

**THE SYNTAX-PRAGMATICS INTERFACE OF
BANGLA**

**A THESIS SUBMITTED FOR THE DEGREE
OF
DOCTOR OF PHILOSOPHY**

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CERTIFICATE

This is to certify that I, Ms. Sanjukta Ghosh have carried out the research embodied in the present thesis for the full period prescribed under Ph.D. ordinances of the University.

I declare to the best of my knowledge that no part of this thesis was earlier submitted for the award of research degree of any University.

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***In memory
of
Nicolas Ruwet***

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A NOTE ON TRANSCRIPTION

E is used as the symbol of open low-mid back vowel.

O is used as the symbol of closed low-mid front vowel.

LIST OF ABBREVIATIONS

cl = classifier

coll = collective

cond =conditional participle

dem = demonstrative

emp/emph =emphasizer

fut =future

gen = genitive

hab = habitual

imp = imperfective

imp part = imperfective participle

loc =locative

loc ger = locative gerund

neg =negative

nh ord =non-honourific ordinary

obj =objective

perf =perfective

pl = plural

pr/ pres =present

pr pft =present perfect

prog =progressive

redpl =reduplicated

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Chapter 1

Introduction

1.0 Prelude:

The present work continues the line of inquiry of an earlier work done during my M.Phil. and is an attempt towards a much more ambitious project. The earlier study (for the 1998 M.Phil.) initiated a move to explain some areas of language performance, which cannot otherwise be clarified without any aid from outside the formal syntactic study. For that purpose, I selected the area of overt objective case marking of Bangla along with some comparison with Marathi and Esperanto. The main empirical point of my M.Phil. dissertation was to pursue some long familiar but still unresolved problems concerning the competition of the zero vs. overt case marking strategy. What was revealed after that study was that this is only one of many domains of natural language use where the grammar sometimes allows grammatically free choice of more than one linguistic strategy but the speaker selects only one of them guided by his/her intention to produce a particular effect on the hearers.

This level is tentatively identifiable as 'the pragmatics of the utterance' without a commitment to any formal pragmatic theory or to develop a formal/informal relation between pragmatics and formal grammatical theory. While pursuing that problem, I developed a theory (in its first approximation) of prominence named 'individuation' which uses some linguistic tools to make a particular linguistic element prominent in a discourse according to the wish of the speaker. It turned out that /ke/, the overt objective marker of Bangla, is not just a case marker but a mechanism to make a particular NP prominent. I also suggested along with this some other devices of highlighting an NP including the default classifier /Ta/, the emphaser /I/ and the demonstratives.

1.1 Introduction of the present work:

The present study is an attempt to take one further step beyond the point where I finished the earlier study. The goal of this dissertation is to develop a programmatic tool called individuation which roughly works as a theory of prominence in language. To illustrate the general idea of individuation, I propose the use of a formal linguistic feature called Individuation. A linguistic element which is more individuated contains more information than the others and is also more prominent. There are some tools in the language which are used by the speakers to make a linguistic element more individuated, therefore, more prominent. Emphasizers, demonstratives and classifiers are some of them.

The theoretical approach taken in this dissertation follows Nicolas Ruwet and his hermeneutic way of studying linguistics. This approach not only considers the grammatical aspect of linguistic study but also takes into account the psychological aspects of a communication, a speaker, a hearer and a linguist's consciousness. I relate Ruwet's work to traditions in the Indian study of meaning and philosophy of language, specifically with Bhartrhari's sphota theory.

The present study, based on the idea of Bhartrhari that meaning is understood from the words when they become the objects of the sense of hearing, places the hearer in a programmatically very important position in the framework of a linguistic theory. In such a conceptual framework, the grammaticality or interpretation of an utterance is not determined exclusively from elements and combinations available to both the interlocutors but by the generosity of a patient listener who is judging from the linguistic as well as social context of a speech. A generous listener decides which constituent of a sentence will be submitted for further processing in a larger context (that includes the pragmatic component of such processing). This move of shifting

the focus from the speaker to the hearer releases language from the exclusive control of society and empowers the speaker-listener dyad.

Bhartrhari's 'whole over part' view of language which is adopted and developed further in this work is to be contrasted with the traditional structuralist as well as recent Minimalist position. In both these theories, the smaller constituents are submitted for extralinguistic interpretation as soon they are formed and a total view of the larger construction is thus obstructed. Such frameworks assume that cognition also directly operates on parts of a construction. I have shown in the chapter 4 of this dissertation that actual cognition does not happen by parts. One of the main aims of this dissertation is to work towards a more explanatory account of cognition.

1.2 The "How" of the work:

For the syntactic account of the sentences given in this dissertation, I have followed one of the more or less current generative models of grammar, utilizing a variant of the minimalist machinery. Let me clarify at the very beginning that I don't possess fascination for any of the grammatical theories or modules available for the linguistic study and I don't think the basic proposals made in this work will not be valid if someone takes some different framework for explaining the syntactic facts shown here. I select one implementation of Chomskyan generative grammar as the syntactic module partly because I am most comfortable with that framework. For the judgements of the sentences of Bangla discussed in this study, I as a native speaker have not only used my intuition but also consulted several other speakers.

1.2.1 Syntactic foundation of the work:

For the convenience of the readers the basic syntactic machinery assumed in this work is mentioned in this section very briefly. Following the basic ideas of the Minimalist Program developed by Chomsky (1995, 1998 and

1999), I assume two basic levels of representation for the computation of human language CHL. These levels are PF or the articulatory-perceptual level and LF or the conceptual-intentional level. These two extralinguistic systems of representations have to impose on CHL the conditions known as the bare output conditions (Chomsky 1995) or the legibility conditions (Chomsky 1998).

Computation of human language involves a process where an expression converges at an interface level if it is legible, otherwise an expression crashes. An expression converges only if it converges at both interfaces. I make standard assumptions about checking, Merge, Move, etc. Throughout most of the discussion, these specific assumptions play only an insignificant role. While discussing the Bangla DP structure, I make crucial use of checking, as the discussion there is in the context of minimalist work by other authors.

1.2.2. Pragmatics involved:

As this is a study at the syntax-pragmatics interface, it is quite obvious that there will be a special place for pragmatics in this dissertation. The methodology which I am following in the dissertation is influenced by the work of Nicolas Ruwet, the founder of hermeneutic linguistics. Coming from generative linguistic background he showed a new way of analyzing some puzzling facts of language which were never approached and possibly will never be addressed in the hardcore generative grammar. Ruwet showed how a speaker's, a listener's as well as a linguist's consciousness must play distinct and interrelated roles in analyzing linguistic data.

If it is Ruwet who inspires me to do this kind of interface study, it is Bhartrhari, a philosopher of language of ancient India (5th century AD), who makes a major contribution towards formulating the theory presented in this dissertation. An elaborate discussion in chapter three relates these two

scholars and gives an account of where they differ from mainstream generative linguistic study.

In the course of the discussion I also discuss the works of two great proponents of pragmatics, viz., Strawson and Grice from whose work the concept of 'speaker's meaning' started to develop.

1.3 Organization of the chapters:

The second chapter is an account of the Bangla DP structure taking into consideration the main theme of individuation. The classifiers which are one of the main tools of individuation take a central place in the chapter. Some other categories such as the quantifiers, quantifying adjectives, demonstratives and some prenominal vague words are also discussed in that chapter. Finally prenominal categories are classified on the basis of the feature of individuation in a hierarchical arrangement.

The third chapter discusses in detail the concrete theoretical standpoint taken in this thesis. This chapter is the place where a dialogue between the generativists, Bhartrhari and Ruwet is proposed.

The fourth chapter is, like chapter two, again empirical, this time providing data from the non-finite participles of Bangla. The distribution of the imperfective, the perfective and the conditional participles in the language in the context of a particular reading (the sequential event reading) is analyzed in the chapter. These participles are also classified in chapter four according to the feature of individuation. Chapters two and four, quite independently of the reader's opinions about the methodology advocated in this dissertation, offer new descriptive generalizations about South Asian linguistic phenomena that scholars in any framework will have to deal with. Part of my argument is that these phenomena do not lend themselves to a descriptively

adequate account in frameworks that fail to pay sufficient attention to the syntax-pragmatics interface.

The last chapter concludes the work with some of the residual problems and issues for future research.

CHAPTER 2

The DP Structure of Bangla

2.0 Outline of the chapter: -

In this chapter, I will address the issues related to individuation, the main theme of the present work (and some surrounding pragmatic issues), particularly in the field of pre-nominal categories in Bangla DP. A considerable literature already exists on Bangla DP. Most of these writings are studies of classifiers in the generative framework. The most recent additions to this corpus are the dissertations by Rajat Ghosh (2001) and Tanmoy Bhattacharya (1999). My detailed survey of their relevant works will be placed in a context set by other generative studies of Bangla nominals, mostly by Probal Dasgupta. It is important to bear in mind that my approach to the observation of these phenomena is altogether different from this whole stream of writings, as they never raised the question of pragmatics in this domain. This chapter will concentrate on both theory and data not presented before. The chapter will start with the two competing functions of the classifiers — quantification and individuation. In the course of discussion of the data, this chapter works out the characteristics of some of the important Bangla quantifiers as well as some adjectives behaving like quantifiers, which will be referred to as Quantifying Adjectives (QAs), and analyzes their occurrence and non-occurrence with the most individualized classifier /Ta/. Some of the notorious vague words, whose formal analysis has never been made part of the standard accounts of the Bangla nominal, will be discussed in this chapter. Their overall place and relevance in the individuation program will be discussed using a hierarchical partitioning of the set of DPs, following the Silverstein hierarchy. A special note on a peculiar classifier /Tuku/ ends the discussion. Finally, in the concluding remarks of the chapter, I propose that in a language like Bangla with no overt determiner, the

function of the D is largely taken over by the classifier /Ta/. With this introduction, I shall directly go to the review of the earlier literature in the next section.

2.1 Survey of literature: -

2.1.0 Studies of Bangia classifiers:

Classifiers have been of interest to the linguists and language thinkers from very old days. Observations about them started right from Rabindranath Tagore, esp. about the default classifier /Ta/ and after that all authors, be it Prof. S. K. Chatterji of comparative philology tradition or Probal Dasgupta, Tanmoy Bhattacharya and most recently Rajat Ghosh of generative tradition: everyone had said something on classifiers. I will do a very quick survey of some highlights in these classifier studies.

2.1.1 Rabindranath Tagore: -

Tagore was the first Bengali whose linguistic observations and descriptions were to stand the test of time. He identified the classifiers as /nirdeSok cinho/ 'a sign that marks, indicates, points, specifies' as early as the 1890s. His point was that adding such a sign makes a noun specific as in /kagoj/ 'paper' vs. /kagojTa/ 'the paper'. According to him, it is equivalent of the English definite article the, though later linguists rejected this assumption and described /Ta/ as a classifier. But the classifier in a language like Bangia where there is no overt D, does take over some of the discourse-linking pointing functions of a D also, as I shall argue in the latter section. If that argument is valid, then Tagore's idea about its character was not actually off the mark. One more observation of Tagore is also significant for my purpose: his point that proper nouns do not take the classifier /Ta/. If it is applied to a proper noun, then the noun is understood as conveying a degraded sense. /Ta/ is never attached to the name of a respectable person. This particular behaviour of /Ta/ also helps me to think of it as a D-linked phenomenon, details of which will emerge in the following sections.

Rabindranath, an insightful observer, also discovered that /Tuku/ (on which I have a separate section) is an exceptional classifier in two senses, one being its ability to denote only a small amount and the second its occurrence with a demonstrative. He also made useful linguistic observations about the behaviour of /khana/, /gacha/ and /gachi/.

2.1.2 **Suniti Kumar Chatterji:** -

In 1926, in his monumental work 'Origin and Development of Bengali Language', Chatterji observed the behaviours of the classifiers, which were defined by him as 'postpositional affixes or words which are added to nouns or numerals to define the nature of the object or article referred to.' He first pointed out that these classifiers (enclitic words in his language) have similarity with Chinese and Japanese 'numerative' type of words but they lack the range and variety of them as found in those languages.

2.1.3 **Probal Dasgupta:** --

Published generative work on Bangia classifiers began with the writings of Dasgupta (1981,1983). He was the first to establish the grammatical status of /Ta/ as a classifier and not a definiteness or specificity marker, and thus different from the definite articles. He also observed that some numeral-noun constructions are classifierless. In the other directions he stressed that not only numerals but even certain quantifiers such as /kOek/, /kichu/, /Onek/, /SOB/ occur with /Ta/. Dasgupta also showed how classifiers attached to numerals mark specificity when this numeral-classifier complex occurs as a clitic after a noun. He added /gulo/ in the earlier list of classifiers. Dasgupta (1985) made a distinction between number and aggregation. Unlike a noun system such as that of English or Hindi where a noun must respond to the tacit question of cardinality (one or more than one), the Bangia noun system is built around a different tacit question, that is whether the noun approaches its *designatum* collectively (as a collection) or individually (one segment of reality at a time). Classifiers do the job of

expressing the aggregation value, the classifier /Ta/ marks individual aggregation whereas the classifier /gulo/ marks collective aggregation.

/ra/ in Bangia, which had long been called a plural marker in the traditional grammar, is also an indicator of grouping like Japanese /tati/ as in /marikotati/, which means 'Mariko and other people' and not 'a number of people named Mariko'¹. Therefore, /ra/ is also an aggregation marker. He mentioned in this article how the language uses the classifiers /jon/, /khana/, /khani/ and /gulo/ with respect to human, animate, mass or count nouns. But the fact that classifiers themselves bear these features was not pointed out in that article. This point has been taken up first by Ghosh (2001) and will be developed in this work also.

2.1.4 Pabitra Sarkar:-

Sarkar (1992) commenting on Bangia classifier /Ta/ showed that this item is used for performing different functions in the language such as referential, highlighting, emphasis and exclamation. He also discussed the occurrence of /Ta/ with the adjectives as in /choToTa/ 'the small one', /laITa/ 'the red one', as a device for the selection and identification of the thing as distinct from others. Except the referential function mentioned above by him, all others are of direct relevance the individuation program proposed in my work.

2.1.5 Tanmoy Bhattacharya (1999): --

In a detailed analysis of Bangia DP structure, Bhattacharya kept the classifiers in the QP structure and thus making Q-CI a merged node. His assumption of this structure is followed in the present work and the quantificational CTI feature of the classifiers helps to reinforce this merged head hypothesis. One more important point in his analysis is the position of Dem in the spec of a new FocP just after DP. Thus, he postulated a four-layered DP structure, containing DP, FocP, QP and NP. This structure is also kept in the present study. For the section on /Tuku/, a problem case

unsolved in the previous studies, this particular structure is maintained. Bhattacharya's other area of investigation related to quantifiers and the possible and impossible combinations of Q with CI is given a special status in this work. In his work, there was a distinction between 'all' and 'non-all' quantifiers. A similar kind of distinction has come out from a study conducted independently without consulting the previous work. This study also distinguishes between Quantifying Adjectives and real Quantifiers of Bangla.

2.1.6 Rajat Ghosh (1995 & 2001): -

Ghosh (1995) is a work covering the overall DP structure of Bangla, where he discussed first the specificity effect of the N-Num-CI construction. Mentioning the Bangla classifierless constructions of Dasgupta (1983), he suggested that they are fixed expressions and the definiteness value of the NPs in such constructions comes from the context. Rajat Ghosh (2001) is a comparative study of Bangla and Asamiya classifier system. It is an extensive study where the classifiers of Bangla have been categorized according to their feature system. He argued that classifiers are semi-lexical items having both semantic and phonological content, where he disagreed with the Chomskyan Minimalism (1995), which talks only of two types of categories, lexical and functional. Semi-lexical categories have their semantic, syntactic and phonetic properties specified in the lexicon. The features of the classifier should match with the features of the nouns or the quantifiers, which they attach to. He stated this feature matching in terms of a principle called 'Feature Compatibility Principle' (FCP), which says 'the intrinsic features of a noun, the quantificational features of a quantifier and the boundary definition features of a classifier must be compatible.' I agree with the statement of Ghosh and as a consequence of this conclude that classifiers play an important role in quantification. I propose a feature for the classifiers named CTI or Countability Type Information, which carries the information about its quantificational value. In the next section, I will show how different classifiers take different nouns and quantifiers based on this

feature. They can be graded also in Bangla depending on the CTI feature they carry.

With this short introduction to the previous literature on classifiers, I will go to the next section where the role of classifiers in quantification will be discussed.

2.2. Role of classifiers in quantification

2.2.0. Classifiers in Bangla:

Classifiers are considered to be functional elements that get cliticized to the nouns and are present on a large scale in many East Asian languages like Chinese, Japanese etc. Among the Indian languages Asamiya, Oriya and Bangla have a rich classifier system. Bangla has a default classifier /Ta/, which can be attached not only to the nouns but also to other categories like adjectives, quantifiers and even verbs. The behaviour of this classifier is distinctive. It carries some special feature that generally makes the linguistic element hosting it prominent in the discourse context.

Apart from this default classifier, we have some other regular classifiers like /khana/ used with [+count] nouns, /gulo/ with [+count], [+plural] nouns, /jon/ with [+count], [+human] noun with quantifier and numeral attached, /khani/ used with [-count] mass noun, again with a quantifier attached.

There is one more classifier /Tuku/, a classifier which denotes a small amount. This diminutive classifier behaves rather unusually in relation to its linear sequence inside a DP. This is the only classifier which can occur after a Demonstrative in an otherwise impossible *D-CI-N sequence in Bangla. In other words, this classifier takes a position normally available only to a quantifier in a DP. But DP does not allow any other classifier between D and N, and, since /Tuku/ is not a word, we cannot give /Tuku/ the simple status of a quantifier. This initial observation about the diminutive classifier /Tuku/ led us towards the hypothesis that even classifiers play a role in

quantification. This conjecture is contrary to the standard assumption that since classifiers do not exist in many languages, they are not interpretable at the level of LF, a linguistic level where all languages are presumed to use the same representations. In the next section, we will see some other examples of classifiers with adverbs and quantifiers, which provide additional support to our hypothesis.

2.2.1. Quantificational use of classifiers in Bangia:

We will start this section with the general uses of the classifiers in Bangia.

1. Onekgulo chele
many-coll boys 'many boys'
2. OnekTa dudh
much-Ta milk 'a lot of milk'
3. SObgulo apel
all-coll apples 'all the apples'
4. SObTa tOrkari
all-Ta curry 'all the curry'

The examples given above of the occurrence of prenominal quantifier-carried classifiers show how the collective classifier /gulo/ is used with [+count] nouns only whereas /Ta/, a default classifier, is used with a mass noun. The human classifier /jon/ is used also with [+count] nouns but only if carried by a numeral or a count quantifier like /kOek/ 'a few'. Numerals and other quantifiers select appropriate classifiers to match the noun's count/mass or human/non-human feature. If instead of /paMcjon lok/ 'five-jon persons' we say /paMckhana lok/ 'five-khana persons', this makes the

listener conclude that those five persons are not being given the respect due to actual human beings but they are being viewed as inanimate objects, some meaningless physical collection of humans strung together. In view of the additional fact that some nouns require markers of respect as a matter of lexical features, it now follows that */paMckhana SikkhOk/ 'five-khana teachers' is never used; the form is always /paMcjon SikkhOk/ 'five-jon teachers'.

The distribution of the other classifier /khana/ is also restricted to only [+count] nouns.

5. dukhana kOlom

two-khana pens 'two pens'

6. kOlomkhana

pen-khana 'the pen'

7. *jOlkhana

water-khana

8. jOlTa

water-Ta 'the water'

This restriction of using classifiers on the basis of feature matching with the mass/count feature of noun becomes very evident in cases where one particular noun has different uses, some of them count, some of them mass. The examples below will make this point clear.

9. tOrkariTa (*tOrkarikhana) kharap hoe gEche.

curry-Ta bad has become

The curry has become rotten.'

10. phulkopir tOrkarikhana Opurbo reMdheche.

Cauliflower-gen curry-Ta superb has cooked

The cauliflower curry has been cooked excellently.¹

In (10), /tOrkari/ selects /khana/ because here the curry as a dish is countable, but in (9), it is used as a mass noun and refers to some amount, and therefore the use of /khana/ with it is ungrammatical.

2.2.2. Introduction of CTI feature: -

The data presented in the preceding paragraphs certainly shows that there is something more to a classifier than the status of a mere, meaningless functional element that many linguists seem to attribute to it. Each classifier carries (to speak in informal terms) some information that pertains to the compatibility of a particular classifier with the count or mass features of any noun that one proposes to use the classifier with. At this minimal level, I shall speak of 'Countability Type Information'¹ (or CTI features) to characterize the information that a classifier carries in its feature structure. This is not all, however. There is evidence for supposing that the classifier interacts not only with the noun, but plays a relatively active role in quantification. Consider the classifier /Tuku/, whose classifier status becomes clear in examples like /kOtoTuku dudh/ 'what a small amount of milk, where the quantifier /kOto/ 'how much' hosts it. Now, this classifier occurs also in the environment of a deictic determiner:

11. eTuku dudh

this-Tuku milk 'this bit of milk'

12. ei dudhTuku

this milk-Tuku 'this bit of milk' [+specific]

Generally in Bangla, while the sequence D-N-CI exemplified in (12) is standard (cf. /ei dudhTa/ 'this milk-Ta', 'this milk'), in contrast a *D-CI-N sequence is not allowed (e.g. */eiTa dudh/ 'this-Ta milk'). But we find at (11) that the classifier /Tuku/ can occur in the position between D and N in addition to other positions where classifiers normally occur. Notice that Q is available in the slot between D and N, as in /ei paMcTa boi/ 'these five books', but that /Tuku/ cannot simply be a Quantifier, as it is not an independent word and it never takes a Classifier after it. We tentatively associate /Tuku/'s ability to occur between D and N with the independently evident fact that /Tuku/ is not a mere classifier, but also carries quantifier information: /Tuku/ consistently indicates a small quantity.

I have claimed that a classifier carries CTI features that determine the way it can deal with noun neighbours as well as with quantifier neighbours. The CTI features of /Tuku/ leave it free, then, to select either a mass noun like /dudh/ 'milk' or a count noun like /chele/ 'boy': /eiTuku chele/ 'this-Tuku boy', 'such a little boy'. But a count noun does not permit the D-N-CI format, which means that */ei cheleTuku/ 'this boy-Tuku' is ill-formed. More needs to be said about /Tuku/, and the equipment that will enable us to say it efficiently has yet to be invented. We merely mention the existence of the expression /eiTukuTuku chele/ 'such little children', where the iteration of /Tuku/ marks plurality of the children. It seems comparable to the way a measure word can be iterated in an example like /ei bOsta bOsta cal/ 'this sack sack rice' for 'these sackfuls of rice', or to the iteration of the adjective in /bhalo bhalo boi/ 'good good book' for 'good books'. But we cannot draw any firm conclusion as no other classifier ever iterates.

To turn to another example of a classifier whose quantificational properties are prominent, /khani/ 'the extensive classifier' intensifies the quantificational force of a Quantifier that hosts it. I have purposely chosen a noun of variable countability:

13. /Onekkhani rasta/

a lot-Khani way 'a long long way, a lot of distance'

14. /OnekTa rasta/

a lot-Ta way 'a long way'

15. /Onekgulo rasta/

many-Gulo roads 'many roads'

Where /rasta/ means a count noun 'road', a classifier is selected whose CTI feature bundle is compatible with count nouns, whereas in (13) where the same noun is a [-count] noun and means 'distance', the classifier /khani/ carrying a CTI package compatible with mass nouns is attached instead.

So far I have been considering classifiers with special properties that deserve investigation. Turning to the other end of the spectrum, /Ta/, as a default classifier, can be attached to any quantifier whatever, and as a bare (enclitic) classifier to any noun, any adjective, and even any finite verb. Its minimal Countability Type Information feature matrix, which enables its use with nouns of all types, also ensures that /Ta/ is interpreted without any inherent quantification. This fact brings about a non-collective, non-plural interpretation when no quantifier is present to override this default. The result is that, when /Ta/ is used alone with a noun or adjective, the interpretation is singular, as in (16) or (18). This use of /Ta/ creates, through mechanisms that are not yet understood, a prominence effect, so that the (non-quantificational) element that hosts it receives discourse prominence, as in all three cases given below.

16. amake bhaloTa dao.

Me-dat, good-Ta give

'Give me the good one.' (in a context where the reference set is known)

17. aha! korchoTa ki?

Aha do-2p-pr-Ta what

'Aha! What are you doing?' (assuming hearer's familiarity with the action)

18. maNSoTa khubjhal.

Chicken-Ta very hot

The chicken curry is very hot.'

I leave open the issue of whether such prominence is a result of the fact that /Ta/ is the minimally CTI-specified default classifier or an independent fact about this element that requires special statement.

2.2.3. Conclusion:

To summarize, one proposal that helps address the facts of Bangla surveyed above is that classifiers always bear Countability Type Information (CTI). Quantifiers and nouns select appropriate classifiers to match the noun's mass or count feature. One type of CTI bundle is associated with /khana/, /gulo/ and /jon/ which always work with [+count] nouns. In sharp contrast to these, /khani/ co-occurs only with nouns that bear the [-count] feature and, in addition, denote a divisible mass (I am not committed to the claim that divisibility is a feature). Only non-count quantifiers co-occur with this classifier, as in /Onekkani pOth/ 'a lot of way', /ekTukhani doi/ 'a little bit of yogurt'.

/Ta/ as a default classifier can occur with any of these nouns, and with other elements, and connotes an extra component of referential specificity, a range of phenomena possibly related to the fact that the default classifier has less CTI information than the typical classifiers.

/Tuku/ behaves like a cross between a classifier and a quantifier and its CTI features, which emphasize its diminutive character, leave it free to select

both [+count] and [-count] nouns. It has other properties that seem to pertain to its having more CTI information than usual.

In general the CTI feature bundle of the classifier seems to be a place where a noun and a quantifier can arrange the way they will deal with each other. In other words, the CTI features of the classifier serve as an interface between the noun's phi-features and the quantifier's Q-features. I conjecture that countability is the basis for negotiation between quantification and plurality, and that classifiers are characteristic of languages which separate the site of this negotiation from the N site of plurality and the Q site of quantification.

If non-classifier languages organize this negotiation differently, perhaps within the phi feature bundle of N, then it follows that LF provides parallel, but feature-geometrically slightly different, treatments of the negotiations at the noun-quantifier interface. It also follows that Classifiers are not meaningless pieces of mere morphological baggage.

2.3. Role of classifiers in individuation: --

2.3.0. Introduction to the section: -

In the previous section, I have shown that /Ta/ needs some special attention as it can be used as a default classifier with almost anything in the language and it gives a special effect to the linguistic element which it is attached to. I will develop a new account of /Ta/ in this section. Individuation, as a concept important to the pragmatic theory, emerged in my M.Phil. work and as I said in the beginning it will still have major role to play in the present dissertation. In the following paragraphs, I will reveal the role of the classifiers as tools of individuation.

2.3.1 What is individuation:--

Individuation is a programmatic tool for investigating certain ways of

highlighting one linguistic element in a discourse. Thus individuation studies should be seen as a syntax-pragmatics interface research programme, and at its present stage we still speak of various degrees of a nominal's individuation, thus treating the term 'individuation' as a concept that remains operative. As we keep unpacking it, this term may be replaced at some later phase of the programme by one or more terms that are more precise. But the research programme will still be concerned with the discursive highlighting of an element, esp. a nominal.

This focusing or highlighting effect can be brought about by means of different ancillary devices either directly attached with that linguistic element or from the surrounding elements. For instance, addition of the successive linguistic elements in the following examples enhances the specificity/prominence of the noun 'book'.

1. amar boi cai.

I-gen. book want 'I want books.'

2. amar boiTā cai.

I-gen. book-cl. want 'I want the book.'

3. amar oi boiTā cai.

I-gen. that book-cl. want 'I want that book.'

4. amar oi boiTāi cai.

I-gen. that book-cl.emph. want 'I want that book only.'

The default classifier /Ta/, demonstrative /oi/ and emphasizer /i/, each of them contributes to the individuation of the noun.

2.3.2 Specificity effect related to the classifiers: -

Although upto this point, I talked only about /Ta/ both in the previous

subsection and section 2.2.2 in relation of it with an extra specificity or pointing effect, it is not the case that /Ta/ is the only classifier in Bangla which has this property. Though it is the most frequently used classifier which can be used with any other item to give specificity or prominence/discourse reference effect, there are other classifiers also which work in a similar fashion giving the above said effect to a less extent.

5. tomader iSkule kOto chatro ache?

you.pl.-gen. school-loc. how many students have

'How many students are there in your school?'

No one expects a specific numerical figure in answer to this, so /kOto/ 'how many' without a classifier is sufficient in the question. But where an exact figure /number is expected, a classifier is introduced to give a specificity effect, e.g. in the example below /jon/ 'a human collective classifier' is added to the quantifier.

6. tumi kOtojon chatroke pORao?

you how many-jon student-obj. teach

'How many students do you teach?'

The classifiers /gulo/, /jon/, /khana/ and /khani/ are always attached to the quantifiers which are "D-linked" in Pesetsky's sense. Therefore, /ki/ 'what' and /ke/ 'who' never take classifiers; but the discourse-linked items /kon/ 'which' and /kOto/ 'how many' take classifiers in order to focus on the quantified nominal.

/Tuku/, the classifier which has the maximal quantifying role, does not take part in individuation. This shows that if the CTI feature of a classifier provides plenty of quantifying information, it cannot produce the individuation effect. In other words, whenever the [+Q] feature of a classifier is especially

salient, the result is that the factor which is responsible for individuation becomes dormant. In this connection, I am adopting the term "ostensive" from Dasgupta (2002) who offered this feature as a device for formalizing the phenomenon Pesetsky had characterized as "D-linking". My proposal is that the ostensivity feature should be used to describe a classifier's prominence marking property or degree of individuation.

The classifiers in Bangia can be graded according to their CTI feature into three groups and the group associated with maximal CTI is responsible for minimum individuation effect and vice versa. The table provided in the following section (2.3.3) illustrates this. Though /Ta/ is the most frequently used classifier which can be used with any other item to produce specificity or prominence/discourse reference effects, there are other classifiers also which work in a similar fashion giving rise to these effects to a lesser extent. To see this, consider the contrast between (7), where the quantifier carries no classifier, and (8), where it has the classifier /jon/ attached to it.

7. tomader iSkule kOto chatro ache?

you.pl.-gen. school-loc. how many students have

'How many students are there in your school?'

8. tumi kOtojon chatroke pORao?

you how many-jon student-obj. teach

'How many students do you teach?'

No one expects a precise numerical figure in answer to (7), so /kOto/ 'how many' without a classifier is sufficient for the purposes of (7). But where an exact figure /number is expected, a classifier is introduced to give specificity effect. E.g. in the example (8) /jon/ 'a human collective classifier' is added to the quantifier to show that a fairly exact answer is expected.

2.3.3. Grading of classifiers according to their features:

Quantification and Individuation-- two competing properties of a classifier:

The classifiers in Bangia can be graded according to their CTI feature into three groups and the group which exhibits the greatest degree of quantificational CTI is responsible for the least salient individuation effect and vice versa. The following table illustrates this: -

grading

features /Tuku,khani/ /gulo,jon,khana/ /Ta/

CTI	maximum	medium	minimum/nil
individuation	minimum/nil	medium	maximum

This table spells out the claim that quantification and individuation are two competing properties of a classifier and that the quantificational role of a classifier diminishes as the individuation property becomes important. Assuming tentatively this characterization of classifiers, I will shift my interest towards the other elements of a DP structure, viz., demonstratives, quantifiers and quantifier-like adjectives. Some vague words, whose categorical status is yet to be confirmed, will also be my concern in the next section.

2.4 On some Bangia Quantifiers and Quantifying Adjectives: -

2.4.0 Introduction to the category quantifier: -

Quantifier, as a category, is not very distinctly defined in Bangia studies. It is not enough to consider translation equivalents of traditional typical quantifiers, such as [every] or [some]. In addition to them, there are some words from other categories which function as quantifiers in some contexts. Therefore, the role of the quantifiers is distributed among categories like demonstratives, adjectives and even classifiers. Obviously, the first question that comes to our mind after this is how to delimit the set of quantifiers in

Bangla. This task cannot be attempted on an off-hand basis. The prototypical examples are no doubt the numerals, but there are many more baffling words whose status is yet to be clarified.

One more question also comes up in relation to this. Are quantifiers a specific category or do the categories to which quantifiers belong overlap? Some of these problems will be discussed in the following subsections.

2.4.1. Demonstratives and Quantifiers: their relation and interaction in Bangla: -

We will start with the demonstratives, which again typically include the deictic words like [this], [that] etc. which correspond to /ei/ and to /Sei, oi/ respectively in Bangla. These words can occur in the D-N-CI order as in /ei bOI Ta/ 'this ball-CI' but the *D-CI-N order is ruled out. On the other hand, in the initial slot before (-)CI-N, the usual occupant found is a numeral or some other quantifier, as in the following cases: -- /tinTe goru/ 'three-cl. cows' or /kOekjon chele/ 'a few-cl boys'. Certainly, then, Quantifiers and Demonstratives are in complementary distribution, as they cannot occupy the same slot.

There are some words which apparently seem to belong to both the classes like /ki/ 'what', /kon/ 'which', /kono/ 'a/some'. /ki/, /kon/ and /kono/ are syntactically demonstratives because they cannot occur in the *D-CI-N order. But these are quantifiers also as interrogatives and indefinites are the most common quantifiers. /kon/ can be followed by any numeral as in /kon carTe/ 'which four' (-animate) or /kon dOSjon/ 'which ten'(+animate). But /ki/ and /kono/ cannot be. What is happening here? If all of them have the feature of the Dem., they should be followed by the numerals. /ki/ and /kono/ cannot be followed by the numerals possibly because they have the feature of the quantifier also while /kon/ has lost it and can be followed by a numeral. /kon/ 'which' has one more intrinsic property which /ki/ 'what' lacks.

It can pinpoint a thing which /ki/ cannot. This is related to D-linking in Pesetsky's term. Which is D-linked, i.e., linked to the context, whereas what is not. Therefore, the power of focusing some element is also greater in /kon/ 'which'. That is why, we can say /ki SOb/ 'what all' in some vague sense, not specifying that 'all'. But we can never say */kon SOb/.

2.4.2 Vague words: previous work: --

In this section, I shall discuss about some vague words in Bangla. By vague words, I mean words, which denote vagueness in meaning. I will deal with a typical /jO-kO/ construction, but before that let me quickly report what already been done in this area particularly with the vague 'one'.

Dasgupta (1993) analyzed the characteristics of some Bangia vague words ending with /o/ as in /kOkhono/ 'sometime', /kothao/ 'somewhere' and /kono/ 'something or someone'. /EkTa/ 'one' occurring with these words makes them much vaguer. He suggested, reiterating a proposal from Dasgupta (1979), that this /o/ is an augment turning an interrogative into an indefinite word. It has an allomorph /u/ as in /keu/ 'somebody' and /kichu/ 'something'. He classified /ki, kichu/ in the determiner category and /ke,keu/ in the noun category. This hypothesis explains why Case suffixes directly attach to /ke/ and /keu/ whereas /ki/ and /kichu/ precede a noun (overt or zero) to which case suffixes are attached.

Dasgupta also made concrete proposals (difficult to transfer across theories) as to what licenses a clitic such as vagueness-indicating /EkTa/. What any analysis must express is the fact that in /kichu EkTa (-r)/, the D /kichu/ licenses the vague word and the case affix /x/ occurs after what Dasgupta took to be the zero noun. For /karur EkTa/, /keu/ itself is the noun and it takes the suffix with it as /karur/. So instead of /keu EkTar/, we get /karur EkTa/. With this background about the vague words, let me introduce my observations in this field.

Some vague words or Free Choice Items: -

What is the status of Bangla Free Choice Items (FCI), i.e., /jO-kO/ words like /jekeu/ 'anybody', /jekono/ 'any(thing/body)', /jakichu/ 'anything'? These words like the Demonstratives and unlike the Quantifiers cannot be followed by CI-N. Moreover, they can be followed by Num-CI like /jekeu Ekjon/ anybody one-CI 'anyone (from a group)', /jakichu EkTa/ anything one-CI 'anything (from a set)', /jekono carjon/ any four-CI 'any four persons (from a set)'. If numerals are prototypical examples of Quantifiers, then the above structures exemplify D-Q(Num)-CI order. How is that possible? Does the /jO/ element of these /jO-kO/ sequences retain its characteristics of a Demonstrative? Certainly, the kO-parts are ordinary quantifiers. (However, the /kono/ of /jekono/ seems to behave like a demonstrative also).

Initial inspection suggests that /jekono/ is different in behaviour from /jakichu/ and /jekeu/; /jekono/ can be followed by other numerals also, apart from /Ek/ 'one'; but /jakichu/ and /jekeu/ can only be followed by the numeral /Ek/ 'one'. These expressions (/jekeu Ekjon/ and /jakichu EkTa/) are fixed in the sense that the second element of the expression cannot be changed. They are inherently vague expressions compared to /jekono/, which, without specifying one or more exact elements of a set, certainly points more clearly to the number denoted by the numeral attached to it in an example like /jekono carjon chele/ 'any four boys'.

Even in a case such as /jekono Ekjon chele/ 'any one boy' where the numeral /Ek/ 'one' occurs, there is no sense of vagueness about the quantity (here the number one), in contrast to /jekeu EkTa/ 'anybody at all' where the numeral /Ek/ does not convey the meaning 'one' but only underscores the vagueness. We draw the conclusion from the above-mentioned behaviour of the FCIs that /jekono/ retains the feature of the Dem only and lacks the feature of the quantifier, and therefore can be followed by a numeral that retains its full semantic function of denoting a cardinality value, whereas /jakichu/ and /jekeu/ are charged with both quantifier and Dem features.

Syntactically, they behave like the Demonstratives as mentioned in the previous paragraph and semantically they belong to the quantifier class.

2.4.3. Quantifiers and Quantifying Adjectives: A distinction between 'part' and 'whole' quantifiers: -

Something curious also happens with some quantifiers and quantifier-like Adjectives that are hereinafter called quantifying adjectives. These elements, Qs and QAs can be broadly categorized into two groups on a preliminary quasi-semantic basis. The members of group A roughly denote a 'whole' and the members of group B indicate a 'part' of something larger. Elaborate discussion and detailed study of these elements are required in order to determine their categorical status; some of them seem to retain both quantifier and adjective features.

The existence of Quantifying Adjectives in this sense is empirically demonstrable even in English. In this language, if a quantified nominal is made to undergo topicalization, the sentence becomes ungrammatical. To see this, compare (a) with (b) in: (a) John, I like. Vs. (b) *Somebody, I like. Now, if the relevant nominal contains the item [whole], the same restriction applies, e.g.: *The whole proposal, we have rejected. This confirms the status of [whole] as a Quantifying Adjective retaining the characteristics of both a quantifier and an adjective. Let's come back to the case of Bangla. Consider the following taxonomy:

Group A

/SOB/ 'all'

/Somosto/ 'whole, all
(count)'

/goTa/ 'whole, entire'

Group B

/khanik/ 'some'(mass)

/kichu/ 'some (mass)', 'a few'

/kOek/ 'a few (of a set)'

/asto/ 'whole, entire'	/kOtok/ 'a few' (used in a stylistically older written text)
/puro/ 'whole, complete'	/baki/ 'the rest'
/Sara/ 'whole'	/addhek/ 'half'

Group B words, when they occur as the Q in a DP consisting of Q-CI-NP, mostly behave like 'real' quantifiers, while the words of group A do not. However, the pattern is not simple enough to be amenable to such brief description. We will discuss the distribution of these and some other quantifiers in the next sub-section.

2.4.4. Distribution of the 'whole'-'part' quantifiers: -

For instance, take the word **/Sara/ 'whole'**, which typically collocates with the words denoting parts of the day like **/bEla/ 'time of the day'**, **/SOka/ 'morning'**, **/dupur/ 'noon'**, **/bikel/ 'afternoon'**, **/Sondhe/ 'evening'**, **/rat/ 'night'** and **/din/ 'day'**; with some other words only when those denote either duration (like **/SaraTa rasta amra khub anondo korechi/ 'we enjoyed ourselves a lot all the way'**) or vastness, width etc. as in **/Sarata akaS meghe bhore ache/ 'the whole sky is covered with clouds'** and **/SaraTa mejhe noNra hoe ache/ 'the whole floor has become dirty'**. Even in the case of words denoting a part of the day, **/Sara/** is never used with the words **/godhuli/ 'twilight'** and **/bhor/ 'dawn'** because these words do not express a duration of time; rather, they denote a point of time. **/Sara/** when attached with **/Ta/**, followed by a noun (e.g. **/SaraTa bEla/ 'the entire daylight period'**, **/SaraTa pOth/ 'all the way'**), specifically denotes the duration of time or width of the space, as opposed to a point in time or space. Then it behaves like a quantifier. E.g.

1. **SaraTa ghOr mocha hOy ni, kichuTa hoeche.**

'Not the whole room had been mopped, some portion is left.'

2. SaraTa rasta brisTi hOyni, kichuTa Suknoo chilo.

'It was not raining all the way, some part was dry also.'

The point to note is that /Sara-Ta-N/ in (1) and (2) exemplifies Q-Cl-N. In (3) below, on the other hand, /Sara/ occurs as an adjective in the sequence /Sara-N-Ta/, Adj-N-Cl, which is possible for any regular adjective. This is why I place /Sara/ in group A rather than B:

3. /Sara ghOrTa Ogochalo hoe ache/.

'the whole room has become unordered.'¹

4. /o Sara SOkaITa khele kaTie dilo/.

'he/she has spent the whole morning playing.'

The point that this use of /Sara/ is more adjectival is reinforced by other parallels with regular adjectives. For example, the adjectives can be piled up one after another before a noun; this is true for /Sara/ of (3) with other adjectives, e.g. /briSTibheja Sara rastaTa phule bhore ache/ 'the whole road, wet in rain, is covered with flowers.' We can also replace the /Sara/ of (3) with other regular adjectives like /bORo/'big' or /choTo/ 'small', which we cannot do for (1) or (2). The /Sara/ of sentences (1) and (2) behaves more like a quantifier and that of sentences (3) and (4) is like an adjective. The parallelism between /SaraTa/ and /kichuTa/ in (1) and (2) strengthens the character of that /Sara/ as a quantifier, for /kichuTa/ uncontroversially is a quantifier. We can conclude that /Sara/ can be entered in the lexicon as a word with characteristic features of both categories, quantifier and adjective. Its adjective feature is prominent and in the default case it alone is active.

But if /Sara/ is followed by a classifier, the quantifier feature becomes activated (a matter not formalized here). It is the following classifier which activates the quantifier feature of the item to which it is attached. We will

return to that detail later. Coming to /puro/, /asto/ and /goTa/, the group A items that also mean 'the whole', can all be followed by the default classifier /Ta/. Most often, the noun that would normally follow is dropped and these words are topicalized for the sake of emphasis. E.g.

5. na,na, puroTa khete parbo na.

no no whole-cl eat-inf can-fut not

'No, all of it I cannot take.'

6. astoTa amake dile kEno?

whole-cl me give-past-2p why

'why did you give me all of it?'

7. goTaTa khabar proSnoi nei.

whole-cl of eating question-emp no

There is no question of taking the whole.'

In all the above sentences, the words for 'the whole' are uttered with a topic intonation. These words+/Ta/+noun is an unacceptable sequence: e.g. /*goTaTa murgi/ 'the whole hen' or VastoTa murgi/ 'the whole hen' are crashingly bad.

However, /puroTa/ followed by a noun, as a topicalized NP is okay. E.g.

8. puroTa ruTi khete parbo na.

the whole roti to eat can-fut. not

'I cannot eat the whole roti. '

The contrast between ill-formed /astoTa, goTaTa/ and well-formed /puroTa/ must be interpreted with the general unacceptability of the A-CI-N sequence in mind (In general, nominals such as VbhaloTa chele/ 'good-cl boy' are excluded). I conclude that /goTa/ and /asto/ are surely adjectives as

contrasted to /puro/, which cannot be so as it occurs in the ()-Cl-N slot otherwise unavailable for an adjective. Therefore, this /puro/ 'whole' is a quantifier which can enter into a parallelism construction with other quantifiers as in sentence (9). E.g.

9. /puroTa ruTi khabar Saddho amar nei, tumi bOroN khanikTa kheer nao./

whole-cl roti of eating ability my not, you rather part-cl eat-pr-2p

'I don't have the ability to eat the whole roti, rather you take a part of it.'

In conclusion, I decide to regard only /puro/ 'whole' as a quantifier and other two /asto/ and /goTa/ as just adjectives.

To continue down the 'A' list of 2.4.3, /SOB/ 'all' can occur in ()-Cl-N slot unavailable to Adjective, e.g. /SOBTa dudh/ 'all-cl milk'. Therefore, surely /SOB/ cannot be an adjective, but must be a 'real' quantifier.

/Somosto/ 'whole' has a restricted use as it is used only with nouns associated with a vast space like /akaS/ 'sky', /paRa/ 'locality', /gram/ 'village', /SOhor/ 'city' etc. This has a specialized use in the written domains only. This seems to be a 'real' adjective, to judge from the following example:

10. /Somosto akaS/ vs. * /SomostoTa akaS/

all/whole sky all/whole-cl sky

Adjective followed by /Ta/ (if there is no N) is a possible combination in Bangla, which makes (11) admissible:

11. /SomostoTa kharap hoe gElo?/

whole-cl spoiled had gone

'So, the whole thing has got spoiled?'

Surely this use reminds us of the behaviour of quantifiers. Probably we can say now that /SOB/, /Somosto/ and /Sara/ were really adjectives and from that use these had been extended in the use of quantifiers later.

Out of the items listed under group B, /baki/ and /addhek/ are also like /Sara/ etc. standing halfway between an adjective and a quantifier. Their adjectival characteristics are observed in the following construction, where /baki/ 'the rest' and /addhek/ 'half' can be piled up one after another an option otherwise available only to adjectives. e.g.

12. /ei baki addhek sundorj hOlmOle kapoRTa die ki korbo?/
 this rest half beautiful gorgeous cloth-cl with what do-fut-1p
 'What shall I/we do with this half of beautiful gorgeous cloth?'

Their occurrence in the slot ()-Ta-N indicates that they have non-adjectival and quantifier-like properties, e.g. /bakiTa dudh/ rest-cl milk 'the rest of the milk' and /addhekTa dudh/ half-cl milk 'half of the milk'. These two are best treated as quantifying adjectives.

Apart from these two, /khanik/, /kichu/, /kOek/ and /kOtok/ 'some' are only 'real' quantifiers in the sense that the classifiers are always attached to them. They are generally associated with a partitive meaning. Furthermore, they presuppose an already existing set of nouns from which some are taken into consideration in the discourse, e.g.

13. khanikTa dudh rakha ache.
 some-cl milk has been kept
 'Some of the milk has been kept.'

14. kichuTa tOrkari nOSTo hoe gEche.

some-cl curry spoiled has become
'Some of the curry has got spoiled.'

15. kOekjon lok aSe ni.
a few-cl men has come not
'A few of the people did not come.'

16. kOtokguli bakSe guli chilo na.
some-cl box-loc marble was not
There was no marble in some of the boxes.'

From the picture given above, the main points can be summarized as follows:

(X) From the words of group A, only /goTa/ and /asto/ are adjectives whereas /puro/ is a real quantifier. From group B, /khanik/, /kichu/, /kOek/ and /kOtok/ are 'real' quantifiers and /baki/ and /addhek/ are quantifying adjectives.

(Y) The meaning of 'whole' and 'part of a whole' is closely associated with the 'real' quantifiers. True Adjectives consistently have meanings distinctly different from these.

2.4.5 Some other common quantifiers/quantifying adjectives of Bangia:

Apart from these two lists given above, we can also find some more very common quantifying adjective and quantifiers. One among them is /Onek/ 'many' which functions as a quantifier, an adjective and even as a modifier of an adjective. e.g.

17. mElay Onek lok hoechilo.

fair-loc many people became

'Many people came in the fair.'

18. gache gache Onek rONer phul phuTeche.

trees-loc many colour-gen flower have bloomed

'Flowers of many colours have bloomed in the trees.'

19. aj OnekTa bhalo achi.

today much-cl good am

'I am much better today.'

In 17, /Onek/ is a quantifier, while in 18, the same word is arguably an adjective, (it is interchangeable there with /nana/ Various') and in 19, it acts the way many quantifiers often do as a modifier of an adjective.

But there are also some clear cases of true adjectives, which act also as a quantifying modifier of another adjective. Consider the following instances : -

20a. meyeti dekhte beS.

girl-cl looks nice

'The girl is pretty.'

b. meyeTi beS kalo.

girl-cl quite dark

The girl is quite dark.'

21a. meyeTi dekhte bhalo.

girl-cl looks good

The girl is good-looking.'

b. meyeTi bhalo phOrSa.

girl-cl good fair

The girl is really fair.'

22a. meyeTi dekhte darun.

girl-cl looks beautiful

The girl is very beautiful.¹

b. jaygaTa darun Sundor.

place-cl very nice

The place is very nice.'

The last words of all the (a) examples above are adjectives but in all the (b) sentences the same words play the role of a quantifier. These words can be used in the answers when the question contains a 'how much', itself a quantifying question word that demands a quantifying answer. The Sanskritic adjective /durdanto/ 'terrific' also acts as a quantifying adjective.

There are two more widely used quantifiers in Bangla, /proti/ 'each' and /prottek/ 'every', the first of which generally takes /Ta/ with it before a noun except for some cases where the word following it is treated as a measure word, e.g. /proti bOchor/ 'every year', /proti maS/ 'every month' etc. Otherwise, the normal sequence is /proti+/Ta/ followed by a noun, e.g.

20. protiTā ghOre alo o pakha ache.

each-cl room-loc light and fan has

There are lights and fans in each room.'

/proti/ is also used in a special sense after a measure word as a suffix esp. when counting, e.g. /jonproti/ 'per person', /kiloproti/ 'per kilo'. /protiyek/

'every', on the other hand, need not always take a classifier with it. An occurrence of /protyek/ that carries no classifier can be followed by a noun as in (21):-

21. protyek baRitei bagan ache.

every house-loc-emp garden has

There is a garden in every house.'

But /protyekTa/ is also not ruled out, it seems to be used more often when the utterance is emphasized. In that case, this /Ta/ does some other work of focusing the noun as pointed out in Sanjukta Ghosh(1998). /protyek/ followed by a noun with the classifier /Ta/ is totally out of the question as in */protyek baRiTā/.

These two items are also quantifiers; the claim that they do not belong to the adjective class is also justified by the same test of occurrence in the slot () - Ta-N which is unacceptable for an Adjective and okay for a quantifier. e.g. /protiTā baRi/ or /protyekTa baRi/ is not ruled out. If they belonged to the adjective class, the above constructions would immediately be ruled out.

This is as much as I can establish here about the characteristics of the Qs and/or Quantifying Adjectives, I now move to the next section where the relative importance of these categories in relation to individuation will be discussed in a hierarchical structure.

2.5. Referential feature hierarchy and individuation:

2.5.0 Concept of Silverstein hierarchy :-

In this section, I will try to develop a system of hierarchy of nominal phrases which is based on their referential features and correlates with the occurrence of classifiers with them and other sources of high individuation.

The inherent lexical content of noun phrases has been used by Silverstein

(1976) to formulate a hierarchical system which is relatable to the case marking strategies of the language. The noun phrases which are higher in the Silverstein hierarchy follow nom-acc case marking whereas which are lower in the structure go in for the ergative pattern. Those which are midway may exhibit a mixed pattern, described by Heath (1976) as 'doubly-marked' or by Silverstein in terms of an O-A-S system. Silverstein keeps personal pronouns at the highest level of the structure followed by proper nouns, higher and lower animate nouns and inanimate nouns. Heath, in his addendum to Silverstein, includes Demonstratives also in the hierarchy just after the higher ranked nominals.

2.5.1 Similar hierarchical system for the pre-nominal categories: -

Given the Silverstein hierarchy as a widely accepted conceptual basis, I propose an extension to accommodate what I shall call pre-nominal categories within this hierarchy based on their referential features. I am using the term prenominal categories as a convenient designation for grammatical or semi-lexical items that precede a noun in a nominal phrase such as clear Quantifiers, clear Demonstratives and other elements such as Relative or Interrogative Determiners whose values for deictic and quantificational features have never become clear. The question of where such categories should appear in revisions of the Silverstein hierarchy can be tackled independently of the position one takes on the formal phrase structure of the nominal constructions in Bangla where prenominal categories appear. Silverstein's placement of pronouns and Heath's placement of demonstratives in the hierarchy invites extensions that will locate the full range of prenominal elements relative to each other. For it has always been obvious that the degree of deixis, referentiality, quantificationality or other properties of a nominal expression arises from the interplay of the features carried by the noun plus its associated lexical sisters (such as adjectives) with the features of what I am calling the prenominal categories. In terms of the individuation research programme that the

present study pursues, the relevance of the Silverstein hierarchy is obvious; hence my attempt to extend it. Items occupying higher and lower niches in this hierarchy exhibit greater and lesser degrees, respectively, of inherent deixis and individuation. Correspondingly, I find that the lower an item is in the Silverstein hierarchy, the greater the chances of that element being able to attach classifier and thereby convey definiteness or some other aspect of individuation. With this point in mind, my presentation of the extended hierarchy, below, focuses not on the potential for case-marking, as in Silverstein's and Heath's work, but on the admissibility of a classifier attached to the items in question:

1. personal pronouns

ami, tumi, Se, apni

*1p/2p/3p Ta/jon

2. proper nouns

ram, rohim

*proper noun-Ta/jon

3. Demonstratives

ei, oi, Sei 'this, that'

*Dem.-Cl-N, but o.k. Dem-Tuku-N

4. Left relatives

jara, je je 'who'

5. D-linked wh-Qs

kOto, kon 'which, how many'

kOto/kon-jon/Ta

6. non D-linked wh-quantifiers

ke, ki 'who, what'

Q(non D-linked)-Num-Ta/jon/gulo

7. D-Q vague words

jekeu, jakichu, jekono 'anybody, anything'¹

jO-kO word-num.-cl

(only small numbers)

8. numerals, other Quantifiers

Ek..., SOb, puro, proti, kichu 'all, whole each, some'

Num-cl, Q-cl

*keu-Ta/jon 'any'

9. common nouns

bagh, kapoR 'tiger, cloth'

N-cl

Personal pronouns (1) and proper nouns (2) have a high degree of referentiality. Generally they do not take any classifier to produce the effect of salience or prominence. The relevant principle is perhaps that one cannot point to the same thing with two different pointing tools. Longobardi (1994) proposed, in a period of DP research when the view that a pronoun is a D was taken for granted, that proper nouns head-move to D to discharge a referential feature. If the classifier /Ta/, when it is endowed with the individuation feature, also originates at or goes to the same D position for similar reasons, then it becomes clear why the first two categories of the above structure cannot occur with such a /Ta/.

The claim that personal pronouns and proper nouns take no classifier, straightforward as it may sound, faces some apparent empirical difficulties, as one sees at (11a, b):

11a. ami SeTa jantam na.

I that-cl know-past-1p not

'I did not know that.'

11b. rahulTa kintu bhiSon boka.

Rahul-Ta but very foolish 'But Rahul is very foolish.'

The form /SeTa/ in (11a) can be seen by some as the third person human pronoun /Se/ plus /Ta/. But surely this is a misreading of the facts. The third person inanimate pronouns simply have the forms /eTa, oTa, SeTa/ in the proximal, distal and sequent series, respectively. That the pre-/Ta/ portions of these words look like the human personal pronouns /e o Se/ is diachronically significant (and explainable), but surely does not damage the observation that no classifier can be attached to a human /Se/ 'he, she' or /tini/ 'he-hon, she-hon'.

To consider (11b) next, my move here is to propose that the /Ta/ there belongs to a functional category bearing name features, and is similar to the honourific members /babu, mOSai/ 'mister' of that as yet formally undescribed syntactic class. One may tentatively call it the class of Name Status Designators. Unlike /babu/, the items /Ta/ is anti-honourific. I leave open such issues as the lexical and functional feature composition of the class of Name Status Designators. Perhaps the class, on serious investigation, will turn out to include /da/ 'elder brother', /di/ 'elder sister', /boudi/ 'wife of elder brother', which by extension cover non-kin acquaintances also in the relation-maximizing Bangia speech community (in effect /di/ serves as the feminine for /babu/ 'mister'). The use of these post-name elements in any case needs, and awaits, a formal grammatical account. Thus, (11b) does not undermine the generalization that classifiers as such are unavailable for attachment to a proper noun.

Demonstratives in general do not support classifier attachment; I presume that this reflects the double pointing device prohibition. I discount such example as /eiTa/ 'this one' which I analyze as Dem-N-/Ta/ with a zero noun. But there is one exception among the classifiers: /Tuku/ with maximum CTI feature and nil individuation effect. Because of this characteristic feature of /Tuku/, it can be attached with a demonstrative directly, a matter examined at length in section 2.6.

Left relatives unlike right relatives, as explained in Dasgupta (1987) share with personal pronouns the ability to carry first or second person features, trigger agreement with them on the verb, and even have these features carried over into the sequent clause whose sequent subject as in (12) is in the third person. The following examples will make this clear (data adopted from P. Dasgupta 1987):

12. jara baire jete cao, tara jete paro.

Who out to go want-2p, those to go can-2p

Those who want to go out, can go.'

In contrast, the right relative constructions exhibit the standard inability of a sequent pronoun to initiate anything but third person reference:

13. tara baire jete pare/*paro, jara jete cay/*cao.

those. can-3p/*can-2p, who....want-3p/want-2p

Those who want to go out, can go.'

Therefore, left relative pronouns occupy a relatively high position in the Silverstein hierarchy. I leave the details of this for further study by others.

2.5.2 Some empirical tests for judging the categorical hierarchy :-

Some tests can empirically distinguish the higher categories from the lower ones in this table. One such test is pointing: a deictic reading can be obtained only from the first three niches of this system. After /Emonki/ 'even', we consistently find a nominal expression that can point to or refer to a presupposed entity known to the speaker. Personal pronouns, proper nouns and Demonstratives do have a deictic reading and wh-pronouns both D-linked and non D-linked have that presupposed reading.

Generally, non D-linked Wh-pronouns do not refer to anybody even in the mind of a speaker but in this particular case probably /Emonki/ adds some extra meaning to the sentence. Without going into that matter also, we can say that there is a demarcation line between the first five niches and the others. In contrast, /Emon/ 'such' always requires a non-deictic expression after it and all niches after the first three satisfy this requirement.

2.6 A problem case: /Tuku/--

In section 2.2.2, while discussing the Bangla classifiers in general, I noted that it is exceptional in behaviour, being the only classifier that can be attached to a demonstrative, and furthermore it bears maximum countability type information. There are some questions and problems related to this exceptional classifier. To address those, this separate section on /Tuku/ is introduced.

2.6.0 Some data related to /Tuku/'s quantifying property: Its differences with /Ta/: -

For the readers' convenience, I will repeat some of the data and facts related to the diminutive classifier /Tuku/ in this section. According to the table showing the gradation of the classifiers based on two features (see section 2.3.1), /Tuku/ stands on the top bearing maximum CTI feature and hence

minimum individuation feature.

1. EtoTuku dudh

this much-Tuku milk 'this small amount of milk'

2. eiTuku meye

this-Tuku girl 'this little girl'

In both the cases, /Tuku/ denotes only the small quantity. One more point to observe here is its CTI feature leaves it open to select both [+count] noun such as /meye/ 'girl' and [-count] noun such as /dudh/ 'milk'.

The second criterion based on which the distinction is done for the Bangla classifiers is individuation. It is taken as a feature or property of the linguistic elements, which roughly denotes pointing, reference, specificity like features and adds some extra information to the element with which it is attached to. This feature has been created to understand some characteristics of a word in relation to the information it contains as part of my investigation where the concept was launched as a programme to deal with some syntax-pragmatics interface issues (see section 2.3.1).

On the basis of this individuation feature, classifiers can be graded into three categories. As it has been shown in the table in section 2.3.3, the rating is exactly opposite for this criterion compared to the first criterion of Countability Type Information (CTI) feature. Therefore, a conclusion can be made that a classifier's quantification role diminishes as individuation becomes important. /Tuku/ cannot produce or only minimally produces an individuation effect as its CTI feature value is very high.

Comparison of the use of /Tuku/ with other classifiers will make this fact clear.

3. kagojTa porjonto pORar SomOy paini.
 newspaper-Ta even read-gen. time got not
 'I didn't even get the time to read the newspaper.'

4. kagojkhana porjonto pORar SomOy paini.
 newspaper-khana (otherwise same translation)

5. kagojTuku porjonto pORar SomOy paini.
 newspaper-Tuku
 'I didn't even get the time to read this small newspaper.'¹

For /Ta/, pointing to the newspaper to increase its salience is the main function. /khana/ bears some countability type information as it co-occurs only with [+count] nouns. Moreover, it also induces a definite reading. /Tuku/ adds to the newspaper only the information that the or a newspaper is a trivial thing to read and that even for this triviality the speaker could not find time. When I utter the above sentence, obviously I do not rule out a specific or definite reading by using /Tuku/. But this element emphasizes the quantitative insignificance and not the speaker and/or hearer's prior familiarity with some particular paper. This point lies at the heart of the difference between /Tuku/ and other classifiers.

2.6.1 The empirical asymmetry: a problem : -

Now notice the following asymmetry in the data pattern surrounding /Tuku/: -

- 6a. eiTuku dudh
 this-Tuku milk 'this little amount of milk'
- b. ei dudhTuku
 this milk-Tuku 'this little amount of milk'

7a. eiTuku baccha/chagol

this-Tuku child/goat 'this little child/goat'

b.* ei baccha/chagolTuku

this child/goat-Tuku

For some speakers, (6b) yields a clear specific reading but for me (6a and b) can be interchangeably used for same reading. However, there is an important asymmetry between well-formed (7a) and ill-formed (7b).

In other words, Dem-/Tuku/-N is allowed whatever the noun is but Dem-N-Tuku is allowed just in case the noun is a [-count] noun. Interestingly the behaviour of /Tuku/ and other classifiers in relation to the Dem. is in complementary distribution in Bangla. Where /Tuku/ can occur, other classifiers cannot and where others can (compare /ei bacchaTa/chagolkhana/ 'this child-Ta/goat-khana'), /Tuku cannot.

2.6.2 Previous literature on /Tuku/ :--

Rajat Ghosh (2001) responds to the question as to why Bangia allows only /Tuku/ after Dem when Asamiya allows all classifiers to occur between Dem and a Noun. Ghosh (2001) proposed a new parameter to distinguish between Bangia and Asamiya. His Excapsulation parameter is based on the idea that 'a non-substantiv6e demonstrative can be substantivized by the lexical features of the classifier shared with the classified noun to make its reference more appropriate.' He empirically establishes that in Asamiya all the classifiers can be attached to prenominal demonstratives whereas in Bangia it is marginal as only /Tuku/ can be attached to a prenominal Dem. He shows also that the Dem-Cl combination retains the category specification of the Dem, i.e., [+N, +V]. Excapsulation is consistently available in Asamiya and consistently unavailable in Bangia because on Ghosh's analysis Asamiya classifiers are semi-lexical but in Bangia they have become functionalized. Ghosh states that the Dem-Cl combination is

generated in the spec of NP, i.e., the standard AP position. This Dem-Cl moves upto spec of QP to check its referential feature as that is the site of referentiality in a classifier language. A Dem-Cl which moves upto the spec of QP is indexical and the type which does not move is adjectival.

This portion of Ghosh's work becomes important for the following section where I discuss Dem-Cl sequence of Bangla going into the details of the exceptional word /Tuku/, which, in my view, belongs to two different categories. But about the asymmetry mentioned above, Ghosh's analysis has nothing to offer. What can be the possible explanation for that phenomenon?

2.6.3 A Possible solution: --Two /Tuku/s--Classifier and QA: --

In this section, I propose that two different words of the form /Tuku/ exist in the lexicon. One /Tuku/ is a classifier, in the sense of Cheng and Sybesma (1999), which is a classifier that has all the features of a measure word and can collocate only with a [+continuous, -count] noun. The other /Tuku/ is a Quantifying Adjective that does not have an independent existence but always occurs attached to a degree word. If this is a degree word homonymous to the demonstrative /ei/ 'this', then the phrase /ei-Tuku/ is generated as an AP at the spec of NP and moves up to the DemP position at the spec of FocP to check the inherent [+Referential] feature coming from its first element /ei/. Bhattacharya (1999) proposes a FocP inside the DP structure. Following him, Bangla DP consists of four levels [DP[FocP[QP[NP]]]]. If there is a referential reading of the DP, AP /eiTuku/ goes to the spec of FocP position by spec to spec movement. For instance, compare /eiTuku dudh/ 'this-Tuku milk' vs. /oiTuku dudh/ 'that-Tuku milk'. In the first case, along with the small quantity of the milk, the proximity of the milk to the speaker is also indicated. But for the second sentence, the milk is certainly not proximate to the speaker. If /Tuku/ occurs attached to an

adjective-modifying pure degree word like /Eto/ 'this much' or /kOto/ 'how much', then Deg-/Tuku/ does not move out of the *HP*. In the next few paragraphs, I shall give the details of this solution.

I begin by proposing that the extensive /khani/ and the diminutive /Tuku/ are not regular classifiers. Rather, they bear the feature of a measure word, even though this feature does not usually co-occur with the possibility of attachment to a noun (a typical classifier property in Bangla). Cheng and Sybesma (1999) used the term *massifier* to denote this type of element in Chinese.

My next move is to draw upon the work of Muromatsu (1998), who classified nouns into three categories based on their internal complexity, both syntactic and conceptual, as follows: —

1D: - +degree, -measure, -form: predicate use of noun

2D: - +degree, +measure, -form: concrete mass nouns

3D: - +degree, +measure, +form: count nouns

1D nouns are bare nouns and they are type-lifted to 2D nouns by the use of a measure word or a quantified expression; so that they can be referential. Technically this type-lifting predicate is called a *warp*. 3D nouns are not only referential but also bound and individuated. They allow numerals and determiners. The warp that type-lifts a 2D noun to a 3D noun instantiates as a classifier in a classifier language. In the absence of classifiers, a language uses grammatical number to serve the same purpose (Castillo 2001).

Coming back to our discussion, example (6a) where /Tuku/ is attached to /ei/, refers to a very small amount of milk. Here /ei/ is a degree word homonymous to the proximal demonstrative *this*. That it is a degree word is confirmed by the similar construction /Eto/ia bORo baRi/ so/yay big house

'this much big house'. /Tuku/ is a 2D noun here with the features +degree, +measure (a measure word in our terms) but not a classifier.

Similarly, /baccha/ 'child' or /chagol/ 'goat' of (7a), though used as a count noun in general, is not so used in that particular case. To confirm this, consider some further examples: -

8. ora baccha dhOre.

they children catch 'they catch children.'¹

9. eiTuku baccha kOtha bolte pare na.

this-Tuku child talk-infinite can not

'A baby this little is not able to talk.'

10. oder eiTuku duTo baccha ache.

their this-Tuku two-cl children have

They have two children this small.'

In example (9), /baccha/ is a mass noun without the [+form] feature. We cannot individuate the item /baccha/. From its status as a bare noun in (8), it is lifted to the next higher rank of the hierarchy. In (10), when /To/ (an allomorph of the classifier /Ta/) is added, the noun is lifted to the highest rank where it can be counted. This particular construction is referential as the word /eiTuku/ here is generated in the DemP position since the /ei/ in this case is a referential Dem. There is yet another reordered variant of the construction given as (11): -

11. oder duTo eiTuku baccha ache.

QP AP

The nominal here is non-referential in nature; /duTo/ 'two' is a QP with Q and Cl and /eiTuku/ is generated in AP position as in (9).

The description given for /Tuku/ holds good of /khani/ also as it too is a massifier (or in our usual parlance a measure word) and involves type-lifting a bare noun to a quantified expression, but never to a count noun in the way exemplified in the following data-set:

12. baRir Samne rasta.

house-gen. in front of road

The road is in front of the house.' (bare noun use)

13. amader Onekkhani rasta jete hObe.

we-gen. much-khani way to go

'We have to go a long long way.'

(/khani/ used with a quantifier measures the bare noun /rasta/ 'road')

14. Onekgulo rasta ekhan theke berieche.

many-gulo(cl) roads here from started

'From here a number of roads have started'

In (14), /gulo/, a collective classifier, type-lifts a mass noun to a count noun.

Coming to the impossibility of (7b), /Tuku/, when attached to a noun, acts as a classifier bearing a [+continuous] feature, which allows only [+continuous] nouns with a divisible cumulative structure. Therefore, /dudh/ 'milk' is allowed because a very small quantity of milk is milk only and /baccha/ 'child' is not allowed, as */bacchaTuku/, if could be generated would mean a small piece of baby with all its features!

2.6.4 A reduplicated construction with /Tuku/: --

In a reduplicated construction, repeated use of adjective/ measure word before a count Noun denotes marked (collective if in principle count or extensive if in principle mass) aggregation.

15. choTo choTo chele

small small boy 'small boys'

16. gada gada boi

lots lots books 'lots of books'

The nouns of these cases are not perceived as [+count] nouns, but as a collection or mass of many books/boys. That means, when we say /gada gada boi/ 'lots of books' and /gada gada bhat/ 'lots of rice', we don't really distinguish between those two constructions even though books are count and rice is mass. Nobody expects that someone has counted the books or measured the rice; hence the irrelevance of the distinction between counting and measuring here. Similarly, if /Tuku/ 'a very small amount' is repeated as a measure word in a construction such as /ei Tuku Tuku baccha/ 'these small children', one refers to a proximal group of children who are very small. Extralinguistically, we can perceive such a group and even ascertain its cardinality. But what the language presents here is an aggregation of very small number of some formless things that are not supposed to be counted. This logic may not directly carry over to the denotation of a mass noun. But we can always perceive a number of small amounts of a substance distributed over a number of containers. Bangla uses a particle /kore/, which conveys a sense of distributional measurement and operates on an expression that serves as a unit of measurement. Therefore, /ei Tuku kore bhat/ 'this little amount of rice (per unit)' is the natural choice instead of */ei Tuku Tuku bhat/. /kore/ always occurs after a measure word and is followed by a mass noun as expected with a measure word.

2.6.5 /Tuku/-/khani/ asymmetry: --

There is still one more asymmetry between the two measure words **cum** classifiers of Bangla, viz., /Tuku/ and /khani/. Like /Tuku/, /khani/ cannot be attached to a Demonstrative. E.g.

16. *eikhani rasta
this-khani road

Corresponding to this, Vrastakhani/ 'road-khani' is also out. What is the reason for this asymmetry? Demonstrative is a node where the referential feature of a DP is located. Therefore, only those classifiers and measure words can attach to Dem, which bear a referential feature. Certainly, /Tuku/ bears such a feature and /khani/ does not. In Asamiya, as evident from the data by Ghosh (2001), all the classifiers bear such a feature. The referential feature of the Q/Cla node is uninterpretable, therefore it is moved to the Dem to check that feature, as Dem has an interpretable referential feature. /Tuku/ as an adjective does not have that feature as seen at (11).

Now the feature matrix of the classifiers (and/or measure words), with which I started the discussion, will be given.

Tuku(Massifier)	khani(MW)	gulo/khana/jon(CI)	Ta(CI)
[+Q]	[+Q]	[+Q]	[-Q]
[+R]	[-R]	[-R]	[-R]
[-Individuated]	[-individuated]	[+Individuated]	[+Individuated]

[+continuous] if added with a noun as a classifier

Adjectival /Tuku/ is different from this, a point that has been made in detail.

2.7 Conclusion: -

In this chapter, I have discussed the pre-nominal categories and their relative importance in the study of individuation. Special attention has been paid to the classifiers as they are the category of interest to the present day syntacticians concerned with Bangla. The Individuation function of a classifier, as mentioned in the feature matrix, may turn out to some extent to resemble the function of D in a language like English where there is overt D. The function of D, which is basically a discourse function, is pointing towards an entity in the real world. The English definite determiner <the> does such pointing. What the highly individuated classifier /Ta/ of Bangla does is similar to this, though not identical.

In addition it makes the linguistic item prominent also in the discourse apart from anchoring it referentially. In a classifier language, on the one hand, the classifiers do the job of counting in the absence of the number feature (Muromatsu and Castillo) and on the other hand, they take over for a classifier language some of the job of an overt D in a language where number serves as a phi feature.

Chapter 3

Theoretical Foundation

3.0 Introduction to the chapter:

I started this dissertation with a specific aim, which I stated in the first chapter itself, viz., to develop an account of the individuation mechanism, how it works in the language and how it is connected to the cognitive process. The previous chapter has shown how, in the DP structure, elements are ordered hierarchically, based on the feature individuation. Among the specific devices of individuation, the role of classifiers, esp. of the most individuated classifier /Ta/, had already been discussed in the second chapter. Chapter Four, which deals with non-finite verbal participles, will bring out the role of the other major device of individuation the language uses, viz., the emphaziser /V/. But before going back to a stream of empirical facts, which can sometimes bewilder a reader unfamiliar with the language and can thus obscure the point made by the analysis, I pause at this juncture to clarify my standpoint in relation to the already existing theories of grammar and meaning, and to explain in what **way the present study** advances the development of this standpoint.

The ordinary understanding of language takes it to be either primarily a means of communication (a frequently reiterated view in functionalist approaches to linguistics and several perspectives in the philosophy of language) or primarily a means of expression that may be put to communicative or other use (this is Chomsky's view, adopted by many generative grammarians), which has two core components, expression (the formation of composite expressions in the language on the basis of its primary vocabulary) and content (mapping between these expressions and their interpretations). The speakers of a language, on this conception, use an expression in this language to convey some meaning or message. The question then is how a formal theory of linguistics is to account for the way a

particular meaning can be associated with a particular use of a given expression. One's approach to this question remains incomplete if one investigates the issue from inside the language alone, without taking into consideration the surroundings of the communication, which include the speaker, the hearer and the situation where the communication takes place. To cater to these needs of a linguistic theory, pragmatics developed as a bridge discipline between the language proper and the extra-linguistic world. For readers who adopt this view of the matter, it is simplest to assume that the present dissertation is situated at that meeting place and takes a broader perspective of meaning in most of the cases; and, to do so, it takes into consideration the speaker's ability to choose from a range of available linguistic tools to make his/her points clear to the hearer, who is the other human component of a communication.

A reader who approaches the present dissertation on this basis can legitimately use the material presented here. I have no wish to object to such use of this study. However, one purpose of the present chapter is to clarify the actual standpoint from which this work is being done. I now approach the methodological issues in terms of an often unnoticed tension that lies at the heart of the fairly viewpoint just presented. For simplicity, I will assume the language for communication approach, as it is prevalent among most users of pragmatics. Presumably extending these reflections to the language for expression approach is a straightforward matter.

I detect a tension between the upward lexical projectionism implied in the usual conception and the notion of the speaker being free to convey what s/he wishes to. Let us suppose that larger structures are projected from lexical heads as usually assumed. It follows that a given verb and a particular nominal object of that verb, for example, should uniquely determine whether and what inflection appears on that object. In that case the speaker would have no choice as to the overt or covert Case marking of

a Bangla direct object, contrary to the fact. For the speaker to have some choice, the upward lexical projection process must be less strict than this picture would lead us to believe.

One way to handle this problem is as follows. We allow the speaker to assign surplus content to the whole, to the constitute, over and above the interpretive content that the constitute acquires by projection from the parts, the constituents. For example, consider the difference between (1) and (2) below:

(1) uni Sokal-Sondhe chatro pORan

s/he morning-evening student teaches

'S/he teaches (faceless) students in the morning as well as in the evening.¹
(as a routine work).

(2) uni Sottii chatroder bhalobeSe pORan

s/he really student-PIAcc lovingly teaches

'S/he really teaches the students lovingly.'

We may suppose that the grammar proper leaves lexical projection mechanisms neutral between the unaffixed /chatro/ of (1) and the affixed /chatroder/ of (2) in the position of object of the verb /pORan/. On this account, affixation of the object is optional in these sentences at the level of the grammar of the language. The grammatically determined interpretations of the affixed and unaffixed versions of the object are also identical.

But there is an observed interpretive difference, as is familiar, between the specific reading of the affixed /chatroder/ in (2) and the nonspecific reading of the unaffixed /chatro/ in (1). If I propose an account based on the speaker's assignment of surplus content to the utterance, I attribute this difference to the fact that s/he has a choice between the affixed and the

unaffixed form of the object for such a nominal. The speaker can choose the unaffixed form /chatro/, for instance, as in (1). S/he thereby chooses to bring the sentence s/he utters into paradigmatic association with those sentences where the grammar requires an affixless nominal object, such as (3) below. Alternatively, the speaker can decide to use the form /chatroder/ as in (2), thus associating the utterance with sentences like (4) where the grammar forces an affixed nominal object:

(3) nisar tOrkari bEce.

Nisar vegetable sells

'Nisar sells vegetables'

(4) Sudhirbabu amader pORan.

Mr./Dr. Sudhir us teaches

'Mr./Dr. Sudhir teaches us.'

This account, call it the SACSI (Speaker-Assigned Constitute Surplus Interpretation) analysis, attributes the interpretive contrast between the affixed and unaffixed objects in (1) and (2) to the speaker's ability to assign surplus content to one of two choices that the grammar is neutral about. On this analysis, the speaker exercises this ability by paradigmatically associating his/her use of that particular form with other forms crucially resembling it. On these assumptions, the affixed nominal /chatroder/ in (2) carries no interpretive specificity as a matter of its grammar. The grammar treats /chatro/ and /chatroder/ in (1) and (2) as a matter of free variation. It is the speaker's decision to use one or the other, relating the utterance paradigmatically with either the (3) type or the (4) type which ultimately leads to the interpretive specificity or nonspecificity.

It follows that upward lexical projectionism coupled with standard compositionality operating over the interpretations of constituents does not

wholly determine the interpretation of a constitute. The speaker has an overriding ability to assign surplus content to the composite. This ability is exercised at the point where the constitute, which in this case is a sentence-length utterance, is submitted to the syntax-pragmatics interface for interpretation.

The working of this analysis brings out the tension between upward lexical projectionism and the speaker's right to modulate what s/he wishes to say. If a grammatical description were to make only projectionism and compositionality the relevant factors determining the interpretation of utterances, then one would be forced to leave interpretation entirely, without residue, to the social conventions of the language. That type of picture would leave no role for the speaker, whose freedom to anchor an utterance in its context would become vacuous. I am assuming a different picture, in which it is crucial that the grammar leaves space for the speaker to exercise this freedom.

What I have provided above is a first approximation, where I stick to the assumption, standard in pragmatics, that the speaker submits the sentence-long utterance to the pragmatic interface. If this is so, then no grammatical unit smaller than a sentence is directly subject to Use and therefore to pragmatic principles. Is this undesirable? Should I propose instead that, in examples (1) and (2), it is the verb-object complex and not the entire sentence that gets submitted to the interface between syntax and pragmatics? Is it necessary and appropriate to suggest that a syntactic unit of any rank (sentence rank, phrase rank, word rank) can meet pragmatics at the interface?

The fact that I am forced to face such a question indicates that the work I wish to do cannot be adequately described and done within the current

theoretical framework. No direct answer that accepts this formulation of the question offers a viable research programme.

One possible answer, (A), underscores the fact that allowing the speaker to submit units of any rank to the pragmatic interface will lead to a proliferation of distinct derivations of the same utterance-interpretation pairing, raising inappropriate issues about how to converge on the optimal member of this derivation set. Thus, only sentences should meet the interface with pragmatics, as- has been assumed by philosophers of language as the default of their speech act theories.

But an opposite line of reasoning, (B), equally plausibly stresses the lack of any conceptual basis in the theory of grammar for constraining the set of units that can legitimately interface with the pragmatics. From that consideration it would follow that the theory must allow the speaker in principle to submit any syntactic unit for independent interpretation at the interface, and that perhaps in cases like (1) and (2) one should consider the minimal pragmatically relevant unit (here the verb-object complex) as requiring study, not the whole sentence.

The benefit of my accepting proposal (A) is that I avoid a proliferation of needlessly distinct derivations of the same utterance-interpretation pairing that differ only in the details of which units get submitted when to the pragmatic interface. The cost is that I allow only the grammatically conceptualized Root of the Syntactic Derivation to meet the pragmatic interface. This move produces empirical difficulties. It has always been known that certain grammatically embedded clauses count pragmatically as illocutionary acts and exhibit syntactic root effects. Once I allow certain embedded units to break out of the tree and meet the pragmatic interface, I have no systematic basis for denying this privilege to other embedded units, and I am back in proposal (B), if I take this cost too seriously.

If on the other hand I accept proposal (B), the benefit just indicated needs to be balanced against the cost. For me, the cost of proposal (B) is extremely high. It forces me to abandon the study of individuation, for the concept makes sense only if I can validly speak about the anchoring of a particular constituent and its subconstituents. I am thus unable to prefer (B) over (A).

My response is to reject the very question whose formulation forces a choice between two unacceptable answers. I therefore find myself compelled to reject a conceptualization of language and its use where an expression (typically a sentence), generated by a grammar, is like a book stored in a library, and where a language user, or a speaker uttering an expression, becomes analogous to a borrower issuing a book from a library.

In that traditional picture associated with generative grammar, the competence or linguistic knowledge of the native speaker-hearer visualized as a perfect member of an ideal and homogeneous speech community is in effect a librarylike collection of infinitely many well-formed expressions. Performance occurs when a user puts a piece of this infinite knowledge to finite use in productive or receptive action in real space-time, analogous to borrowing a book from that library. My problems seem to arise from this visualization itself, but I need to preserve the many useful results of the research traditions that have depended on this conception.

The material I present in this methodological chapter is offered in response to this fundamental theoretical problem that I face. To summarize what I would like to do, my current inclination, which may change in the course of research now in progress, is to postulate an infinitely generous and comprehension-maximizing listener processing what is said by finite speakers in real space-time. Such a listener, in my conceptualization, submits to the pragmatic interface an entire clause, but with some

highlighting of relevant or crucial chunks of the clause such as the verb-object complex in (1) or (2). Call my move proposal (C).

Independently of the issues just considered, my need to advocate proposal (C) is related to my need to understand and work with a crucial move made by the minimalist syntacticians, the move of abolishing the system of (referential) indexing that used to be central to generative grammar. By making that move, minimalist scholars have basically proposed that it is not part of the grammar, neutral between speaker and hearer, for particular expressions to be anchored with respect to any concrete referent in space or time. In a certain sense, I welcome their move as it removes from the abstract formal grammar yet another matter that should concern the concrete actions of production and reception by speakers and listeners in real space-time. However, my concern is with the mechanisms whereby linguistic material registers individuation, and to this extent I have to solve the problems raised by the minimalist move.

Operationally, I have been using the machinery as it stood in the principles and parameters period of that tradition's research; this serves to avoid a confrontation with the logistics of minimalist implementations. I am now concerned to provide a conceptually well-founded response to the minimalist enterprise.

As my serious conceptual response to minimalism, I suggest that we reconsider the proper formalization of human knowledge of language. Specifically I advocate adopting the viewpoint of a listener monitoring and revisiting the speaker's actions and choices. I am not hereby reproposing what others have already suggested, to recast standard competence on the basis of listening rather than speaking. I am proposing to focus instead on an ideally comprehension-maximizing listener figure replaying what has been done by the speaker. By this I mean, echoing a point hinted at but not

rigorously formulated in the minimalist abandonment of referential indexing, that it is not in the formal construction of a syntactic object, but at the pragmatics-applying moment of the listener's replay that entities get anchored in space and events in time. Speaker intentions with respect to referential anchoring, on this account, are always a matter of the speaker expecting the ideal listener to find out what intentions need to be reconstructed.

To return to the proposal whose theoretical background I have just explained at some length, proposal (C) is able to overcome the sterile dilemma of (A) versus (B) by rejecting the initial question's premise that compelled the idealized speaker, in the course of assembling the sentence, to decide either to stop at the juncture where the relevant phrase had been built, or wait until the entire clause was ready, but without the option of considering both the clause and a highlighted phrase within it. I am now proposing to work with the listener, for whom this third option (C) is available without special stipulation. For the listener, the highlighting provided by intonation makes it natural in certain cases for a particular phrase to count as salient within a clause.

3.1 Organization of the chapter:

With these considerations in mind, in this chapter I shall try to connect the threads that make possible the operative work of this dissertation. Ordinary discussions of language as a system of communication naturally take the works of Strawson and Grice as their point of departure, for it is the theories about speaker's meaning proposed by these philosophers of language that initiated this stream of inquiry. However, in this dissertation, I follow the hermeneutic approach developed by Ruwet where linguistic contributions are perceived and evaluated in a broader setting of non-linguistic factors.

My strategy in this methodological chapter involves finding ways to relate Ruwet to current generative syntactic work, which although it does not include pragmatics in the mainstream of linguistic theory nonetheless does make it appropriate to consider, for interpretive purposes, the possibility of taking a context larger than a sentence.

The recent minimalist move of postulating only two interface levels PF and LF for the computation system of human language makes one conceptualize a sentence or even a phrase or a clause just a product of a computational process involving words, which are usefully considered as the minimum unit of novelty for the speaker (or for the listener) and the maximum unit of oldness or establishedness for the speech community. I say this to bring my viewpoint to bear on the derivation and use of sentences in minimalism. Let us take a closer look at the elements involved.

Under minimalist assumptions, the words that will appear in a given sentence are selected from the lexicon and set up as a lexical array whose members are successively merged (and subjected to other formal operations) to assemble a sentence in the idealized process that generates sentences within language conceptualized as a library in the sense of my remarks in the introductory section above.

Now, is it accurate to say that exactly which words will be selected is entirely guided by what meaning a speaker wants to convey by the sentence to be uttered? Or that this allows a speaker to create new sentences every time s/he utters something? No, these statements do not hold within the minimalist implementation of the generative distinction between language system, formalized as a competence, and language use, visualized as a performance that lies outside the domain of that knowledge system. For minimalism continues to maintain what I have earlier characterized as the library approach to the formal representation of knowledge of language, and

the library look-up mechanism for describing the productive and receptive actions of the speaker and the listener. Given that approach, the selection of words for a lexical array underlying the derivation of a sentence is a library matter, not a look-up matter. Within the language as a library, no derivation is either old or new. Only the speaker, in performing, experiences a sentence-length utterance as new and its production or reception as creativity.

But one of the guiding intuitions in the growth of generative grammar has been the sense that recursion and creativity are central to syntax. It is thus important for the generative enterprise, and should become important for its minimalist implementation, that sentences are the minimal forms which a speaker can freely create as units of fresh, creative speaking. Sentences are understood at all, and are perceived as novel, in the context of larger stretches of discourse by the listener, a fact that becomes crucial to the recasting of the generative enterprise in terms of the infinitely generous listener revisiting the speaker's real-time performance if my proposals are adopted. Minimalism dismantles the specifically syntactic apparatus of D-structure and S-structure that gave a grammatically privileged status to the sentence as the domain within which derivations had to be managed. The minimalist move of claiming that the PF and LF interfaces obey the dictates of what lies outside language, given that neither sound as such nor interpretation as such is sentence-bound, opens up in a new way the option of going beyond the sentence domain in the linguistic understanding of how sounds and interpretations are paired with each other.

Note that Ruwet's hermeneutic approach to the study of meaning works in principle with discursive or textual units larger than the sentence in order to construct the context within which pragmatic principles apply. I will show that the proper expansion of Ruwet's hermeneutic approach helps to complete the direction taken by recent trends in mainstream generative grammar.

Specifically, when we look at the way a revival of GT (the Generalized Transformation device from very early generative syntax) is at work in the logic of minimalism, it can be plausibly argued that a syntax without deep structure provides a natural account of relations across clause boundaries in syntagmatic terms, and that extending this logic to the paradigmatic axis connects the generative enterprise as we know it to Ruwet. The bridge between these two threads in our concerns is provided by Bhartrhari. Accordingly, this chapter ends by reviewing, and showing the proper contemporary use of, the *Vaakyapadiyam*, an important work by Bhartrhari in Indian philosophy of grammar. To anticipate briefly, the sphota view of language cognition, as developed by Bhartrhari, emphasizes the fact that a *sabda* is comprehensible in principle only from the idealized listener's viewpoint. The sphota views give an immense importance to the hearer's cognition of the utterances. I shall argue that, just as Bhartrhari's work makes possible a paradigm shift from etymologically oriented Paninian linguistics to a user-focused linguistics of listening within the Indian tradition, so also a proper use of his research today will enable the shift of perspective required for the purposes of the inquiry undertaken in this dissertation.

This paradigm shift proposed here will be described, for convenience of reference, as the transition from a formalist to a substantivist approach to the interface between generative syntax and pragmatics.

3.2 Some Western and Indian thoughts on meaning: -

Before developing the actual formulations of my main proposals, I shall first give a background exposition of certain classical theories of meaning from the Western and Indian traditions. These provide terms of reference that some readers will need in order to follow the logic of the programme developed here and the alternatives against which it is to be evaluated. Accordingly, section 3.2.0 will briefly present a review that begins with the

Russell-Strawson-Grice material and then turns its attention to Indian schools of philosophy.

3.2.0 Departure from Russell (1905): -

In the beginning of 20th century, in a famous paper named 'On Denoting', Russell proposed that a linguistic expression never has a meaning in isolation; rather, every proposition in which it occurs has a meaning. This Russellian theory of meaning contradicted Frege's theory of sense and reference, where every linguistic expression itself has a denotation in the real world as well as a meaning, which is 'sense' in Frege's terminology. But the next half of the century witnessed two philosophers treating the Russellian theory literally as a point of departure. Departing from his view, Strawson and Grice made proposals, taken up in sections 3.2.1 and 3.2.2, that allow a linguistic expression to have a meaning only in a context. No proposition in isolation carries a meaning. When this move was made, the 'context of utterance' became, for the first time, a crucial factor in determining the meaning of a sentence.

3.2.1 Strawson (1950): --

Strawson in his essay 'On Referring' first distinguished between a sentence, a use of a sentence and an utterance of a sentence and correspondingly between an expression, a use of an expression and an utterance of an expression. He gave the example 'the king of France is wise', which is a sentence or an expression which can be uttered by a number of persons at different periods. If one man utters this expression in the reign of Louis XIV and another man utters it in the reign of Louis XIII, they will have made different uses of the same expression. If two different men use the same expression at one and the same point of time, these will also be different utterances of a sentence or expression. Contra Russell, Strawson did not judge a single expression in abstraction. He distinguished meaning, which is a function of the expression, from referring and mentioning, as well as from

truth or falsity, which are the functions of uses of expressions. Expressions themselves cannot refer to anything, though they can be used innumerable times to refer to many things. From Strawson's article onwards, the context of utterance became an extremely important factor co-determining a truth conditional value for the sentence as uttered in that context. In a way, Strawson is the true predecessor of Grice, who seven years later distinguished between sentence-meaning and speaker-meaning, taking the speaker into consideration. Pragmatics as we know it started with these two important papers, though the term Pragmatics is never used in either of them.

3.2.2 Grice (1957):

One of the definitions of pragmatics runs as follows:- 'Pragmatics is the study of all those aspects of meaning not captured in a semantic theory.' This includes those senses of meaning implied in a conversation which cannot be covered by truth-conditional semantics, e.g. metaphor, irony, presupposition and all other implicit aspects of meaning, which are not found literally from the utterance. To draw a distinction between the literal sentence-meaning and the other meanings intended to be communicated by the speaker, a very important idea was put forth by the philosopher Grice in an insightful paper 'Meaning' in 1957. He distinguished between two types of meaning: meaning natural, which he represented as meaning_N with the subscript N, and non-natural meaning written by him as meaning_{NN} , which may be called speaker-meaning. Grice gave the following characterization of meaning_{NN} : " 'A meant $_{NN}$ something by x' is (roughly) equivalent to 'A intended the utterance of x to produce some effect in an audience by means of the recognition of this intention.' "

This formulation may be expanded as follows: there is a speaker S in a communication, who by uttering U in front of a hearer H intends (this is the intention i) to produce some effect z in the recipient H, and the content of the

intention *i* includes the intention that that effect *z* should be brought about by *H* recognizing intention *i*.

This means there is a speaker *S* in a communication, who by uttering *U* in front of a hearer *H* produces some effect *z* in the recipient and that effect has to be recognized by *H* in order to have a fruitful communication. Certainly then in the process of communication, a shared knowledge of speaker and hearer is involved, otherwise the 'intention' of the speaker to communicate something fails. The most important part of Grice's meaning_{NN} theory is what a speaker means_{NN} by uttering *U* may not be closely related to the meaning (this is natural or literal meaning) of *U* at all. Therefore, there can be an interesting discrepancy between 'speaker-meaning' (Grice's meaning_{NN}) and 'sentence meaning'. For example, a speaker by uttering 'I am feeling cold' can mean 'please shut the window' when cold wind is coming through it.

In the definition of pragmatics given in the beginning of the discussion, by the word 'meaning', this Gricean aspect of meaning_{NN} has been tried to capture.

3.2.3 Indian schools of philosophy on the nature of meaning:

I now turn to the Indian side of the story. This is made necessary at least by the roots of today's international linguistics enterprise in the Paninian tradition. I need to present the original tradition and the seeds of the Bhartriharian critique of its formalistic version as part of the background for the proposals made in this dissertation in relation to contemporary work.

Right from the stage of the Vedas, Indians grammarians and philosophers were concerned about the theories of meaning. The study of language acquired a central position in all the schools of Indian philosophy. However,

there were differences of opinions among them regarding the nature of sabda (the 'word') and its meaning. The main two divisions among the schools of Indian philosophy on the nature of meaning were the Brahminical tradition (consisting of the saamkhya, yoga, miimamsaa and vedaanta schools) and the naturalistic tradition which includes Caarvaak and early Buddhism. The Nyaaya and Jaina schools fall somewhere between these two as stated by Prof. T.R.V. Murti and reiterated by Coward in their accounts of the philosophical history of the study of language in ancient India. The Brahminical school of thought envisaged the relation between sabda and its meaning as eternal and language as a divine entity. This school perceived sabda as identical with Brahman or the Supreme Being. What human beings utter for communication are manifestations of that absolute Brahman. Only those persons are able to cognize that impersonal knowledge who have made themselves fit to see and receive it. Therefore, Vedic rsis were the 'seers' of the hymns rather than their composers and the Vedas were sruti (or something which has to be heard) of non-human origin. Putting aside the metaphysical part of this, what remains important for our purposes is the fact that cognition in the form of understanding language depends on the hearer's capability for receiving such transmission.

The naturalistic school, on the other hand, views language as an arbitrary and conventional tool. The Caarvaaks and the Buddhists deny sabda as an authoritative source of knowledge and rely entirely on perception (pratyaksa) and intuition (prajnaa) respectively. The Nyaaya and the Jaina schools accept sabda as a pramaana or a source of valid knowledge.

However, there is a difference between their view about sentence meaning perception and the view of the Brahminical tradition on this matter. According to the Naiyaayikas (followers of the Nyaaya doctrine), meaning is compositional in nature. If one knows the meanings of all the constituting elements of a sentence, one also perceives the meaning of the sentence by

applying invariant procedures of meaning composition that a philosopher can derive from first principles. However, there is no natural relation and also no logical conceptual relation between a sabda and its meaning, for at that level everything is conventionally fixed by social norms not rooted in either nature or logic. According to this doctrine, we cognize meanings of a sequence of words in a sentence one after another and the meaning of the previous word is stored in our memory during the listening and cognizing process. Notice that these compositionalist assumptions about meaning leave no room for pragmatics to play any role in the determination of what the listener cognizes. By virtue of the conventions of a society, if the speaker and the hearer share some words and their meanings, every utterance of a speaker will be comprehended by the listeners automatically. This reduces the importance of both the speaker and the listener under the supremacy of conventional nature of speech acquired at the level of a society's habits or customs. In other words, what I have described as the SACS analysis cannot be elaborated by adopting the Nyaaya doctrine.

3.3.0 Placing Ruwet in the Goldsmith Hierarchy of grammar types: -

This section will introduce Nicolas Ruwet's work in the context of the grammatical description type hierarchy proposed by Goldsmith. Under Goldsmith's assumptions it is possible for Ruwet's and Chomsky's lines of inquiry to be jointly pursued without incoherence. The relation between Chomsky's minimalist program and Ruwet's hermeneutic approach will be the concern of the next sub-section at a more detailed level.

John Goldsmith, introducing his translation of Ruwet's work, describes a hierarchy of grammar types. He classifies grammars or grammatical descriptions into four types, which are as follows:

1) **Type 0** - the Platonic view of grammar which is an abstract object inhabiting the mathematical world of platonic abstractions.

2) **Type 1** - This is generative grammarian's competence view, where the grammar is physically embodied in a real world but silent about the subjective existence of the people of that world.

3) **Type 2** - This assumes Type 1's reality and also takes seriously the subjectivity of the speaker or the hearer, a type exemplified by the phenomenological view of grammar by Kuno.

4) **Type 3** - In addition to speaker's consciousness, this type takes into account a linguist's consciousness also; this is where Ruwet's hermeneutic approach is located in the classification.

But this type hierarchy proposed by Goldsmith does not make water-tight compartments for each of the types; rather, every lower structure, as Goldsmith himself states, is included at the next higher level in the typology. If this is taken for granted then there is no incompatibility between type 3, which is 'Ruwet's grammar' and type 1, which is Chomsky's, as type 3 includes type 1 and as type 1 provides the foundation for the type 3.

3.3.1 Relating Ruwet and the Chomskyan works: --

I turn now to the task of situating Ruwetian inquiry more carefully in an overall generative framework. For my purposes I need to revisit the chronology of the major moves in generative grammar. In the logic of early generative grammar (as in Chomsky 1957, 1965), the point is to think of a sentence as a unit larger than a word, and certainly much larger than a morpheme, but falling within the purview of the etic-emic format of structuralist inquiry. It is convenient to imagine that what early generativism introduces is in effect the idea of 'allo-sentences', if I may use a term that brings out the way they are similar to allophones and allomorphs in phonology and morphology respectively, for the alternative forms of a single sentence. Of course, generative invented its own distinctive terms for the notions of *sentenceme* (Deep Structure) and of *allo-sentence* (Surface structure) This view was thus very far removed indeed from the mentalistic

approach of language characteristic of generative grammar and from the later proposal that linguistics should be recast as part of a biologically founded theory of human psychology.

But with the next major development of generative grammar in 1980s (which is known as principles and parameters theory), the social rule-governed form of language had even at the operational level been replaced by the more psychological principle-bound form. In the 1990s, as part of the further progress of that generative work, when the minimalist program was launched, there were only two interface levels, PF or the articulatory-perceptual level and LF or the conceptual-intentional level, which were necessary for computation of human language. A derivation has to meet some conditions at these two interface levels. Any derivation which fails to do so crashes. Words, as they are in the mental lexicon of a native speaker, are assembled to make a sentence or a construction. There is no readymade mental unit larger than a word (I offer this as a contextually usable first approximation; of course this and other theories recognize idioms). The acceptability of an utterance is judged in a context, which is of course larger than a word. There is no upper limit to this context, at least theoretically, be it a phrase, a clause, a sentence or even a discourse.

Chomsky's formal theory of language in the minimalist period, therefore, opens up a possibility for considering the grammaticality judgements of a native speaker in a context larger than a sentence. The current practitioners of generative grammar limit themselves to narrow context of a single sentence and leave the issues beyond narrow syntax to a residually defined pragmatics. This practice of avoiding some issues reflects their external decisions and not a true domain delimitation of their work. If on the one hand they admit that language has to meet some conditions at the conceptual-intentional level, the level of a speaker's mind, where language is situated, then how can a linguist in their view work without taking into consideration

the speaker and his/her intentions/views? Ruwet explored that very possibility and surely was ahead of his peers in this respect. He stood out as a thinker who scrupulously respected the valid needs of an autonomous syntax and at the same time drew attention to pragmatic considerations that many syntacticians were inappropriately setting aside. We can construe Ruwet's work as showing that pragmatics comes into play wherever a syntactic stretch displays any sort of illocutionary salience that involves evaluating exactly how a part is configured within a whole. These concerns thus do not wait until the so-called hard core grammar submits a complete syntactic assembly to the speech act system at the root sentence level. Pragmatics acts wherever it must and thus interpenetrates with so-called hard core syntax.

From this viewpoint, I find a fundamental difficulty with this 'minimalist program' in the recent works by Chomsky. Derivation and spelling out by phase do not enable an integrative view of a sentence. This atomistic part over whole analysis of a sentence is contrary to the position taken by Bhartrhari and Ruwet and defended in this thesis. For the comprehension of a unit of any size starting from a word, it is necessary to understand how a potential listener grasps the segments of the units as they come in sequence at the time of utterance as well as the whole within which that unit figures as a part.

But in Minimalism, once a phase is built, it is submitted for interpretation to PF and LF and the phase becomes inactive for any further processing. This approach to linguistic cognition is contrary to the position I advocate, where sentences are the smallest stretches at a macro-discourse level, not the largest stretches of a micro-grammar. A careful scrutiny of the logic of minimalism will reveal that on the one hand the mechanism of minimalism accepts only words as arbitrary parts of the system of language. The recognition that these alone belong to society is what technically enables

this theory of language, unlike late structuralism and early generativism, to allow for the creative freedom of the speakers in composing their own sentences. But on the other hand the theory models cognition in terms of syntactic phases being the smallest and the largest units submitted to phonetic and semantic interpretation. This model postulates cognitively isolable parts and does not provide a suitable platform for interpreting any item in a larger formal or performative context. I expect many linguistics, even non-minimalists, to agree that one of the goals of modern linguistics should be to address this tension which minimalism shows in a particularly frustrating version, since minimalism's focus on integral lexical items raises expectations. We all need to pursue the minimalist goal of rolling back society's incursion into the individual's free space.

To put it differently, I wish to reinforce Chomsky's latest claim that 'language is an optimal solution to legibility conditions' (Chomsky 1998) which means that issues related to the interfaces become of central importance in the coming days of linguistic research. Legibility conditions are the conditions given by the outside systems, therefore, designing an optimal device to satisfy these conditions become the primary task of the linguistics. However, the task is no doubt much difficult than it was before as the outside systems are yet to be known completely. Still, a decision to consider issues like grammaticality or acceptability of a sentence and the speaker's thoughts and intentions will surely move us closer to the common goal of designing an adequate theory of language.

3.4 Speaking vs. dialogue: --

To continue the discussion started in the first section of this chapter, I am here treating language essentially as a means of communication. When a speaker utters a sentence, (s)he has some will (vivaksaa) to express something and in this process (s)he expresses the utterance for somebody. Whether that listener is physically present there or not does not really matter

for a speaker. In case the hearer is also present, a dialogue starts. However, the forms that the actual utterance takes are always created keeping in mind a prospective hearer. Therefore, the maxims of a communication are always hearer-centred. If we see Grice's theory of conversational implicature, we find all the maxims are to account for what an intended communication should look like in order to be comprehended by a hearer. Making a contribution such as is required by the hearer following the maxims of quality (telling what one believes to be truth), quantity (making the utterance as informative as necessary, no more no less) and relevance (making an unambiguous, brief, orderly and clear utterance) is the core of Grice's conversational principles. When we perceive language in this mode of a speaker-listener interaction, we understand that it transcends the barrier of any fixed norms imposed by a society. To see this point, it is important to begin by recognizing the role that social norms do play in the conversational exchange.

Speakers utter only those expressions which are accepted by the listeners. For this acceptance, of course, they have to share some concepts coming from a specific socio-cultural background, which following Jackendoff (1992) we call E-concepts. Moreover, a language known by both the speaker and the hearer as instantiations of the ideal speaker-listener or Chomsky's E-language must also be shared. A speaker employs certain forms (speech-units such as sounds, syllables, words, sentences etc.) to convey some ideas. They help to manifest the speaker's thought in some observable sequential forms. The hearer also receives the signal in some sequential form and stores in some files for the next step of processing. But once this processing takes place, the whole thought flashes as one unit. The units that are postulated as connecting a speaker with a hearer are for the convenience of a speaker for speaking, a hearer for receiving and a linguist for analyzing the utterance. We normally conduct our linguistics on the basis of the hope that we can converge on a single set of units and combinatorial



principles that will equally well characterize what is psychologically real for the speaker, psychologically real for the hearer, and scientifically valid for the linguist at the ideal future time when linguistics can claim that its job is finished. In this setting, the grammaticality or acceptability of an utterance is not only judged on the basis of the principles shared by the E-language of the interlocutors, but also in response to the use of the words in a particular context, a response that may vary as what we are calling the context may be just a neighbouring word or may even be some passage larger than a sentence.

Nicolas Ruwet's discussions of grammaticality directly indicate the truth of this account of what kinds of judgments of acceptability linguistic study rests on. In this way, a linguist also becomes aware of the Wittgensteinian insight that language is essentially a form of life. Meaning lies in the practice of a language not in its form; hence Wittgenstein's maxim "Don't ask for the meaning; ask for the use."

3.5 Bhartrhari on nature of meaning and cognition: --

Bhartrhari, a great Indian philosopher of language of approximately the 5th century provides a very insightful and currently relevant theory of meaning for the study of language. His most remarkable contribution in the field of cognition is the sphota theory. The term sphota is derived from the Sanskrit root sphut 'to burst forth' and is defined as 'the idea which bursts out or flashes on the mind when a sound is uttered' by V.S. Apte in his Sanskrit-English dictionary. Sphota is responsible for a successful communication taking place. According to Bhartrhari, at first the words exist in the mind of a speaker in the form of sphota. When he/she utters them, they appear as a sequence of observable sounds which is received by the listener and ultimately the same sphota is perceived by him/her when the listener comprehends the meaning of a sentence. As in the case of a sentence, vaakya-sphota reveals the nature of meaning of the sentence, so also in the

case of a word or a sound cognition takes the forms of pada-sphota and varna-sphota. These three types of sphota exist in three different levels of cognition and are not in conflict with each other. In Bhartrhari's theory, there are two types of sabda: one is nada or dhvani or vaikharii sabda and the reason for the other kind of sabda. The second kind of sabda is called sphota by Bhartrhari and it is the linguistic potency present in every human being through which transferability of meaning is explained by him from the speaker to the hearer. Sphota is sequenceless (akrama) but appears to be having sequence as well as parts as the properties of naada are transferred to the sphota (Vaakyapadiyam canto I verse 48 & 49). For Bhartrhari, existence of both the sabdas in real time is quite striking. The vaikharii sabda or naada comes in a sequence to a hearer as produced by the speaker, and therefore is a reality to both of them. Although sphota is actually timeless and exists in our buddhi or intellect, yet its realization happens in a temporal sequence. The speaker cannot express the whole meaning all at once.

For the hearer, the ultimate realization of a linguistic expression becomes available through innumerable sequential bits of realizations happening in real time. The concept of time in Bhartrhari is introduced to understand the diversity and change of this world, our experience, speech and thought. A hearer gets the meaning of an utterance only when s/he can connect these temporal bits of linguistic elements together. In Bhartrhari's system, therefore, the role of a hearer in cognition process is paramount. Comprehension of a word or a text is only possible if the hearer perceives the same sphota as the speaker. Bhartrhari said in the Brahmarkanda of the Vaakyapadiyam that 'meaning is not understood from words which have not become objects (of the sense of hearing). Without being (thus) received, they do not express meaning by their own' (translation of Vaakyapadiyam by Raghavan Pillai, Canto I, Verse 56). This implies that words are meaningful

only when they are used in an utterance. Secondly, it places the hearer in a higher rank in a communication.

The idea of sphota, however, was not an innovation of Bhartrhari. Rather, it originated in the time of Rgveda and was tacitly present in the concept of sabda-Brahman (word-Brahman) of Vedanta. But it was Bhartrhari who developed that idea into a full-fledged theory. Bhartrhari stated that the individual sound or word may vary with the speakers from region to region, but still the hearers understand them because of the sphota they share. Sphota, in some of its uses, corresponds to the notion of the competence of an ideal speaker-listener, the study of which is the goal of classical generative linguistics (Chomsky 1965). This is the internal knowledge of every person which is evoked through the stimulus of external language to get the meaning of some utterance. Even if someone utters something wrong, the hearer grasps its meaning by connecting it with the accepted form. Bhartrhari, in this regard, provided the comparison with a child who cannot utter the word *ambaa* properly, but still is understood by the adult listeners. In this theory a patient and generous listener has been placed in a central position of a linguistic theory. Modern generative grammar identifies the area of linguistic study situated in the typical individual human mind but fails to substantivize it in a social and dialogical real world. Generative grammarians leave that task to a psycholinguistics that they recognize and to a sociolinguistics whose legitimacy they have consistently denied (without any reasoned discourse explaining the basis of this denial). In contrast, Bhartrhari's sphota theory underpins the possibility of situating the work of the grammar in the hearer's mind. The switch from the speaker's mind to the hearer's is decisive. The hearer's mind considers the social context of dialogue, the actions of the speaker, and the grammatical underpinnings of these actions. Bhartrhari's account follows the hearer and thus brings all these considerations into the linguistic picture. Since Bhartrhari's listener is seen as assuming that the speaker uses a grammar to build the sentence, a

substantivist (sphota-based) account is only partly comparable to the purely listener-centred view of Kempson:2001. However, her work on dynamic syntax is of course a major contemporary contribution to the linguistics of listening and must form part of the reconsideration of methodology suggested here.

Crucially, a Bhartrharian approach can be implemented today in terms of how the conceptual (LF) apparatus of the listener can allow for perceptual (PF) deviations or variations in order to be "generous" as a way of reconstituting the LF speech-intentions that the listener can reasonably attribute to the speaker. This type of approach is perhaps compatible with some of the mechanics in a minimalist account. In that case dialogue with such accounts remains possible and of interest.

3.6 Whole over part' view: -

Bhartrhari's Vaakyapadiyam instantiates a consistent primacy for the whole over the parts. This stand is radically different from the structuralist position as well as that of minimalism. The difference between Bhartrhari and the structuralist lies in their respective approaches to the social reality. Bhartrhari is following the typical listener's act of listening to a sentence-length utterance. The dialogical dyad of speaker and listener encapsulates for him what grammar needs to represent as the social nature of language. In contrast, the structuralist claims that a speaker, by using sounds and words drawn from a particular inventory of phonemes or of signs, projects a social congregation of fellow speakers who use just the same inventory. Thus the structuralist places the language in the socially shared common inventory of sounds and signs, and not in the person's free exercise of his or her right to combine these into sentences. The reason is that a structuralistic account excludes free actions from its purview. To compose and utter a sentence is, for structuralism, a free personal act.

In Bhartrhari's view, a sentence too is unitary for the listener's understanding. The flow of the sentence, perhaps most clearly embodied in its intonation contour, must therefore be described as unbroken at the level where grammar deals with the sentence as a whole. Such a whole must frame its parts. Such a framing enables this or that part to emerge as salient -- which is the topic of main interest in this study.

It is less easy to show exactly how Bhartrhari's approach differs from the minimalist version of generative linguistic inquiry. Minimalism does allow a syntactic whole to frame a phrasal part along Bhartrharian lines, just as its Principles-and-Parameters predecessor theory did. But minimalist turns its "phase" (a revival of the classical transformational cycle) into a highly constrictive domain within which alone grammatical visibility is allowed to operate in any analysis. Bhartrhari's approach is incompatible with the rigidity of the Phase Impenetrability Condition.

Consider, for instance, the interaction between the Interjection /ol/ and the Surprise Peak /jiten/ in /o, prodip bhabchilo nira boleche JITEN thakte parche na/ 'oh, Pradip thought Nira said JITEN wouldn't be able to stay!' Recall that such interaction cannot cross syntactic island boundaries (a long familiar fact, which, to save space, is not exemplified here). Therefore any minimalist account of the phenomenon must place the Interjection and some abstract copy of the Surprise Peak within the same Phase. Whatever coding devices one may use for this purpose, the intonation contour will still need to hold the speaker's breath and the listener's attention unbroken in a curve that stretches from /ol/ all the way to /jiten/. Bhartrhari's nonrigid approach gives the whole multiclausal sentence carrying this intonation contour primacy over the parts /ol/ and /jiten/ which interact.

The point is not confined to interactions within an utterance one sentence long. Bhartrhari's whole over parts view of language orders successively larger constructions in a hierarchical fashion. Under this approach, a word is comprehended in the context of a sentence and a sentence in the context of a paragraph and so on. The interpretation of the elements of every linguistic level takes place in the context of the next higher level. In this system, there is scope for a hearer to understand the meaning of any utterance jumping (if need be) beyond the level where it occurs. This 'whole over parts' view equips us better than minimalism does to explain the phenomena of long-distance anaphors and logophors. It seems some strands of minimalist work place such matters outside the grammar. Once minimalists offer their account of this domain "outside grammar", we may have to continue the debate with them in that new domain. Following Ruwet, we may wish to call that domain Hermeneutics.

3.7 Relating Bhartrhari and Ruwet: -

The affinity between Bhartrhari and the hermeneutic approach due to Ruwet is primarily observed in the way they deal with the linguistic elements against the setting of levels of linguistic description. For both of them a whole has primacy over its parts. For Bhartrhari, varna-sphota and pada-sphota exist as ancillaries of analyzing a sentence only to get into the *vaakya-sphota*, his primary concern. However, at the levels of varna and pada, each of them is considered as a whole in its own right. One more point is worthy of notice in this system and this takes Ruwet even closer to Bhartrhari. The approach they both adopt to the issues of level hierarchy and of the centrality of the listener allows pragmatics to interpenetrate closely with the system of linguistics proper, their work sets every stretch of speaking in a larger linguistic as well as social context; pragmatics for them transgresses the limits of a sentence quite often. The current syntactic theory allows interplay between two sentences when they are clubbed together as clauses under a

complex sentence head. But there is no formal mechanism available in such systems that can arrange any formal relations between one whole sentence and another whole sentence. The speech-act theory of Grice-Austin-Searle is primarily concerned with a single sentence. Though the conversational implicatures of Grice essentially guide how a conversation can be efficient and hearer-friendly, still the theory has limitations on its formal goals. The trans-sentential perspective of Bhartrhari can fulfill some needs unmet under those approaches. Once we can relate sentence to sentence, larger units of discourse such as paragraphs, chapters and texts can be included in the domain of this line of study.

The hermeneutic approach as taken by Ruwet is mainly concerned with the study of texts based on the interaction of 'grammatical understanding'¹ and 'psychological understanding' (Friedrich Schleiermacher: 1834), thus following Bhartrhari and giving the human participants of a discourse the highest place. A hearer-centred study of linguistics and text analysis combining these two lines will lead us to envisage language as a dimension of human life without sacrificing results based on the formal problem approach.

3.8 Conclusion: -

This was by way of theoretical groundwork for the present study including some review of relevant literature. I stop now and proceed to the next empirical chapter on the non-finite verbal participles. The concept of blocking, which is empirically discussed in the next chapter, invites a **trans-sentential** framework of grammatical study of the sort indicated here. Another major move which has been made in this chapter is the shifting of focus of the grammatical analysis of a sentence from an abstract level of competence to the generosity of a real-life hearer. The full potential of this approach to cognition will become clearer, one hopes, in connection with **the** empirical material to be considered next.

CHAPTER 4

The Non-finite verbal participles of Bangla

4.0 Organization of the chapter: --

This chapter will concentrate on the other major area of a sentence, viz., verbal construction, which has not been touched upon in the second chapter on DP. Even within the verbal area this study is limited to the non-finite verb-forms. The major key that relates chapter 2 with the chapter 4 is the program of individuation. An individuation feature is employed to grade the non-finite participial forms in this chapter, along the lines of the treatment of the pre-nominal forms in chapter 2. This grammatical hierarchy corresponds to their degrees of pragmatic independence.

Among the non-finite forms of the verbs, imperfective participles with the /te/ ending appear to be less independent and have an obvious relationship with the emphazier /-V/. Bare imperfective participles forms rarely surface in the language due to a similar and competing locative gerund form, which blocks a specific 'cause-effect' reading of the imperfective forms. Blocking is shown in this chapter not to be a merely lexo-grammatical phenomenon but one related to speakers' choice, which is the key issue of the thesis. In the course of the chapter, I will give some more examples of blocking in the area of non-finite participial forms.

Imperfective participial forms occur most comfortably with only particular verb classes; that is, their use is restricted semantically. The same verb can have different interpretations depending on its use in a sentence; as a result, it can belong to different classes. Therefore, the use of the imperfective is restricted pragmatically also.

The three non-finite verbal participles discussed in the chapter have been analyzed as switch-reference markers following Finer. Imperfective and

Conditional participles are shown to be DS (Different Subject) markers or A'-pronominals and conjunctive participle inflection has been analyzed as the SS (Same Subject) marker or A'-anaphor. With this short introduction about the chapter, I will give a brief description of the non-finite participles of Bangla.

4.2 Non-finite verbal forms of Bangia: -

Bangia has three types of non-finite verbal participial forms following Zbavitel (1970a), viz., imperfective participle /te/, conditional participle /le/ and perfective participle /e/. All these three participial markers are directly added to the root, a description which ignores the necessary morphophonemic changes of the root. For instance, with the root /kOr/ 'to do', successive attachments of the above suffixes result in the following forms: -

1. /kOr/ +/te/ =/korte/ 'do-imp.'
2. /kOr/ +/le/ =/korle/ 'do-cond.'
3. /kOr/ +/e/ = /kore/ 'do-perf.'

It is necessary to mention at this point that I am going to use examples with /te/ from a severely restricted domain, viz., when it is used with the readings 'when..' with two actions following one another and the first verb taking the imp. /te/ form, the overall effect being that of a 'cause-effect' reading. This very restricted domain of its use excludes iterative v-/te/ v-/te/ form as it is used when two actions take place simultaneously, which has generally been discussed when typical examples of the imperfective are surveyed in the literature. The discussion also excludes the use of one more homophonous /te/ as complement of the verb in the sense of English infinitive form.

I have also considered only one reading of the /le/ participle, i.e., its use on the 'when..' reading shared with the imperfective. That particular reading of /le/ is always associated with non-coreferential matrix and subordinate

subjects. I have excluded the other more common 'if..then' reading as that itself is a huge subject and does not fall within the main parameter of my topic. It should also be mentioned here that a preference has been given to the imperfective participle in the chapter as the area I have taken up had never been studied earlier. Conjunctive or perfective participles have been mentioned here only in comparison with the other two participles discussing their relative pragmatic importance. Before moving on to the main facts and analysis, the next section will quickly look at the existing works in this area.

4.2.0 Review of literature: --

In this section, I shall give a brief review of the earlier works done in the field of Bangia non-finite verbal forms, specifically on the three participles highlighted in this study. The first significant work in this area was of Wim Van Der Wurff (1988) in the principles and parameters framework. After that work, the study done by Tista Bagchi in the autolexical model is significant. After reviewing both of these works, the main body of this chapter will show how my work adds to and modifies this body of writing.

4.2.1 Wurff (1988):--

Wurff was the first person to work on the participle construction of Bangia, concentrating mainly on imperfective /te/, perfective /e/ and conditional /le/ participles. However, his data from Eastern Bangia (henceforth EB), though mostly matches with Standard Colloquial Bangia (henceforth SCB, this is the source of my data), does differ from it in some usage. To investigate the imperfective participle construction, he focused on the iterative V-te form, which is not the main form of interest in my discussion. The examples given by him for perfective or conjunctive participle indicate that in EB the restriction of using a non-overt subject in one of the clauses is not so strict as it is in SCB. Bagchi noticing this point made a comparison of SCB with the sentences of EB given by Wurff. I reproduce some of them here to make the above point clear: —

1a. bulbuh kajTa SeS kore Se₁ resT nibe. (EB) from Wurff
 Bulbul work-cl. finish do-perf. he rest take-fut.3p
 'After Bulbul has finished work, he will take rest.'

1b. * bulbuh kajTa SeS kore Se₁ bisram nebe. (SCB) from Bagchi
 rest

2a, bulbuh kajTa SeS kore bulbuh resT nibe. (EB) from Wurff
 'After Bulbul has finished work, BULbul will take rest.'

2b.* bulbuh kajTa SeS kore bulbuh bisram nebe. (SCB) from Bagchi

However, there is no difference of data regarding coreferentiality of the subjects in EB and SCB. Non-coreferential subjects can occur only in case the matrix clause has a non-volitional subject, e.g. (Wurff)

3. cear bheNe gie poRe jaba.
 chair break-perf. fall-fut.2p.nh.ord
 'you will fall down having the chair broken.'

In this regard, I want to recapitulate the work done by Klaiman (1981) on volitionality and perfective clause.

Klaiman (1981): - In an extensive study done on volitionality of verbs as a parameter interacting with some grammatical processes in Bangla, Klaiman showed that volitionality interacts with dative subject formation, passive and conjunctive participle construction. It had been claimed that conjunctive participial constructions should always have coreferentiality between the matrix subject and all the subordinate clause subjects. But she pointed out that this same subject constraint does not apply in many cases. The contexts where the condition fails to apply had been brought under a

generalization by Klaiman as the cases of non-volitional activities (example 3 above). With non-volitional verbs, it is even possible to have non-dative human subjects to appear in both the clauses as the following given by Klaiman:

4. bhuTTo mara gie bhuTTor stri bidhoba holo.

Bhutto die-perf. Bhutto-gen. wife widow become-past.3p

'Bhutto's wife became a widow after Bhutto died.'

In a few counterexamples with a volitional verb, it is always the 'reduced' or subjoined clause which expresses volitional activity but neither the 'non-reduced' or main clause nor both of them. As a result of these findings, Klaiman concluded that in modern Bangia, the subject of the matrix volitional verb tends to corefer with the subjects of the subjoined clauses. However, no such trend is found historically in the middle or old Bangia texts.

Coming back to the work of Wurff, I will next move to the imperfective participles discussed by him. As I mentioned earlier, his examples of imperfective participles are of a different type, mainly used in the sense of two simultaneous actions with V-te V-te form. Examples produced by Wurff show that all sorts of possible combinations of subjects occur in matrix and subordinate clauses. Subjects may be both overt or both non-overt, or alternatively only one may be overt. The subjects may be coreferential or non-coreferential. Imperfectives of this kind allow a nominative subject. Case marking of subject is one of the major issues in his work as well as mine. But before going into the analysis given by Wurff, let us quickly look at the facts of conditional participles in EB.

In the conditional participle construction, Wurff only considered the true conditional sentences with 'if. then' reading, which is not the concern of my work. The data adduced by Wurff show that in the conditional participle

clause, an overt subject has nominative case, which may or may not be coreferential with the matrix subject. In case of coreferentiality of the subjects, either the matrix subject or the adjunct or both can be non-overt. In case both are overt and coreferential in EB, the matrix subject must be a pronoun and the adjunct subject a referential expression, but not the other way round. (Ex. 5 & 6)

5. bulbul₁ lokTake dekhle Se₁ amader bolbe.

Bulbul the-fellow see-cond. he to-us say-fut.3p

'If Bulbul sees the fellow, he will tell us.'

6. * Se₁ lokTake dekhle bulbuh amader bolbe. (examples from Wurff)

He gave well-formed examples with the same name repeated in both the clauses but intoned with stress on the second occurrence. In SCB, the above case as well as sentence 5 will only be acceptable if said with a stress on the matrix subject.

The conclusions drawn by Wurff observing the behaviour of these three participles are the following: --

1. The perfective and conditional examples of Wurff always exhibited temporal/ logical posteriority for the second event. But his specific imperfective examples showed simultaneity of the two actions involved, which leads him to conclude that both the perfective and the conditional have an inherent Tense specification or their I contains [+T] feature whereas the imperfective lacks it. Though my particular examples of imperfective do not exhibit action simultaneity, still their interpretation depends on interpretation of time on the matrix verb as I will show in the following section. Therefore, I can also draw the conclusion that the imperfective lacks inherent time/Tense specification. Wurff makes the I(nfl), in general,

responsible for assigning nominative case. Therefore, in all the participial constructions, the subordinate *I(nfl)* assigns nominative to the participial subject.

In my study, I take it that *T* along with the *Comp* is responsible for the nominative case. Hence, in imperfective construction, the nominative case of the participial subject is checked against the *T* of the matrix clause (see detailed discussion in 4.3.1).

2. Wurff had generated the conditional participle as a VP-adjunct, the imperfective participle as a CP-adjunct and the perfective as an IP-adjunct. Since my whole analysis is based on a different approach, viz., switch-reference, with these participial markers in restricted uses counting as either Different Subject (DS) or Same Subject (SS) markers, which handle the non/coreference patterns, I consider all the typical uses of the participles as IP-adjuncts, where the *Comp* head of the participial clause holds the SS or DS marker. I assume that the *Comp* to which *I(nfl)* has moved serves as the head of the participle construction.

4.2.2 Tista Bagchi (1993): -

The next work on these participial constructions was done by Bagchi in the autolexical framework. Analyzing the logico-semantics of the conjunctive participles, she proved that the operator '&' fails to explain the semantics of such constructions and like their Hindi version as in Davison (1981), these constructions instantiate subordination, not coordination.

Bagchi's three arguments for subordination are: 1) The verb is non-finite in the subjoined clause. 2) Case marking on the overtly marked subject shows that it is the subject of conjunctive participle like control phenomenon. 3) Conjunctive participles exhibit word order patterns that differ from those typical of coordination. A constituent can be moved to the left of a conjunctive participle phrase but not to the left of a coordinate conjunct

phrase. She also discussed negation and its scope in the conjunctive construction, which provides additional proof for the claim that these constructions do not really exemplify conjunction. Negation does not always take scope over the two verb phrases, rather, sometimes it takes scope only over the matrix verb. E.g.

7. chele na kaMdie eSo.

son not cry-perf.come

'Come without making the son cry.'

The Conjunction analysis of the above sentence would split it into two parts, viz., /chele kaMda/ 'crying of the son'¹ (p) and /aSa / 'coming' (q). If we want to represent the sentence in logical terms using the operator &, the representation will be $\sim p \ \& \ q$. This does not happen if we negate a conjunction. In that case, $\sim(p \ \& \ q)$ means negation of both the propositions. Relaxation of the subject coreference in case the main-clause subject is not volitional has always been a problem for explanation in purely syntactic terms. Bagchi, in this connection, speculatively proposed categorial mismatch between syntax and thematic tier (giving the latter the status of an autonomous tier following Farlund (1989)). She explained it like this: - Typically, the syntactic subject of the main clause is thematically an Agent that must match up with a quantified expression in the logico-semantics that binds the external arguments of both the main clause and the participial clause; however when the role of Agent fails to associate with a single quantified expression that binds external arguments of both clauses, two distinct quantified expressions (none of which are Agents) are permitted as distinct subjects.'

Turning to the Imperfective Participle construction, like Wurff, Bagchi mentioned only infinitival *lief* complements (which unlike Wurff she

discussed in detail) and reduplicated adjunct /te/ constructions comparing them with Wurff's EB variety.

Bagchi (1993) states that in some respects conditional participles pattern pragmatically with the conjunctive or perfective participles (ex. 8a & b). The two forms exhibit complementary distribution with respect to the shared pragmatic function, especially when non-coreference of subjects prevents the conjunctive and thus compels use of the conditional as in (9a & b).

8a. gopal baRi eSe khabe.

Gopal house come-perf eat-fut-3p

'Having come to the house, Gopal will eat.'

8b. gopal baRi ele khabe.

Gopal house come-cond. eat-fut-3p

'Gopal will eat after coming to the house.'

9a. gopal baRi ele Sobha berobe.

Gopal house come-cond. Sobha go-fut.3p out

'Shobha will go out when Gopal will come back to the house.'

9b. * gopal baRi eSe Sobha berobe.

Bagchi shows that conditional /le/ clause has the ability to express a when-clause occasionally, apart from its regular correspondence with a if-then clause.

10a. golap phuler rOn jodi holde hOy

rose flower-gen. colour if yellow be-pres.3p

tate gOndho thake na.

it-loc. scent exist-pr-3p neg (BAGCHI 1993)

'If the colour of the rose becomes yellow, there is no scent in it.'

10b. golap phuler rON holde hole tate gOndho thake na.

rose flower-gen. colour yellow be-cond. it-loc.scent exist-pr.3p neg

'When the colour of the rose becomes yellow, there is no scent in it.'

(BAGCHI 1993)

Because of this power of /le/ to give a 'when' reading, it is able to alternate functionally with the other **kind** of participial clauses, both of which describe an event done prior to some other event. However, not the same semantic function can be achieved by the use of perfective and imperfective participles instead of conditional, is also shown by Bagchi.

Discussing the coreferentiality feature of conditional participles Bagchi mentioned that this is the only participle, which can use a non-coreferential syntactically unrelated subject. Her imperfective participial examples are limited to the adjunct iterative /te/ and complement infinitival /te/; therefore, she did not find the imperfective non-coreference. But my typical examples of imperfective are all with non-coreferential subjects.

4.3.0 Introduction of the Imperfective participle: --

The following section will cover the main participle discussed in the chapter, the imperfective participle, viz., its typical use with 'when..' reading, its close connection with emphaziser, the blocking effect found with a certain reading of it and its restrictions with respect to certain verb classes.

4.3.1 Some characteristics of Imperfective participle: -

Let us start this discussion with some observations concerning Imperfective participial constructions: -

1. gopal baRi jete Sobha berolo.

Gopal house go-imp. Sobha went out

'After Gopal had come to the house, Shobha went out.'

2. gopal baRi jete khete pelo.

Gopal house go-imp got to eat

'Gopal could eat something only after going to the house.'

3.* gopal baRi jete khelo.

Gopal house go-imp. ate

'Gopal ate after going home.'

4.?? gopal baRi Dhukte briSTi namlo.

Gopal house enter-imp.rain came

The rain started after Gopal had entered the house.¹

Notice that, in these sentences, three phenomena stand out; I shall state them as conditions (a)-(c) :-

(a) The subject of the adjunct clause always has to be non-coreferential to the volitional overt subject of the main clause.

Sentence 1 satisfies condition (a). The main verb of sentence 2 /khete pa/ 'to get to eat' gives an experiencer theta role to the subject, which does not make the subject volitional. Moreover, the subject is phonologically null in 2. Therefore, this does not violate condition (a). But 3 violates condition (a) as the subject of the main clause is volitional in this sentence because /kha/ 'to eat' gives agent theta role to the subject, though the subject is an empty category. Sentence 4 cannot follow condition (a) as its main clause is an unaccusative sentence, as a consequence, there is no volitional subject at all. Condition (a) is exactly reverse of the same subject constraint given by

Klaiman in case of perfective adjunct. She showed that any overt volitional subject of conjunctive/perfective participle construction tends to be interpreted as controlling the null subject of the adjoined clauses. In other words, the subject of the main clause with a volitional verb must always be coreferential to the null subject of the adjoined clause.

(b) In case the main clause is unaccusative, the adjoined clause must also be unaccusative. When the adjoined clause is volitional, the main clause also has a volitional verb. Instances of the phenomenon are found in the following sentences: --

5. hOThat EkTa dOmka haoa dite alo nibhe gElo.

suddenly one gusty wind give-imp.light went off

'The light went off as suddenly one gusty wind came.'

6. Onekdin pOre baRite baccha jOnmate sokoler khub anondo holo.

many days after house-loc.baby born-imp everybody-gen. very happy became

'Everybody became very happy as after many days a baby was born in the house.'¹

? 7. baba Taka dite ami jama kinlam.

father money give-imp I dress buy-past

'When my father gave me money, I bought a dress.'¹

I attribute to this phenomenon to the fact that an adjoined clause with an imperfective has a defective T, not capable of assigning nominative. It always depends on the matrix main clause T for this case assignment. In examples where the matrix predicate is unaccusative, such as 5-6, I presume that the obligatory unaccusativity of the adjunct clause reflects (in ways that I don't fully explore here, as the details of the architecture of

functional heads in transitive clauses are controversial area that present study is neutral about) the character of the matrix Infl system on which adjunct-clause-internal Case marking depends. Sentence 7 has a volitional verb in the matrix and should let the volitional verb-Infl complex in the adjunct clause assign nominative and accusative unproblematically. But still according to some speakers, this sentence is not well-formed. The reason for this is probably not the case factor; rather, I believe it lies in the semantics of the verb. Certain verbs do not allow the imperfective form; 'give' falls in that category. I will discuss this phenomenon elsewhere but for the time being, it is sufficient to say that achievement and momentaneous classes of verbs, according to Carlson, most easily fall in the category with which imperfective is allowed.

c) All the sentences with imperfective adjuncts are in past tense.

Interestingly, sentences in any other tenses are very rare. My initial observation failed to find such sentences, but later I discovered certain sentences which predict some future actions and can take future matrix verbs with imperfective. For example, consider a stage instruction where the director specifies the events which must take place in a certain sequence: E.g.

8.0nekdin bade raja ghOre phirte Sokole nacgan Suru korbe
 many days after king house-loc.return-imp. all dancing-singing start do-
 fut.3p

'After many days, on the king returning back home, everyone will start dancing and singing.'

Without the artificially created environment of the stage, it is hard to contextualize such a sentence. I do not have any formal proposal to make

about ways to state this restriction associated with the imperfective future constructions.

It is clear that imperfective verbal form does not itself have a time specification. Therefore, whatever the time of the matrix verb, the imperfective form refers to that time only. I have already mentioned that the incidents which an imperfective adjunct refers to normally happened in the past with reference to the speech time. For instance, in sentence 6, the baby was already born and everybody was happy by the time the utterance was made. But the adjunct clause itself cannot capture a point of time. It depends on the matrix sentence for this time reference.

Carlotta Smith has shown that a sentence can be captured only if it has the same tense as its captor. She also mentions that a certain type of sentence is easily available for capture to enable full temporal interpretation on adverbial or some other sentences. Adjoined imperfective clause, in my opinion, falls in this category. Their captor, on which they depend for full temporal interpretation, apparently must be in past tense as a default.

4.3.2 Imperfective and locative gerund: -

In this section, I will show that one particular use of imperfective participles in the sense of 'cause-effect' relation is blocked in the language by an existing competing locative gerund form. To start with, let's see some data given below: -

1. ?tumi bolte amra gelam.
 you say-imperf. part. we go-past-1p
 'As you told us, we went.'

Imperfective is also found with the temporal sequence reading (though normally requiring the emphaziser).

a) kOthaTa uThtei o berie gElo.
 issue.CI raise-imp.part-emph. he/she went out
 'As soon as the issue is raised, he went out.'

b)? kOthaTa uThte o berie gElo.
 raise-imp.part.

2. tumi boltei amra gelam.
 say-imperf.part. emph
 'As you told us, we went.' (otherwise we would not have gone.)

If we compare the sentences above, it becomes evident that (2) sounds much better than (1), i.e., /te/ with emphasizer /I/ is more natural than the bare /te/. This phenomenon becomes much more evident when the imperfective participle is preceded by a negative particle as in the following example: --

3.? ? tumi na jete amra elam.
 you neg go-imp.part. we come-past-1p
 'As you did not go, we came.'

4. tumi na boltei/bolteo amra elam.
 say-imp.part.-emph.

Though you didn't say, we came.⁷ In spite of your not telling us, we came.'

It is quite clear from the examples above that the imperfective has some close connection with the emphasizer. One of my tasks will be to investigate this relationship. But before that I want to draw the attention of the readers to some other facts surrounding the imperfective construction.

Let us see the distribution of the locative gerunds, eg. /bOlay, bOlate/ 'in saying'. We are familiar with the ordinary gerundial construction in other languages also, but locative gerund is not a common form in the well-studied languages. Therefore, it may need some introduction. That Bangla Locative Gerund is a special type of construction with some peculiarities not available with ordinary gerunds, was first noticed by Robert Jeffers (p.c.[1987] via dasgupta). One of its characteristics, which will be important for the following discussion, is that it takes a nominative subject even when the verb is volitional, which an ordinary gerund can never take. E.g.

5. tumi aSate amra khub khuSi holam.
 you come-loc.ger. we very happy became
 'We were very happy when you came.'

Ordinarily the gerund construction itself due to its nominal character acts as the subject of the sentence.

6. tomar ei hOThat cole aSa amader khub anondo dilo.
 your this sudden come-ger.we-gen. very pleasure gave
 'This sudden turning up of yours gave us immense pleasure.'

The affirmative sentences with locative gerunds sometimes compete with V-/te/ when used to convey a 'cause-effect' relation as in sentence 1 vs. the following (7)—

7. tumi bOlate amra gelam.
 you say-loc.ger. we went
 'We went on your saying.'

I argue that the reason why sentence (1), i.e., /tumi bolte amra gelam/ with imperfective participial form sounds comparatively worse is the existence of the competing gerundial form. This competition takes the form of blocking of the imperfective by the locative gerund as observed in the following negative examples: —

8. ? ? tumi na khete amra dukkho pelam.

you not eat-imp.part. we sorrow got

'We became sorry as you didn't eat.'

9. tumi na khaoate amra dukkho pelam.

eat-loc.ger.

Sentences with an imperfective under negation are even worse because negation, by removing the actual event from the scene, precludes the sequence-of-actual-events reading and thus leaves the cause-effect reading as the only possibility. As only that particular use is blocked, nothing can rescue the sentences with negative imperfective; such imperfectives have to be replaced by (are blocked by) the locative gerund form. Notice that the imperfective V-/te/ form both in the affirmative and in the negative consistently fall within the range of what can be processed. These sentences sound bizarre but are readily comprehended by the native listeners, if someone by chance utters them. Probably the listeners will take that utterance as a slip of the tongue or some other sort of deviation. The way the generation of verb +/te/ is blocked is thus comparable to what Aronoff calls blocking. Notice that a sequence like 'that man's verbosities and monstrosities and piosities always provoke a strong reaction enables 'piosity' to override its normal Aronoff blocking by the more direct 'piety', showing that Aronoff blocking in general is a pragmatic effect subject to pragmatic overrides. In other words, the decision of the speaker to choose a certain

form over the other causes the comparative ill-formedness of the bare *lie/* construction.

Aronoff's (1976), formulation presents blocking as the simple non-existence of one form due to the existence of some other competing form. While his examples make a sustainable and valid point, this formulation is too simple, as the 'piosity' example shows. I shall take the position that blocking is nothing but an aspect of the way a speaker chooses between competing options. Therefore, holding constant the cause-effect interpretation, the V-/te/ form is blocked by the other available locative gerund form. More needs to be said to unpack the claim that this is blocking. A heavier or more complex form is normally blocked by a more economical form. I take it that in the case at hand the locative gerund prevails as it has no interpretation other than the cause-effect reading. In contrast, the imperfective has a different primary meaning and needs to stretch to reach the cause-effect interpretation. Its use thus counts as heavier, and gets blocked.

4.3.3 Imperfective with its close relation to emphasizer /i/: -

Let me come back to the issue of the close relationship between the imperfective and the emphasizer. If Bangla allows at least some verbs to appear with a bare (unemphasized) imperfective; Hindi and Gujarati never do so. Emphasizer is obligatory with imperfective in those languages. Intuitively the relation can be described in the following terms.

Imperfective is a kind of aspect which conveys non-completion of action and expectation of some terminal action segment. Emphasizer is a kind of connector between two sets of things (including two actions and action-segments). Take for instance simple cases of nominals with both the emphasizers of Bangla, /I/ and /o/.

1. Sudhu amrai jacchi.

only we-emph.go-pr.prog.-1p

'Only we are going. (no one else).'

2. Sudhu ora jacche na, amrao jacchi.

only they go-pr.prog.3p not, we-emph. go-pr.prog.1p

'Not only they are going, we are also going.'

In 1, emphasizer /V attached with a set of persons consisting of me and some other members differentiates it from all other sets and specifies that only that set is involved in the discourse at that time. This is, therefore, what can be called a dissociative emphasizer. In all our examples of imperfective constructions, there are two different events, sometimes one is the reason of the other and sometimes one takes place just after the other. The emphasizer makes it easy to connect these two events. When I say /Soma gaitei SObai cup kore gElo/ 'as soon as Soma sang, everyone became silent', there are two events happening one after another, viz., Soma's singing and everyone's becoming silent. Emphasizer /V takes Soma's singing out from all other events at that time and connects it with the change of state that follows, which is from a state of disturbance and commotion in the gathering to the state of silence. Depending on the context of the speaking of this utterance, Soma's singing may also count as causing the event that follows it.

Now take the case of 2, where the emphasizer /o/ takes a previous set of persons consisting he/she and some others and adds one more set to it consisting of me and some other persons. This is, therefore, an associative emphasizer. When this is attached with an imperfective verbal form, it takes the first event on top of some other events not specified in that utterance but implied in it and connects that event to the second event of the utterance. For instance take the following utterance: -

30. Emonki Soma gaiteo keu cup korlo na.
 even Soma sing-imp-emph. nobody silent became
 'Even with Soma's singing also, nobody became silent.'

Here Soma's singing has taken place on top of some other events but even then nobody could be stopped from shouting. Thus, *emphasizers* play an important role in connecting the two events of a sentence featuring the imperfective verbal form.

For the 'when' reading of imperfective, the use of *emphasizer* is quite prominent because there the first event needs to be focused with respect to a terminal point, and the imperfective verbal form cannot provide such focusing. /v appears to help pinpoint the event termination moment the next event starts from. With certain kinds of verbs this help is inevitable but with some others, it is easier to catch the terminal point of the event, so that those verbs need not take *emphasizer* with the imperfective form. the next section will discuss the matter and relate the use of the imperfective with the semantic classification of verbs.

4.3.4 Imperfective and verb classes: --

In this section, I will discuss two particular environments where the imperfective participle is quite readily accepted.

- 1a)? agun na lagte SObai khub beMce gElo.
 fire not break-imp.part. all very escaped

- b) agun na lagate SObai khub beMce gElo.
 break-loc.ger.

The fire not having broken out, everybody had a narrow escape.'

1a) is not so ill-formed (sometimes absolutely fine to my ear) compared to a sentence where the verb is volitional, as it was in all other previous cases and in the example given below:--

2a) ? ? birju mOharaj na nacte amra khub hOtas
 Birju Maharaj not dance-imp.part. we very much disappointed
 holam
 became

b) birju mOharaj na nacate amra khub hOtas holam.
 dance-loc.ger.

'As Birju Maharaj didn't dance, we were very disappointed.'

Though the sentences of the examples are negative, this phenomenon appears equally clearly with the affirmative sentences also. But there are some counterexamples to this volitionality hypothesis where the imperfective is perfectly fine even with a volitional verb. Consider the following case: -

3. ami EkTa ciThi dite ora khub khuSi hoeche.
 I one letter give-imp.part. they very much happy became
 'Because of my writing them a letter, they are very happy.'

Then, it is not volitionality which plays a crucial role in allowing the imperfective participle with the verbs. To arrive at a better account, we have to look into some other cases where this is allowed. The following example also allows the imperfective with a verb and without an emphaziser: -

4. briSTi namte amra bhije gelam.
 rain come-imp.part. we got drenched
 'We got drenched as the rain came.'

I conjecture that the crucial factors lie in verb class differences. The basic type of verbal categorization, found in more or less the same form throughout the literature, had been given different names by different scholars. **Garey (1957)** distinguished between **telic vs. atelic** verbs, similar to the **event vs. process** distinction. **Vendler's** four types of verbal categories (1957, 1967) can also be accommodated in these two basic types. The first three of Vendler's classes, viz., **state, activity and accomplishment** are of **durative** kind, while the fourth category **achievement** is of the **non-durative or punctual** type. States are verbs of the kind which do not describe a process (know, love, like), while process is characterised by change of state and activity verbs show this behaviour (run, walk, dance, drive). Accomplishment takes some time; it is a process with a goal in mind (write a letter, run a mile). Achievement verbs denote actions which happen at a point of time and cannot be done over a period of time (recognize, find, be born, die, start). The Imperfective, as I mentioned before, cannot uniquely refer to a point of time of occurrence of some event. If the verb itself helps to pick out a particular point of time, the imperfective can easily take a ride on this. This type of verb is non-durative and has **an** end-point; therefore, the typical use of imperfective I used in the whole discussion works most comfortably with these verbs. These are the verbs mentioned by Carlson as **momentaneous and achievement** verbs.

Those verbs which can have both temporal sequence readings and cause readings, depending on the context, are used with the imperfective as well as the locative gerund. This double reading of the verb cannot really be explained by the semantics of the verb alone, i.e., based on the classification given by Vendler et al. With the punctual type of verbs both the readings do seem to be easily available, as in the following cases: --

5. TrenTa sTeSane pouchotei loke bhorthi hoe gElo. ,
 train-Cl. station-loc. arrive-imp.part. people packed became

'As soon as the train arrived at the station, it became packed with people.'¹

6. TrenTa derite pouchonotei amra basTa pelam na.

train-Cl. late arrive-loc. ger. we bus-Cl. got not

'It is because the train arrived late that we missed the bus.'

But any verb, otherwise durative, depending on its use by the speaker, can become punctual if a convincing context can be set up and in that context it is compatible with the temporal sequence reading. Take for example the verb 'sing', which is a durative verb as it is an activity in normal circumstances, but in the following sentence the same verb can be used as a punctual or non-durative one if the speaker wants to give it a temporal sequence reading, e.g.

7. tanSen meghmOllar gaitai (=gaoamatroi) briSTi namlo.

Tansen Meghmallar raga sing-imp. part. (sing-at that moment) rain came

'As soon as Tansen sang the Meghmallar raga, the rain started.'

8. tanSen meghmOllar gaoatei Onekdin bade briSTi poRechilo.

Tansen Meghmallar sing-loc. ger. many days after rain started

'As a result of Tansen's singing the Meghmallar raga, the rain started after a long time.'

Therefore, it is not just semantics of the verbs but the pragmatic context too which plays a crucial role in determining the choice of the imperfective or the locative gerund.

4.4.0 Conditional participles: an introduction-

Conditional participle constructions have two different readings depending on their use in the language. One is their typical 'if..then' conditional reading as in the following examples: —

1. Somudrer opor briSti poRle khub Sundor lage.

sea-gen on rain fall-cond. very beautiful looks

'It looks very beautiful if it rains on the sea.'

2. ami caile tomar khoti korte partam.

I want-cond. your harm to do could

'I could harm you if I wanted to.'

But the other one is a 'when' reading; noticing this one, Bagchi commented that it patterns pragmatically with the perfective participial reading. Used in this sense, the construction with the conjunctive participle /le/ as an adjunct allows only non-coreferential NPs as the subjects of the two clauses (ex 9a of section 4.2.2). It follows from this that sentence 9b (of the same section) is also ruled out. The discussion in section 4.4.1 will take into consideration only sentences with the 'when..' reading, whereas section 4.4.2 will deal with the conditional sentences.

4.4.1 Conditional 'when' sentences: --

Let us look at the sentence 9b of section 4.2.2 again from the point of view of semantics. It talks about a future situation where two actions happen, one followed by other, viz., Gopal's coming to the house and his eating. Aspectually speaking, after completion of the first action, the second takes place, exactly as in 9a where the perfective participle /le/ is used. As perfective has historically evolved as the only form for a sentence with two actions happening one after another with a single coreferential agent, the conjunctive participle /le/ cannot be used in the same sense. In other words, the existence of a historically evolved perfective form for the adjoined participial structure with coreferential subjects blocks the use of conditional form in that type of structure.

Therefore, for the 'when' reading of /le/, only non-coreferential agents are found (ex 9a of the same section). We know from the study done by Klaiman that the coreferential agent of the conjunctive/perfective participle construction has a deep relation with volitionality. The agent of any volitional action is required to be coreferential with the (null) subject of the adjoined clauses. In this case, /e/ is the only participial form available. The two other participles discussed in this chapter do jobs complementary to the /e/ form. Imperfective /le/ is restricted to mainly past tense constructions, where both the events of the construction take place before the speech-time and the adjoined clause takes the /te/ form. The agent of the adjoined clause is never coreferential with that of the main clause.

The 'when' reading of /le/ takes over the cases of all other tenses when the two clauses have non-coreferential agents. Interestingly, when the actions are in the past, the adjoined clause with /le/ is particularly found with sentences with a matrix habitual past. In this tense, v-te is not the frequently available form with adjoined clauses when the subjects of the two clauses are non-coreferential, e.g.

3a. gopal baRi phirle Sobha beroto.

Gopal house return-cond. Shobha used to go out

'Shobha used to go out after Gopal's returning home.'

3b. gopal baRi phirte Sobha berolo.

return-imp

'Shobha went out after Gopal returned home.'

3c* gopal baRi phirte Sobha beroto.

used to go out

The examples above show clearly that with the habitual past the /le/ form takes over instead of /te/ in the adjoined clause. The reason for this possibly goes like this: - /te/, the imperfective participle form, in its other uses indicates non-completion of event, and the habitual past, which shares the morphological marker /t/, is semantically also a kind of imperfective. Two imperfective forms in a sentence may not be possible for semantic reasons. Although the imperfective sense of /te/ is not present in this particular use of the form, nonetheless its association with that sense in all other cases may be preventing its use with habitual past. Especially when another competing form /le/ is present in the language, which can be used in the same environment, speakers tend to use that instead of /te/. Therefore, to summarize the distribution of the three participial forms in a complex sentence with two actions one followed by another, the following result is noticed.

<i>Id</i>	/le/	/te/
In all tenses	In present and future	In past generally
with coreferential	generally and in habitual	(except habitual past)
subject	past with non-coreferential	with non- coreferential
	subjects	subjects

4.4.2 /le/ as conditional operator: --

In the analysis provided above, I did not consider at all the 'if..then' reading of /le/ mentioned just once at the beginning (ex. 1.2 of section 4.4.0). In this specific sense, /le/ can take coreferential subjects in matrix and subordinate clauses, e.g.

1. ami caile baire jete partam/ pari/parbo.

I want-cond.out to go can-hab.past/can-pr./can-fut.

'If I want(ed) to I can/could/ will be able to go out.'

The use of matrix tense in this construction is also worthy of notice. This particular construction highlights possible actions, which may or may not take place. Therefore, the verb of the matrix sentence is either in the present or in the future. It can be in the habitual past with -t-, which just indicates a possibility of the action but does not guarantee it. That is why one can say-

2. ami caile baire jete partam, kintu jaini.

I want-cond. out to-go can-hab.past, but go-pr.neg.1p

'If I wanted to, I could go out but I did not.'

The 'If..then' use of /le/ can also take non-coreferential subjects in matrix and subordinate positions as in 3:--

3. ram caile hori e kaj pete pare.

Ram want-cond. Hari this work can get

'If Ram wants, Hari can get this job.'

Unaccusativity may characterize both the clauses as in ex.(4) or only one, e.g.

4. briSTi namle amra bhOgobanke dhan debo.

rain fall-cond. we to-god paddy give-fut.1p

'If rain comes, we will offer paddy to God.'

In short, /le/ allows all sorts of combinatorial possibilities of matrix and subordinate clauses. However, I will not go to the analysis of this particular construction. The Conditional, in general, is a very rich area of logical semantics and needs to be studied at length, which is not the concern of this dissertation. Therefore, this particular use of /le/ has been kept for future research.

4.5 Switch Reference as an explanation of the participial construction:

4.5.0 In this section, I will offer a generalized binding theory-based analysis of the Bangla aspectual participials. The perfective participle marker is analyzed as an a'-anaphor and the imperfective participle marker as an a'-pronominal. The analysis is inspired by the concept of switch reference proposed by Finer. But before going to the analysis, I will discuss the theory of generalized binding very briefly for those readers who are not familiar with it.

4.5.1 Generalized Binding: -

Generalized binding theory was developed by Aoun, Hornstein, Lightfoot and Weinberg (1987) in order to eliminate the disjunction that was present in the earlier Chomskyan Binding theory (1981) in the forms of two unrelated principles, viz, head/lexical government and antecedent government. The properties of adjuncts and argument traces are distinguished in the new version but via a modified theory of binding rather than through the introduction of an additional grammatical relation like antecedent government. Firstly, this leads to a linking between antecedent binding and regular binding in a language. Secondly, this states that syntactic movement and LF-movement, though similar, are not identical. Generalized binding holds on the LF side of the grammar and concerns itself with all the expressions that have antecedents, including traces left by LF-movement operation, whereas the lexical government condition holds on the PF side of the grammar and concerns itself with the syntactic gaps that are phonetically null.

The principles of Generalized binding and lexical government are stated below: -

1. Lexical Government

a) An indexed Empty Category must be properly governed, i.e., governed by a lexical head.

b) A governs b iff all maximal projections dominating B also dominate A and for $B=Y(\max)$ if A governs B then A governs the head of B (i.e. $Y(0)$).

2. Generalized Binding

Where $X= A$ or A'

a) An X-anaphor must be X-bound in its domain.

b) An X-pronominal must be X-free in its domain.

c) R-expressions must be A-free.

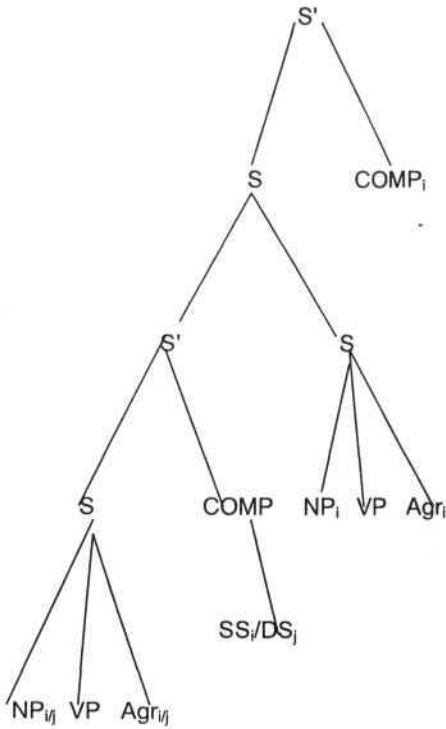
Binding domains are determined as: -

The domain of an expression A is the smallest NP or clause that contains an accessible SUBJECT for A, where a SUBJECT is the most prominent nominal expression in the NP of clause.

4.5.2 Finer (1985):--

Switch reference is defined as the phenomenon, which 'consists simply in the fact that a switch in subject or agent... is obligatorily indicated in certain situations by a morpheme, usually suffixed, which may or may not carry other meanings in addition.' (William Jacobson, 1967) The morpheme is found in a subordinate clause, usually in an adverbial clause and suffixed with the verb. Extensive data from many languages of the world show that there is one same subject (SS) morpheme attached to the adjoined clause in case the subject of the main clause is coreferential with the subject of the subordinate clause. When these subjects are not coreferential, a different subject (DS) marker takes the place. Finer proposed DS markers to be considered as an A'-anaphor and SS marker as an A' pronominal. Thus, according to him, $SS= [+A, -P]$ and $DS= [-A, +P]$. Principles A, B and C operate over the A'-binding system as it does on A-binding system. He placed these markers in the Comp, as evidence from some other languages show that switch-reference markers carry meaning that specify temporal relation between main and SR clause. Finer suggested that Infl/Agr, jointly

with Comp_i , is the head of the adjoined S' and that is coreferential with the NP of the adjoined clause. The structure given by him is the following: --



the $\text{Agr}_i(\text{COMP}_i)$, which is now the joint head of the S' , c-commands the $\text{Agr}_j(\text{COMP}_j)$ of the adjoined clause. DS as A' -pronominal, is free in its governing category, as their indexes indicate and SS is bound by the coindexed $(\text{Agr}/\text{COMP})_i$ of the superordinate clause. To summarize Finer's work and relate it to the participles of Bangla, I mention the main points again: -

1. SS signals obligatory coreference between the subject of the main clause and the subject of the adjoined clause as it happened in Bangla conjunctive participle /-e/ construction. SS is an A'-anaphor. Therefore, conjunctive participial constructions, according to this analysis, will be A'-anaphoric construction.
2. DS signals obligatory noncoreference between the subject of the main clause and the subject of the adjoined clause as it happened in case of imperfective participial /-te/ construction. DS is an A'-pronominal, therefore, imperfective participial construction, according to this analysis, will be A'-pronominal construction.

4.6 The place of the three participles in overall individuation programme: --

The switch reference analysis based on the work of *Finer* assigns /e/ the status of a SS-marker or an A'-anaphor. Anaphor, by definition, does not have an individual reference; rather, it depends on its antecedent for reference. Still, I want to say that /e/ is individualized than /te/ or A'-anaphor is more prominent in terms of individuation feature than A'-pronominal. How can that be justified? Well, I have some independent motivations for doing so.

1. V-/e/ form can occur independently in between a discourse as a sentence connecting link with the previous sentence, which V-/te/ form will never be able to do. E.g.

1. A: ami Ekhon baRi jabo.

I now house go-fut.1p

B: baRi gie ?

house go-perf.pl

As it is shown /gie/ 'having gone' of the second sentence is coreferential with the pronoun /ami/ T of the first sentence. Together with its antecedent, this

typical anaphor contains much information about the referent, making it more prominent. This is something like the following:- Compare the two examples below:--

2a. ami nije e kaj korechi.

I myself this work do-pr.pft.1p

'I myself have done this work.'

2b. amii e kaj korechi.

I-emp. this work do-pr.pft.1p

'I only have done this work.'

Both the sentences have one common thing, that is /ami/ is emphasized in both, once by adding an emphazier /I/ as in 2b and once using anaphor /nije/ after it, as in 2a. The result of both the means is making the NP (with which they have relation) more individualized. Similarly, in example 1 the utterance of A in isolation makes the NP /ami/ less prominent than it is in the conversation of A and B taking the sentences together. Moreover, V-e form can occur independently in a discourse. E.g.

3. A: ami baRi gie ghumobo.

I house go-perf. sleep-fut.1p

'I will sleep after going home.'

B: ar ghumie uThe?

and wake up-perf

'And having waken up?'

This is because of its high referential feature relating to the NP of the previous sentence and getting its index; neither of the two other participles has this feature.

There remain two participles now--imperfective /te/ and conditional /le/, both of which in a special reading of 'when' clause take non-coreferential subjects and therefore, behave like A'-pronominal with independent reference and [+P] feature. Between these two, /te/ has some restrictions of occurrence, as it is unable to catch the terminal point of an event, therefore, possibly lacks the [+T] feature, which specifies time. Bare use of it is also restricted to certain verbs only. All these indicate that it contains less information and hence, use of it makes a sentence less individualized compared to /le/. Therefore, these three participles in some typical usages exist in such an order of a scale based on individuation feature, so that /e/ becomes most individualized, followed by /le/ and /te/.

4.7 Blocking as pragmatic phenomenon: --

I have shown in the preceding sections that blocking has taken an important role in the use of non-finite participial forms of Bangla. Imperfective, when used in the sense of cause-effect is blocked by locative gerund form. Use of perfective participle /e/ blocks the other conditional participle /le/ when two actions take place one after another, both of which with one coreferential subject. Not only these, imperfective /te/ form cannot be used in habitual past with the same 'when' reading with two actions because of availability of another form /le/ in the same sense. The phenomenon of blocking is nearly all-pervasive in this field of Bangla verbal forms.

The later work on blocking by van Marie (1985) that has been mentioned in Rainer (1988) distinguishes two types of blocking, viz., type-blocking and token-blocking. These two though related but are considered to be fundamentally distinct phenomena. The main distinction between type-blocking and token-blocking is the type-blocked words are not blocked by individual stored synonyms, but because the domain of the rule by which they are formed is blocked by the domain of a rival rule. This leads to the

conclusion that all the instances of blocking which are noticed in this chapter are, according to this distinction, is type-blocking.

When Aronoff coined the term blocking, it was restricted to morphology only, but a careful observation shows that it is not just a phenomenon of that particular field. For instance, see from English the examples of blocking given by Dasgupta (1980): - 'all two' in English is blocked by the word 'both'. This tacit 'two' need not be present in the sentence also. When we say 'they all like it', we always mean there are more than two persons referred to. But if it is 'they both like it', it is always 'two persons' who have been referred to. This proves that blocking goes beyond the level of sentence grammar. Two distinct forms for two purposes are stored in the mental lexicon of a speaker of English, viz., 'both and all'. The speaker also knows where they can be used. Proceeding now on the basis of the previous information in the discourse or guided by their extra-linguistic knowledge (e.g. by observing the number of people), the speaker selects one of the forms to serve the purpose. If we think of the phenomenon from this point of view, blocking is nothing but speaker's selection or choice, therefore, an entirely pragmatic issue.

Speakers, for their convenience, map some of the expressions of the language with some sense of their use, which lies in the process of thought. Now, if I say, imperfective form /te/ is mapped with the sense of non-completion of action, therefore, the sentences with habitual past (an imperfective aspectual form) and with an imperfective adjoined verbal form create a problem for the speaker to catch a point of time of the action. The speaker readily accesses a conditional /le/ form used in the same sense, that is, for denoting the first action in a sequence of two actions with non-coreferential subjects. Therefore, he/she selects that; /te/ is blocked in this particular sense, as a result of this.

This particular analysis of blocking in a language is supported by the facts about mental representation of language provided by the cognitive linguists like Jackendoff. He stated that one particular language expression is associated with one particular concept characterized by some primitives relating it to certain phonological and syntactic structures. In the next chapter, while discussing this mental representation of language, I shall give the detail of this kind of study relating it to the phenomenon of blocking discussed in this chapter.

CHAPTER 5

SOME RESIDUAL ISSUES

5.0 Introduction to the chapter:

This chapter will discuss some of the residual issues left over in the other chapters. The first of them is an asymmetry between the distribution of the non-finite participles described in the fourth chapter, where perfective participles contrast with imperfective and conditional participles. But when one turns to the use of doubled or iterated participles characteristic of the language, the distribution is different with the two aspectual participles contrasting with the conditional participle. **The** discussion of this in section 5.1 leads to a tentative account of this asymmetry maintaining a basic distinction between aspectual and non-aspectual participles.

Section 5.2 is an attempt to connect individuation devices with the mental representation of language reviewing Heim's idea of File semantics. A subsection here deals with the mental space idea developed by Fauconnier **and** its connection with the representation of tenses. Cutrer following Fauconnier represented three major tenses in mental space.

Following this I have offered one explanation why the present tense is the default in human language. I have also given a diagrammatic representation of the three non-finite participles which had been discussed in the previous chapter. This representation in addition supplements and reinforces the attempt made in the previous chapter to categorize the major verbal forms hierarchically based on the feature of individuation.

The section then relates blocking to the mental representation of language using the cognitive linguistic theory of Jackendoff. Blocking is a major area of linguistic study which needs serious attention in cognitive linguistics. How

it will be processed in a hearer-centred treatment of language is a major issue to be addressed. I conclude the chapter recapitulating the main points of the dissertation once again for the convenience of the readers.

5.1 Some residual issues: Reduplicated participles: --

I have shown in the previous chapter that if one considers only the sequential 'when..' reading of the non-finite verbal participles /te/ 'imperfective', /e/ 'perfective' and /le/ 'conditional', they can be grouped into two classes on the basis of whether coreference holds or need not hold between the matrix clause subject and the adjoined participial clause subject. The perfective participle /e/ is only used when the subjects of the matrix and the adjoined clauses must corefer. On the contrary, sentences containing imperfective and conditional adjuncts on a 'when..' reading always can and in fact must exhibit non-coreferential subjects. The imperfective co-occurs with a matrix past except with habitual aspect and the conditional co-occurs with the present, the future and the habitual past as the matrix tense.

But this classification is not maintained if these participles are used in reduplicated form. The aspectual participles /te/ and /e/ can be used only under (integral or whole word) reduplication. E.g.

1. amra baRi theke berote berate Sondhe hoe gElo.

we house from leave-imp(redpl) evening became

'By the time we left the house, it became dark.'

2. heMTe heMTe amra klanto.

walk-perf(redpl) we tired

'We are tired having walked a lot.'

In the first sentence the two events, viz., our leaving the house and the onset of the dusk are almost simultaneous. Therefore, the aspectual non-completion sense of the imperfective is present in this use. Repetition of the perfective participle /le/ in the second sentence indicates the prolonged duration and nonetheless the completion of the action of 'walking' before 'getting tired' sets in. Here also the original aspectual sense is retained.

The conditional participle /le/ is never reduplicated, even when it is supposed to carry the 'when..' reading. For instance, notice the following sentences: —

*3. ami baRi phirle phirle Sobha beroy.

I house return-cond(redpl) Shobha goes out

*4. Onek dur haMTle haMTle amra klanto hoe poRi.

long way walk-cond(redpl) we tired become

The reason behind this distribution probably comes from the difference between aspectual and non-aspectual (in this case modal) forms. It is quite probable that the modals cannot 'anchor' any action the way the tense and aspectual forms can. Though the typical sense is absent in the 'when..' reading of the conditional /le/ participle, I conjecture that the conditional feature complex counts as modal in all occurrences of the /le/ form and that is why reduplication of the form is not an option. However, this is just a hunch towards an explanation of the fact described; a full account calls for much more careful study.

5.2.0 Language and thought: --

In this section, I will discuss briefly how information is processed in our brain and used for further communication. There is obviously a relation between this topic and my dissertation. I started my agenda with the goal of developing 'individuation' program. In order to give the program some formal

content, in the course of the discussion, I used individuation as a formal feature, which can be assigned to any linguistic element, verbal or nominal, as [+individuated]. This is a combination of definiteness, specificity, prominence related features. A linguistic element which is more individuated contains more information. This recalls the file semantics proposed by Heim (1982). As the file containing information about the linguistic elements can be updated in the course of the discourse, so a linguistic form stored in some mental space can be updated by adding the tools which facilitate individuation like demonstratives, classifier and emphazier in Bangla as stated in the second chapter. Before showing this connection, let me introduce the idea of file semantics as developed by Heim.

5.2.1 File Semantics: -

Helm's most fascinating idea about information representation in human mind is the notion of 'file-semantics'. By using this device human communication can be viewed as including a crucial component file-keeping. According to this theory, indefinites correspond to introducing new file cards and definites to updating the old cards. For a first approximation she supposed that initially before beginning of a conversation file cards are empty. Then a conversation starts between A and B. A utters the following sentences : - a. Mother gave me a dress. b. The dress is beautiful. c. Father gave me one watch. d. But the watch is lost. After the uttering of sentence (a), B takes cards and writes on card no (1) 'mother' and 'gave 3 to 2'; on card (2) the speaker's name and 'received 3 from 1'; on card (3), 'dress' and 'given by 1 to 2'. Then after the utterance of the second sentence by A, B updates card no. (3), 'is beautiful'. Sentence (c) introduces two new cards, card (4) contains 'father' and card (5) 'a watch'. Card (4) also contains the information 'gave 5 to 2' whereas card (5) is filled with the entry 'given by 4 to 2'. Sentence (d) updates the old card (5) adding 'is lost'.

5.2.2 File keeping and individuation : -

The linguistic element equipped with any one of or all the tools of individuation is not a new card in our mental file. It updates an already existing file card. For instance, compare the following sentences: -

1a. EkTa kOlom ano.

one-cl pen bring

'Bring one pen/

1b. ebar kOlomTa amake dao.

now pen-cl me give

'Now give me the pen.'

While uttering the first sentence, there was no reference of a pen but the introduction of a 'pen' file card corresponding to the sense of it in speaker's mind; whereas the utterance of the second sentence refers back to the pen of the first sentence. In this way, the use of /Ta/ with /kOlom/ provides additional information enable this occurrence of /kOlom/ to do referential work. In (1a) /kOlom/ 'pen' is indefinite and a new element in the discourse, therefore it is stored in a new file card. But in (1b) /kOlomTa/ 'the pen' is a definite NP. For this no new card is opened, but the old card is updated with the new information that 'give pen to the speaker.' There is always a connection between the filecards of our mind. This point becomes clearer if a careful look is taken at some data in the previous chapter from the non-finite verbal forms. The data on the imperfective participles of Bangla make clear the point that a tool of individuation (in this case the emp /I/) connects two incidents which can be thought of as two different pieces of information. Consequently, it can be said that the devices of individuation act as connectors between the files of the mind. For instance, take the following example: -

2. Sobha kOthaTa tultei rOmeS uThe gElo.

Sobha words-cl raise-imp Ramesh left

'As soon as Sobha raised the matter, Ramesh left.'

Two incidents happening one after another are connected in this sentence by the emphasizer /V/. These are two different actions taken as two different inputs in our mental files. One file contains the agent 'Sobha', her action of saying something and the object 'words' and the other file contains the agent 'Ramesh' and his action of leaving. The first action happened before the second and therefore, is stored in the mind also before the second as a separate file.

After the second information comes, we see the connection between the two, the emp /V/ helps to connect these two files. Without the emp, the sentence is not completely acceptable if compared to its emp-endowed version.

5.2.3 Individuation hierarchy and mental space connection:

At this point, it is reasonable to connect the file keeping of Heim with the descriptive account of mental spaces that Fauconnier employs to explain human cognition. In this section, I will give an account of the mental representation of the various tense-forms and non-finite participle forms. There will be an attempt to connect these representations with the positions these forms take in the individuation hierarchy in the language.

In the previous chapter, I arranged the non-finite verbal participles according to the hierarchy of individuation. Perfective stands highest in this structure and imperfective is at the lowest position of the structure while conditional occupies a middle position between them. Finite verbal forms occur higher than all these non-finite forms. Among the finite tense forms, present is the

most individuated with past and future following it. Relating this individuation factor to the mental space organization as developed by Fauconnier (1997) can be helpful to find out the hierarchical status of the verbal forms. Fauconnier introduced three 'dynamic' notions of discourse management: Base, Viewpoint and Focus. 'At any point in the construction, one space is distinguished as Viewpoint, the space from which others are accessed and structured or set up; one space is distinguished as Focus, the space currently being structured internally - the space so to speak, attention is currently focused; and one space is distinguished as the Base - a starting point for the construction to which it is always possible to return.' (Fauconnier, 1997) These three spaces need not be distinct, often two or more of them overlap. While applying these concepts in describing Tense, Fauconnier introduces one more notion called Event. Event space corresponds to the time of the event or state being considered. Using these four notions of mental space, Cutrer characterized three basic tenses in the mental-space framework.

Present is the state where base, viewpoint, event and focus are at the same mental space. For instance, for the sentence in the simple present tense /Sobha bhat khay/ 'Sobha eats rice'; the representation would be the following:

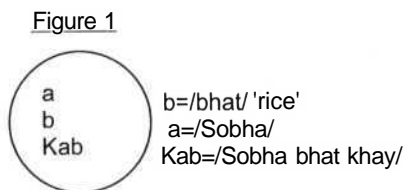
3. Sobha bhat khay.

Sobha rice eats

'Sobha eats rice.'

(diagram 1)

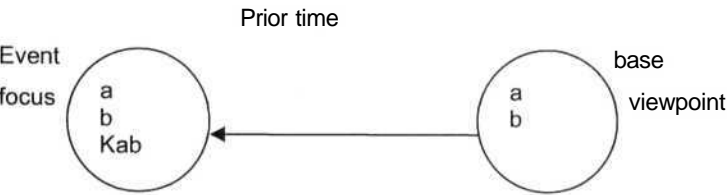
Base
viewpoint
event
focus



For the past, the representation is as in figure 2:

4. Sobha bhat khelo.
Sobha rice ate
'Sobha ate rice.'

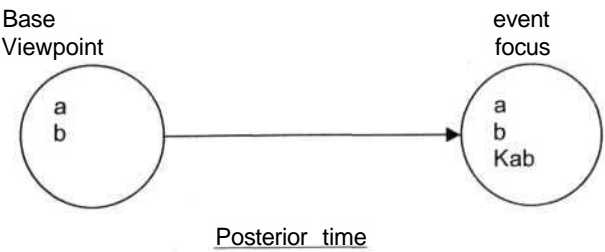
Figure 2



Event/Focus space are prior to the time of base/viewpoint space. Therefore, two different mental spaces have to be connected for the past. The same is true for the future also, the only difference being that the event as well as the focus space is posterior to the base/viewpoint space (Fig 3).

5. Sobha bhat khabe.
Shobha rice will eat
'Shobha will eat rice.'

Figure 3



Comparing the present with the past and the future reveals that the former contains all the information about base, event, focus and viewpoint in one single mental space. This makes the present more individuated concentrating all the information and probably this is the reason why the present is the default tense. Generally the default is the most unmarked element and we often find unmarked items to be the least complex. For two spaces to be connected makes a representation more complicated than the single mental space configuration of the present.

The Locative gerund construction also involves two mental spaces, one containing the base, viewpoint and focus and the other containing the event, e.g. (fig 4):

6. ami bOlate gopal raji hoe gElo.

I say-loc ger Gopal agreed became

'On my telling him (when I told him), Gopal agreed.'

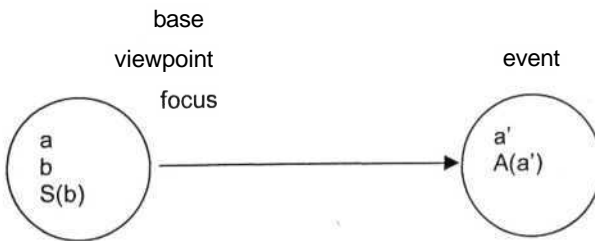
Figure 4

a=/gopal/

b=/ami/

S(b)=/ami bOlate/

A(a')=/gopal raji hoe gElo/



For the perfective, the conditional and the imperfective, mostly there are three mental spaces, with two different spaces denoting two actions. The

only exception will be the perfective with the matrix clause in the present tense where event, base, viewpoint and focus are at the same space. The following are the diagrams for the perfective construction:

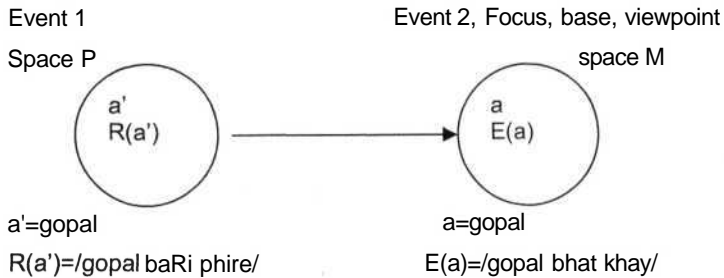
(fig 5,6, and 7)

7. gopal baRi phire bhat khay.

Gopal house return-perf rice eats

'having returned home Gopal eats rice.'

Figure 5

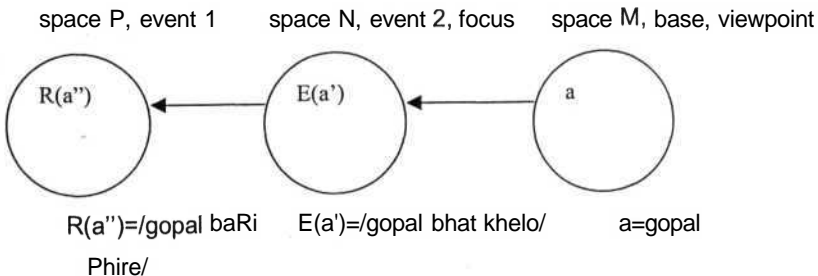


8. gopal baRi phire bhat khelo.

ate

'Having returned home Gopal ate rice.'

Figure 6



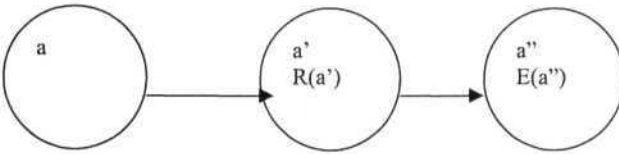
9. gopal baRi phire bhat khabe.

will eat

'Having returned home Gopal will eat rice.'

Figure 7

a=gopal R(a')=/gopal baRi phire/ E(a'')=/gopal bhat khabe/



Base, Viewpoint
Space M

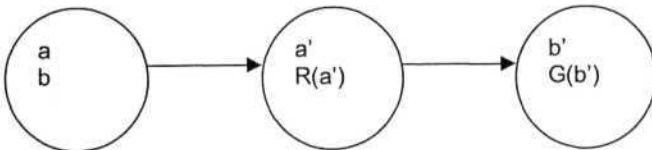
Event 1
Space N

Event 2, Focus
Space P

For the conditional sentence, the diagram will be the following:
(fig 8)

Figure 8

Space M Space N Space P
Base, viewpoint Event 1 Event 2, Focus



a=/gopal/

R(a')=/gopal baRi phirle/ G(b')=/Sobha berobe/

b=/Sobha/

10. gopal baRi phirle Sobha berobe.

Gopal house return-cond Shobha will go out

'When Gopal returns home, Shobha will go out.'

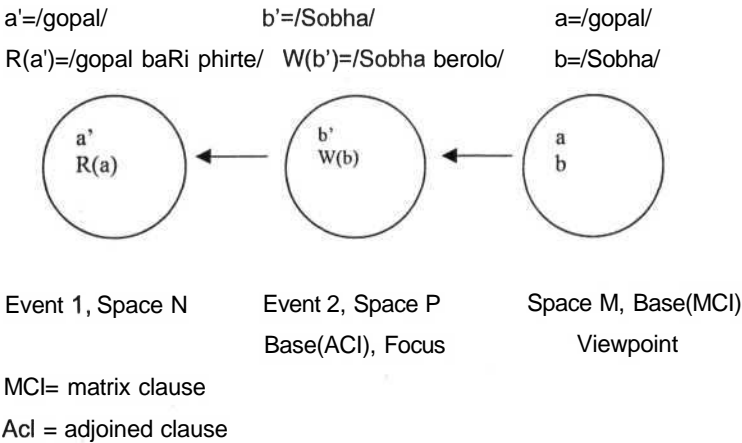
The **imperfective** is slightly more complex than the other two; here the two actions take place in immediate succession; therefore, for the previous event or the event of the adjoined imperfective clause, the first event space becomes the base. That is, there are two base spaces in the imperfective sentence; one is for the matrix clause and the other is for the adjoined clause. (fig 9)

11. gopal baRi phirte Sobha berolo.

Gopal house return-imp Sobha went out

'When Gopal returned home, Shobha went out.'

Figure 9



The figures above also support the view taken in the previous chapter about the individuation hierarchy of the non-finite participles.

The imperfective is the least individuated as the information components are more widely dispersed in that diagram and connection between different mental spaces is more complicated.

5.3 Blocking: moving towards a cognitive linguistic explanation: —

In this section, I will try to develop an explanation of the blocking phenomenon, which has been given considerable importance in the previous chapter, using a cognitive linguistic approach developed by Jackendoff. The explanation is based on the notion of association of the mental concepts and the linguistic expressions.

Jackendoff distinguishes between E-concepts and I-concepts parallel to the distinction made by Chomsky between E-language and I-language. When one language user is uttering a sentence, he/she is expressing a concept or a thought through it. As the sentences which can be produced by one person are infinite in number, so are the thoughts behind them. But infinite sentences are processed from a finite set of words and principles of language. Similarly, the repertoire of concepts must be characterized by a finite number of primitives and some principles of mental combination. Jackendoff refers to these two sets together as the 'grammar of sentential concepts'. The primitives that underwrite a sentential concept are lexical concepts, concepts expressed by the words. Lexical concepts cannot be encoded by a list of instances, e.g. a list of all the dogs in the world, but must consist of finite schemas that can be creatively brought into relation with novel inputs.

Just for the explanation of language there is an innateness hypothesis, the Faculty of Language (FL) responsible for a human child to acquire a language where s/he is exposed to, so also in the case for concepts. There should be some innate basis of possible concepts, from which lexical concepts are constituted. This innate basis consists of some primitives and principles as for the FL; therefore, almost every lexical concept is composite in nature and can be decomposed in terms of the above primitives and principles.

Because lexical concepts are also very abundant in number and the innate basis for acquiring them is encoded in a finite brain, there is a 'grammar of lexical concepts'. According to Jackendoff, 'learning a lexical concept' is to be thought of 'constructing a composite expression within the grammar of lexical concepts, associating it with phonological and syntactic structures and storing them together in long-term memory as a usable unit. If something like this happens in the human brain, then the concept of blocking can be explained on the basis of this characterization. I tentatively suggest a displacement of the theory of blocking from a purely formal linguistic domain to the domain of this grammar of concepts because my explorations convince me that a purely lexical analysis can only cover certain restricted types of blocking. If a unified account is constructed over mental conceptual representation, lexical blocking mechanisms are bound to fall out as special instantiations of those mechanisms.

Obviously the work done so far provides too limited a foundation for the actual construction of a conceptual theory of blocking. But I do not find that the evidence for blocking-type relations between both lexical and grammatical entities is varied enough to force the (tentative) conclusion that blocking must be based in the conceptual domain rather than purely formal-lexical.

5.4 Recapitulation of the main points:

Before I end the dissertation, let me recapitulate the main points again. The aim with which I started writing this dissertation, viz., developing the individuation programme, has been pursued in the two empirical chapters (ch 2 and 4) on DP structure and non-finite participles in Bangla.

In the DP structure chapter, it has been shown that the classifiers play a significant role in imparting the effect of individuation to some particular NP. The role of classifiers in quantification is also discussed in that chapter.

Though a good amount of space is devoted on the issue of the classifiers of Bangla, nonetheless, the other prenominal categories such as quantifiers, quantifying adjectives, demonstratives and some other words denoting vagueness of meaning are also analyzed in that chapter. As a result many words in this prenominal category, which had vague or no status in the traditional or other earlier work in grammar, are in that chapter categorized for the first time, in a generative linguistic framework. Using the Silverstein hierarchy to classify the prenominal categories based on the feature individuation is that chapter's most important contribution to the overall study of individuation in this dissertation.

Chapter 4 is the other empirical chapter and focuses on the analysis of data from Bangla imperfective, perfective and conditional participles. The important finding of the chapter is the complementary distribution of these three participles relative to the action sequence reading. The perfective is found in all tenses with coreferentiality of matrix and adjunct subjects. The conditional is found in the present and the future in general and in the habitual past with non-coreferential subjects and the imperfective is observed only in the past with non-coreferential subjects except if it is a habitual past.

Blocking emerges as a central issue in chapter 4. Observations presented there indicate at least three cases of blocking in the area of non-finite participles. One is the blocking of the imperfective form in the cause-effect sense by the locative gerund form; the second is the blocking by the perfective participle of the conditional participle with coreferential subjects on the sequential events reading; and the last is the non-use of the imperfective form in habitual past on the same sequential event reading in view of the availability of the conditional participle for that purpose.

Finally, another highlight of that chapter is the switch-reference analysis of the non-finite participles, treating the perfective participle as an A'-anaphor and imperfective as an A'-pronominal.

In between these two empirical chapters, the third chapter clarifies my actual standpoint from which the work has been done. The main theme of the dissertation is to establish *speakers'* freedom to assign meaning to an utterance in a conversation within limits broadly set by the language. This chapter brings out the tension between upward projectionism and the speakers' right to modulate what s/he wishes to say. Language becomes the exclusive property of a society if a grammar depends only on projectionism and compositionality for the interpretation of an utterance. In order to liberate language from the clutches of a society so viewed, I propose the idealizing-device of a comprehension-maximizing listener who processes the utterance as uttered by the speaker and takes the decision about the size of constituents that will be given to the pragmatics interface for the interpretation of the intended meaning. I revive Bhartrhari's listener-centred view of speech cognition as a bridge to relate Generative grammar's revival of the old theory of Generalized Transformation (in Minimalism abandoning DS) with the paradigmatic hermeneutic approach of Ruwet verging on text analysis. The paradigm shift from the formal Paninian model to the user-focused listener-based Bhartrharian type of grammar that enables the formal syntactic analysis to connect coherently with the pragmatic interface will help the linguists to address many unasked as well as unanswered questions. This dissertation is one humble footstep towards that 'substantivist' linguistics.

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