maximal projections, that intervenes
between Y* and ZP will be a government barrier between the two :
XP is theta-indexed with Y* = X+Y via Y; ZP is theta-indexed with
Y*=X+Y via X. Y* C-Commands ZP and hence it follows that Y*

33

governs ZP. We thus see that, X-o movement automatically changes the government properties of a structure in the way described by GTC in(18), by inducing coindexing relationship between two distinct nodes, as a result of movement. The word 'Transparency' in GTC accounts for the fact that XP becomes transparent/ invisible for the purposes of government when its head is incorporated.

Baker thus concludes that <u>GTC is an essential property of incorporation.</u>

In an attempt to narrow down the distinction between Morphology and Syntax to its minimum, Baker proposes that the same morphological principles apply when two morphemes come together in the lexicon in the standard way and when they come together in the syntax as a result of incorporation. The proof of this comes from the fact that it is a natural principle of morphology to block syntactic phrases (XPs) inside a word. Also, that 'Move-Alpha' cannot in general move a art of a word to some other part of the string. That is, there cannot be traces inside a word, or that a trace cannot be dominated by a zero level category. This is nothing but a confirmation of the old Lexical Integrity Hypothesis which says that (20) should be true.
(20) * [X-0........ti.........]

In sum, the principles of morphology and syntax should be the same, and what holds for morphology, should hold for syntax too, and vice versa.

The validity of this claim is to be tested for 'Bangla'

data. Also, Baker doesn't dwelve into the question, 'What is a word'? Which may not have a very clear-cut definition in all instances, contrary to what one presumes, Bangla 'Complex Verbs' are a case in point.

I.5.1.(n)   PROPERTIES OF NOUN INCORPORATION (NI)

(1) NI shows subject-object asymmetry. In ordinary transitive clauses, the direct object may be incorporated, but subject may not be. Patients may be incorporated, but agents may not be, because, in ordinary transitive sentences, agents are canonical subjects and patients are canonical objects. The reason behind this is illustrated by the following tree diagrams (21a) and (21a).
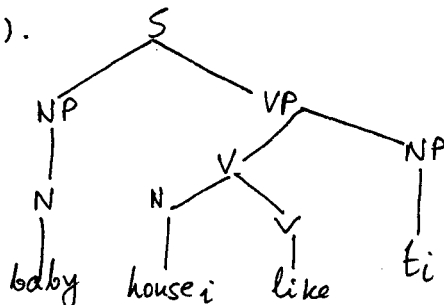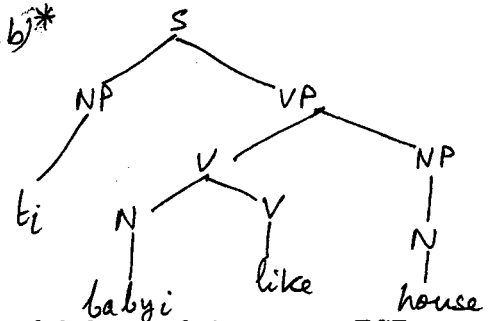
The traces in the trees above, should be subject to ECP and hence must be properly governed. In (21a), the antecedent is part of the verb which governs and theta-marks the embedded NP. Such is not possible in (21b). In (21b), the Noun root 'baby' has moved lower in the tree such that it doesn't c-command its trace. VP is the maximal projection which contains the Noun root, but not it's trace (unlike in (a)). Hence, whereas antecedent government is possible in (a), it is not possible in (b). This implies that subject Incorporation violates ECP while Incorporation of object does not.

(2) Nouns can never be incorporated out of prepositional phrases

:- Consider the following tree, (22):

(22)*
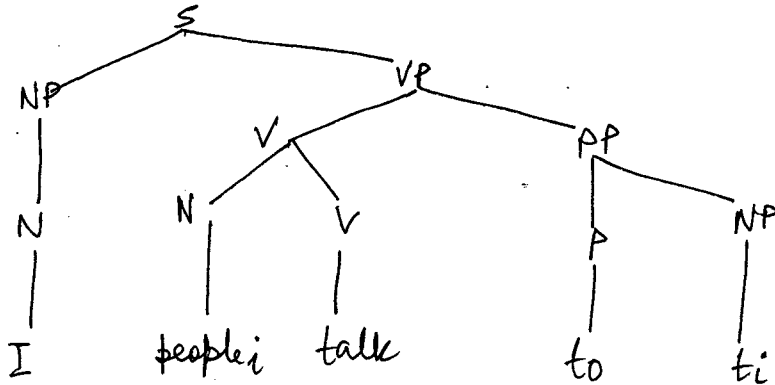
To satisfy ECP, the trace of the noun root 'people', should be governed by its antecedent. However, in (22), the maximal projection PP will block the government of the trace by the noun 'people', since PP contains a closer lexical governor, namely the preposition 'to'. Technically, the resulting verb complex is theta-indexed with the PP, but not the NP and this creates a barrier to government. Also, it is not a case of head movement, hence antecedent government is ruled out.

(3) NI should never be able to take a noun root out of an NP adjunct that appears in the VP. Such an incorporation would give a structure like (23).

(23) *
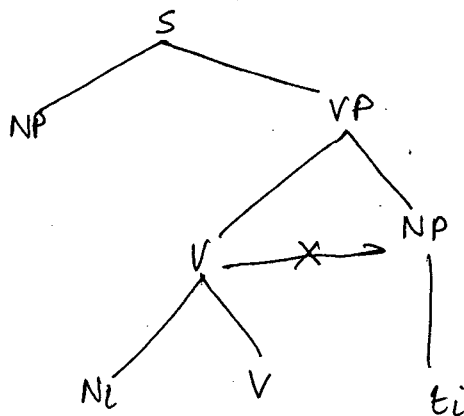
In (23) NP is not theta-marked by V, since it is an adjunct. Thus NP node will be a barrier to government, and hence the antecedent will not govern its trace in these structures.

36

(4) Subjects of Instransitive verbs should not incorporate either i.e., if they are indeed subjects. It has already been shown that subjects of transitive clauses do not incorporate. Unergative verbs, which take true subjects, which are agentive or experiencer subjects, do not show subject incorporation because NP traces in subject position violate ECP if their antecedent is incorporated. In case of unaccusative verbs, the so called 'subject' is actually the D-structure object, and is the patient or theme argument of the verb. It can hence incorporate without violating ECP.

(5) NI being a syntactic process, only syntactic principles explain what can and what cannot be incorporated. The generalisation is that, only patients or themes can be incorporated. In case of triadic verbs (Dative types), goal can never be incorporated, whereas theme can be . Only direct objects are incorporated.

(6) NI shows determiner stranding, stranding of relative clauses, modifier phrases, quantifiers, numeral phrases etc, similar to discontinuous dependencies shown by idpmatic expressions consisting of a verb and its object noun. Consider the following examples (24a) and (24b) of English :

24(a) Little heed seems to have been paid to my warning.

(b) Some headway finally appears to have been made on this problem.

The nouns 'heed' and 'headway', which form idiomatic expressions with verbs 'pay' and 'made' respectively, are far away from the licensing verbs pay and make. These nouns (N) are

the objects of the corresponding governing verb V. 'Pay heed to' and 'make headway' are idiomatic expressions. This kind of discontinuous dependency is accounted for by movement. The idiomatic NP appears as the object of its licensing verb at D-structure, and is moved to its final position by passive and raising transformations.

Similarly, in case of NI, the incorporated noun root can be modified or specified by a non adjacent word or phrase that remains morphologically outside the verb complex. Fox example, the external specifier can be a demonstrative element. Consider the following example (25) from Mohawk.

(25) ka - nuhs -rakv   thikv   (Postal (1962:395))
     3N-house-white   that
     'That house is white'.

Similarly, for other kinds of modifier phrases, as has already been pointed out above. (In all these cases, Baker repeatedly shows that parallel sentences exist in which the noun forms a phrase together with the relative clause or the modifier. In languages like 'Bangla', such parallel sentences may not always exist in all cases. In such cases, other proofs are necessary to prove that they are indeed incorporated structures).

I.5.1.(o)   EXPLAINATION OF DISCONTINUOUS DEPENDENCIES IN CASES OF NI.

As shown in the following example (26) from English, the noun root to be incorporated is separate from the governing verb at D-structure, where it heads the phrase that is assigned the verb's direct internal theta role. A specifier or a modifier can then be a part of this NP in the usual way.

(26)

```
                    S
                  /   \
                NP     VP
                |     /   \
                I    V     NP
                     |    /  \
                    Saw 'a'   N'
                     |   |    |
                         two  N
                              |
                             men
```
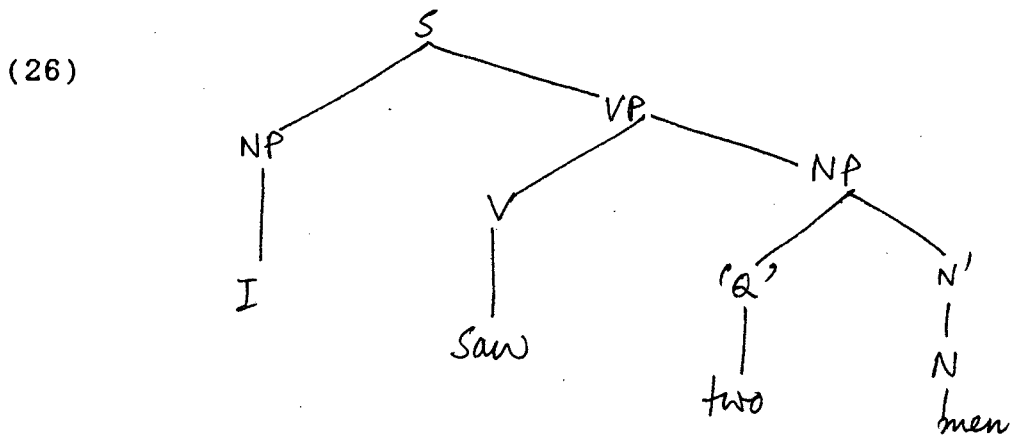
If 'Move Alpha' applies, NI results, and the following S-Structure is obtained.

(27)

```
                    S
                 /     \
               NP       VP
               |      /    \
               I     V      NP
                    / \     |  \
                   N   V   'a'  N'
                   |   |    |    |
                 men_i see  two  N
                              t_i
```
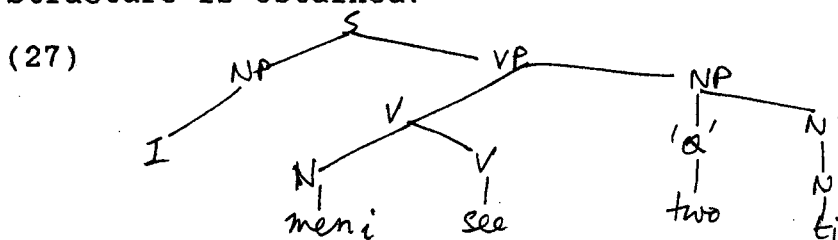
Assuming the morphological principal that : 'only a lexical category can adjoin to a lexical category' (has already been discussed ~~en~~ ~~bg~~ earlier), only the N-o projection 'man' can be moved, thus necessarily stranding the specifier. Since, the trace of N-o is in a local configuration with the specifier or modifier, thus providing a link between the incorporated Noun root and the external phrase, they can be interpreted together by the LF component.

The conclusion is that, if N-V (or V-N) combinations were always generated in the lexicon, and NI structures like (27) were base generated, then some special stipulation will have to be added to express the fact that the quantifiers, modifiers etc., may and must be interprested as modfying the incorporated noun root. (In fact this is one very strong reason for treating Bangla Complex Predicates (and also of other Indian Languages) as incorporated structures - incorporateds in the Syntax).

7(A) As in case of determiner and modifier stranding etc., NI shows prossessor stranding or possessor raising. Here, there is both an incorporated noun root, and an independent noun phrase outside the verbal complex. The external NP is the prossessor of the noun root at D-Structure.When the noun root incorporates, the possessor is stranded. The examples (28a) and (28b) from English demonstrate the effect (28b) is the incorporated Structure whereas (28a) is the pre-incorporated structure.
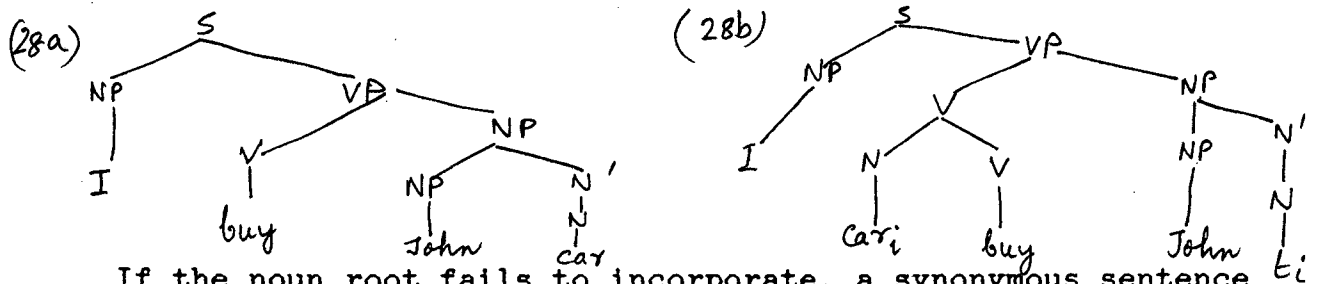
If the noun root fails to incorporate, a synonymous sentence is obtained in which the noun forms a phrase with it's possessor.

(B) <u>Agreement Facts in Possessor Raising</u> : When the noun head of the verbs internal argument is not incorporated, the verb shows object agreement with that head, as one would expect. Normally, when the noun is incorporated, the agreement on the verb is unchanged (अब तब म्हासी; cf. बम ह it still references the features of the object, which now come from the incorporated noun root.

When a possessor is Stranded, the verbal agreement shifts (in some languages). Verb Agrees with the possessor, rather than with the incorporated noun. (In Hindi, Verb agrees with the possessor, as well as the incorporated noun, cf. कफ).

The explanation is that, there is an intrinsic difference between the possessor stranding and specifier or modifier stranding in GB framework. The possessor is a full NP, which

receives a possessional thematic role from the head noun. Therefore, a possessor, unlike other specifiers and modifiers, will need to receive case in order to pass the case filter. In languages which show only agreement, Baker assumes that it is the agreement process which causes the possessor to pass the Case Filter. (In Bangla and Hindi, the possessor NP has a special case ending(Genitive) and Hindi shows agreement in addition) cf.pg)

Now, when the head noun is incorporated into the verb form, it is no longer in a position to directly assign case to the possessor via the agreement relation. Now, Baker assumes that :

'Traces of X-0's never either assign case to the NPs which they govern or transmit case to such NPs from their antecedents'.

Hence, the stranded possessor NPs in NIs must receive case from some other source, or the structures will be ungrammatical. The stranded possessor NP receives its 'case from the main verb complex. (This relation is expressed by agreement only, in certain languages (e.g., in Mohawk and Southern Tiwa). This implies that the possessor NP should be governed by the main verb complex to receive abstract Case from it.

(C) It is impossible to bypass the head noun of the object NP and incorporate the head noun of the possessor of the object instead. According to Baker, structures of the following type are impossible in natural languages.

(29)' Tree diagram: NP (Mary) and VP; VP branches to V and NP; V branches to N (man_i) and V (find); NP dominates NP and N'; NP dominates (that) and N (t_i); N' dominates N (pigs).

If the verb governed the possessor in this structure, the noun root 'man' would have governed it's trace within the possessor NP, thus satisfying ECP. Then (29) would have been grammatical. That however is not the case. (29) is ungrammatical, and the verb doesnot govern the possessor. The reason being, it is not theta-indexed with the possessor. Hence, the category NP of the possessor is a barrier to government between the verb and itself. However, when the head noun of the object (i.e. possessed Noun) moves out of it's NP and is incorporated into the verb, the resulting verbal complex will inherit the theta indexes of the incorporated noun. Thus, it will be coindexed with the possessor in the derived structure. This time, the possessor NP is not a barrier to government between the verb complex and the possessor. Nor is the larger object NP a barrier.

Based on the study of a range of data, Baker concludes :

'Verb governs the possessor of its object if and only if the verb has incorporated the head noun of that object.'

The trace of N does not count as closer governor of the possessor because, Incorporation has the side effect of making the projection of the moved category 'transparent' to government from outside (a consequence of GTC).

(8) On Noun Complements : Noun complements are generated under the N node as sisters of N-o. They behave like possessors and can

be stranded. A complement needs case and is governed and theta-marked by the head noun. Thus, when the head noun is not incorporated into the verb, the verb will not govern the complement, since N is a closer governor. But, if the head noun incorporates, it will no longer be the closer governor, and the verb will govern and assign case to the stranded complement. The incorporated noun root is semantically interpreted together with a full noun outside the verb, and hence they qualify as cases of stranding.

I.5.1.(p)   NOUN INCORPORATION & CASE THEORY

Baker proves that :

'A noun phrase whose head noun is incorporated does not need to receive case in order to pass the case filter, even though it is phonologically overt.'

<div align="center">or,</div>

Incorporates do not need case.

Proof

(1) Baker cites the example of incorporation in Unaccusative verbs, to prove his point. According to Burzio's generalization, unaccusative verb types do not assign accusative case to their structural object. Yet, (only) in unaccusative (intransitive) verbs the object (which superficially looks like the subject) gets incorporated into the verb. e.g.

<div align="center">43</div>

(30)

```
                    S
          _____|_____
         NP                      VP
                          _____|_____
                         V                 NP
                     ____|____         _____|_____
                    N         V        |          N'
                    |         |        |          |
                 house_i     old      this       [t_i]
```
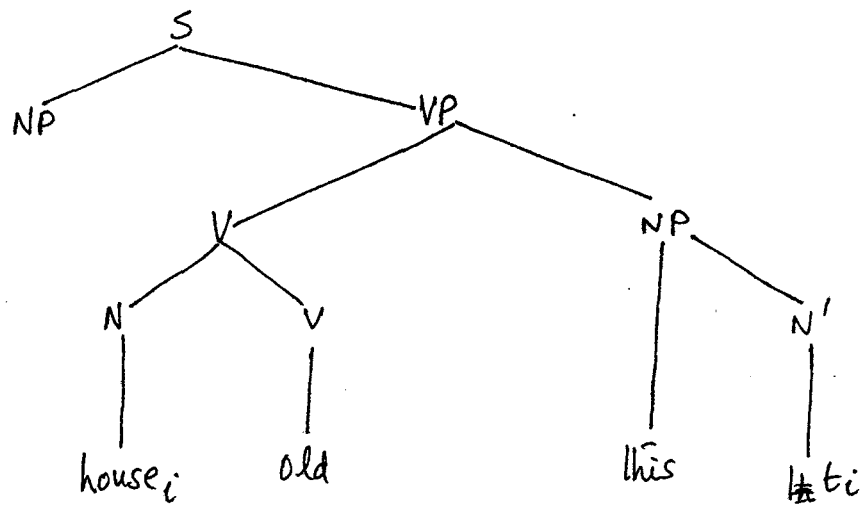
The question naturally arises, how does the object NP here
pass the case filter, if it cannot receive case from the verb ?
The most usual way for this argument to get case is by moving to
the subject position, where it can receive nominative case from
the INFL. In case of NI however, this NP node cannot move to the
subject position.. If it did, ECP will be violated as has already
been shown.(cf. -   ) Yet, when the head of the object NP of an
unaccusative verb is incorporated, the structure is grammatical.
This means that the incorporated NP does not need to have case at
all.

(2) Another proof of the claim that incorporate do not need case
is that, when the object of a verb that does assign case gets
incorporated,   the verb's case assigning potential is   not
exhausted; rather, the verb becomes free to assign accusative
case to some other NP. In the language 'Southern Tiwa', the
triadic verb 'give' assigns only one accusative case, and both
the theme and the goal need case. When the theme incorporates,
the goal can appear without postposition which generally assigns
case to the goal NP. This is possible because, the incorporated
NP doesn't need case. Hence, the verb is free to assign case,
which would normally go from the theme NP, to the goal, giving a
grammatical structure.

(3) The third proof comes from the cases of Posessor stranding in 'Southern Tiwa' as exemplified by the following example (31). English equivalents are used for convenience.

```
                  S
          _____/ _____
        NP                 VP
       /              ____/  _____
      I              V             NP"
                   _/ \_          /  \
                  N    V        NP*    N'
                  |    |         |      \
               house_i buy     John     t_i
```
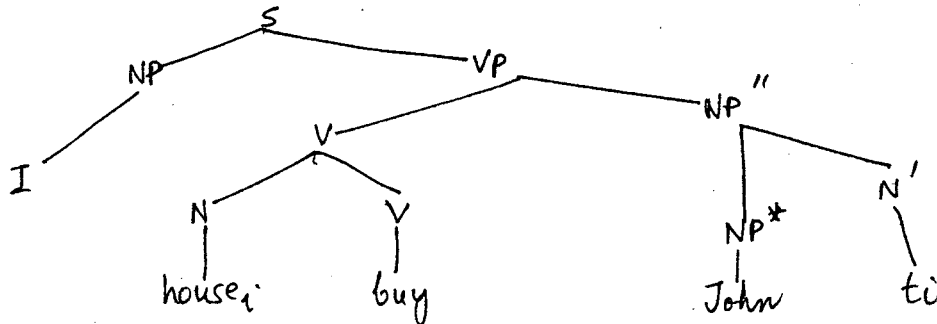
The verb assigns case to the possessor 'John', as represented by the fact that it agrees with its features rather than those of the tnematic object 'house' (This is visible in the original example of Southern Tiwa). Even when the verb ~~greverus~~ governs the possessor (as in this case), it is free to assign that case to the pessessor NP only if it doesn't have to assign that case to the object as a whole NP". Since it does case mark NP* (as is visible from the agreement features), we conclude that NP" doesnot need case here. Again, NP whose head is incorporated, can afford to let the case which would normally be its, pass on to another NP in need.

Thus, drawing from a rich variety of facts taken from a number of typologically different languages, Baker concludes that a NP need not be case marked if its' head noun is incorporated into the governing verb.

(4) Lastly, Baker points out that direct object NPs can undergo incorporation but NPs which are arguments of prepositions cannot. Some languages however, show exceptions, where prepostion phrases may incorporate into the verb complex after all. According to Baker, such phrases are not true PPs. They are pure arguments of

the verb receving their theta role from it directly. Seiter calls them 'middle objects'. Such prepositions do not appear in the D-structure in there sentences. Then, middle objects are like normal direct objects, which accounts for the fact that they can incorporate into the verb. Nevertheless, if they donot incorporate, they must take post positions.

Once again, this proves that incorporates do not need case.

I.5.2   ARGUMENT STRUCTURE

I am assuming Grimshaw's (1991) "Theory of Argument Structure", in its broad framework. According to this theory, the argument structure or 'a-structure' is the lexical representation of the grammatical information about a predicate, and is thus a part of its lexical entry. The a-structure of a predicate is derivable from its lexical semantic structure (or lexical conceptual structure 'lcs') of Jackendoff (1990). However, there is a distinction between the grammatical arguments and the semantic participants. Not all semantically relational lexical items have a syntactic a-structure and take syntactic arguments. In other words, though verbs and nouns both have meanings, and are associated with a lexical conceptual structure, which defines the set of participants involved in the meaning of a lexical item, verbs project at least some participants (not necessarily

all) into their a-structure and thus, make their participants grammatical arguments. Amongst the nouns, only Complex Event Nominals, which have an internal aspectual analysis take obligatory grammatical arguments (except the external argument) of the kind that verbs have. But other nominals, in particular the Result Nominals, though they have participants in their lcs, do not have grammatical arguments.

Grimshaw presents a prominence theory of a-structure, according to which the a-structure of a predicate is a structured representation which represents prominence relations among arguments. The prominence relations are jointly determined by the thematic properties of the predicate (via the thematic hierarchy) and the aspectual properties of the predicate. According to this theory the external argument is the most prominent argument - prominent along two dimensions : thematic and aspectual. Along the thematic dimension the version of hierarchy which she adopts is the following :

(Agent(Experiencer(Goal/Source/Location(Theme)))).

Along the aspectual dimension the hierarchy is as follows :

(Cause/Other(---))

The prominence relations in the two hierarchies must coincide. If they don't, the property that qualifies an argument for maximal prominence is aspectual. The aspectually most prominent argument is realised as the subject.

Each verb has associated with it an event structure. The event structure represents the aspectual analysis of the Clause. Anderson (1983-84) had concluded that Abstract Nouns can be :

a) Theta assigning - take subject-like arguments.

47

b) Not Theta assigning - are like concrete nouns and hence take modifiers.

Nominals (Derived Nominals and Deverbal Nouns to which the analysis will be extended) have traditionally been divided into :

i) Process Nominals which name a Process or an Event

ii) Result Nominals, which name the output of a process or an element associated with the process.

Grimshaw (1991) however divides Nouns according to the presence or absence of an associated event structure, or an internal aspectual anlysis. Since argument structure is composed of the aspectual and thematic anlysis of a predicate, any predicate lacking an aspectual analysis will also lack an argument structure and will never take grammatical arguments. This thus holds very much for derived nominals or Deverbal Nouns which are all predicative in nature.

Hence, Nouns will be divided into :

a) Complex Event Nominals - Nouns with an associated Event Structure or an Internal Aspectful Analysis.

b) Result Nominals/Simple Event Nominals - Nouns with no event structure.

I would use the term Result Nominals in an extended sense, to cover both Result Nominals and Simple Event Nominals.

Properties of Complex Event Nominals (CENs)
& Result Nominals (RNs)

1) The Theta grid of the verb is preserved only in CENs which have an event structure analysis and hence an a-structure.

48

They take obligatory grammatical arguments. RNs on the other hand never take arguments.

2) Result Nominals may have PP complements that correspond to arguments of the verb but they are never obligatory, and frequently show other indications of being modifiers not arguments. (Abney 1987)

3) The external argument of the verbal base is suppressed in argument-taking nominals, that is in CENs. Thus, though the CENs take obligatory objects, the possessive subject in (1b) (below) is never obligatory, and hence are not arguments. Grimshaw gives other proofs too to prove that CENS don't take external arguments.

1a. The enemy destroyed the city.

agt   theme

1b. (The enemy's) destruction of the city.

opt-agt

4) Sentential complements to nouns are never arguments because they are always optional even when the corresponding verb takes an obligatory complement. (Nouns with sentential complements consistently and systematically act as RNs and not as CENs - Grimshaw 1991).

5) Finally gerundive nominals behave like CENs and take obligatory arguments.

To disambiguate Result and Process Nominals, certain diagnostics have been suggested (Grimshaw 1991).

1) CENs donot pluralise but RNs do.

For example, 'The clipping of the grass' is a CEN, but 'the

clippings' is a RN. (Abney 1987).

2) CENs donot occur with demonstratives, though RNs can. For example, (a) is doubtful, but (b) is grammatical. In (a) The nominal

is a CEN, whereas in (b) it is a RN (Abney 1987).

(a) ? That examination of the students occured a week ago.

(b) That examination is twenty pages long.

3) RNs often require determiners.

For example, (Abney 1987)

(a) * examination was two pages long.

Here, 'examination' is a RN and requires a determiner, but

(b) examination of the students took ten hours

     is fine because here 'examination' is used as a CEN.

4) Indefinite determiners and the numeral 'one' occurs only with RNs. Only the definite determiner 'the' occurs with both kinds of nouns.

For example,

a) They studied the/an/one/that assignement.

b) They observed the/*an/*one/*that assignment of the problem.

c) The assignment of that problem too early in the course always causes problems.

(b) & (c) are CENs and (a) is a RN. Hence the point is proved.

5) CENs resist indefinite subjects (external a-adjunct). For example., (Grimshaw 1991):

a) ? ? A teacher's assignment of the problem.

b) The assignment of the problem by a teacher.

6) CENS can have no determiner at all, though not possible for singular count nouns, For example.,(Grimshaw 1991):

a) The assignments were long

b) *The assignments of the problems took a long time.

c) Assignment of difficult problems always causes problems.

Whereas (a) is an RN, (c) is a CEN, which doesnot need a determiner, as shown by the ungrammaticality of (b).

7) CENs donot occur predicatively, or even with equational 'be' while RNs do. For example,

a) That was the/an assignment

b) *That was the/an assignment of the problem

8) Temporal modifiers like 'in an hour', 'for six weeks' etc. and aspectual modifiers like 'while clauses' are permitted by CENs only. CENs admit the same temporal modifiers as their verbal counterparts, e.g., (Grimshaw 1991)

a) The total destruction of the city in two days appalled everyone.

b) *The total destruction of the city for two days appalled everyone.

c) The bombing destroyed the city in only two days/*for two days. Thus 'destruction' takes the same temporal modifiers as its verbal counterpart 'destroy'.

9) Unambignous RNs never allow 'Event Control' while CENs do. For example, (Grimshaw 1991).

a) *The translation of the book (in order) to make it available to a wide readership.

b) *The exam in order to determine whether.

c) *The murder in order to pressure peace.

d) *The solution (to the problem) in order to simplify the

assign&ment.

These are all RNs and hence event control is not possible. Only CENs denote event and hence control by an event is possible.

10) While Gerundives pattern perfectly as CENs, Simple Event Nominals pattern as RNs. Simple Event Nominals denote events like race, trip, exam, event etc.

Not all those tests which are patterned on English language will hold for Bangla. For example, Bangla manifests aggregation which differs from the Number dimension of English. 'A given NP in a number language must have a specification for the Number feature (i.e, Singular or Plural). In an aggregation language, a given NP need not have spefication for aggregation. Truly neutral NPs are possible, and indeed exist. For example,

> ciThi SeS hoeche ?
> letter(s) finished has become
> Have (you) finished your letter(s) ?

'ciThi' here has a number free reading (can be singular or plural), which is not possible in Number languages like English. In Bangla, verbs and adjectives do not agree with nouns for aggregation (Dasgupta 1985).

Considering all these, I take the test No. 8 of 'Temporal/Aspectual Modifiers (TM/AM) and test No. 9 of 'Event Control' (EC) to be the real test of the status of the nominal.

While it would ℓhave been very simple to adopt Dasgupta's (198Ø) test of 'negatibility' to check if a nominal is a Complex Event Nominal or not (the test he uses to distinguish between Quasi Gerunds (Verbal Nouns) and Gerunds), because, as will be seen below, all Verbal Nouns in Bangla, including the Adjectives and Expressives of the AV and ExpV predicates respectively, are

Result Nominals. Since Dasgupta (1980) doesn't talk explicitly in terms of RN and CN, that test was abandoned. Now however, it seems that the test of negatibility is a right test to distinguish between RNs and CENs.

The so called Verbal Nouns/ Quasi Gerunds occur only as the Nominal part of the NV predicates. They are never Gerunds – unless Gerund Verb combinations in passive constructions are considered conjunct verbs too. That would require further research in the light of the Incorporation Theory. I refrain from using the term 'derived nominals' the standard term for nominals derived from verbs as in English, because it is yet to be decided whether it is these nominals which have been derived from their verbal counterparts or the verbs (conjunct verbs) themselves are derived from these verbal nouns in Bangla (as in many South Asian Languages). These nominals are all abstract nouns, predicative in character with internal arguments or participants in their lcs. Nowhere in the literature on complex predicates have the arguments of these verbal nouns been projected inside their maximaal projection NP, though it has been assumed these nominals do have their own argument structure. The reason generally cited have been that the scrambling facts prove to the contrary (Jayaseelan, 1988) and, that there is a tacit assumption (cf. Aoun 1985, Chomsky 1986), that nouns being unable to case mark their internal arguments, even if present are not visible for theta role assignement. Nouns when they combine with the verb allow such arguments to be case marked and to be theta assigned. Hence the internal arguments of the nouns ultimately present

themselves as the arguments of the complex verb NV. This does not solve the problem however. A mismatch between the number of arguments of the noun and that of the host verb creates problems for theta role assignment. Jayaseelan, (1988) has proposed a solution.

Against the backdrop of Grishaw's 1991 analysis, we have to check if Bangla Verbal Nouns, can be so neatly classified into CENs and RNs with totally different argument structures. If yes, then Result Nominals would be the Verbal Nouns without an argument structure, but with modifiers. They would then team up with a host verb and borrow the argument structure of the latter entirely. CENs on the other hand, will have obligatory arguments within their maximal proejction. It is to be seen how these arguments shift to get case etc. inside the clause.

———————————————*———————————————

I.5.3   THE 'FP HYPOTHESIS'/THE 'DP HYPOTHESIS

Two major traditions have gone into the making of the Functional Phrase (FP) Hypothesis, also called Determiner Phrase (DP) Hypothesis following Abney (1987).

(i) That each lexical category is a complement of corresponding functional category. By this, a noun phrase is taken to be headed by a functional category, usually a determiner, and hence is actually a Determiner Phrase. Abney (1987), Fukui (1986), Speas(1986,1990) etc. have all argued in favour of this hypothesis. This should also entail that APs (ADjective Phrases) and PPs (Prepositional/Postpositional Phrases) should also contain an FP. Not all PPs however are FPs. Only some Ps are functional, as opposed to contentful.

54

(ii) That INFL is the head of S as suggested by chomsky (1981:140 n.20) and that COMP is the head of S', which was first suggested by Bresnan (1970,1972) and later adopted by Chomsky (1981:19).

Following Fukui & Speas (1986) and Speas(1986), it is assumed that there is a fundamental assymetry between lexical categories and functional (non-lexical) categories

(1) Functional Heads have one and only one specifier which closes off the category projection. It is not clear that all lexical heads have spec position.

(2) Functional heads are closed class items and lack the sort of semantic value associated with lexical categories.

(3) Functional heads donot have theta grids, whereas lexical heads have theta grids.

(4) Both may have Kase grids. Functional heads assign Function features or F-features at their Spec position. The F-features include Nominative Case assigned by' Tense/Agr, Genitive Case assigned by 's and +WH, assigned by WH-Comp (Speas 1986). Speas(1986) introduces the term Kase to mean both Case in the standard sense (i.e. case assigned by lexical categories, in particular objective case assigned by V) and F-features assigned by Functional Categories.

(5) Spec of a Functional Category is always empty at D-structure, since Kase assignment takes place at S-structure, while theta assignment takes place at D-structure (Speas 1986).

According to Abney (1987), the determiners found in NPs are functional heads, (for Bangla, see Bhattacharya & Dasgupta(forthcoming)), just like INFL and COMP. Abney(1987)

55

assumes that within DP, Kase (genitive) is assigned only when the Noun moves from its complement position (single complement position, as per our assumption above), to the spec of DP position and is assigned by the DAGR (i.e. the Agr in D). When the noun doesn't move, it remains in the complement position of D and hence doesn't get the Kase.

According

Ace to Speas(1986), any DP may move to the Spec of DP position to receive Kase assigned by D, regardless of whether that DP is an argument of N. She cites the following examples from English to prove her point.

(a) The city's destruction by the Romans.

(b) Roman's destruction of the city.

(c) Yesterday's destruction of the city by Romans.

This stand is vindicated by the following statement of Napoli (1989:152). She gives strong evidence to prove that :

"The difference between modifiers and arguments is not built into syntax. In particular, both modifiers and arguments are sisters to X (N here). Thus this distinction in function is a semantic distinction unparalleled by any syntachic distinction."

Though she concludes that syntax and semantics are orthogonal, rather than parallel or isomorphic components of the grammar, we don't accept it as a sweeping generalization.

To start with, we shall assume that DP contains one complement and one specifier position, along the lines of Speas (1986).

We adopt the structure of DP proposed by Bhattacharya &

(fig (i), next pg)

Dasgupta(forthcoming). Besides the Declension (or D) head of the

STRUCTURE OF BANGLA DP

(1)
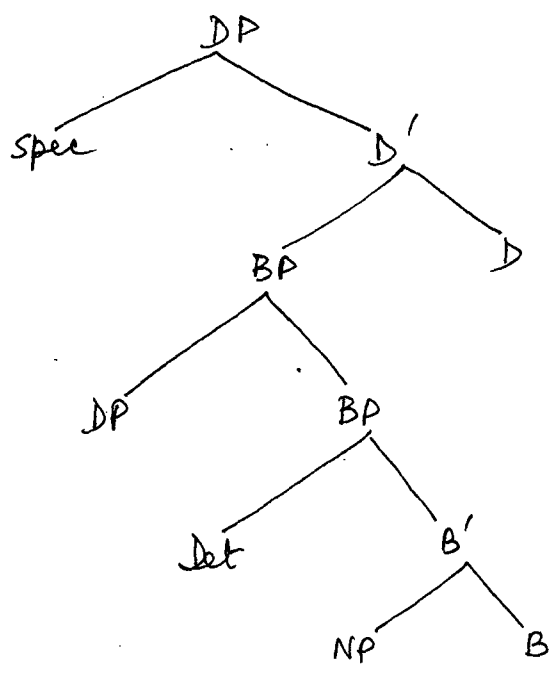
DP, they propose a Badge (or B) head, where the internal grammar of a noun complex resides. According to them :

"The syntactic environment of a Noun Phrase is conditioned by two forces. It's external grammar shows up at the Declension (or D) head of the DP and registers case, definiteness and other relational properties. It's internal grammar resides in what we have called the Badge (or B) enclosure of the noun complex. The D slot will carry out the instructions of ~~the instructions of~~ the external world. The Badge decides how the internal world, that is, the N is to be organized.

— — — — — " In class languages of the classifier subtype, Badge may be a site, between the Noun word proper and the Delension, where a classifier (with or without a numeral prefix) may appear." According to them, the definiteness is manifested by strengthening Det (the Spec of B') or D or B.

———————————— ✳ ————————————

I.5.4   PRINCIPLES & PARAMETERS THEORY(P&P)

I am enumerating below only that part of P&P which is necessary and which is readjusted to suit our purpose:

Case Theory

According to Miller (1993), In the Principles and Parameters (P&P) theory, Case is assigned under government (local C-command with no barrier present) (Chomsky & Lasnik 1991) by a Case assigning head ((V)erb or (P)re/Post position). U.G. provides three kinds of Case (cf. Chomsky 1986, Chomsky & Lasnik 1991):

(i) Semantic Case - assigned at D-Structure and intrinsically linked to a theta role (e.g., dative=benefactive;

ablative=source); etc.

(ii) Inherent Case - generally associated with a theta role, is also assigned at D-structure. It does not require identical case and theta marking, and is realized separately on the NP, allowing for case to be assigned in one position and realized on another, eg., Genitive Case markigng on an NP.

(iii) Structural Case - Determined by government and Universal Principles, only requires that the NP bear some theta role, not necessarily assigned by the Case assigner, and therfore is assigned at S-structure. Nominative Case is assigned by INFL in <Spec, Agrs> position, and accusative case is assigned in <Spec, Agro>.

In the minimalist theory on the other hand, Chomsky (1992) abandons the notions of government, D-structure (as a unique level)and S-structure, going directly from movement to spell-out. Even if we continue to use the traditional terms D-structure and S-structure as convenient labels for pre and post-movement structures, nothing is lost, and no contradiction is obtained. By abandoning the notion of government, Chomsky(1992) introduces typically "local" relations stated in simple terms of X-bar theory. Only Spec-Head relations and Head-Complement relations are relevant. His narrower approach now requires that all modes of Structural Case assignement be be recast under Spec-Head relation. Both agreement and structural case are manifestations of the Spec-Head relation. But since Case properties depend on the characteristics of T and the V head of VP, it is assumed that T raises to AGRs, forming (1a) and V raises to AGRO, forming (1b).

1(a) [AGR T AGRs]

1(b) [AGR V AGRO]

This complex includes the ϕ features of AGR and the Case features provided by T, & V respectively. An NP (Here NP refers to NP/DP. No distinction between the two is made when not necessary.) in the <spec,head> relation to the AGR complex bears the associated Case and agreement features. A noun phrase, then, may enter into two kinds of structural relations with a predicate:

agreement, which involves features shared by NP and predicate; or Case, manifested on the NP alone. Both relations involve AGR : AGR alone, for agreement relations, the element T or V alone (raising to AGR) for Case relations. Subject of verb or adjective and object of verb enter into these relations (but not object of adjective if that is an instance of inherent, not sturctural Case.) (Chomsky 1992).

I am hence assuming Chomsky's (1992) version of structural case assignment which overrides the earlier version of assignment of structural case under government. This doesn't however imply that I am totally discarding the notion of government as Chomsky (1992) has done.

Following Pollock (1989), Chomsky (1989), Pesetsky(1989), Mahajan (1988,1989) and Chomsky and Lasnik (1991), a highly articulated IP structure will be assumed. Along the lines of Davison (1991), I am assuming an aspect node for Bangla. Though Bangla doesn't in general show object agreement, AGRo becomes relevant in case of Experiential constructions which show object

59

agreement. If we assume that as the verb moves up the tree it goes on acquiring the features (suffixes) of aspect, ~~Axu~~ Aux, Tense, Agr etc. in the order specified on the tree, it will be a problem for Bangla if AGRPo is placed right above the VP node as Mahajan (1990) does. The Agreement is the last suffix on the verb. It appears that the verb in Bangla has only one slot for agreement (person only), which is the outermost slot on the verb. This can be filled either by AGRs or AGRo. While talking of Agreement it seems that it is necessary to specify whether it is the Verb that initiates the agreement, or the noun. If it is the noun, then we assume that the agreement is reflected primarily on the verb slot for Agreement. Now suppose that AGRs is active. Then, assuming the tree structure in (1), *(Pg. 61)* the verb first moves to AGRo, assigns structural accusative case to it's Spec position where the object moves. It does not acquire AGRo features because that is inactive. Then it moves up the tree up to AGRs and suffixes are put in place in the proper order. The tense however moves to AGRs and <u>knows</u> that it has to <u>prefix</u> itself to AGRs. The verb complex reaches AGRs only after Tense has done it's part and this way ordering of suffixes is explained.

But how does one explain the ordering of suffixes when AGRo is active? If AGR_o is placed in the same place as in the tree above, then AGR_o must <u>know</u> that it is the last slot on the verb and as the VAGRo complex moves up the tree, other affixes take their place in between the Vstem and the outermost slot AGRo. Otherwise, we have to postulate that AGR_o is somewhere between AGR_s and TP. That won't make the structure perfect either, because now Tense has to cross AGRo to reach AGRs. We therefore

assume the tree structure (1) and also assume that each of the nodes in the tree <u>know</u> which slot is specified for them and they simply fall in place. Then, the ordering of the nodes can remain the same for all languages and they simply <u>know</u> where they have to go. 'Knowing' here means some kind of feature specification on the verb as well as on these terminal nodes. May be it would then be simpler to assume that fully inflected forms are picked up from the lexicon and their features are only 'Checked' ~~only~~ on the tree, as Chomsky (1992) proposes. But that is to be worked out.

Bangla is a SOV language, and the direct object is the direct sister of V, followed by the indirect object, the subject being in the <Spec, VP> position. The basic structure of Bangla clause is given in (1).

(1)
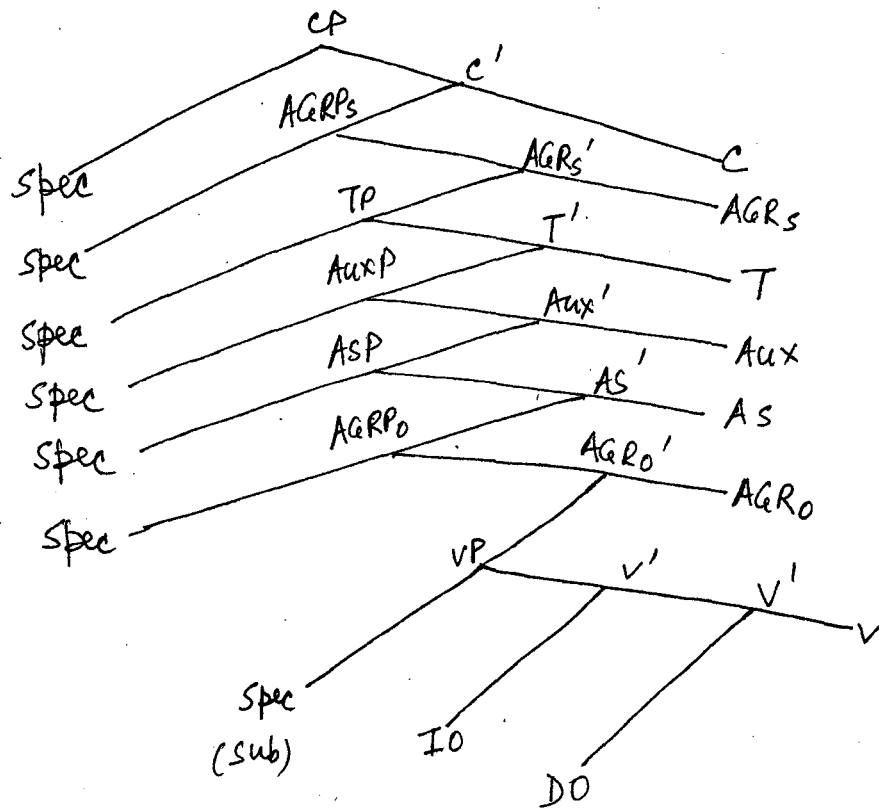
Omitted here is a phrase headed by a functional element negation (Pallock 1989, Laka 1990).

AGR is a collection of ϕ features (gender, number, person): AGRs houses the features of subject agreement and AGRo that of object agreement.

In the analysis that follows, an expanded INFL of the form given above will be depicted only if necessary. Otherwise only the bare essentials of the tree will be given to save space & confusion.

I.6.   OTHER THEORETICAL ASSUMPTIONS

I.6.1   Following Chomsky(1981) & Mahajan (1990), I assume that there are three kinds of movements.

(i) Argument shift - eg., NP/DP movement for case, agreement etc.

(ii) Adjunction to XP - eg., movement for topicalization, focussing or wh-movement.

(iii) X-0 shift - Head movement (the primary movement in Incorporation (Baker(1985,1988) etc).

I also assume that there are two kinds of positions : Narrowly L-related (Chomsky 1992) or L-related (Mahajan 1990) and Broadly L-related (Chomsky 1992) or non L-related (Mahajan 1990).

62

positions of a lexical item and functional heads projected from it. Within the clausal system it includes the Spec and complement positions of V,AGR &T. Such a position has the basic properties of A position.

Broadly L-related postion :- All other positions, including Spec CP and adjoined positions. Such a position has the basic properties of A-bar position.

Argument Shift is movement to a narrowly L-related position. It involves substitution into a narrowly L-related position. This movement shows binding properties normally associated with A movement, as per LGB framework.

Adjunction to XP: is movement to broadly L-related position. It is an adjunction operation and it shows properties associated with A-bar movement i.e., it doesnot provide new binders, can license parastic gaps and is not subject to binding locality in terms of extended chains, as per the LGB framework.

I.6.2 THE UNACCUSATIVE HYPOTHESIS

Perlmutter (1978) proposed that there are two kinds of intransitive verbs :

(i) Unaccusative/Ergative Verbs : They are monadic verbs with a single internal argument, usually a patient.

(ii) Unergative Verbs : These are monadic verbs with a single external argument, usually an agent.

(i) Unaccusative/Ergative verbs are generally those in which there is no control or volation attributed to any putative actor. (Miller 1993). They are typically the verbs involving change of state (collapse, fall, elapse, happen etc.), as well as those in

which some potential actor is affected (e.g., be born, swell, wilt, faint, die, etc.) This class may also include a variety of quasi-involuntary bodily processes (blush, belch, sneeze, snore etc.), depending on whether there are conceptualized as activities or change of State. (Levin & Rappaport 1989; Dowty 1991 etc.) However, protagonist control is not (per se) an accurate diagnostic for unaccusativity because, there are languages which mark with affixes, the presence or absence of or degree of control by an actor.

(ii) <u>Unergative Verbs</u> :- These are verbs in which it is ~~plansule~~ possible to attribute some control or volition to a putative actor. These are the verbs like 'dance', 'swim', 'fly', 'laugh', 'cry' etc. (Miller 1993).

Syntactically, an unaccusative verb has a D-structure sister (complement), Whereas, an unergative verb has NP in <spec,VP> position, i.e, only has a VP subject.

Chapter II, begins with the listing of the characteristics of Bangla language. Next, I have shown the stand I have taken vis-a-vis the Lexicalist vs. Phrase Structure Morphology. Then begins the analysis of Conjunct Verbs in Bangla. For that, I have begun by first analyzing the nature & status of the Nominals, Adjectives, Expressives etc., occuring in Conjunct Verbs.

Next, I have tried to see whether a CP behaves like a single syntactic constituent, or not. I found that it shows split properties. To study the nature of the nominals occuring with

CHAPTER II

ON BANGLA

Bangla, or Bengali, is an Indo Aryan language. It is spoken in West Bengal, in portions of Assam, Bihar, Orissa and Tripura. It is also spoken in many other towns all over the country, by the erstwhile migrants from West Bengal, and former East Pakistan (new Bangladesh). It has been in existence as an independent language or as a distinct dialect group, for nearly ten centuries. (Chatterjee(1926)). It's sister languages are Assamese, Oriya, Magahi and Maithili.

The unmarked word order of Bangla is SOV. It is a pro-drop language. In a ditransitive sentence the unmarked word order is Sub-IO-DO-V. Auxiliaries and the Negative Marker in the finite clauses follow the verb. It is a strictly post positional language. Agreement in Bangla is very week. It shows only person agreement. Adjectives do not agree with the noun, nor do gentive constructions show any agreement. Bangla is a Class language (has classifiers) as opposed to a gender language like Hindi. Bangla nouns show aggregation as opposed to the number dimension exhibited by many languages like English.

Following are the Case desinences shown in Bangla :

(a) Nominative has zero marking. That is, a nominal in nominative case doesn't take any suffix.

(b) Accusative Case shows zero marking when the noun is indefinite, but takes a suffix '-ke' when the noun is definite Plural animates take '-r' and inanimate plurals can take '-ke' or '-r' markings.

(c) Dative case takes the following suffixes when following a singular noun or definite animate nouns (singular or plural). '-ke' suffix when following a consonant and 'ye/ke' suffix when following a vowel. In takes the suffix '-r' when following plural indefinite nouns.

(d) Locative case takes '-e' suffix when following a consonant and '-te' suffix when following a vowel.

(e) The genitive case takes '-er' suffix when following a consonant and '-r' suffix when following a vowel.

II.2   LEXICALIST HYPOTHESIS VS. PHRASE STRUCTURE MORPHOLOGY

Constant debate is on between the pro-lexicalists and the pro-syntactic theories of morphology.

A lexicon has always been taken as a repository of the idiosyncratic. As a result, derivational morphology was always supposed to belong to the lexicon whereas inflectional morphology, which is productive in nature, was thought to be handled in the Syntax. Derivational morphology, even if productive in form, is rarely productive semantically. It's various semantic shades cannot be captured by productive rules. Also, because it was believed that lexical insertion depended on fully derived forms, derivational morphology was supposed to belong to the lexicon.

Chomsky (1970) preposed that Syntactic Rules cannot make reference to any aspect of the internal structure of the word. This was the Lexicalist Hypothesis. According to Desciullo &

Williams (1987) words are 'atomic' at the level of phrasal syntax and phrasal semantics. They have features, but no structures. Hence, only the words as a whole are relevant to the syntax. These ideas led to the conclusion that fully inflected forms are to be listed in the lexicon, derivational and inflectional morphology, both.

Traditionally there are two most common theories of the lexicalists : Strong Lexicalist Hypothesis (SLH) and Weak Lexicalist Hypothesis (WLH).

According to Miller (1993), the WLH (or Interpretive Morphology) preposes that Inflectional operations are applied in the syntactic component (or later), either as actual rules or checking devices, as a way of accounting for syntactic dependency of inflection.

The SLH (or 'Generalized Lexicalist Hypothesis' or 'Lexical Morphology') on the other hand proposes that fully inflected forms (provided by Lexical redundancy rules) are drawn from the lexicon and placed in the phrase structure by lexical insertion.

Chomsky (1992) continues with the SLH tradition and proposes the checking theory. He assumes that fully inflected lexical items are drawn from the lexicon with all of their morphological features. These features are then checked at appropriate places by a feature checking mechanism. If the features match, the abstract forms which do the matching, (viz. AGR etc) disappear and the lexicon enters the PF component by a Spell-out Rule.

The proponents of the Phrase Structure Morphology include Sproat (1985), Walinska de Hackbeil (1986), Baker (1985,1988) and Hale & Keyser (1991) etc. As stated by Miller (1993), according

to them :

(1) There is no separate morphological component

(2) There are no word formation Rules (except for Spell-out rules at PF)

(3) All morphology is essentially syntactic in the sense that it is governed by grammatical (rather than lexical) principles and parameters.

Infact, Baker's (1985,1988) Mirror Principle, which says that "Morphological derivations directly reflect syntactic derivations (and vice versa)", which is assumed to be true, is a strong argument in favour of Phrase Structure Morphology.

My approach follows Baker's approach but finds no contradiction with Chomsky's (1992) version of checking theory, for the following reason.

Even if fully inflected forms of lexical items are drawn from the lexicon and moved to appropriate places for feature checking, the question arises, how are those features checked? As Chomsky (1992) says, the abstract forms like AGR etc, which contain the relevant features to be checked, check for the presence of those features in the lexical items which have moved to the Spec position of AGR etc. The next question is how does AGR obtain those features? It must be obtaining them from the lexicon only. Also, it does not suffice to say whether a feature is present or absent. It must also mention the 'form' the feature takes in that particular language. For example, if the faminine gender in a particular language is marked with a suffix '-i' (as in Hindi) or if the auxiliary is suffixed as '-ch', (as in

Bangla), it must check the form too. And that implies that the form of the gender or the aux suffix should be present in Agr or in Aux respectively. These affixes can only be drawn from the lexicon. This is as good as saying that words and affixes are projected as syntactic heads at D-structure, which is what Baker says. The next question is, how are these so called features, which are either indeed features where a word cannot be broken up into smaller morphems, or are affixes, listed in the lexicon? If one goes by the maxim, that only idiosyncratic is listed in the lexicon, all these features of a fully inflected lexical item, which are nothing but the manifestations of the idiosyncracies of a lexicial item have to be listed against each item in the lexicon. That implies that, against each lexical item, we are not only writing it's phonetic, semantic and syntactic properties, but we are also separating out the affixes and mentioning their form and their characteristics. This seems to boil down to the fact that there is no distinction between the idiosyncratic and the non idiosyncratic in a lexicon. Everything is idiosyncratic. For example, if a lexical item 1 has ten features to specify (including its semantic, phonetic, syntactic and inflectional etc. features), it is most unlikely that there will be another lexical item, all of whose features will be productively derived from the features of lexical item 1. If that is the case, lexical item 2 should also be listed in the lexicon and so on, far all other lexical items.

The greater the number of features of a lexical item, less likely is the chance of another lexical item being derived productively from the first one. This was all in reference to

Chomsky (1992)'s checking theory.

Now, even in Baker's case, where affixes are also projected as syntactic heads in the D-structure, all affixes have to be listed in the lexicon besides the root form of the word and also the derived and the inflected forms. Those who proposed that words are derived in the syntax, they too have to list all words in the lexicon to check if that word indeed exists in the lexicon.

Given these arguments, I conclude that lexicon cannot be reduced under any theory. Computationally speaking, one can only think in terms of arranging the lexicon in such a way that it's size is reduced. I therefore, do not distinguish between the idiosyncratic and the non-idiosyncratic. The meanings of idiosyncratic items cannot be derived productively. But if their forms can be derived in the syntax, then the suggestion is that they should be derived in the syntax, depending on the syntactic properties they exhibit, and then be checked for their form and meanings in the lexicon. This, if we are concerned with generation of sentences. If however, we are doing translation, then the procedure should be reversed. We first check the lexicon for an equivalent word. If it is one of the so called idiosyncratic ones, we still put them in the phrase structure, where they, depending on their properties would obey the syntactic rules and sentences would be derived.

The Verbal member 'V' of the Conjunct Verb is selected from a close class of verbs. The 'V' has also been called a light verb or a host verb in the literature, on the grounds that, in many cases, it has lost it's semantic content. However, it is not entirely true of Conjunct Verbs. The V of a Conjunct Verb, mostly (not always though), retains it's original semantic content, and ar#gument structure.

The 'V' stem is chosen from the following set of verb stems: kOr(do), de(give), ne(take),pa(get), mar(hit), kha(eat), lag(strike), kaT(cut), bana(make), dhOr(hold), phEl(drop), pat (spread) etc.

Amongst these, the verb stem 'kOr' (do) is used in the majority of the cases, followed by 'de'(give), 'ne'(take), 'pa' (get), 'mar'(strike) etc. Some of them have almost come to be used idiomatically. The most productive Conjunct Verb structure is the 'N + kOr' construction, which is an open and a dynamic set, forever admitting borrowings from other languages. In the borrowed form, it is only the N part which is admitted as a borrowing, while retaining the host verb's original form, which is 'kOr' in most cases.

Bangla Conjunct Verbs are an open class whereas the Bangla one-word stems are a closed class.

The Conjunct Verbs in Bangla also occur in the following combinations:

Adjective + Verb (AV predicates)

71

Expressive + Verb (EV predicates)

It may be noted that both Adjectives and Expressives have an underlying event structure or participants in lexical conceptual structure, which manifest themselves only when they combine with a verb. The adjectives combine with 'hO' (be) to give a stative reading, and with 'kOr' to give a process reading. 'kOr' adds an external argument.

The expressives too can be adjectival or nominal or adverbial. The adjectival expressives can occur with 'hO' (be) or 'kOr'(do), while the adverbial expressives occur only with 'kOr'(do). Expressives are Unaccusative Verbs.

Hence, by combining with 'kOr' they donot acquire an extra argument. They are all monadic verbs with one external argument, a patient.

Examples of AV Predicates :

1) poriSkar hO/kOr -> clean be/do

2) birokto hO/kOr -> disturbed be/do

3) Opoman hO/kOr -> insulted be/do

4) OtiStho hO/kOr -> exaperated be/do

5) noNgra hO/kOr -> dirty be/do

6) nOSTo hO/kOr -> spoil be/do

Examples of Exp Predicates (Expressives)

1) cOkcOke hO/kOr -> shine be/do (adjectival)
   /jhOkjhOke
   kOTkOT(e)

2) TOkTOk hO/kOr -> bright be/do (adjectival)

3) khOSkhOS hO/kOr -> rough be/do (adjectival)

4) guRguR kOr -> thunder do (adverbial)

5) jhirjhir kOr -> patter(rain)/blow(wind) do (adverbial)

6)   Ton Ton kOr -> pain do (adv)
     /kOn kOn

7)   dau dau kOr -> burn (fire) do (adv)

Only adjectival expressives can occur with hO because they are states. Since they are unaccusatives, there is no scope for adding an external argument even with 'kOr'.

Postposition + Verb (PV)

These are the only Complex Predicates considered here, whose first member does not behave like a Result Nominal, nor does it have participants in the lexical semantic structure. The 'V' part of the predicate is chosen from a closed set like 'lag' (strike) , 'Ṭan' (pull) etc. Bangla postpositions can be transitive or intransitive (Dasgupta 1980). A transitive
                                                          or nominative
postposition necessarily governs a nominal in the genitive. An intransitive postposition doesn't take any complement noun which it can govern. When postposition incorporates, it strands a nominal in the genitive if it is a transitive postposition. In case of intransitive postpositions, no stranded item is left behind.

EXPERIENTIAL SUBJECT CONSTRUCTIONS

Many languages in the world, and South Asian languages in particular employ a specific linguistic device to mark the experiencer in constructions expressing psychological states. These constructions have also been called Dative Subject constructions or Oblique marked Subject Constructions (Abbi 1991). These are constructions in which a subject undergoes an

73

experience or is in a certain state which is 'out of control' of the subject nominal. Such constructions are to be constrasted with active and agentive constructions where the subject nominal is marked mostly as nominative or ergative (in ergative languages). Agent of active constructions have control over the action, which is lacking here. Infact, these constructions have been called passive constructions (Abbi 1991). Oblique subjects occur in Non Experiential Constructions too. For details see Abbi (1991).

While the Experiential Subjets in South Asian languages are marked as Dative or Accusative or Instrumental or Genitive, Bangla marks them as Genitive. Typical examples of Experiential Subject Constructions in Bangla are:

1. amar   <u>khide   peyeche</u>.
   I-Gen   hunger   got
   I am hungry.

2. amar   <u>ghum   peyeche</u>.
   I-Gen   sleep   got.
   I am sleepy.

3. amar   <u>ghum   aSche</u>.
   I-Gen   sleep   coming.
   I am feeling sleepy.

4. amar   <u>1Ojja   korche</u>.
   I-Gen   shy   doing.
   I am feeling shy.

5. amar   gan   <u>bhalo   lage</u>.
   I-Gen   music   good   strikes.
   I like music.

6. amar   tomake   <u>pOchondo   (is)</u>. *(hocce)*
   I-Gen   you-Acc   like   (is).
   I like you.

7. ami   <u>rag   korechi</u>.
   I-nom   anger   doing.
   I am angry.

Experiential Subjects can sometimes occur in the Nominative also

74

as example (7) shows. Here the nominal (subject) is conceptualised as 'Agentive'.

It may be noted that verbs like 'khide pa' (feel hungry), 'ghum pa'/'ghum aS' (feel sleepy), 'lOjja kOr' (feel shy), 'bhalo lag'(like),'pOchondo hO'(like) are all Noun Verb combinations and hence are Conjunct Verbs. Semantically they denote a single state, qualifying the experiencer subject. The objective here is to prove that syntactically too they form a single lexical category, i.e., a single head, which is formed by the incorporation of N into V.

II.4 Some examples of Bangla Conjunct Verbs.

I   Examples of NV predicates occuring with 'V' stem 'kOr'(do)

(A) NV	Equivalent English Verbs
(i) kaj kOr:(work do)	work
(ii) Sahajjo kOr: (help do)	help
(iii) Seba kOr : (care do)	look after
(iv) khEla kOr : play do	play
(v) kripa kOr : bless do	bless
(vi) bhOrSa kOr : trust do	trust
(vii) gan kOr : song do	sing
(viii) nOkol kOr : copy do	copy
(ix) Onnaye kOr : wrong do	do wrong
(x) probeS kOr : enter do	enter
(xi) oddhoyon kOr : study do	study
(xii) grohon kOr : take do	take
(xiii) dan kOr : gift do	gift

(xiv) dhar kOr : borrow do   borrow

(B)   NV Predicates with 'kOr' formed with borrowed Nominals (N):

(i)   diskas kOr : discuss do   discuss

(ii) fi:l kOr : feel do   feel

(iii) kriTisaiz kOr:Criticize do   criticize

(iv) Telifon kOr : Telephone do   telephone

(v)   Sain kOr : Sign do   sign

Nominals like "Telifon"(Telephone) do not retain their concrete

meaning. They acquire the meaning of abstract nominals which

means the action of telephoning.

(C)   NV pridicates with kOr formed with Echo words:

(i)   bhaNgcur kOr : break do   destroy

(ii) tolpaR kOr : topsy turvy do   (make topsy turvy)

(iii) haNkDak kOr : scream call do   (scream and shout)

(D) NV predicates with 'kOr' formed with Expressives

(i)   guRguR kOr : thunder do   thunder

(ii) cOkcOk kOr : shine do   shine

(iii) daudau kOr : fire burn do   burn

II   NV predicates occuring with 'de'   (give)

(i)   upodeS de : (advice give)   advise

(ii) dhar de : (lending give)   lend

(iii) onumoti de:(permission give)   (permit)

(iv) dhakka de:(push give)   push

(v)   laph de:(jump give)   jump

III   NV predicates occuring with 'ne'   (take)

(i)   upodeS ne:(advice take)   take advice

(ii) dhar ne:(borrowing take)   borrow

IV   NV predicates occuring with 'pa' (get) (Mostly in Expressive

76

Verbs)

(i)   khide pa:(hunger get)   feel hungry

(ii) teSTa pa:(thirst get)   feel thirsty

(iii) dukkho pa:(grief get)   feel grief

(iv) Ter pa:(idiomatic)   (sense)

V   NV predicates occuring with 'mar'   (hit)

(i)   douR mar:(run hit)   run

(ii) uMki mar:(peep hit)   peep

(iii) ghapTi mar:(hiding hit)   hide

(iv) cOR mar:(slap hit)   slap

VI   NV predicates occuring with 'kha'   (eat)

(i)   mar kha:(hitting eat)   get hit

(ii) cume kha:(kiss eat)   kiss

(iii) Thokor kha:(stumble eat)   stumble

VII   Other NV predicates :

(i)   SaMtar kaT:(strim cut)   swim

(ii) film bana:(film make)   make films

(iii) haMp dhOr:(breathlessness catch)   (feel breathless)

VIII Idoimatic NVs with Case Endings :

N here is a concrete Nou, with a locative case.

(i)   cokh-e pOR:(eye-loc fall)   catch attention

(ii) ga-e makh:(body-loc put)   pay attention

(iii) mon-e kOr:(mind-loc do)   remember

(iv) mon-e rakh:(mind-loc keep)   remember

(v)   hat-e rakh:(hand-loc keep)   keep in control

IX   Examples of Postposition Verb (PV) Constructions

(1)   pechone lag:(behind strike)   tease

(ii) baire kOr:(out do)   take out

(iii)bhitore kOr:(in do)   bring in

(iv) kache Tan:(near pull)   endear

II.5 NATURE OF THE HOST VERB 'V' IN N+V STRUCTURES

Is 'kOr'(do) an auxiliary or a full verb?

The wide range of examples show that 'kOr'(do) occurs in constructions ranging from two arguments upto four arguments. 'kOr' has been considered a diadic verb in the literature, based on the construction type :

```
(1) ami    kaj    korchi
    I      work   doing
    1        2
    I am working.
```

Here 'kaj' has been considered an argument of 'kOr' though it is a deverbal nominal and though 'kaj kOr' should be treated as a Conjunct Verb. 'kOr' however doesnot occur with a single argument.

```
(2) * ami      korchi
    I am doing.
```

The construction though colloquially sounds correct, has actually a missing argument. If however, 'ami korchi' is taken to be correct, then 'kOr' should be treated as a monadic verb. And since this is the only construction of 'kOr' in which it doesnot occur with another verbal noun (or adjective) which adds it's own set of arguments, this can be taken as a model 'kOr' construction. This is one option.

In the following example 'kOr' occurs as a triadic verb.

```
(3) ram    Samke/Samer        Opoman   Koreche
    Ram    to Shyam/Shyam-Gem insult   done
    1        2                  3
    Ram has insulted Shyam.
```

In the following, 'kOr' occurs with four arguments.

(4) raja   projader   bOstro   dan   korchen
    king   to subjects   clothes   giving   doing
             /subjects-Gem
    1   2   3   4
    The king is gifting clothes to his subjects.

Amongst these four model constructions of 'kOr', which one should be considered most basic? In all of these constructions, except in (2), 'kOr' occurs with a deverbal nominal, and the remaining arguments are essentially the arguments of the deverbal nominal - except the external argument.

Following Grimshaw(1991), I assumed that the deverbal nominals have their external argument suppressed. The external argument is supplied by 'kOr' and other V's of the N+V construction. That 'kOr' indeed supplies the external argument is also proved by the Adj + V constructions. Adj + 'hO' (be/become) are stative Predicates. But Adj+kOr are process Verbs which add an external agent to the construction. 'kOr' here acts like a causativizer adding an agent/external argument to the construction. In sum, since 'kOr' in all the construction is doing the work of adding an external argument and not merely of adding the auxiliary endings, it is tempting to consider (2) as correct (which in any case in colloquial speech is considered to be correct) and thus consider 'kOr' as a Monadic Verb and neither a diadic Verb, nor an Auxiliary.

All other 'V' stems of N+V structures similarly do the work of atleast adding the external argument. Hence, none of them can be considered a mere auxiliary. 'V' stems like 'de', 'ne' etc. generally act as full verbs though others might be simply working like 'kOr'. Except 'kOr', all the other V's can exist otherwise

79

and take arguments without a deverbal noun as one of their arguments.

Given the state of affairs, I shall consider kOr as dynamic as any other verb, with various shades of meaning. Sometimes it indeed function as a triadic verb like 'de'(give) and sometimes as monadic verb. But 'kOr' as a DIADIC Verb will be taken as its STANDARD INTERPRETATION.

Similarly, other host verbs, have their own argument structure. But whereever they seem to have lost part of their semantic content and thus have a different theta grid, and/or an argument structure, we take them to be different verbs. So, in all cases, there is a standard reading of V or other readings, which are now interpreted as V1, V2.... etc. This means that the N of the Conjunct Verb will always be the head of an argument of the host verb.

II.6.   NATURE OF THE NOMINALS (VERBAL NOUNS/QUASI GERUNDS) AND THEIR ARGUMENT STRUCTURE

Following Grimshaw(1991), it is assumed that these nominals do not have an external argument. The external argument is supplied by the 'V' of N+V predicate as proved above.

It is assumed that these Verbal Nouns are either Result Nominals (RNs) or Complex Event Nominals (CENs). RNs do not have argument structure but have modifiers. The CENs have argument structure. Structurally, that would imply that the arguments of CENs all occur inside the NP node and are theta marked by the head noun as required in the GB framework. In case of RNs, only the modifiers of RNs occur under the NP node. As stated earlier,

and according to Aoun(1985) and Chomsky(1986), the hidden
arguments of the noun get realized when ~~the~~ *it* combines with a verb.
Ofcourse they donot distinguish between RNs and CENs. In our
case, since CENs are preserving their argument structure anyway,
it would follow that the unrealized arguments of RNs are realized
when they combine with a host verb. One way of doing this is by
'borrowing' the arguments from the host verb. It would also imply
that those arguments are not realized under the maximal
projection NP. This also implies that RNs need to combine with
the right kind of verb which is able to 'lend' its' arguments to
RN for realization. As stated above, only the modifier of RN will
appear under the maximal projection NP of RN.

That what is said above is indeed true is proved by the
examples that Jayaseelan (1988) cites - in English as well as in
Malayalam. viz,

a) John gave permission to Mary to leave

Ex

b) raajaawo pookuwan mantRikko   anuwaadam   kodutta(Mal.F
   king-non go-inf   minister-dat permission-acc give-past
   King gave permission to the minister to leave.

In both ~~the~~ *of* these cases the arguments of 'permission' and
'anuwaadam' occur outside the NP of which they are the head.
According to our proposal above that is not unexpected since in
both the cases(a) & (b) above, 'permission' and 'anuwaadam' are
RNs and hence that is a possibility. According to Grimshaw's
Theory, any nominal with a sentential complement is bound to be a
RN. In fact this is the surest test for RNs. The sentential
complements 'to leave' and 'pookuwan' above are modifiers of
'permission' and 'pookuwan' respectively. Hence only they occur
under the NP head. This also solves the problem of theta marking

(atleast in these cases).

Coming to Bangla, the aim now would be to check if the theory holds. The following tests are suggested:

RNs with sentential complements must combine with triadic verbs like 'de' & 'ne' only. Since Nominals with sentential complements are all RNs, and also because excluding the external argument they all have an indirect argument (unrealized). We except them to pair up with a triadic verbs only, which would lend it's external argument and the indirect (/goal) argument to the RN for the full realization of it's arguments. Such verbs are the triadic verbs 'de' and 'ne'. The conclusion that comes out of this is that RNs with sentential complements cannot occur with 'kOr' or any diadic verb which fails to supply it it's goal argument. Where it does, 'kOr' itself acts like a triadic verb, 'de'. The examples on the following page show that that indeed is the case.

ANALYSIS OF NOMINALS OCCURING WITH 'de' (GIVE) :-

Nominals with Sentential complements: RNs

(Sentential complement can occur either as a NP with genitive marking, or as an infinitival complement or as a finite sentential complement.)

(i) upodeS de(counsel give) = counsel

Example,

(a) ram   SEmke [NP [NP baRi jabar] upodeS]   dicche

                              / [s baRi jete]

        ram   Shyam-dat home   going counsel give
        Ram is counselling Shyam to go home.

(b) ram   SEmke [N   upodeS] dicche [CP je[IP or baRi jawa ucit]]
        ram   Shyam-dat   counsel give-pres that he-gen home go-ger mus·

Ram is counselling Shyam that he should go home.

Similarly, the following Nominals occur with Sentential complements only.

(ii)   onumoti de (permission give) = permit

(iii)   agga de (order give)   = order

(iv)   aSSaS de (promise give)   = promise/give hope

(v)   gEMn de (lecture give)   = lecture(with a negative
                                         connotation)

II.6.1   STATUS OF NOMINALS OCCURING WITH 'de' (GIVE) :

Proof that these nominals are RN :

a) The nominals below are ill formed when they occur with (TM) temporal modifiers, whereas their gerundive counterpart (formed by suffixing '-Wa/no' to the 'N+V' stem), which are always CENs are grammatical.

b) RNs cannot show event control (EC).

(i) ramer Bamke [Etokkhon dhore] upodeS dewa/(*upodeS) aScorjer biSOY
                 TM   thing
    ram-Gen Shyam-Dat[a long time]lecture giving/(*lecture) surprising t
                  TM
    It is surprising that Ram has been lecturing Shyam for so long.
                                                       ObhOdrota
(ii) ramer Samke [bidaYe kOrar jonne] dhakka dewa/(*dhakka)bhiSon ObhO
                  EC
     ram-Gen Shyam-Dat [to turn out] push giving/(*push) very ill manne
                  EC
     It is extremely ill mannered of Ram to push Shyam to turn him ou

(iii) amar tomake [dudin dhore] SONgo dewa/(*SONgo) mone ney?
                   TM
      my you-dat [two days during] company giving/(*company) remember n

      Don't you remember my given company to you for two days?

(iv) ramer nodite [Otokkhon dhore] SaMtar dewa/(*SaMtar) bhalo nOY.
                   TM
     ram-Gem river-loc[so long during] swimming/(*swim) good not.
                   TM
     It is not good for Ram to swimm in the river so long.

(v) ramer porikkha dewa/(*porikkha) [jate kOleje dhukte pare]
                                      EC

83

ram-Gen giving exam/(* exam)[so that he can enter college].
　　　　　　　　　　　　　EC

Ram's taking exam so that he can enter college.

(vi) SiSur hama dewa /(*hama)[mar kache jabar jonne].
　　　　　　　　　　　　　　EC
　child's crawling /(* crawl)[to reach his/her mother.]
　　　　　　　　　　　　　　EC
　Child's crawling to reach his/her mother.

(vii) ramer Samke R[gaMja kenar jonne] pOncas Taka dhar dewa/(*dhar)
　ram's Shyam-Dat drug buy-Ger for fifty rupees loaning /(*loan)

　bhalo nOY.
　good not.

　　　　　　　　　　　　　　　　　　　　　　　　　　drugs
　It is not good for Ram to lend fifty rupees to Shyam[to buy dru
　　　　　　　　　　　　　　　　　　　　　　　　　EC

Similarly, it would be found that all the nominals occuring

with 'de'(give) are RNs. Only their counter part gerunds are

CENs.

II.6.2 STATUS OF NOMINALS OCCURING WITH 'kOr'

They too are RNs.

1　amar roj kaj kOra/(*kaj)[kiSer jonne]?
　my everyday working/(*work) [what for]?
　What do I work everyday for?

2　Sitar [Saradin dhore] khabar ranna kOra/(*ranna)dekhle koSto hOY
　Sita's [allday long] food cooking/(*cook)　　seeing bad feel
　I feel bad that to see Sita cook all day.

3　Sitar make/mayer EkniSTho Seba kOra/(*Seba)[jate ma Sere oThen]
　Sita's mother-acc constant caring/(*care)[so that mother cure bec
　Sita's constant caring of her mother so that she is cured.
　　　　　　　　　　　　　　/(*jhOgRa)
4　ramer Samer SONge jhOgRa kOra/ Thik hOY ni.　　　/(* fight)
　ram's Shyam-Gen with fight doing/right be not
　It wasn't right for Ram to fight with Shyam.

Similarly it can be proved that all nominals occuring with 'kOr'

are Result Nominals.

It is proposed both the Adjectives in the AV Predicates and

the Expressives in the EV predicates be treated as Result

Nominals. Besides the fact that both the adjectives and the

Expressives have an event structure in their lcs, and their

respective participants, they indeed behave like RNs as the following examples will show. It is a point to note that some of the expressives have verbal paraphrases of the form of NV predicates in which 'N' acts as a RN. Eg.,

```
guRguR kOr  =  gOrjon kOr
thunder do     thunder do
Exp     V      N      V
```

If 'gOrjon' can be a RN, then our speculation that Expresives are indeed RNs is not in the wrong track.

II.6.3   STATUS OF ADJECTIVES IN AV PREDICATES - RNs

(The following examples prove the point as before).

1   ramer Shamke Opoman kOra/(*Opoman) Thik nOY.
     ram's Sham-Acc insulting/(*insult) right not.
     It's not right for Ram to insult Shyam.

Similarly it can be proved that all Adjectives in AV predicates behave like RNs.

II.6.4   STATUS OF EXPRESSIVES IN EXPV PREDICATES - RNs

The following examples prove that the Expressive also behave like RNs.

1   baSoner cOkcOke hOwa/(*cOkcOke) ....
     Utensils - Gen shine being/(*shine) ......
     The shining of the Utensils.......

2   megher guRguR kOra/(*guRguR) mane ebar briSTi hObe.
     cloud's thunder doing/(*thunder) means this time rain will happen.
     Cloud's thundering means it will rain.

Similarly it can be proved that all other Expressives (E) in the ExpV EV constructions are RNs.

II.6.5   STATUS OF NOMINALS IN EXPERIENCER VERBS

(ALL RESULT NOMINALS(RNs))

1. baccar khide paWa /(*khide)mane baRi toTostho.
   child-Gen hunger geting/(*hunger) means house tense.
   Child's getting hungry makes the whole house tense.

Similarly for teSTa(thirst), ghum(sleep) etc.

2. amar gOrom laga/(*gOrom)to nOY, SObay najehal.
   I-Gen hot feeling/(*hot) is not, everybody disturbed.
   My feeling hot creates problem for everybody.

3. tomar Oto lOjja kOra/(*lOjja)bhalo nOY.
   you-Gen so shy doing/(*shy)good not.
   Your feeling so shy is not good.

Similarly it can be proved that all nominals occuring in the Experciencer Verbs(Complex types) are RNs.

The conclusion is that, that all the Nominals/Adjectivals /Expressives in Bangla Conjunct Verb Constructions or Experiential Construction, behave like Result Nominals, and hence, I shall treat them as RNs only. By the word 'Nominal', I shall often refer to the first part of a Conjunct Verb or an Experiencer Verb.

II.7. CAN A COMPLEX PREDICATE BE TAKEN AS A SINGLE LEXICAL ENTRY ?

I)   Semantically, each Complex Predicate (CP), which includes (NV,AV,ExpV,

EV and PV constructions), represent one single action - a verb which has it's own argument structure, different from the 'V' of the CP.In many other languages eg., English, most of the CPs are represented as one word. Any change in the N or A or Exp or E or P of the CP results in a different action, and hence qualify to be treated as a different verb. This is in contrast to a mere object verb combinations, where the change in the object of the verb doesnot change the 'action' or the verb. For example,in 'ami bhat khacci' (I am eating rice) and in ' ami am khacci' (I am

eating mango(es)), the action or the verb is that of eating. Whereas in 'ami kaj korchi' (I work doing = Iam working), and in 'ami ranna korchi'(I cooking doing=I am cooking), two different actions are implied, that of working, and of cooking, though, in both the cases only the object nominal of the host verb.has been changed. Same reasoning applies to all other Conjunct Verbs. The reason being, the first part of the Conjunct Verbs ie., the N/A/ Exp/E part all behave like Result Nominals which are abstract nouns with lexical conceptual structure, but without an argument structure. True, there are some NV combinations which take case marked (mostly Locative), concrete NPs as the N of the NV, but these are idiomatic in nature as well as in structure. Idioms are mostly, always, Object Verb combinations. They too are treated as CPs because they anyway, represent one single action semantically, and have the structure of a CP.

II) Syntactically, in the tradition, many diagnostics have been proposed to check whether a given set of words in a sentence is a constituent or not. We use the same tests to check if a CP exhibits the integrity required of a Single Predicate.

1) A CP ACTS LIKE A SINGLE PREDICATE IN COORDINATION:

That is, it can be coordinated with another similar string. For example, the CPs 'ranna kOr'(cooking do = cook) and 'poriSkar kOr' (clening do = clean) can be coordinated in a single sentence as follows:

a) Sita   e baRite   ranna kOre   ar ghOr poriSkar kOre.
   Sita this house-loc cookin does and room cleaning does.
   Sita cooks and cleans the rooms in this house.

2) IF PART OF A CP IS OVERTLY EXPRESSED, THE ENTIRE CP MUST BE

EXPRESSED:

A null pronominal, which is allowed in Bangla in all argument positions, cannot occur in the position of the nominal host in a CP. For example, while (b)& (c) are grammatical with one argument of the verb 'de'(give) suppressed, (e) is ungrammatical where the nominal host 'onumoti' (permission) of the CP 'onumoti de' (give permission) is suppressed.

a) ami ramke boyTa diyechi.
   I Ram-dat book-cl given.
   I have given the book to Ram.

b) ramke boyTa diyechi.
   Ram-dat book-cl given.
   (I) have given the book to Ram.

c) ami boyTa diyechi.
   I book-cl given.
   I have given the book (to Ram).

d) ami ramke jabar onumoti diyechi.
   I Ram-dat go-Ger-Gen permission given.
   I have given permission to Ram to leave.

e) * ami ramke jabar diyechi.
   I Ram-dat go-Ger-Gen given.
   * I have given to Ram to leave.

3) THE NOMINAL HOST IN A CP DOESNOT YIELD WH-QUESTIONS:

In the sentences (a) and (c), the CPs are 'bEkkha kOr' (expand/explain) and 'pOchondo kOr' (like). The examples (b) and (d) show that the nominals 'bEkkha' (explaination) and 'pOchondo' (liking) cannot be questioned.

a) ram kobiTar bEkkha korche.
   Ram poem-cl-Gen explaination doing.
   Ram is explaining the poem.

b) (Qs)* ram kobitaTar ki korche ?
        Ram poem-cl-GEn what doing ?
        * Ram is doing what of the poem?

C) ram Sitake pOchondo kOre.
   Ram Sita-acc liking does.

Ram likes Sita.

d) (Qs) ⚹ ram Sitake   ki   kOre ?
         Ram Sita-acc what does ?
      ⚹ Ram does what to Sita ?

4) ONLY THE NOMINAL HOST OF THE CP CANNOT BE CONJOINED:

CP in it's entirety can be conjoined , and that has already been shown in (1). In the following examples, (a) and (b) are ungrammatical because, only the nominals 'kaj' (work(n)) of 'kaj kOr'(work(v)) and 'gan' (singing(n)) of 'gan kOr'(sing (v))cannot be conjoined, nor can 'upodeS' (advice) of 'upodeS de' (advise) and 'onumoti' (permission) of 'onumoti de' (give permission) can be conjoined.

a) ⚹ ami kaj   eboNg gan   korchi.
      I work(n) and   singing doing.
      I am working and singing.

b)⚹ ami ramke   upodeS eboNg (pORbar) onumoti dicchi.
      I Ram-acc/dat advice and (study-Ger-Gen) permission giving.
      I am advising Ram and also giving him permission to study.

However, the following example (c) can be taken as grammatical. Here the verbal nouns 'bEkkha' (explaination) and 'SOmalocona' (discussion/criticism) are semantically akin to each other, and it seems that they can be conjoined if the corresponding CPs 'bEkkha kOr' (explain) and 'SOmalocona kOr' (discuss /criticize) share all the arguments. Eg.,

c) ami boiTar   bEkkha   eboNg SOmalocona korchi.
      I book-cl-Gen explaination and discussion doing.
      I am explaining and criticizing/discussing the book.

Thus, it seems that if two CPs are semantically very close and they share the argument structure, their nominal hosts can be conjoined, otherwise not. This implies that, semantically, CPs show all signs of a single predicate. Semantically, two completely differnt actions cannot be conjoined to express one single action,

which is what a NV predicate does. It also confirms the fact that a CP indeed expresses one single action. Also, if such conjunctions were possible, it would create problems for the lexicon, because, such conjoined CPs would have to be listed in the lexicon too, and that would create a potentially infinite lexicon by creating recursion. It may be noted, that all predicates need to be listed in the lexicon, whether derived syntactically or otherwise.

5) A CP BEHAVES DISTRIBUTIONALLY AS A SINGLE STRUCTURAL UNIT.

It recurs as a single unit in a variety of sentence positions, as the following examples show:

a) ram SEmke Sahajjo koreche.
   Ram Shyam-acc help done.
   Ram has helped Shyam.

'Sahajjo kOr' (help) is a CP, which in (b) and (c) occur as a single structure in sentence initial position and in sentence medial position respectively.

b) Sahjjo koreche ram SEmke.
   Ram has helped Shyam.

c) ram Sahajjo koreche Samke.
   Ram has helped Shyam.

This kind of movement of CP to various sentence positions creates special discourse effects.

While on one hand CP movement shows that it is a single structural unit, N and V can be separately moved in a sentence to prove the contrary. (see pg 92).

III) THE FOLLOWING EXAMPLES SHOW THAT CP DOESNOT BEHAVE AS A SINGLE UNIT:

1) IT PERMITS INTRUSION OF EMPHATIC PARTICLES LIKE '-i' (only)

AND '-o' (also)

AND '-to' (only) etc., BETWEEN N & V:

For Example.,

a) ami ekhane kaj-i-to   korbo, tumi birokto hocco kEno ?
    I   her-loc work-emph-emph will do, you disturbed are why?
    I shall only be working here, why are you feeling disturbed?

Between the N & V of the CP 'kaj kOr' (work), the emphatic

particle 'i-to' (only-only) have been introduced and the sentence

is still grammatical.

b) tumi mar-o   debe abar ador-o korbe, e abar ki ?
    you hit-emph will give again love also will do, this again what ?
    You will hit also and then love also, what is this ?

Here the emphatic particle 'o' (also) has been introduced

between the N and V of the CP 'mar de'(hit) and 'ador kOr'(love)

and the sentence is still grammatical.

2)   In Bangla, the negative particle (neg) '-na' can intervene

between the N and V of a CP in a non-finite form. In a finite CP,

the 'neg' doesnot intervene. Instead, it follows the finite verb

(cf. Dasgupta.M. 1990). In Hindi however, the 'neg' can intervene

between N and V in finite as well as non-finite constructions,and

in all tenses.

a) ami oke   biSSaS na   korle   kajTa   hoto   na.
    I   he-acc belief not do-non fin work-cl be-pst not.
    If I didnot believe him the work wouldnot have been done.

The neg 'na' has intervened between the N 'biSSas' (belief)

and V 'kOr' (do) of 'biSSaS kOr' (believe) in the non finite form.

b) ami jutoTa bEbohar korbo na.
    I   shoe-cl use   do-fut not.
    I shall not use the shoe (es).

In finite form the neg 'na' follows the CP 'bEbohar kOr'

(use).

3) V MAY OCCUR IN SENTENCE INITIAL POSITION, SEPARATED FROM N BY OTHER ARGUMENTS, FOR SPECIAL DISCOURSE EFFECTS:

Similarly, N may occur in sentence initial position separated from V by other arguments . Dasgupta.M. (1990) shows that this is not true of all CPs. While some CPs allow their N to be preposed, some don't. Awaiting a detailed analysis of that properety, I take it that NVs allow preposing of N or V as the following examples show:

a) ami oke   pOchondo kori.
    I (s)he-acc like   do.
    I like him/her.

'pOchondo kOr' is a CP. Whereas in (b) V of NV is preposed, in (c), N of NV is preposed.

b) kori ami oke   pOchondo.
    do   I (s)he-acc like.
    I do like him/her.

c) pOchondo ami kori oke.
    like   I   do (s)he-acc.
    I like him/her.

4) ADVERBIAL ELEMENTS LIKE 'taRataRi'(hurriedly), 'niScoi' (certainly) etc.,

CAN INTERVENE BETWEEN N &V OF CPs.

In the example (a), the adverbial 'taRataRi' intervenes between N and V of 'kaj kOr'(work (v)). In (b),'niScoi'(certainly) intervenes between N and V of 'onumoti de' (give permission).

a) tumi eY kajTa taRataRi kOro.
    you this work hurriedly do.
    .Do this work fast.

b) ami tomake   jabar   onumoti   niScoi   debo.
    I you-dat/acc go-Ger-Gen permission certainly will give.
    I will certainly give you permission to leave.

We thus find that Bangla CPs show split properties

syntactically. On one hand they behave like a single constituent, and on the other hand they don't. The question naturally arises, 'What are they'? How are they to be treated syntactically ? Are they to be listed in the lexicon ? If yes, what are the criteria for listing an item in the lexicon ?

II.8   ADJECTIVAL MODIFIERS Vs ADVERBIAL MODIFIERS OF A CP

Does the nominal host in a CP take Adjectival modifiers, or does only the CP as a whole take Adverbial modifiers as any other verb would? The contention is that, it does take adjectival modifiers.

It is however, difficult to disambiguate adjective and adverbs in Bangla, because, in many cases, they are homophonous. For example, 'Sundor' (beautiful/handsome/good etc.,) can be used both as an adjective and as an adverb. However, in many cases, the addition of the suffix 'bhabe' or 'kore' (in this way) to the adjective, converts it into an adverb.

The best is to chose words which are typically adjectival in character and see if they modify the nominal of the CP. Such words can be 'choTo' (small or menial) or 'bORo' (big or great). For example.,

1. ram khub choTo/bORo kaj kOre.
   Ram very small/big work does.
   Ram does a small/big work.

Here, 'khub choTo' (very small) or 'khub bORo' (very big) can only be Adjective Phrases (AP) which can modify only the nominal 'kaj' (work(n)) of the CP. These adjectives cannot be converted into an adverb by adding 'bhabe'(in a manner) to them. Eg.,

a) * choTo bhabe / * bORo bhabe

b) * small manner/ * big manner

2. ami eY kobitaTar ⟋ lOmba bEkkha   korechi.
   I this poem-cl-Gen⟍long explaination done.
   I have done/written a long explaination of the poem.

Here, 'EkTa lOmba' (a long) can only modify a nominal, which is

'bEkkha' (explaination) here.

It is best not to test with quantifiers like 'Eto' (so much),

'Onek'(a lot), 'OnekTa' (a lot-cl = a lot) etc., because they can

occur both as adjectives and adverbs. When they occur with CPs,

they seem to qualify either the nominal host of the CP or the

entire verb, as the example (3) shows.

3. SObkOthaYe   Eto biSSaS   kore   labh neY.
   all things-loc so much belief having done use not.
   There is no use believing everything so much.

   Here, 'Eto' (so much), which normally occurs as an adjective

and can be interpreted either as qualifying the verbal noun

'biSSaS' (belief) or as qualifying the entire CP 'biSSaS kOr' (to

believe). This is similar to the following English sentence where

'a lot' qualifies the verb.

4. I walked a lot testerday.

II.9   MODIFIERS OF THE NOMINAL OF A CP

     Before dealing with this topic, it is necessary to

disambiguate the Case desinences in Bangla.
                    DISAMBIGUATION OF CASE DESINENCES IN BANGLA

     Let us consider the following examples:

Bangla shows many CP constructions of the following kind, where,

the object nominal appears either with the '-ke' marking, or with

the '-er/- r' marking. This is an accusative genitive alternation

and not a dative genitive alternation. For example, in the

following sentences, the object nominal (of the entire CP),

appears with the (-ke)/(-er/-r) marking.

1. ami eY kobitaTar/kobitaTake   bEkkha   korechi.
   I this poem-cl-Gen/poem-cl-acc explaination done.
   I have done/written the explaination of this poem.

Similarly,

2. ami ramer/ramke   Sahajjo korechi.
   I Ram-Gen/Ram-Acc help   done.
   I have helped Ram.

But in the case of real datives, which is identified by the presence of a theme object which is transferred from the source to the goal, this kind of alternation is not possible, proving that in the examples cited above, the '-ke' suffixes are indeed the accusatives. The disambiguation of the genitive and the accusative will be taken up below. In example (3), (-ke) marks a dative.

3. ram meyeTike/(* meYeTir)   bOstro dan korlo.
   Ram girl-cl-dat/(* girl-cl-Gen) cloth gift done.
   Ram gave (away) a cloth to the girl.

However, in the plural, the accusative and dative desinences show the same marking as the genitive, ie., '-r' if the noun is animate. Inanimate accusative in the plural can take either '-ke' or '-r' suffix.

4. ram cheleder bOstro   dan korlo.
   Ram boys-dat cloth(es) gift done.
   Ram gave (away) the cloth(es) to the boys.
5. ram cheleder Sahajjo koreche.
   Ram boys-acc help   done.
   Ram helped the boys.

6. ami kobitagulor/kobitaguloke   onubad   korechi.
   I   poem-Aggr-Gen/poem-Aggr-acc translation done.
   I have translated the poems.

Hence, the best way to disambiguate dative and accusative markings is to consider them in the singular. It remains however, to disambiguate a genitive and an accusative marking. There is no confusion between dative and genitive marking, because, I take it

95

that in example (4), there cannot be any genitive reading of the type ' cheleder bOstro' (boy's clothes). So in (4), the reading is that,the dative in plural is marked '-r', which is homophonous with genitive marking.

II.10 THE GENITIVE AS THE MODIFIER OF THE NOMINAL OF A CP

Now consider the following,

7. ami eY kobitaTar   EkTa   choTTo /lOmba bEkkha   korechi.
   I this poem-cl-gen one very small/long explaination done.
   I have made/written a very small/long explaination of the poem.

We want to know, whether the '-r' marking on the object 'kobitaTa'(the poem) is an accusative or a genitive marking. Here, 'EkTa choTTo'/'EkTa lOmba'(a very small/big) is an AP modifying the nominal 'bEkkha' (explaination). A genitive can occur only with a nominal. That the '-r' marking above is indeed genitive and not accusative, is proved by the following.

8. ami eY kobitaTake choTTokore/*EkTa   choTTo) bEkkha korechi.
   I this poem-cl-acc in a short way/*one-cl small explaination done.
   I have done (* a short) explaination of this poem in a short way.

We thus see that with an accusative marking '-ke', the nominal host of a CP can no longer take an adjectival modifier. The CP as a whole can take only an adverbial modifier like 'choTTo kore'(in a very short way) and not an adjective like 'EkTa choTTo' (one small). This proves that the '-r' marking in genitive is indeed a genitive marking, since genitives can occur only with nominals.

Hence, the entire NP headed by 'bEkkha' (explaination) in (7) would be:

(I am ignoring here the details of a DP). (Details of DP are given on pg 99)

7a)   [NP [NP eY kobita-Ta-r] [N' [AP EkTa choTTo] [N bEkkha]]]
         this poem-cl-Gen   one-cl very small explaination

The obvious question is why this difference in behaviour between (7) and (8) ? Well, I can only say that it is showing clear signs of 'Incorporation' effects. In (8), the nominal and the verb have incorporated, and are behaving like a single predicate, and hence are admitting of only adverbial modifiers and the object nominal is taking accusative marking , which is marked by the CP as a whole. On the other hand, in (7), the nominal of the CP is not incorporated. It forms an NP/DP with the object nominal 'poem'. The 'D' head of the DP marks the 'poem' in the genitive. In Bangla DAgr is absent. (For details of Bangla DP see Bhattacharya & Dasgupta (forthcoming)). This way, the argument structure of 'kOr' (do) is also satisfied in (7), which is a diadic verb as standardly assumed.

II.11   SENTENTIAL MODIFIERS OF THE NOMINALS OF A CP

Now consider CPs with Sentential Complements like 'agga de'/'nirdeS de' (order give = order). According to Grimshaw(1991), the sentential complements are always modifiers of the derived nominals. We take it that the sentential complements are modifiers of the Nominal of a CP. In Bangla, the sentential complement either occurs as a clausal complement or as a nominal in the gerundive form, with genitive marking. For example,

9. ami tomake   ekhane   aSar   /aSte   agga diyechi.
   I you-acc/dat here-loc come-Ger-Gen/to come order given.
   I have ordered you to come here.

The reason for marking the '-ke' of 'tomake' (you) as dative or accusative will become clear soon. I take it that, 'ekhane aSar/ aSte', which is actually an equivalent of a sentential complement,

forms a NP/DP with the nominal 'agga' of CP. Then the arguments of the host verb 'de' (give) will be satisfied, and 'tomake' (you-dat) would have a dative marking, as required of the goal argument of 'de' (give). But, when 'agga' has been incorporated, into the host verb 'de', the entire CP 'agga de' (order) would have it's own argument structure, and 'tomake'(you-acc), would now have an accusative marking. 'aSar' is now the stranded sentential complement of the NP headed by 'agga' (ignoring the details of DP),and it doesn't need case. Since in Bangla singular nouns, the accusative and dative marking is the same '-ke', the problem is solved even if 'toma-ke' retains it's case desinence even after incorporation.

II.12   HOW MANY MODIFIERS CAN THE NOMINALS OF A CP TAKE ?

Following Speas (1986) we had assumed that a Functional Phrase like DP has one complement and one specifier position. The Genitive Case is assigned when the DP moves to the specifier position of the bigger DP, and is assigned by the D head of the DP. Now, the example (7) and (7a) above seem to confirm this position. There is one NP in the Genitive, which should be in the specifier position, and one AP complement of the nominal host of the CP. But the question is, are they base generated in that position, or is one complement moved from it's complement position in the D-structure to the specifier position to receive the Genitive Case ? We assume the movement analysis, and if we admit of the following tree structure for Bangla DP (following Bhattacharya & Dasgupta (forthcoming) the problem is solved. The S-Structure of the DP

[eY kobitaTar EkTa choTTo bEkkha] of example II.B.10B(7) looks as follows : (fig (1) below)

In the S-Structure, the DP 'eY kobitaTa' moves from the Spec BP position of the internal BP to the Spec DP position, where Genitive case is assigned to it by D. The D position of the larger DP will accomodate the genitive Case marker '-r' (Bhattacharya & Dasgupta (forthcoming)).

assumption that there is only one complement position in the DP because, then, in the D-structure, we need two complement positions to house two modifiers of the nominal of the CP. And if we assume that the modifiers are base generated in that position, we contradict Bhattacharya & Dasgupta (forthcoming), who prefer the movement theory along the lines of Abney (1987). The logic in this case says that we should take them as base generated.

The next chapter tries to prove that all Complex Predicates we have studied so far, are incorporated structures.

(1)
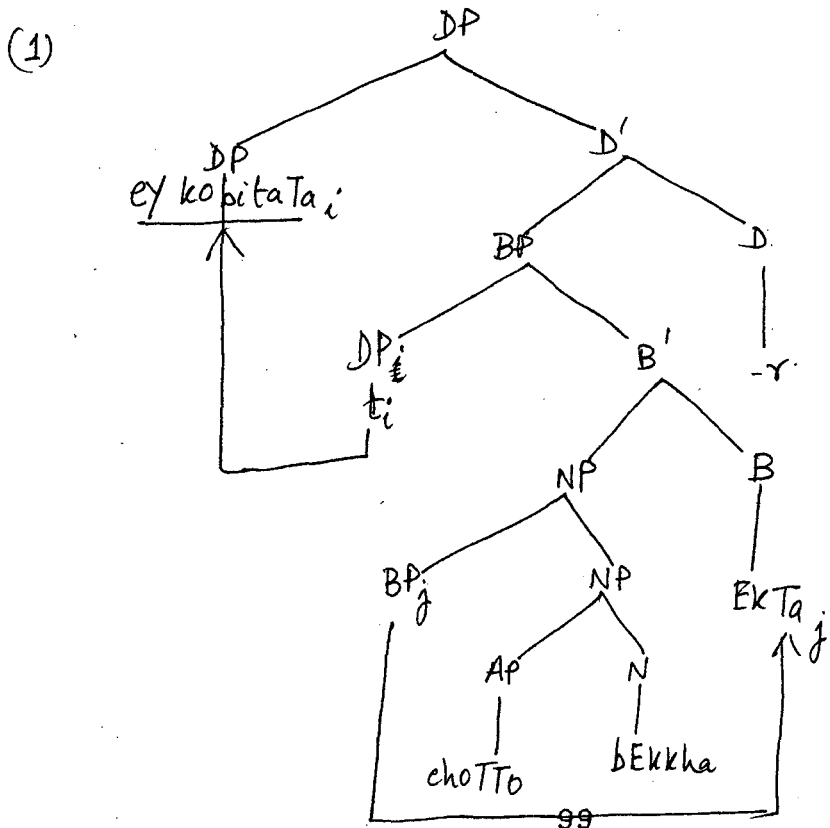
CHAPTER III

III.1 COMPLEX PREDICATE - AN INCORPORATED STRUCTURE

The final claim is that, all Complex Predicates in Bangla (and it should hold for the Complex Predicates of other South Asian languages too), are Incorporated structures.

Motivations For Postulating that a CP is an Incorporated Structure

Baker's (1985,1988) UTAH and the Mirror Principle are two strong arguments favouring Incorporation Theory. For Bangla, we have assumed that 'Mirror Principle' holds. We would expect a Causative Incopration to follow the Noun Incorporation. For example, the causative morpheme 'a' in (b) will be incorporated only after the N 'kaj' has incorporated with V 'kOr' in (a) to form the CP 'kaj kOr'.

```
(a) ami  kaj  kor-chi
          N    V-aux
     I    work  doing
     I am working
```

```
(b) ami  kaj  kOr-a-cchi
     I    work do-caus-aux
          N    V-caus-aux
     I am getting the work done.
```

In the same vein, we expect the Causative Incorporation to follow the passive incorporation. For example the Causative morpheme '-no' is added after the passive morpheme '-wa' in 'kha-wa-no hoeche?' 'eat(v)-pass-caus done?' 'Have(you)fed(the people)?

Though all these have not been tested for Bangla in this work, we are assuming the 'Mirror Principle' to strictly hold for Bangla.

For UTAH to be applicable in 'Incorporation' cases, it would require that two equivalent structures, one a paraphrase of the

other, be present in the same language, and that one be an incorporated structure, and the other not. The one which doesnot show incorporation, shows ' stranding'. For example, in NV structure, if N is not incorporated in V, N would be called 'Stranded'. This is Baker's Stranding Test. The second requirement of UTAH would be that the Stranded lexical item ought to be an argument of the (host) /(complex) Verb into which it gets incorporated.

III.2   APPLICABILITY OF UTAH IN BANGLA

We start with the observation that the conditions laid down by UTAH needn't necessarily be present in every language. The presence of two paraphrases, one 'incorporated' and one 'Stranded', implies redundancy and it is natural principle of language to avoid redundancy. This ofcourse might lead to the problem of identifying and incorporated structure. In such cases, we would suggest comparison with other languages, to get the clue. For example, if English is using only one word 'work' to express 'kaj kOr' (work) in Bangla, we should be able to get the clue that 'kaj kOr' might be an incorporated structure. For Bangla however, as we shall see below, clues and 'symptoms' of Incorporation are quite readily detectable.

Miller (1993) proposes a few more tests to diagnose the 'Syntactic Visibility' of Incorporated Structures', besides Baker's Stranding Test. They are :

(1) Non-atomicity of word structure (e.g., separability of constituents, non-anaphoric islandhood, etc.), allowing syntactic movement to alter formative order.

(2) Ability to occupy different argument positions, such as subject, object, object of P (antipassives), etc.

(3) Availability of FPs (e.g., as landing sites for various forms of movement), incorporation of F0s, or incorporation into an FP. Morphology composed in the lexicon doesnot have access to FPs.

III.3 REASONS FOR PROPOSING THAT COMPLEX PREDICATES IN BANGLA ARE INCORPORATED STRUCTURES

Let us call a Complex Predicate HV (Dasgupta.M 1990) where H can be a (N)oun, (V)erb, (A)djective, (Exp)ressive, (E)xperiential Nominal or (P)ostposition.

1) HV doesnot behave like an 'atomic' word. H and V can be moved and separated (ref.II.7.3), thus leaving a trace behind. If we adopt the maxim that there cannot be traces inside words (ref I.5.1.m(20)), then a HV cannot be a word.

2) HV shows clear signs of possessor raising or possessor (/genitive) stranding as we have proved in II.⅋.10ℬ.

3) HV shows the signs of a single constituent (ref.II.7.𝕀). In those cases, a HV behaves like a 'word'.

4) Semantically, HV is always a single word, and it's argument structure is satisfied.

5) HP͟is always an argument of V (e̶x̶c̶e̶p̶t̶ i̶n̶ P̶V̶s̶) because we have _(Phrase headed by H)_ already considered the V's occuring in CPs to have a dynamic structure. Where the argument structure of V doesnot retain it's normal standard form, we assume that it is a different V, V1 for example.

6) In Hindi, HP agrees with V in certain cases. Mohanan.T.(1993)

takes that as a sign of argumenthood. In Bangla H agrees with V only in Experiential Constructions. However, if 'agreement' can be taken to be a 'sign' of argumenthood, then we can take H to be an argument of V, so that it is a separate D-structure contituent as per UTAH.

We thus conclude that in Bangla (it is expected to hold even in other South Asian languages), the same HV structure behaves like a single syntactic constituent, and also not like a single syntactic constitutent. When it behaves like a single single syntactic constituent, it is the incorporated version of the structure which doesnot behave like a single syntactic constituent. However, I don't consider it necessary for a language to fit into UTAH exactly the way Baker (1985,1988) proposed. We have enough of other symtoms to postulate that the HVs in Bangla are indeed 'incorporated' items.

III.4 NOUN INCORPORATION IN CASE OF NV, AV, & EXPV CONSTRUCTIONS:
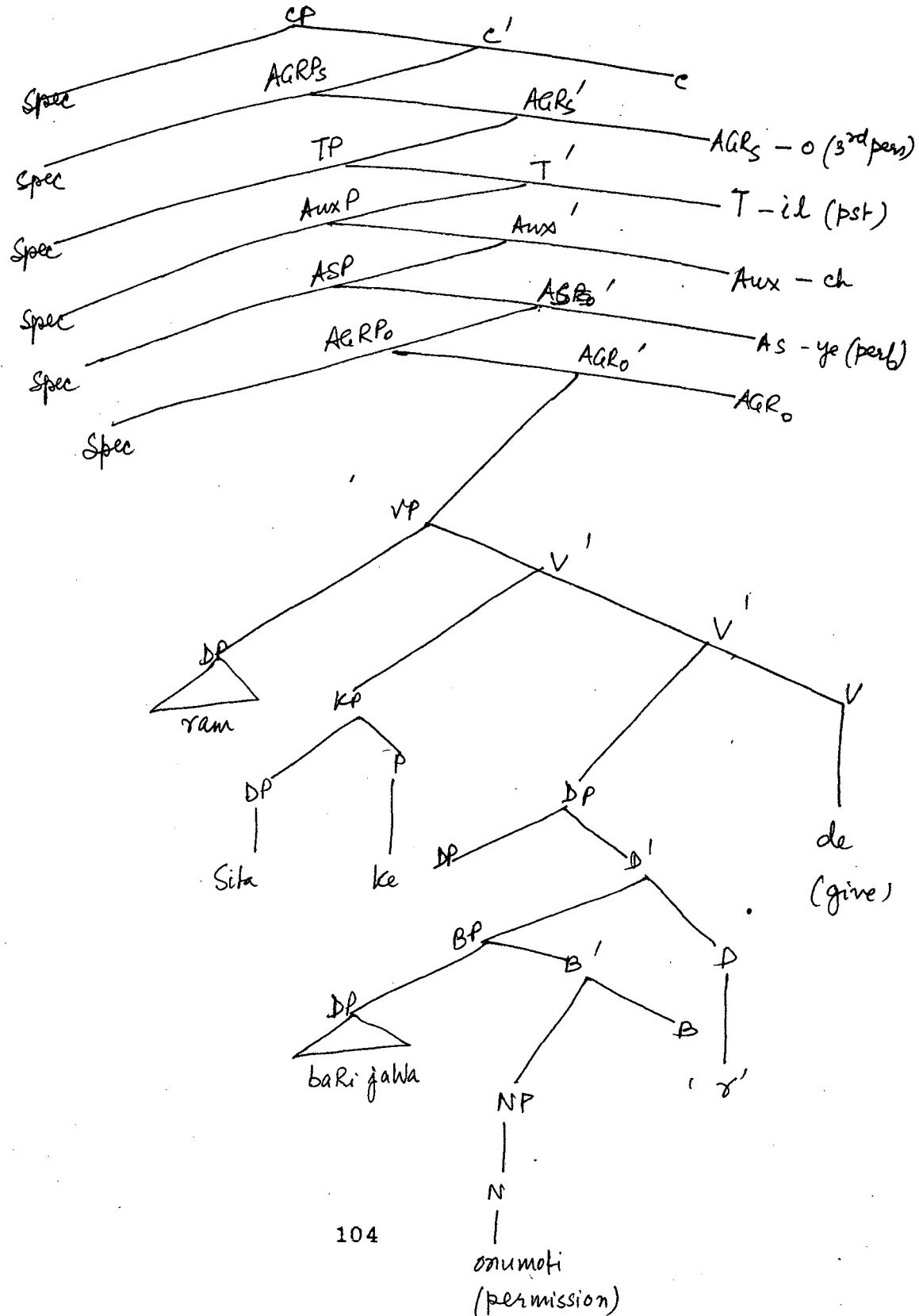Noun Incorporation

Since the N,A & Exp part of the CP has already been proved to behave like a Result Nominal, I shall assume that they all have a feature[+N,-V]. When such a lexical item incorporates with a host verb, it would be a case of Noun Incorporation. I have picked up at random, examples of NV, AV and ExpV predicate structures, to demonstrate cases of Noun Incorporation and it's properties. Detailed tree structure has been demonstrated only in few cases. Other examples are demonstrated with bare essentials of a tree structure.
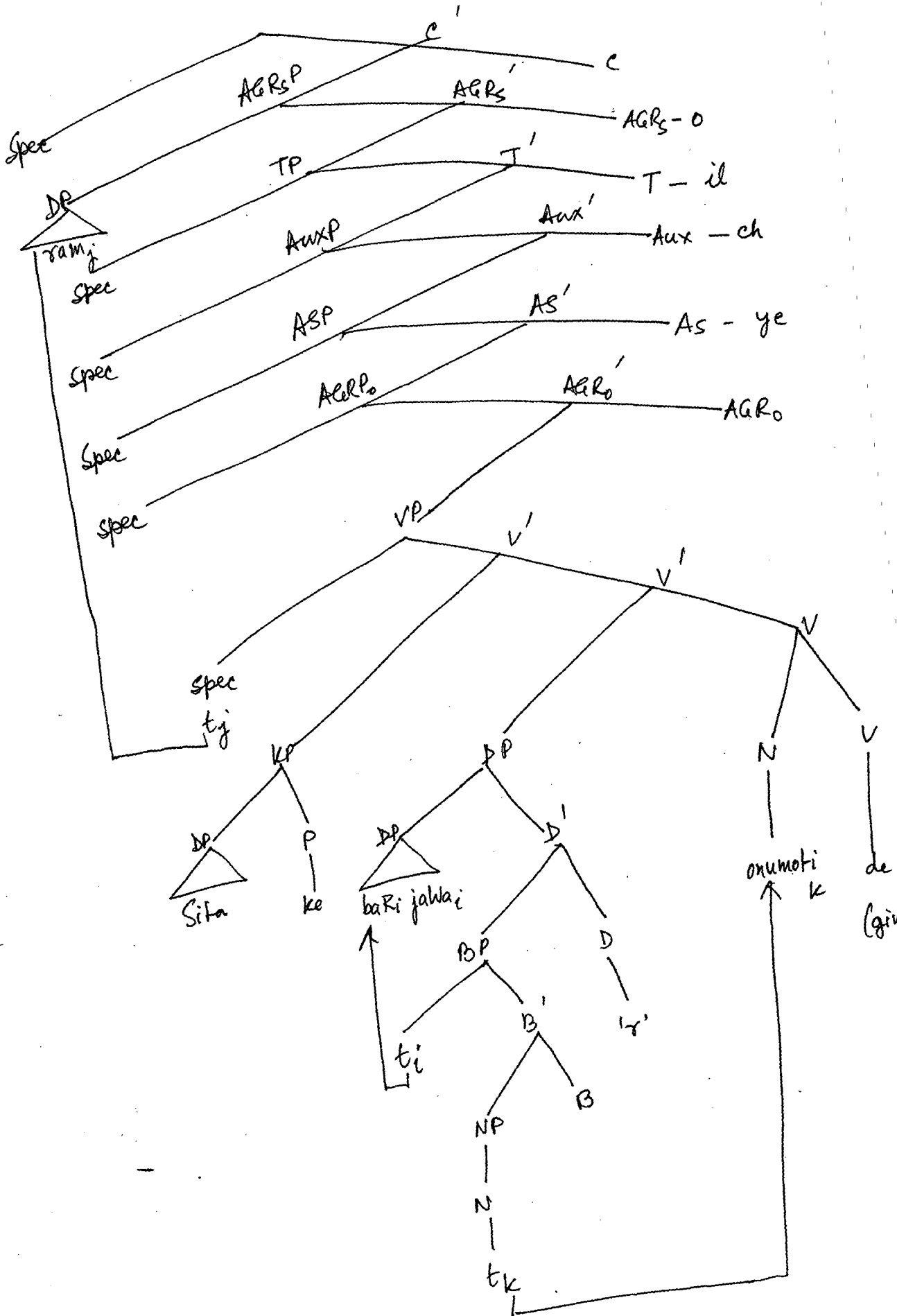
III.4.1   Consider,

(1) Ram Sitaké   baRi jaWar   onumoti   diyechálo
    Ram Sita-dat/acc home go-Ger-Gen permission gave.
    Ram gave permission to Sita to go home.

(1a) is the D-Structure of (1) and (1b) is the S-Structure
obtained by moving N-0 (onumoti) into VP, to adjoin with the Vroot
(de).

CP
c'
AGRPs
c
Spec
AGRs'
Spec
AGRs - o (3rd pers)
TP
T'
Spec
T - il (pst)
AuxP
Aux'
Spec
Aux - ch
ASP
AGRo'
Spec
As - ye (perf)
AGRPo
AGRo'
Spec
AGRo
Spec
VP
V'
V
V'
DP
V
ram
KP
DP
DP
P
DP
D'
de
(give)
Sita
ke
BP
B'
D
DP
B
B
NP
N
onumoti
(permission)

104

(1b)

Spec

AGRsP   AGRs   C'

AGRs - O   C

DP

ram_j

TP   T'   T — il

Spec

AuxP   Aux'   Aux — ch

Spec

ASP   As'   As - ye

Spec

AGRPo   AGRo'   AGRo

Spec

VP   V'

V'

V

spec

t_j

KP   PP

N   V

DP   P   DP   D'

Sita   ke   baRi jaWai   BP   D

onumoti   de

k   (giv

t_i   B'   'r'

B   B

NP

N

t_k

105

(1a) incorporates the idea that sentential complements are modifiers of NP's. In an expanded DP, the DP 'baRi jaWa' (home going) appears in the Spec of BP. The NP 'onumoti' is the complement of the B head of BP, which itself is again a complement of the D head 'r' of DP. (1a) also incorporates the idea that subject 'ram' (Ram) is generated in <Spec,VP>, as are all other arguments of V 'de' (give). In the D-Structure, the argument structure of 'de' (give) is satisfied.

It takes an agent (ram), a goal (Sita-ke) and a Theme (baRi jaWar onumoti). Of course the DP 'baRi jaWa' gets it's genitive case only in the S-Structure (1b).

Two kinds of movement are taking place, from D-Structure (1a) to S-Structure (1b):

(1) <u>Argument Shift</u> :

(a) The Subject DP/NP 'ram' moves from the <Spec,VP>, to <Spec,AGRPs>, to get mominative case from T which moves to AGRs. The agreement features of the Verb and the Subject nominal are also checked here.

(b) Such that the DP 'baRi jaWa' moves from the <Spec,BP> to <Spec,DP>, where genitive case is assigned by the D head 'r' of DP. The 'r' attaches to the DP 'baRi jaWa' either at S-Structure or at PF.

(2) <u>X-0 Movement or Incorporation</u> :-

The head noun 'onumoti' (permission) of the direct object, moves in the D-structure to combine with the governing verb 'de'(give), thus creating a complex 'V' NV (onumoti de). The movement of N-0 'onumoti' leaves a trace behind, and satisfies HMC. DP is not a barrier between N + V (onumoti de) and the trace

of 'onumoti', since it is theta-indexed with V 'de', and hence with N + V by (16) of I.5.1.1. N + V is also coindexed with it's trace by (16) of I.5.1.1. Hence N + V properly governs it's trace and ECP is satisfied.

<u>Properties of NI that are detected here</u> :-

(a) Baker proved that Incorporates donot need case. The Incorporated N 'onumoti' here cannot take any case marking. In fact, except in a few idiosyncratic constructions, the N of a CP doesnot take any case marking.

(b) Only patients or themes can incorporate. In this case, the head of the theme NP gets incorporated.

(c) After incorporation, the N + V complex as a whole assigns case to the stranded possessor DP 'baRi jaWa'. It assigns structural accusative case to it. Though 'baRi jaWa' continues to retain the 'r' marking which is typically of a genitive, the 'r' now marks an accusative case. This accusative case is assigned now, when in the next step after incorporation, the verb complex N + V 'onumoti de' moves to AGRo and the DP 'baRi jaWa' to <Spec,AGRPo>, where it is assigned the structural accusative Case, by the V which moves to AGRo. The AGRo is empty as AGRs is active and Bangla has only one AGR slot, which can be filled by either AGRs or AGRo.

(d) The movement of X-0 level category, N here, must obey the HMC. The target of movement must be the closest possible position, such that, it must properly govern it's trace. A properly governs B iff A governs B, such that no barrier intervens between A and B, and A and B are coindexed. Now, in the

107

tree (1b), though the Subject in <Spec,VP> and the indirect object of V are both theta-indexed with V 'de'(give) neither the subject, nor the indirect object (in the case) can incorporate into the V because by HMC, the closest C-commanding head (which is the direct object here), cannot be passed over.

(e) According to Baker, objects of adpositions cannot be incorporated, an observation which holds in this example too. The indirect object 'Sita' which is an object of the postposition 'ke' cannot be incorporated here.

(f) Subject incorporation is totally ruled out by Baker's Theory and it seems to follow that order in this case too.

(3) After Incorporation, we have already seen that the verb moves to AGRo to assign sturctural case to the modifier noun 'baRi jaWar'. Subsequently, it moves up the tree to receive the aspect, auxiliary etc. markings. Tense and AGRs markings which are fused now (after Tense moveṣd to AGRs), then attach themselves to the verb after the Verb complex moves to AGRs. This Movement is different from the Movement Due to Incorporation.

III.4.2   Now consider the following example :

(2)   ami eY kajTa korchi.
      I this work-cl doing.
      I am doing this work.

In this case, can we say that NI has taken place? If we say the [NP/DP eY kajTa] has been incorporated, then we would be wrong, because, only heads can incorporate, not full NPs/DPs. And if we say that only the NP head 'kaj' (work) is incorporated to create NV of the form 'kajkOr', then both the determiner 'eY' (this) and the classifier 'Ta' should be stranded. Bangla
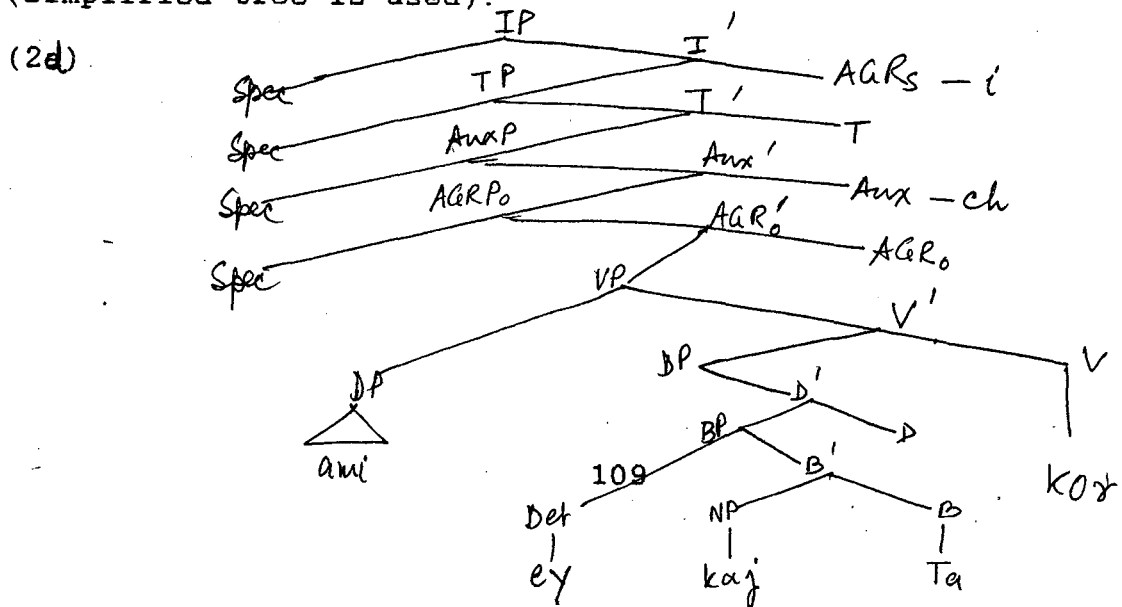
however, doesn't show any such stranding effects because no adverbial can be inserted between the determiner 'ey' (this) and the nominal 'kajTa' (Work-cl), nor can the classifier 'Ta' be simply stranded. An adverbial can however be introduced before the NP 'eY kajTa'. Thus,
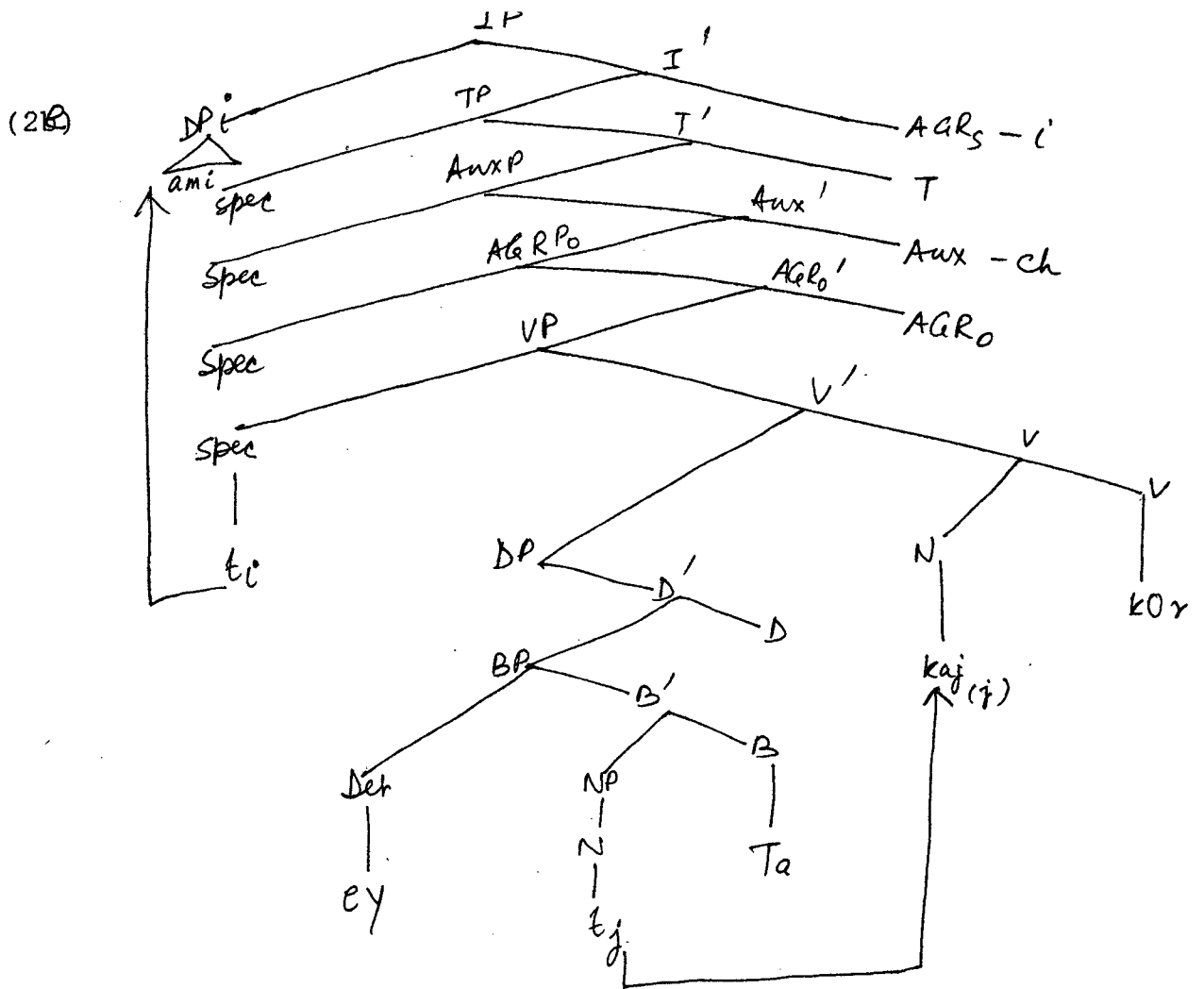
(2a) * ami eY taRataRi kajTa korchi.
     I   this hurriedly work-cl doing.

(2b) ami taRataRi eY kajTa korchi.
     I hurriedly this work-cl doing.
     I am doing this work hurriedly.

(2c) ami eY kajTa taRataRi korchi.
     I this work-cl hurriedly doing.
     I am hurriedly doing this work.

(2b) seems to imply 'eY kajTa kOr' (this work do) is a full verb which the adverb taRataRi (hurriedly) seems to qualify. (2c) shows that the structure is an unincorporated one, since the adverb has intervened between N and V. If we assume that (2c) is the unincorporated structure and (2b) the corresponding incorporated one, then we have to assume that in the S-Structure only the head noun 'kaj' (work) incorporates with the V 'kOr' thus stranding the determined and the classifier. In the LF they join the N of the NV to give the structure like (2), (2d) and (2C) are the D-Structure and S-Structure representation of (2). (Simplified tree is used).

(2d)

(20)

IP

I'

DP TP

ami T'

Spec AuxP AGR$_s$ – i'

Spec Aux' T

AGRP$_o$ Aux – ch

Spec AGR$_o$' Aux'

VP AGR$_o$

Spec V'

V

t$_i$ DP V

D' N V

D kOr

BP kaj (j)

B'

Det B

NP

ey N Ta

t$_j$

As before, the head N 'kaj' moves to join V and form the complex NV *kaj kOr' a category of X-0 level. Thes subject NP 'ami' moves to <Spec,AGRPs> to get nominative case. After the object incorporation, there is no more structural accusative case to be assigned to any NP/DP. The verb after incorporation behaves like an Unergative Verb.
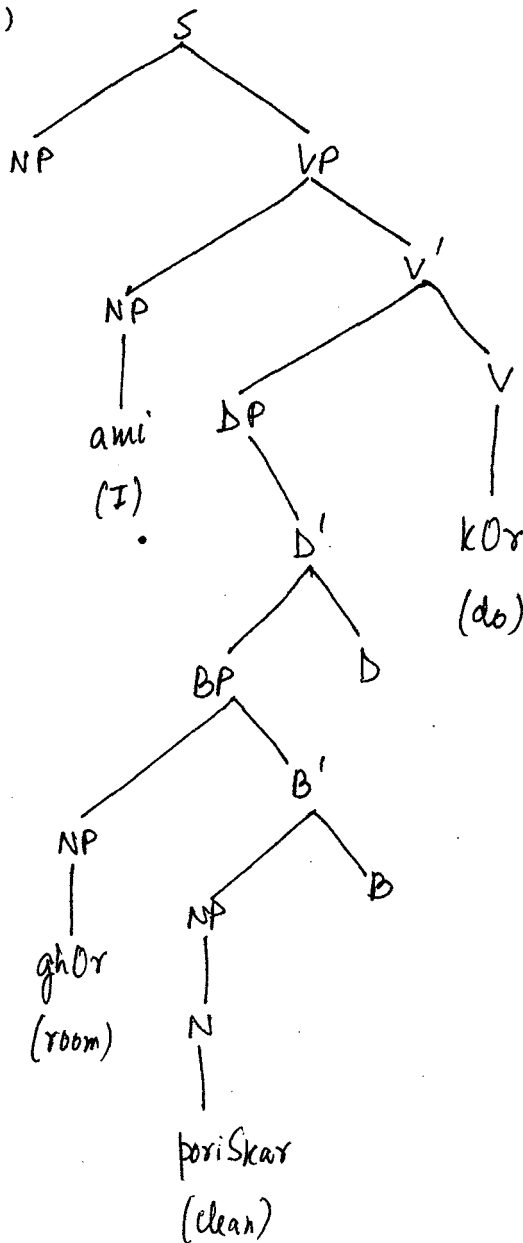
III.4.3   Now consider,

(3) ami ghOr poriSkar korchi.
     I   room clean   doing.
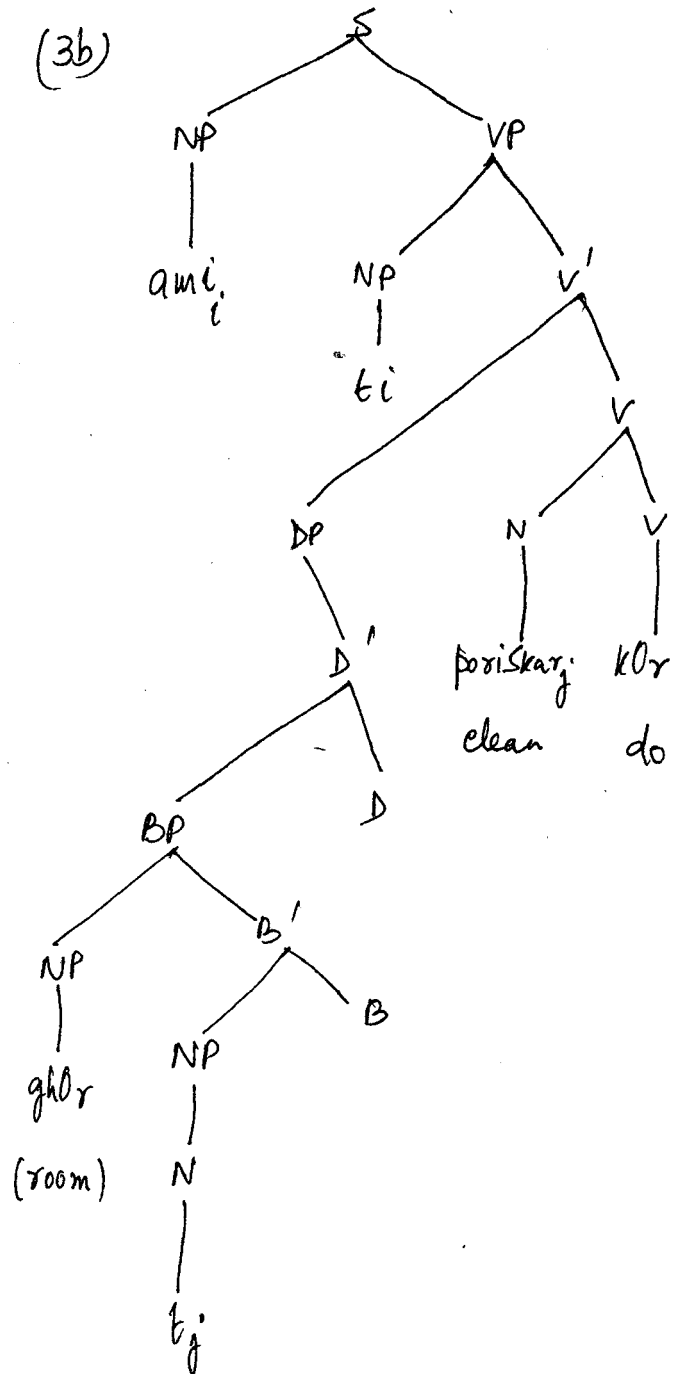   I am cleaning the room.

If we have to take into account the fact that 'kOr' is a diadic verb, then 'ghOr poriSkar' should be a single DP/NP. 'poriSkar' (cleaning) here is a result nominal, though 'poriSkar' (clean) in general is adjectival. Though generally, it is the

adjective which modifies the noun, e.g., 'clean room' where 'clean' modifies 'room' in 'the cleanings of the room', it is 'room' which is the modifier of the nominal 'the cleanings'. Similarly for Bangla. Hence the D-Structure (3a) and S-Structure (3b) of (3) would be : (very simplified tree structure is reprsented here)

(3a)

```
                S
              /   \
            NP     VP
                  /  \
                NP    V'
                |    /  \
               ami  DP   V
               (I)  / \  |
                   BP  D' kOr
                  / \     D  (do)
                 NP  B'
                 |  /  \
               ghOr NP   B
              (room) |
                     N
                     |
                  poriSkar
                   (clean)
```

(3b)

```
                       S
                    /     \
                  NP       VP
                  |       /  \
                 ami    NP    V'
                   i    |    /  \
                        ti  V     V
                           / \    |
                          DP  N   V
                         /   poriSkar  kOr
                        D'   clean    do
                       / \
                     BP   D
                    /  \
                  NP    B'
                  |    /  \
                ghOr  NP    B
               (room) |
                      N
                      |
                      t
                       j
```

111

(3a) shows that 'ghOr' is a modifier of N 'poriSkar'. We assume that unless a NP/DP has to receive a genitive case, it doesnot move to <Spec,DP>. Hence the NP 'ghOr(room) remains at <Spec,BP>. (3b) shows that N 'poriSkar' has been incorporated with the V head 'kOr'(do) of VP and HMC followed. The trace tj of 'poriSkar' is properly governed. However, we find that the NP 'ghOr' (room) has been stranded. To receive case, it has to move to <Spec,AGRPo> while the NV complex 'poriSkar kOr' moves to AGRo to assign structural accusative case to 'ghOr' and to match AGRo features between the V and the NP 'ghOr'. AgRo however, is null here. NP 'ami' has moved to <Spec,IP> to receive nominative Case. We thus find that the NP 'ghOr' actually has an accusative case assigned by the verb 'poriSkar kOr' (clean) as it would be even in English.

III.4.4   Now consider example (4) where N is an Expressive

(4) megh guRguR korche.
    cloud thunder doing.
    The cloud is thundering.

If 'guRguR kOr' (thunder) is an unaccusative verb, reflecting change of State, lack of Volition etc., then 'megh' should not originate in <Spec,VP> position. It should originate as a complement of V. I assume that here, megh(cloud) occurs as the modifier of guRguR 'thunder' in the D-Structure. 'kOr', unlike in other cases doesnot behave like a diadic verb, but behaves like a monadic (intransitive) verb. I assume that the lexical entry of 'guRguR' should specify the host verb it combines with.
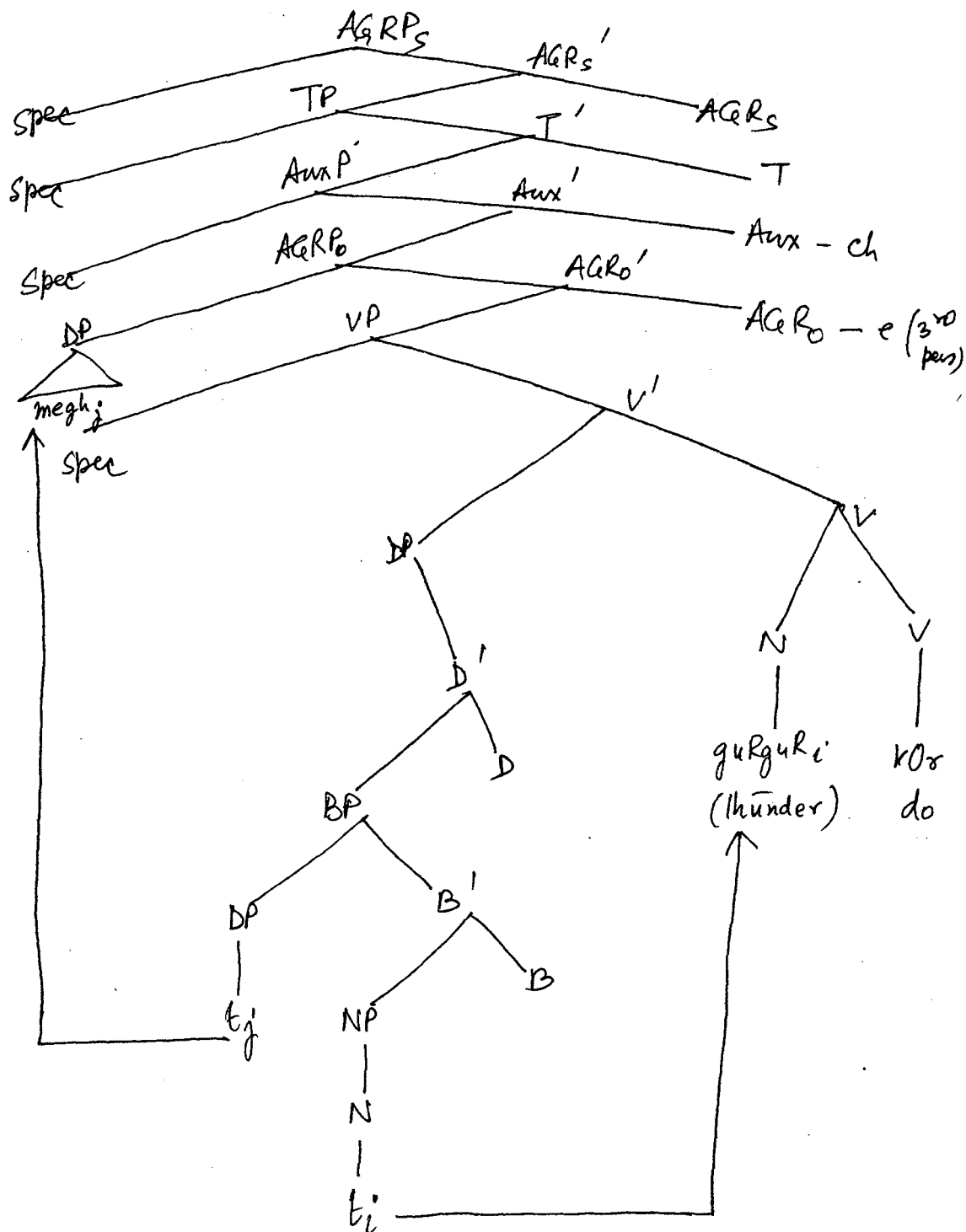
The D-Structure of (4) is represented by (4a).

(4a)

AGRPs   AGRs'   AGRPs

Spec

     TP   T'   T

Spec

       AuxP   Aux'   Aux -ch

Spec

         AGRPo   AGRo'   AGRo -e (3rd pers)

Spec

            VP   V'   V

Spec

                                   kOr
                                   (do)

DP

    D'

      D

BP

    B'

      B

DP

  megh
(cloud)

NP

  N

guRguR
(thunder)

113
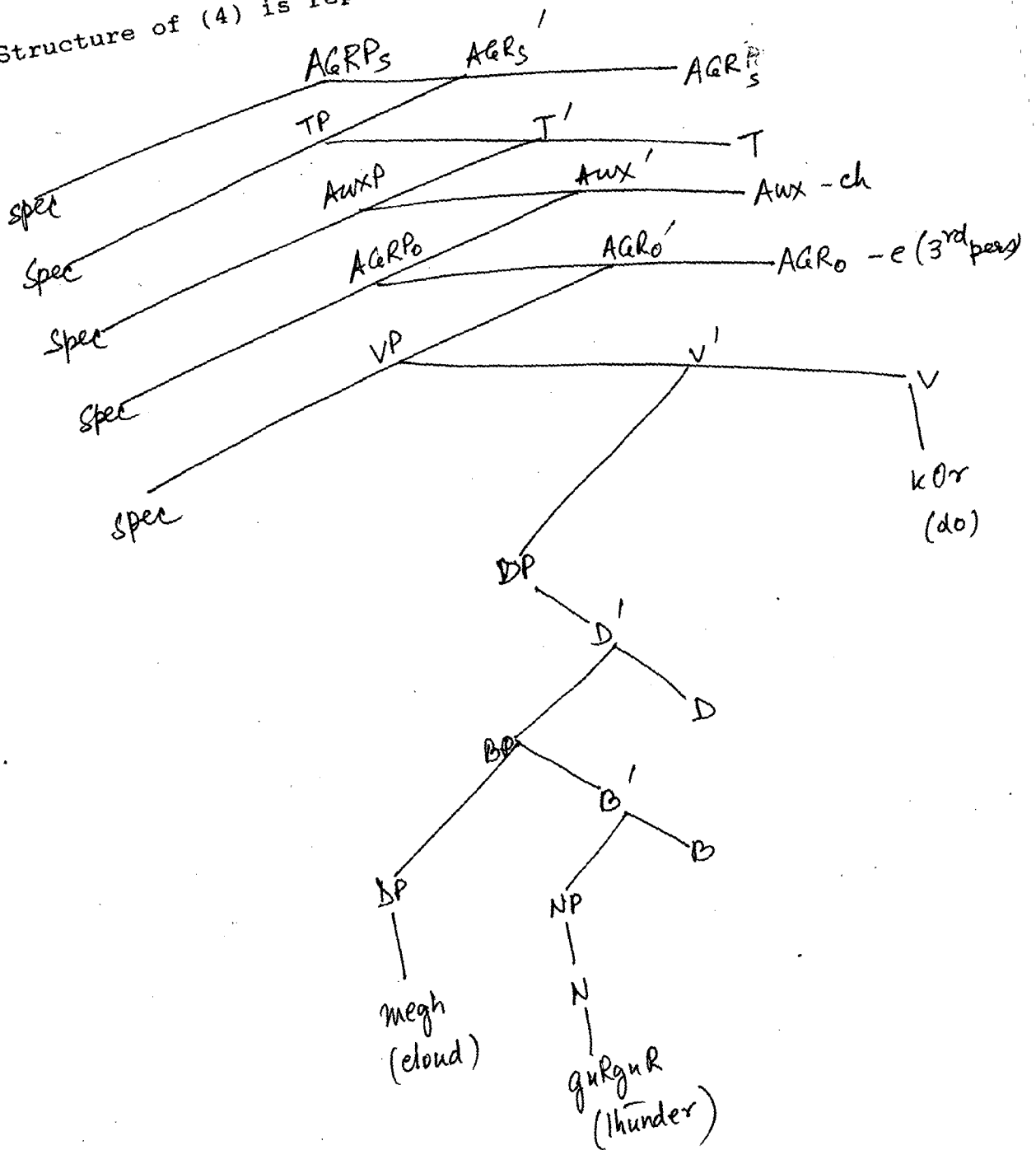
Along the lines of Chomsky (1992), I assume that in case of unaccusative verbs, only AGRo is active. Hence, the S-Structure of (4) is represented by (4b) :

(4b)

In the S-Structure, N 'guRguR' has moved to join V 'kor' without violating HMC and thus creating a complex V which in NV. The stranded 'megh' (cloud) in the DP, which occurs as a complement of B, now moves to ⟨Spec, AGRPo⟩. The verb complex N + V moves to AGRo and assigns structural accusative case to 'megh' (cloud). The agreement between the NP 'megh' and NV which shows up as a suffix on NV complex, is checked and added to NV. As the verb moves up the tree, the tense and aux suffixes are acquired by it.

By this treatment, we are able to catch the fact that 'megh' in (4) is not an agent, but is a patient. The action shows nonvolitionality on the part of the actor 'megh', which instead of being placed in the canonical subject position, is placed in the object position. This treatment also incorporates the fact that nominals which donot show case markings, originate as modifiers of the Result Nominal. By placing 'megh' under the DP node containing the RN 'guRguR, we are able to capture that fact.

III.5   EXPERIENTIAL SUBJECT CONSTRUCTION

Now consider the following :

(5)   amar khide peyeche.
       I-obl hunger got.
       I am hungry.

Here too, I would prefer treating 'khide pa' (hunger got) as one verb, obtained by incorporation. 'khide' (hunger) is in any case a RN. An adverbial like 'bhiSon' (very) can be introduced before 'khide' in (5) to modify the whole NV 'khide pa', or, it can be introduced between 'khide' & 'pa' showing that here NV is behaving like an unincorporated structure.

For example, (5a) & (5b) :

(5a) amar bhiSon khide peyeche.
    I-obl very hungry got.
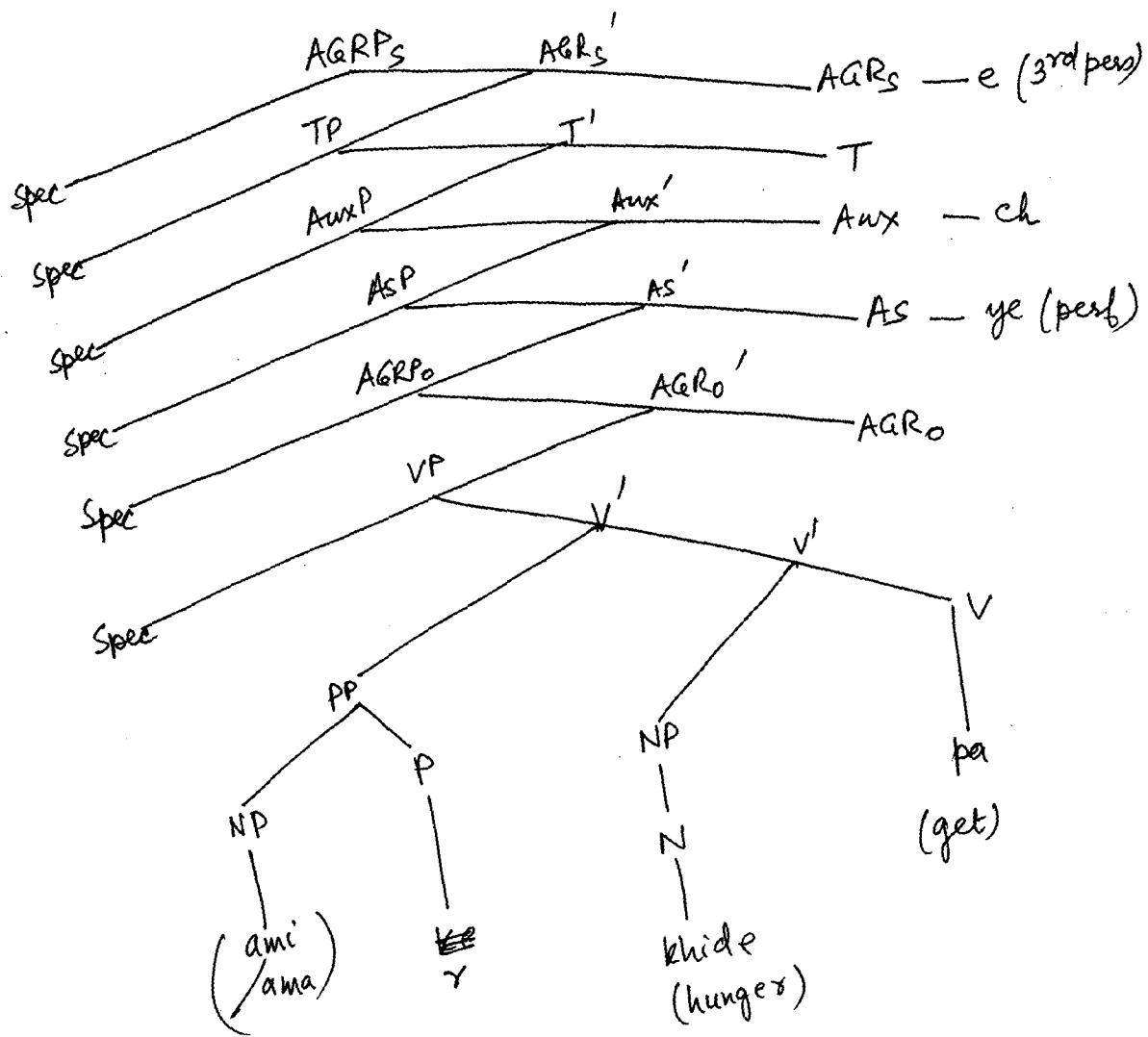   I am feeling very hungry.

(5b) amar khide bhison peyeche.
    I-obl hunger very   got.
    I am feeling very hungry.

Semantically, 'khide pa' denotes one state-to be hungry.

Now if we adopt the Incorporated view of 'khide pa', one problem props up, that is, of agreement. Here, the verb 'pa' (get) shows agreement with the RN 'khide' and not with the experiencer 'amar' (my). How is this idea to be captured, given our tree structure? Even if the verb complex NV moves to AGRo (assuming that the 'khide pa' too is an unaccusative verb), and the experiencer moves to <Spec,AGRPo>, the agreement problem doesn't get solved because the verb doesnot agree with the Experiencer 'amar'.

However, we shall not consider Experiencer verbs (CPs) as unaccusative even if they are monadic because, the object nominal of an unaccusative is usually the patient, whereas 'amar' here is an Experiencer, which is second highest on the thematic hierarchy, after the Agent. So it is expected that an Experiencer would move to the subject position <Spec,AGRPs>, in the absence of an agent.

Now, though, because of the presence of the genitive marking on the Experiencer Nominal, one is tempted to put 'amar khide' (my hunger) under one DP in the D-Structure, comparison with transitive Experiencer Verbs and with similar constructions in other languages like Hindi, which takes a 'dative marking', would refrain one from taking that stand. For example, in (6),

116

AGRP$_S$ — AGR$_S$' — AGR$_S$ — e (3rd pers)

Spec

TP — T' — T

Spec

AuxP — Aux' — Aux — ch

Spec

AsP — As' — As — ye (perf)

Spec

AGRP$_o$ — AGR$_o$' — AGR$_o$

Spec

VP — V' — V'

Spec — V

PP

NP — P

ami / ama — γ

NP

N

khide (hunger)

pa

(get)

(6)   amar oke pOchondo (hocce)
      I-obl he-acc like (is)
      I like him.

Here, in the unmarked case, 'oke'(him) intervences between the genitive 'amar' RN 'pOchondo'(like).

Also, (6) has a counterpart with 'kOr' (do), where the experiencer is in the nominative.

(6a) ami oke pOchondo kori.
     I   him like   do.
     I like him.

If (6) has been obtained from (6a) by changing an action process verb into an Experiencer verb, thus marking the Experincer with a Suffix 'r', it would be preferable to take '-r' as a postposition, similar to the obliques of passive construction, and not genitive. Also, if it had indeed been a genitive marking, atleast in Hindi equivalent constructions one would expect the Experiencer to show agreement with the RN, which it doesn't.

I therefore conclude that the Experiencer in Bangla are indeed 'obliques'. Hence in D-Structure, the Experiencer occurs as an indirect object. The D-Structure of (5) would therefore be (5c). (See opp. pg) .

(I have ignored the detailed DP tree and replaced it by simplified NP).

In the S-Structure, if we assume that the PP 'amar' moves to the <Spec, AGRPo> to get nominative case, and to occupy the subject position, we have no straighforward way to check that because the nominative case doesn't manifest itself on the Experiencer. We are left with two options.

(A) Either assume that postposition in Bangla blocks agreement and by testing for subjecthood of a NP in the usual way i.e., anaphora, conjunction reduction, conjunctive participles etc., and also topicality, one should conclude that, the Experiencer is indeed in the subject position.

(A') <u>Counter arguments to this Proposal :-</u>

One can always propose an AGR Phrase for the indirect DP/NP too, along the lines of AGRo and AGRs for object, DP/NP and subject DP/NP. In fact, Miller (1993) does suggest this casually. If that is so, and the PP 'amar' is moved to the <Spec, AGRPi> where AGRi is the agreement node for indirect object and AGRPi the maximal projection, then all the properties of narrowly L-related position would be satisfied by the PP in that position, including 'anaphora, conjunction reduction, conjunctive participles' etc. One could even include topicality in that, as that would be the highest postion in the clause. Also, the agreement effects shown by PPs in other languages can be accounted for, without bothering about case assignment.

(B) If we consider Experiencer to be the 'topic', then one can also say that the Experiencer NP/DP is adjoined to IP, which is also the topic position. But then the problem would be that it wouldnot show the properties of narrowly L-related positions, which it does. Hence I rule that out.

I would prefer to post another phrase AGRPi to house the agreement relations of indirect object as stated in (A') above. The case however is assigned by the postposition P here, to it's object. This way indirect objects do not take nominative case anymore.

Now, we are still left to tackle the problem of incorporation and agreement. If we assume that incorporation takes place in the D-structure along the lines shown earlier, agreement is not accounted for. To account for the agreement, we assume that the direct object 'khide' (hunger) of the verb 'pa' moves to <Spec, AGRPo> and the verb 'pa' to AGRo. The agreement relations are accounted for in that position. Now, we have to assume that incorporation takes place in this position. The structure would then be as follows in (i). *(only AGRPₒ is shown)*

(i)
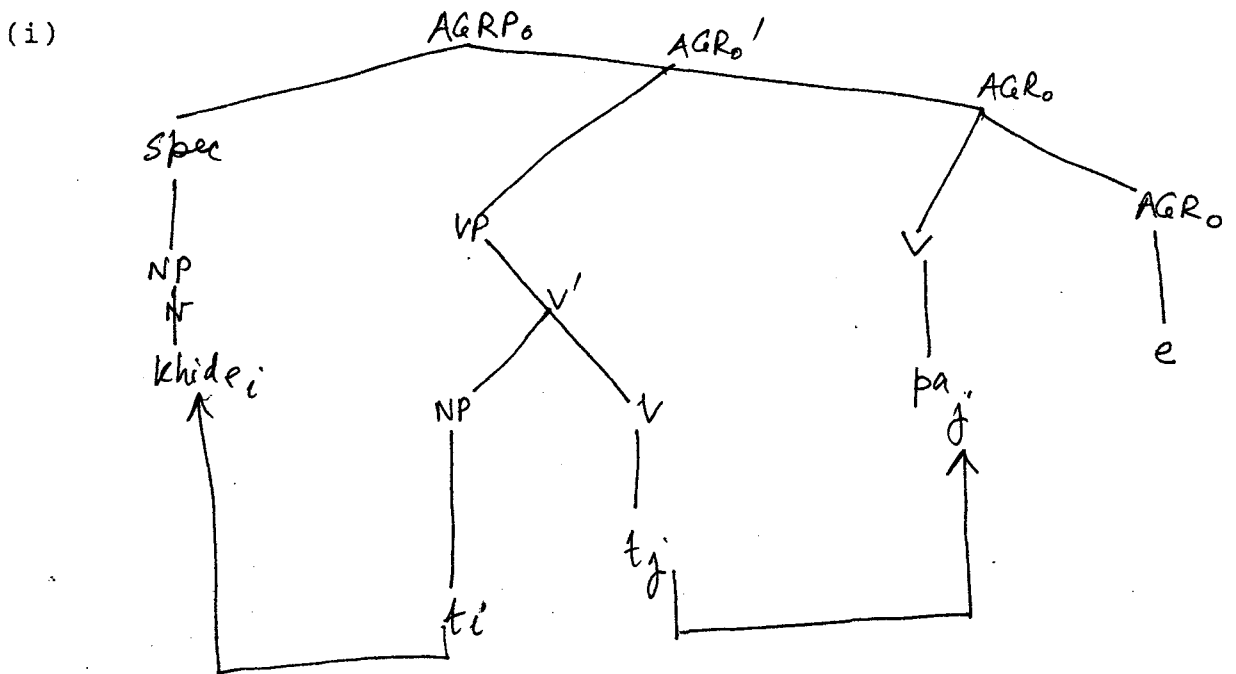
If Incorporation does take place, then the structure after incorporation would be (ii).

(ii)

AGRP$_0$
AGRP'
Spec
AGR$_0$
NP
VP
N
AGR$_0$
t$_i$
V
N
V'
e
khide$_i$
pa
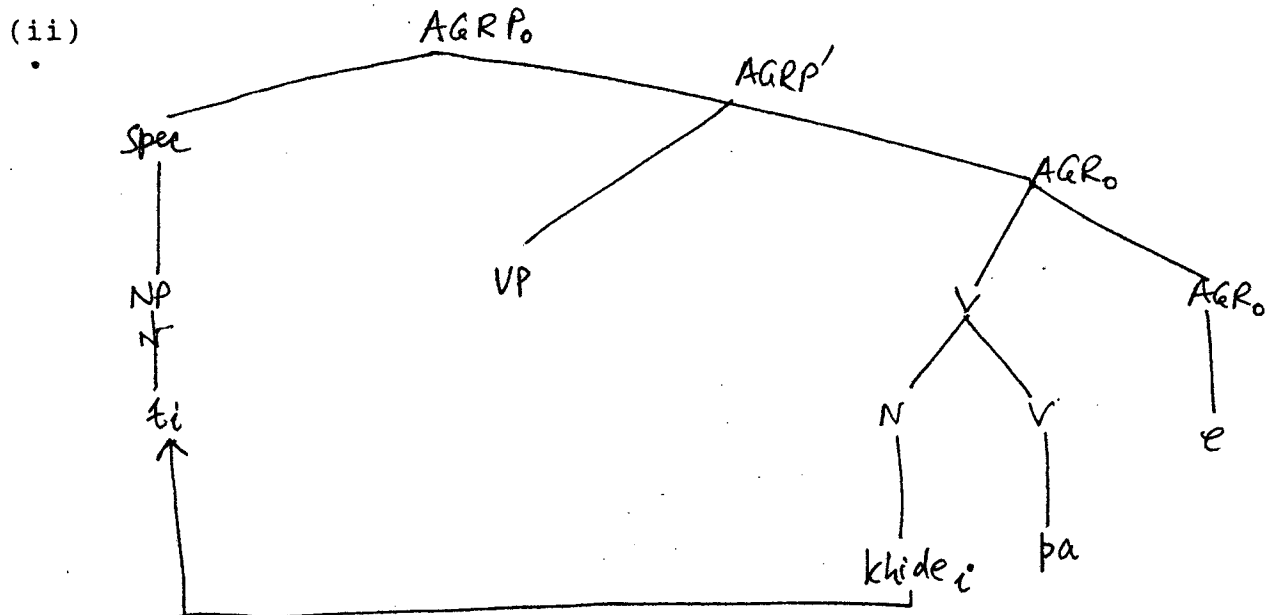
This seems strange, but I can't think of any other solution besides positing that there is another Agreement node within VP between the direct object and the V. But that too is not very convenient. In (ii) above, VP will be a barrier because it is not theta-indexed with V. The 'Proper government' should now include m-command and not just C-command, to account for the fact that NP moves from Spec to adjoin to V.

I realize that this is not a case of Head to Head movement that HMC is not very nicely solving the problem here. However, ECP is not violated. I leave the problem unsolved, hoping that, in the 'Minimalist Framework' this problem would get solved, where the notion of c-command and government has been discarded. It is only 'agreement' which created the problem here.

It is also necessary to study passive incorporation to get the greater insight into the problem.
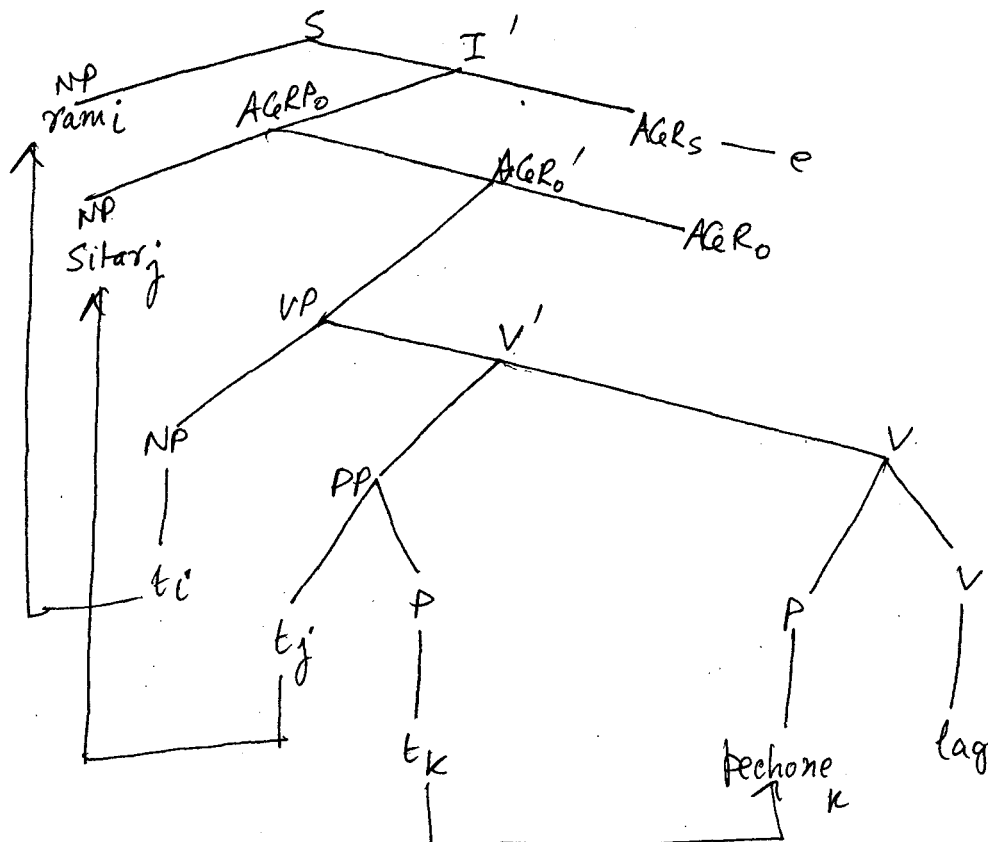
Lastly, I present below the D-structure 1(a) and S-Sturcutre

1(b) of the following PV structure.

(1) ram Sitar   <u>pechone lagche</u>.
     Ram Sita-Gen/acc after   striking.
     Ram is teasing Sita.

(1a)

(1b)

121
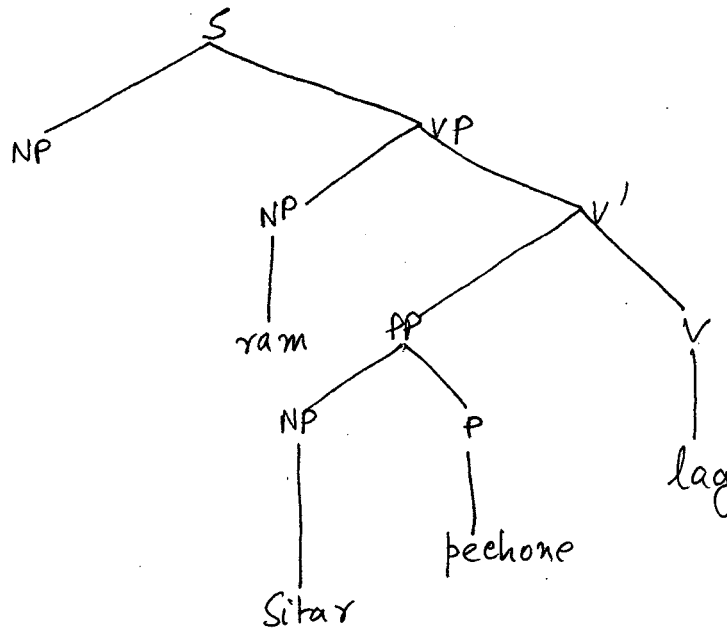
Once the P incorporates into V, to form PV 'pechone lag', &
the NP 'ram' moved to <Spec,IP> to get nominative Case, the NP
'Sitar' moves to <Spec,AGRPo> to get accusative case assigned by
PV which to AGRPo. Hence 'r' now manifests accusative case.

Idiomatic NVs

The idiomatic NVs in Bangla generally occur with a nominal
in the locative e.g., 'mathaY aSa' (head-loc come)'realise'.
Hence they are actually PPV where PP is a Postpositional Phrase.
By Baker's Theory, only head can be incorporated, and not an
entire phrase. Also, if at all there is any incorporation, only
the postposition (the head of the phrase) can be incorporated and
not the NP of PP. Thus, these PPVs are not incorporated
structures. These have to be listed in the lexicon like any other
CP. However, the V of PPVs do retain their syntactic properties.
Hence these are to be syntactically derived too.

CHAPTER IV

CONCLUSIONS :

(1) I have proved that Complex Predicates in Bangla, which in my Study include NV, AV, ExpV, EV and PV predicates are all incorporated structures, in the sense of Baker (1985, 1988).

(2) Following Grimshaw (1991)'s theory of 'Argument Structure', I have proved that the first part of any Complex Predicate, be it a (N)ominal, (A)djective, (Exp)ressive, (E)xperiential Verb, all behave like Result Nominals, Hence they have the feature [+N,-V] and are treated as nominal arguments in the syntax.

Except the PVs, a HV (Complex Predicate) is detected by the fact that 'H' is an abstract noun and not a concrete Noun. Hence, idiomatic NVs, where N is concrete and occurs with a locative case, are not treated as incorporated structures and hence are not Complex Predicates in the sense we have used here.

(3) After studying the properties of CPs, I find that they show split properties. They show properties of a single lexical entry as well as the properties not of a single lexical entry.

(4) CPs show many symptoms of incorporation, and hence they are treated as incorporated structures.

(5) Even Experiential verbs have been taken to be incorporated structures. Though that solves the problem of the 'subjecthood' of experiencer verbs, as subjects can never be incorporated, the agreement between the nominal and the verb in the Experiential Constructions creates problems in the syntax. If Incorporation takes place before agreement, then agreement is not explained. If agreement takes place before incorporation, then the structure

seems to violate HMC. We guess that a full study of the Passive Incorporation would give a better understanding of the Problem. Also, the intuition is that that in a Minimalist framework, the problem faced by us in Experiential Constructions will not be faced.

(6) I have proposed an AGRPi phrase in the syntax to take into
account
∧ the agreement in case of indirect objects. This becomes useful in case of Experiential Subject Constructions.

NOTE

1. The transcriptive conventions in this dissertation follow P.S. Ray et. al. (1966). T D R are retroflex, E O low, Y W mid, e o mid, y w high, N velar, S palato-alveolar, c, j alveolo-palatal, and M nasalizes the nucleus preceding it.

2. The data comes from my own (native speaker's) knowledge of Bangla.

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