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 emphasisizer $l-l$. 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'-prononinals 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 /le/ 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 Se₆ 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 Se₆ bisram nebe. (SCB) from Bagchi

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 (nfl), in general,
responsible for assigning nominative case. Therefore, in all the participial constructions, the subordinate l(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 l(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 '&amp;' 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 kamyte/ 'crying of the son' (p) and /aSa / 'coming' (q). If we want to represent the sentence in logical terms using the operator &, the representation will be &p q. This does not happen if we negate a conjunction. In that case, &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 Farrlund (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 /\el/ 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 emphasizer, 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.

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. hO That 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.  

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.

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 emphaserizer).
a) kOthaTa uThte 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 emphazer /l/ 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. 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 khoSi 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.
   'We became sorry as you didn’t eat.'

9. tumi na khaoate amra dukkho pelam.

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 /ii/:

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, /ii/ and /o/.
1. Sudhu amrai jacchi.
   only we-emph.go-pr.prog.-1p
   'Only we are going. (no one else).'</n
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 /\/ 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 /\/ 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 /\/ 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: -


   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. /\ 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 emphaser: -

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 bhorti 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.'

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 gaitei (=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, /le/ is the only participial form available. The two other participles discussed in this chapter do jobs complementary to the /le/ form. Imperfective /lie/ 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

1
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.

<table>
<thead>
<tr>
<th>/le/</th>
<th>/te/</th>
</tr>
</thead>
<tbody>
<tr>
<td>In all tenses</td>
<td>In present and future</td>
</tr>
<tr>
<td>with coreferential</td>
<td>generally and in habitual past with non-coreferential subjects</td>
</tr>
<tr>
<td>subject</td>
<td>with non-coreferential subjects</td>
</tr>
</tbody>
</table>

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., 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:

```
S'
  \   \  
  S   COMP
    \   \  
    S   NP_i VP Agr_i
      \   \  
      S   COMPP_i
        \   \  
        S   NP_i VP Agr_i
          \   \  
          SS/DS_j
```

the Agr_i/(COMPP_i), which is now the joint head of the S', c-commands the Agr_i/(COMPP_i) 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 (Agr/COMP) 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 emhasizer /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 /le/ 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 /le/ 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 /iel/ 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.