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GRAMMATICAL RELATIONS IN JAVANESE

A Short Description

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of the degree of Master of Arts
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Except where otherwise indicated this sub-thesis is my own work

[Signature]
Abstract

This sub-thesis presents a description of grammatical relations in Javanese. The description is presented within the framework of relational based view in which the notions of grammatical relations such as subjects, objects are treated as labels of relations in a network. Some syntactic tests are used to identify grammatical relations in Javanese, and the result is that grammatical relations in Javanese can be classified into four classes: subjects, objects, second objects, and obliques.

Using the notions of grammatical relations, three syntactic processes: passives, applicatives, and causatives are described. In terms of relation-changing processes, there is only a single rule of passive in Javanese; what is generally called canonical passives and object preposing constructions are variants of a single construction. This supports Kana's (1986) analysis of passives in Bahasa Indonesia, a language genetically related to Javanese. In the syntactic processes of applicative and causative, two suffixes -ake and -i play a crucial role.
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### Abbreviations

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<td>COMP</td>
<td>Complementizer</td>
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<td>Def</td>
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<td>NP</td>
<td>Noun Phrase</td>
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1. Introduction

This paper is a descriptive study about grammatical relations in Javanese, a member of the Austronesian language family mainly spoken on the island of Java, Indonesia. The status of grammatical relations in current syntactic theories has become a controversial issue. There are at least two fundamentally contrasting views of the nature of grammatical relations (grammatical functions): the relationally based view and the configurational view (Andrews, 1985:64-65). The relationally based view, which is adopted in various syntactic theories such as relational grammar and lexical functional grammar, asserts that grammatical relations are primitives, so that they cannot be defined in terms of other notions. In this view grammatical relations are treated as labels of relations in a network. Syntactic theories which adopt the configurational view such as classical transformational grammar and Montague grammar, on the other hand, assert that the notions of grammatical relations such as subjects, objects can be defined in terms of the arrangement of phrases or similar compositional units.

In this paper I adopt the relationally based view. My basic assumption is that grammatical relations are syntactic notions. Since grammatical relations are syntactic notions, the means to identify them should be syntactic tests rather than, say, in terms of semantic roles or discourse functions. In this paper I will show that
grammatical relations in Javanese can be identified in terms of a syntactic point of view, using internal syntactic evidence in the language. The syntactic test of relativization, for instance, can be used to distinguish subjects from other grammatical relations since in Javanese only subjects can be relativized.

This paper is organized as follows. In section 2 I describe briefly the basic structure of Javanese simple clauses to give background information for the discussions in the next sections. In section 3 I describe the properties of Javanese subjects which distinguish them from other grammatical relations. The properties of Javanese objects and second objects are described in section 4; and then in section 5 I describe the grammatical relations of obliques. After describing all grammatical relations: subjects, objects, second objects, and obliques, I describe relation-changing processes in section 6. The discussion in this section is divided into four subsections: subsection 6.1 describes the relation-changing process of passive; subsection 6.2 describes the relation-changing process of applicative; subsection 6.3 describes the relation-changing process of causative; and subsection 6.4 discusses suffixes -ake and -i, two suffixes which play a crucial role in the relation-changing processes. Finally I give a conclusion of the discussion in section 7.

It is important to note that Javanese has many regional dialects such as dialects of Tegal, Banyumas, Yogyakarta-Surakarta, Tengger, Surabaya, etc. Besides that, Javanese also has speech levels, the using of different styles depend on the social relations between the speaker and the person addressed. Roughly Javanese speech levels can be divided into four levels: kromo inggil (very high), kromo (high), madyo (mid), and ngoko (low). The Javanese described in this paper is based on the Javanese dialect of Yogyakarta-Surakarta, which is referred to as the standard dialect of the language, in the ngoko level. The data are written in the conventional spelling system of Javanese as used in Javanese contemporary books and magazines.
Notes on verbal morphology

Javanese verbs commonly appear with affixes. In this sub-thesis stems of the verbs and the affixes are written separated by a hyphen. In the interlinear morphemic translation of the data, glosses are only given to the stems, not to the affixes. Therefore, it is necessary to mention briefly the functions of the affixes. The Javanese verbal affixes found in the data include prefixes \textit{N}, \textit{di}, \textit{kok}, \textit{tak}, \textit{kita} and suffixes \textit{-ake}, \textit{-i}. The actual amount of Javanese verbal affixes, however, is more than this.

The prefix \textit{N} has four allomorphs: \textit{\textipa{/m-}}, \textit{\textipa{/n-}}, \textit{\textipa{/n̥-}}, and \textit{\textipa{/ŋ-}}. The form of the allomorph depends on the initial phoneme of the stem. For example, when the prefix \textit{N} attaches to a stem with an initial phoneme \textit{/p\textipa{}}, the prefix \textit{N} will become \textit{\textipa{m\textipa{}}} such as in \textit{mangan} 'to eat' (from \textit{\textipa{N} + pangan}). Verbs with the prefix \textit{N} have a meaning 'active' in that the subject of the sentence is an agent; so the prefix \textit{N} functions to form an active verb. The label of the interlinear morphemic translation for the prefix \textit{N}, therefore, is \textit{ACT} (active).

The prefixes \textit{di}, \textit{kok}, \textit{tak}, and \textit{kita} function to form a passive verb. The prefix \textit{di} appears when the agent of the passive sentence is a third person both plural and singular; \textit{kok} appears when the agent is a second person both plural and singular; \textit{tak} appears when the agent is a first person singular; and \textit{kita} appears when the agent is a first person plural. Therefore, the labels of the interlinear morphemic translation for these prefixes are \textit{PASS 3PERS} for \textit{di}, \textit{PASS 2PERS} for \textit{kok}, \textit{PASS 1PERS SING} for \textit{tak}, and \textit{PASS 1PERS PL} for \textit{kita}. (See subsection 6.1 page 44 for more detailed analysis of these prefixes).

The suffixes \textit{-ake} and \textit{-i} mark two relation-changing processes: applicatives and causatives. The labels of the interlinear morphemic translation for these two suffixes, therefore, can be \textit{CAUS} or \textit{APPL} depending on the relation-changing processes they mark. (See subsection 6.4 page 69 for more detailed analysis of these two suffixes).
the preverbal NP. The adverbial word wingi, however, cannot be put in the following positions: between the verb and the postverbal NP or between the first postverbal NP and the second postverbal NP. Thus, the sentences (a), (b), and (c) in (2) are grammatical but (d) and (e) are ill formed.

(2)

a. Dheweke ng-(k)irim-i aku buku iki wingi
   he/she    send    I book this yesterday

b. Wingi dheweke ng-(k)irim-i aku buku iki

c. Dheweke wingi ng-(k)irim-i aku buku iki

d. *Dheweke ng-(k)irim-i wingi aku buku iki

e. *Dheweke ng-(k)irim-i aku wingi buku iki

'He/she sent me this book yesterday'

Besides that, the word order of the string which consists of the verb and the following NPs is fixed so their structure cannot be changed. The sentence (1c), for instance, cannot be changed into (3); (3) is an ungrammatical sentence.

(3)  *Dheweke ng-(k)irim-i buku iki aku
     he/she    send    book this I
     (He/she sent me this book)

The ungrammaticalness of (2d), (2e) and (3) provides evidence that the sequence of the verb and the following NPs in Javanese is a VP node. Therefore, the basic rule of sentence structure in Javanese can be formulated in (4).

(4)  S  >  NP  VP  (PP)
     VP  >  V  (NP)  (NP)

In (4) PPs come in the final position, but they do not have to occur in that position. PPs may come in the initial position, or even for some PPs, they may come in the
position after the preverbal NP. Consider the PP marang Sri 'to Sri' in the three sentences in (5) and the PP ing perpustakaan 'in the library' in the three sentences in (6).

(5)

a. Aku m-(w)eneh-ake buku iku marang Sri
   I give book that to Sri

b. Marang Sri aku m-(w)eneh-ake buku iku

c. ?Aku marang Sri m-(w)eneh-ake buku iku
   'I gave that book to Sri'

(6)

a. Sri m-(w)aca buku ing perpustakaan
   Sri read book in library

b. Ing perpustakaan Sri m-(w)aca buku

c. Sri ing perpustakaan m-(w)aca buku
   'Sri read a book in the library'

The marker [?] is given to the sentence (5c) because some speakers accept the grammaticalness of (5c), but other speakers doubt it. All the three sentences in (6), however, are grammatical; there is no doubt about the grammaticalness of (6c). It seems that the PP marang Sri in (5) has different characteristics from the PP ing perpustakaan in (6). The properties of PPs will be discussed later in the discussion of oblique relations. My main point here is that PPs have relatively free positions in the sentence structure. This differs from NPs in which their position in the sentence structure is fixed.

In addition, there are also minor sentences or verbless sentences in Javanese in which the predicate of a sentence is a category other than a verb. The predicate of minor sentences in Javanese can be an adjective, a noun, a numeral, or a PP. Consider the following sentences.
(7)
a. Bocah iku pinter
   child that smart
   That child is smart

b. Wong lanang kae guru
   person male that teacher
   That man is a teacher

c. Mobil-e Pak Krama lima
   car-Def Mr Krama five
   Mr Krama's cars number five / Mr Krama has five cars

d. Wong tua-ne Sri ing Jakarta
   person old-Def Sri in Jakarta
   Sri's parents are in Jakarta

The predicate of the sentence (7a) *pinter* 'smart' is an adjective; the predicate of the sentence (7b) *guru* 'a teacher' is a noun; the predicate of the sentence (7c) *lima* 'five' is a numeral; and the predicate of the sentence (7d) *ing Jakarta* 'in Jakarta' is a PP. Therefore, it is clear that the sentences in (7) are minor sentences or verbless sentences.

3. Subjects

   The structure of Javanese simple clauses has been described briefly in section 2. The next sections will discuss Javanese simple clauses in terms of grammatical relations. First, in this section we will observe the grammatical relation of subject.

   There is no exact method how to identify a subject in a language. For example, as Andrews (1985:104) points out, in many languages such as English a subject grammatical relation may immediately be recognized on the basis of coding features in an ordinary main clause. Coding features, however, cannot be used as a means to identify a subject grammatical relation across languages since in other languages coding features do not provide a clear indication of which NPs are
subjects. Although there are no exact methods to identify a subject, this does not mean that a subject grammatical relation in a language can be identified arbitrarily. The means to identify a subject grammatical relation across languages have been proposed in the linguistic literature. In this paper I mainly use the means to identify subjects as proposed by Andrews (1985) and Keenan (1976a).

In the surface form Javanese subjects have these properties: they are expressed in bare NPs and they come in the initial position before verbs in the normal (unmarked) sentence structure. Thus, the preverbal NPs *bocah kae* 'that child', *asune* 'the dog', *dheweke* 'he/she', and *aku* 'I' in the sentences (1) above are examples of Javanese subjects. In terms of their position in the sentence structure, Javanese subjects can be inverted with respect to the verb phrase. When they are inverted, they come after the verb phrase and they are set off from the verb phrase by an intonational break. Consider the sentences in (8).

(8)

a. Bocah iku ng-gawa buku-mu  
   child that carry book-your  
   That child carried your book

b. Ng-gawa buku-mu, bocah iku  
   carry book-your child that  
   That child carried your book

In (8a) the subject *bocah iku* comes in the initial position of the sentence, this is the normal (unmarked) structure. In (8b) the subject is inverted with respect to the verb phrase, so it comes after the verb phrase and is set off from the verb phrase by an intonational break which is indicated by the comma punctuation. The sentence (8b) may be regarded as a marked sentence.

If there is an adverbial word in the inverted construction, the adverbial word may come in the initial position or in the final position, but not between the verb
phrase and the inverted subject. The sentences (a) and (b) in (9), for example, are grammatical but (c) is ill formed.

(9)

a. Wingi ng-gawa buku-mu, bocah iku yesterday carry book-your child that

b. Ng-gawa buku-mu, bocah iku wingi

c. *Ng-gawa buku-mu wingi, bocah iku

'That child carried your book yesterday'

PPs, which have relative free positions in the unmarked structure, have a fixed position in the inverted construction. They cannot be put in the initial position and after the inverted subject. Consider the sentences in (10) and (11); sentences (c) and (d) are ungrammatical sentences.

(10)

a. Bambang m-(w)eneh-ake buku iku marang Sri Bambang give book that to Sri

b. M-(w)eneh-ake buku iku marang Sri, Bambang

c. *Marang Sri m-(w)enehake buku iku, Bambang

d. *M-(w)eneh-ake buku iku, Bambang marang Sri

'Bambang gave that book to Sri'

(11)

a. Sri m-(w)aca buku ing perpustakaan Sri read book in library

b. M-(w)aca buku ing perpustakaan, Sri

c. *Ing perpustakaan m-(w)aca buku, Sri

d. *M-(w)aca buku, Sri ing perpustakaan

'Sri read a book in the library'
Besides the two properties described above, Javanese subjects have other properties that distinguish them from non-subject relations. The other properties of Javanese subjects are described as follows.

3.1 Definiteness

Javanese subjects are taken as definite or have a definite interpretation, in that when a speaker produces a sentence, he/she assumes that the addressee is able to identify the referent of the subject of the sentence. In other words, the referent of the subject is identifiable by the addressee. Soemarno (1970) isolates this characteristic of the Javanese subject by saying that a Javanese subject must not be [-anaphoric, -specific]. In Javanese the definiteness of NPs, among other things, is marked by: (i) the demonstrative determiners such as the words *iku, kuwi, kae which can be roughly translated as 'that', *iki 'this'; (ii) the definite suffix -(n)e; (iii) a possessor; and (iv) a quantifier. For instance, the sentences in (12) are grammatical but the sentences in (13) are ungrammatical since their subjects are indefinite NPs.

(12)

a. Bocah kuwi turu  
   child  that  sleep  
   That child slept

b. Asu-ne ng-uyak kucing  
   dog-Def  chase  cat  
   The dog chased a cat

c. Kucing-mu m-(p)angan tikus  
   cat-your  eat  mouse  
   Your cat ate a mouse

(13)

a. *Bocah turu  
   child  sleep  
   (A child slept)
b.  *Asu ng-uyak kucing
dog  chase  cat
(A dog chased a cat)

c.  *Kucing m-(p)angan tikus
cat    eat    mouse
(A cat ate a mouse)

If the existential phrase *ana 'exist' is put in front of the ungrammatical sentences (13), the sentences will become grammatical sentences as can be seen in (14).

(14)

a.  Ana bocah turu
exist child  sleep
  A child slept (There was a child sleeping)

b.  Ana asu ng-uyak kucing
exist dog  chase  cat
  A dog chased a cat (There was a dog chasing a cat)

c.  Ana kucing m-(p)angan tikus
exist cat    eat    mouse
  A cat ate a mouse (There was a cat eating a mouse)

To the sentences (14) we might ask: how is the c-structure of these sentences; what is the category of *ana? In Javanese the word *ana can be identified as a verb. This identification is based on the evidence that *ana usually appears in the position where a verb appears in the sentence structure (except *ana in the sentences such as those in (14) above). Consider the sentence (15).

(15) Aku lagi ana masalah
    I   Prog exist  problem
    I am having a problem

In (15) *ana appears in the position where a verb usually appears in the sentence structure, that is, in the position after the subject of the sentence. The word *lagi (indicates a progressive aspect) that comes before *ana in (15) also provides support for identifying *ana as a verb. The word *lagi can appear only in the position before a

*] It seems that the word *lagi indicates a progressive aspect, but a further investigation should be carried out concerning the aspect system in Javanese
verb or an adjective. Another piece of evidence that supports identifying *ana* as a verb is that when *ana* is negated, the word used to negate it is the word *ora*, the word that usually negates verbs. Nouns are negated with the word *dudu*. Consider the following sentences.

(16)

a. Ora ana bocah turun kamar-ku
   not exist child sleep in room-my
   There was no child sleeping in my room

b. *Dudu ana bocah turun kamar-ku

c. Bocah cilik iku ora n-(t)angis
   child small that not cry
   That small child is not crying

d. *Bocah cilik iku dudu n-(t)angis

e. Bocah cilik iku dudu adhi-ku
   child small that not young brother-my
   That small child is not my young brother

f. *Bocah cilik iku ora adhi-ku

Thus, it is clear that *ana* is a verb. Since *ana* is a verb, the sentences such as those in (14), therefore, have two verbs and we might ask which verb is the predicate of the sentence. In this case it seems that the verb *ana* is the surface predicate of the sentence.

For the c-structure of Javanese existential sentences such as those in (14), two possibilities can be proposed. The c-structure of sentence (14b), for instance, can be drawn as in (17a) or (17b); but so far I have found no good reason for choosing between the two structures.
It is possible for a Javanese subject to have no overt marker for the definiteness. If a subject has no overt marker for the definiteness, the subject has a generic interpretation. The subject of the sentence (18) below, for example, has a generic interpretation.

(18) Kucing seneng m-(p)angan tikus
cat like eat mouse
Cats like to eat mice

A generic subject, however, can only appear with certain verbs such as the verb seneng in (18). If the verb seneng in (18) is omitted, the sentence becomes an ungrammatical sentence as can be seen in (13c) above. What type of verbs can take generic subjects remains to be investigated.

To say a general statement such as Cats eat fish, Javanese use another construction in which the verb for 'eat' is nominalized, so we have (19).
(19) Kucing pakanan-e iwak  
cat food-Def fish  
Cats eat fish (the food of cats is fish)

3.2 Relativizations, Clefts, and Questions with wh-movement

Another characteristic of Javanese subjects is that, among constituents of a sentence, only subjects can undergo the syntactic operations of relativization, cleft, and question with wh-movement; other constituents cannot undergo these syntactic operations. The three kinds of syntactic operations occur with a complementizer (COMP) sing. Consider the sentence (20).

(20) Bocah iku ng-gawa buku kanggo uwong kuwi  
child that carry book for person that  
That child carried a book for that person

Only the subject of the sentence (20), the NP bocah iku, can be relativized as can be seen in (21a); the syntactic operation of relativization cannot be applied for the other constituents. Attempting to relativize the NP buku and the PP kanggo uwong kuwi in (20) produces the ungrammatical sentences (21b) and (21c).

(21)  
a. bocah sing ng-gawa buku kanggo uwong kuwi  
child COMP carry book for person that  
the child who carried a book for that person

b. *buku sing bocah iku ng-gawa kanggo uwong kuwi  
book COMP child that carry for person that  
(the book that the child carried for that person)

c. *uwong sing bocah iku ng-gawa buku kanggo  
person COMP child that carry book for  
(the person for whom that child carried a book)

Javanese cleft constructions are formed by inserting the complementizer sing in the position after the clefted constituent. Only a subject of a sentence can be
clefted; so based on sentence (20) it can be formed with the cleft sentence (22a), but not (22b) and (22c). Although in (22b) and (22c) the clefted constituents have been moved in the initial position, these sentences are ungrammatical.

(22)

a. Bocah iku sing ng-gawa buku kanggo uwong kuwi  
   child that COMP carry book for person that  
   It is that child who carried a book for that person

b. *Buku iku sing bocah iku ng-gawa kanggo uwong kuwi  
   book that COMP child that carry for person that  
   (It is the book that that child carried for that person)

c. *Uwong kuwi sing bocah iku ng-gawa buku kanggo  
   person that COMP child that carry book for  
   (It is the person for whom that child carried a book)

As in the case of the syntactic operations of relativization and cleft, questions with wh-movement also can only be applied to a subject. Based on sentence (20) it can be formed with the information question (23a) but not (23b) and (23c); sentences (23b) and (23c) are ungrammatical.

(23)

a. Sapa sing ng-gawa buku kanggo uwong kuwi?  
   who COMP carry book for person that  
   Who carried a book for that person

b. *Apa sing bocah iku ng-gawa kanggo uwong kuwi?  
   what COMP child that carry for person that  
   (What did that child carry for that person?)

c. *Sapa sing bocah iku ng-gawa buku kanggo?  
   who COMP child that carry book for  
   (For whom did that child carry a book?)

It seems that the three syntactic operations described above agree with the noun phrase accessibility proposed by Keenan and Comrie (1977) which say that, among other things, if in a language there is only one constituent of a sentence that
can be relativized, the relativized constituent must be a subject. In the case of Javanese, besides relativizations, clefts and information questions with wh-movement are other syntactic operations that can only be applied to subjects.

3.3 Number Agreement

Javanese verbs and adjectival predicates may optionally be marked for plural when the subject of the sentence is plural. This is similar to the characteristic of nominative NPs or subjects in Tagalog as described by Kroeger (1991). In Javanese the plural number of verbs is indicated by the word padha which comes in front of the verb, and for adjectival predicates, the plural is shown by reduplication. Consider the sentences in (24).

(24)

a. Bocah-bocah lagi padha n-(t)onton televisi
   child -PL Prog PL watch television
   The children are watching a television

b. Para demonstran padha di-tembak-i dening polisi
   PL demonstrator PL shoot by police
   The demonstrators were shot by the police

c. Prawan Australia ayu-ayu
   girl Australia pretty-PL
   Australian girls are pretty

The subjects of the three sentences in (24) are plural NPs. The reduplication of the NP *bocah-bocah* in (24a) and the word *para* which comes in front of the NP *demonstran* in (24b) indicate that they are plural NPs. In (24c) although there is no overt marker for the plurality of the subject *prawan Australia*, this should be interpreted as a plural NP since the predicate of the sentence is plural. If singular NPs replace the subject of the sentences in (24), the sentences become ungrammatical as can be seen in (25).
(25)

a. *Bocah iku lagi padha n-(t)onton televisi
   child that Prog PL watch television
   (That child is watching a television)

b. *Bambang padha di-tembak-i dening polisi
   Bambang PL shoot by polisi
   (Bambang is shot by the police)

c. *Sri ayu-ayu
   Sri pretty-PL
   (Sri is pretty)

The ungrammaticalness of (25) proves that Javanese subjects agree with the verbs/adjectival predicates in terms of number. Note that this is an agreement between subjects and verbs/adjectival predicates, not between agents and verbs/adjectival predicates since the subject of (24b), the NP para demonstran, is not an agent.

3.4 Reflexivization

Javanese subjects control the referent of reflexive pronouns. This means that if there is a reflexive pronoun in a clause, the reflexive pronoun is coreferential with the subject of the clause, not with the other constituents. The forms of reflexive pronouns in Javanese are awakku dhewe for the first person singular, awake dhewe for the first person plural, awakmu dhewe or dhewekmu dhewe for the second person both plural and singular, and dheweke dhewe for the third person both singular and plural. Consider the following sentences.

(26)

a. Bambang ny-(c)rita-ni Sri ngenani dheweke
   Bambang tell Sri about he/she
   Bambang told Sri about him/her
b. Bambang ny-(c)rita-ni Sri ngenani dheweke dhewe
   Bambang tell Sri about he self
   Bambang told Sri about himself

c. *Bambang ny-(c)rita-ni Sri ngenani awakku dhewe
   Bambang tell Sri about I self
   (Bambang told Sri about me)

In (26a) the pronoun dheweke refers to someone, it cannot refer to Bambang or Sri; a pronoun cannot have an antecedent in the same clause. The reflexive pronoun dheweke dhewe in (26b), however, must refer to the subject of the sentence, the NP Bambang; it cannot refer to the NP Sri or to someone else; a reflexive pronoun must have a subject as the antecedent. Meanwhile (26c) is ungrammatical since the reflexive pronoun does not agree with the subject of the sentence. The reflexive pronoun awakku dhewe is for a first person singular whereas the subject of the sentence (26c) is a third person singular.

Since Javanese reflexive pronouns must have subjects as antecedents, Javanese use another construction to reflexivize a non-subject relation. For example, if the NP Sri in (26b) is reflexivized, this NP takes the form awake Sri dhewe, so the sentence (26b) becomes (27).

(27) Bambang ny-(c)rita-ni Sri ngenani awake Sri dhewe
   Bambang tell Sri about she Sri self
   Bambang told Sri about Sri

Keenan (1976a) proposes that subjects have universal properties, one of which is autonomous reference. This means that the referent of a subject cannot be made to depend on the referent of the other NPs which follow it. This property is also true for Javanese subjects. The sentence (26b), for instance, cannot be changed to (28).
(28) *Dhiveke dhewe ny-(c)rita-ni Sri ngenani Bambang
   He self tell Sri about Bambang
   (Bambang told Sri about himself)

   It should be noted, however, that the subject which controls the referent of reflexive pronoun is the subject of the same clause. A subject cannot control the reflexive pronoun across clauses. Thus, in (29) it is the NP Sri, the subject of the embedded clause, which controls the reflexive pronoun dheweke dhewe. The reflexive pronoun dheweke dhewe cannot refer to Bambang, the subject of the matrix clause.

(29) Bambang ng-(k)ira menawa Sri ny-(s)alah-ake dheweke dhewe
   Bambang think COMP Sri blame self
   Bambang thinks that Sri blames herself

   It seems that Javanese reflexive pronouns need to be further investigated. Here I just point that subjects control the referent of reflexive pronouns in the same clause.

3.5 Possessor Ascension

   In many Austronesian languages such as Cebuano, Tagalog, Bahasa Indonesia, and Javanese there is a phenomenon called "possessor ascension" which may be regarded as a topicalization of a possessor phrase. Davies (1993) uses the possessor ascension as evidence to support the role and relevance of subjects and topics in the Javanese grammar. Here I do not discuss the Javanese possessor ascension in terms of subjects and topics, but my main point is that the Javanese possessor ascension can only be applied to subjects. This means that a topicalized possessor can only be interpreted as being a possessor relation to the subject of the sentence. This is similar to the Tagalog possessor ascension as discussed by Kroeger (1991). Consider the Javanese possessor ascension in the following sentences.
(30)
a. Asu-ne bocah iku ng-uyak kucing
dog-Def child that chase cat
That child's dog chased a cat

b. Bocah iku, asu-ne ng-uyak kucing
child that dog-Def chase cat
That child, his dog chased a cat

The subject of the sentence (30a), the NP asune bocah iku, is a possessive phrase with asune as the possessee and bocah iku as the possessor. In (30b) the possessor bocah iku is topicalized so it comes at the beginning of the sentence and is set off from the rest of the sentence by an intonational break which is indicated by comma punctuation. In (30b) the topicalized NP bocah iku is interpreted as being the possessor of the preverbal NP asune, the subject of the sentence; it cannot be interpreted as being the possessor of the postverbal NP kucing. A possessor can be topicalized only if the possessive NP is the subject of the sentence. The possessor of a possessive NP which is not a subject cannot be topicalized; consider the sentences in (31).

(31)
a. Bambang m-(p)ati-ni asu-ne bocah iku
Bambang kill dog-Def child that
Bambang killed that child's dog

b. *Bocah iku, Bambang m-(p)ati-ni asu-ne
child that Bambang kill dog-Def
(That child, Bambang killed his dog)

Attempting to topicalize the possessor of the possessive NP asune bocah iku in (31a) produces the ungrammatical sentence (31b) since the possessive NP asune bocah iku is not the subject of the sentence.
3.6 Raising

Javanese thought verbs such as *ndakwa* 'to accuse', *ngira* 'to think', *nduga* 'to expect', *nganggep* 'to consider', *nyangka* 'to suppose' etc. may take a clausal complement. When these verbs take a clausal complement, the complementizer *menawa* or *yen* is used. Consider the sentences in (32).

(32)

a. Bambang ng-(k)ira menawa asu iku ng-uyak Sri
   Bambang think COMP dog that chase Sri
   Bambang thought that that dog chased Sri

b. Aku ng-anggep menawa dheweke n-delik-ake buku-ku
   I consider COMP he/she hide book-my
   I think he/she hid my book (I considered that he/she hid my book)

c. Kowe n-dakwa menawa aku ny-(s)eneng-i Sri
   you accuse COMP I love Sri
   You accused that I loved Sri

The subject of the embedded clauses in (32) can be raised to the matrix clauses. When this occurs, the complementizer *menawa* is deleted and the subject of the embedded clause then bears the object relation of the matrix clause as can be seen in (33) below.

(33)

a. Bambang ng-(k)ira asu iku ng-uyak Sri
   Bambang think dog that chase Sri
   Bambang thought that dog to chase Sri

b. Aku ng-anggep dheweke n-delik-ake buku-ku
   I consider he/she hide book-my
   I think he/she was the one who hid my book (I considered he/she hid my book)

c. Kowe n-dakwa aku ny-(s)eneng-i Sri
   you accuse I love Sri
   You accused me of loving Sri
The subjects of the embedded clauses in (32) have been raised into the objects of the matrix clauses in (33). As a proof that the NPs asu iku in (32a), dheweke in (32b), aku in (32c) bear the object relation of the matrix clauses, these NPs can be promoted to subject via the syntactic process of passivization (in Javanese only objects can be promoted to subjects; the properties of objects and the syntactic process of passivization will be discussed later). The passive counterparts of the sentences (32) can be seen in (34).

(34)

a. Asu iku di-kira Bambang ng-uyak Sri
   dog that think Bambang chase Sri
   That dog was thought by Bambang to have chased Sri

b. Dheweke tak-anggep n-dhelik-ake buku-ku
   he/she I - consider hide book-my
   I thought he/she was the one who hid my book
   (He/she was considered by me of hiding my book)

c. Aku kok-dakwa ny-(s)eneng-i Sri
   I you-accuse love Sri
   I was accused by you of loving Sri

A subject of an embedded clause cannot directly be promoted to the subject of the matrix clause via the syntactic process of passivization. Attempting to promote the subjects of the embedded clauses in (32) directly to the subject of the matrix clause will produce the ungrammatical (35).

(35)

a. *Asu iku di-kira Bambang menawa ng-uyak Sri
   dog that think Bambang COMP chase Sri
   (That dog was thought by Bambang to have chased Sri)

b. *Dheweke tak-anggep menawa n-dhelik-ake buku-ku
   he/she I - consider COMP hide book-my
   (He/she was considered by me to have hidden my book)

c. *Aku kok-dakwa menawa ny-(s)eneng-i Sri
   I you-accuse COMP love Sri
   (I was accused by you of loving Sri)
The crucial fact that I want to emphasize here is that only the subject of the embedded clause can be raised into the object of the matrix clause; non-subject relations of the embedded clause cannot be raised into the object of the matrix clause. Thus, attempting to raise the non-subject relations of the embedded clauses in (32) to the object of the matrix clause, for example, produces the ungrammatical sentences in (36).

(36)

a. *Bambang ng-(k)ira Sri asu iku ng-uyak
   Bambang think Sri dog that chase
   (Bambang thought that dog chased Sri)

b. *Aku ng-anggep buku-ku dheweke n-dhelik-ake
   I consider book-my he/she hide
   (I considered he/she hid my book)

c. *Kowe n-dakwa Sri aku ny-(s)eneng-i
   you accuse Sri I love
   (You accused me of loving Sri)

3.7 Coreferential Deletion

Andrews (1985) says that the commonest property of subjects that is useful for identifying them is their tendency to be optionally or obligatorily ellipsed in various kinds of grammatical constructions, especially multi-clause sentence structure. This is also true for Javanese subjects. Below various kinds of missing subjects in Javanese are described. First, consider the two sentences in (37) in which Bambang is a man and Sri is a woman.

(37)

a. Bambang ke-temu Sri nalika lagi tuku buku
   Bambang meet Sri when Prog buy book
   Bambang met Sri when he/she was buying a book
b. Nalika lagi tuku buku Bambang ke-temu Sri
when Prog buy book Bambang meet Sri
When he was buying a book Bambang met Sri

The two sentences above are complex sentences which consist of two clauses: the matrix clause *Bambang ketemu Sri* and the subordinate clause *nalika lagi tuku buku*. In (37a) the subordinate clause comes after the matrix clause whereas in (37b) the subordinate clause comes before the matrix clause. In both (37a) and (37b) the subject of the subordinate clause is omitted. There is a different interpretation for the missing subject of the subordinate clause in the two sentences.

In (37a) the missing subject of the subordinate clause can be interpreted as coreferential with the subject of the matrix clause, the NP *Bambang*, or as coreferential with the other NP of the matrix clause, the NP *Sri*. On the other hand, in (37b) the missing subject of the subordinate clause can only be interpreted as coreferential with the subject of the matrix clause. Thus in (37b) it is *Bambang* who was buying a book, not *Sri*. It seems that in constructions such as those in (37) the position in which the subordinate clause comes determines the controller of the subject ellipsis.

Since the missing subject of the subordinate clause in (37a) can be interpreted as coreferential with the subject of the matrix clause or with the other NP of the matrix clause, it seems that sentence (37a) has two c-structures. The c-structure of (37a) can be proposed as in (38a) or (38b) below.

(38)
a. 

```
  S
  /\   
 NP  VP
   /\   /
  V'  S
   /\ |
  V  NP  COMP Aspect VP
    |
  Bambang ketemu Sri nalika lagi tuku buku
```
In (38a) the subordinate clause is generated under VP, this is the c-structure in which the missing subject gets interpretation as coreferential with the non-subject relation of the matrix clause (the NP Sṛi). The c-structure in which the missing subject of the subordinate clause is interpreted as coreferential with the subject of the matrix clause is (38b) in which the subordinate clause is generated under S. Thus, it can be suggested, if the subordinate clause is generated under VP, the NP of the matrix clause under the VP controls the referent of missing subject; and if the subordinate clause is generated under S, the subject of the matrix clause controls the referent of the missing subject. Since in (37b) the missing subject of the subordinate clause can only be interpreted as coreferential with the subject of the matrix clause, the subordinate clause should be generated under S, so the sentence (37b) would get a structure like (39).

(39)

Consider also the controller of the missing subject when the subject of the matrix clause is postponed such as in (40) below.
(40)
a. Ke-temu Sri, Bambang nalika lagi tuku buku
   meet Sri Bambang when Prog buy book
   Bambang met Sri when he was buying a book

b. Ke-temu Sri nalika lagi tuku buku, Bambang
   meet Sri when Prog buy book Bambang
   Bambang met Sri when she was buying a book

c. Nalika lagi tuku buku ke-temu Sri, Bambang
   when Prog buy book meet Sri Bambang
   Bambang met Sri when he was buying a book

In (40a) the subject of the matrix clause is postposed and comes before the
subordinate clause. In this case the missing subject of the subordinate clause is
interpreted as coreferential with the subject of the matrix clause; thus it is Bambang
who was buying a book in (40a). In (40b) the subject of the matrix clause is
postposed and comes at the end of the sentence. In this case the missing subject of
the subordinate clause is interpreted as coreferential with the non-subject NP of the
matrix clause; it is Sri who was buying a book in (40b). In (40c) the subordinate
clause comes before the matrix clause and the subject of the matrix clause is
postposed so it comes at the end of the sentence; the missing subject of the matrix
clause is interpreted as coreferential with the subject of the matrix clause. Thus,
there are various kinds for the interpretation of missing subject depending on the
linear order of the constituents in the sentence structure. My main point here is that
the subject tends to be ellipsed in multi-clause sentence structure.

Other kinds of missing subject constructions in Javanese are illustrated in the
following sentences.

(41)
a. Bambang ny-(c)oba ng-angkat watu iku
   Bambang try lift stone that
   Bambang tried to lift that stone
b. Pak Marta ng-rencah m-bangun omah-e
   Mr Marta plan build house-Def
   Mr Marta planned to build his house

The embedded clause *ngangkat watu iku* in (41a) and the embedded clause *mbangun omah-e* in (41b) have no subjects; in this case the subjects of the two embedded clauses are interpreted as coreferential with the subject of the matrix clause. Missing subjects in constructions such as those in (41) are verb-governed in which the controller of the missing subject is determined by the type of the verb in the matrix clause. Besides the verbs *nyoba, ngrencana,* other verbs that require the subject of the embedded clause which follow them to be obligatorily ellipsed are *nigrancang* 'to plan', *ngupaya* 'to make serious efforts to do something', *kepengan* 'want to', *janji* 'to promise', etc.

The verbs such as *meksa* 'to force', *ngajak* 'to invite', *ngijinake* 'to permit', also require the subject of the embedded clause which comes after them to be obligatorily ellipsed. Unlike the verbs such as *nyoba, ngrencana, nigrancang* in which the missing subject of the embedded clause is coreferential with the subject of the matrix clause, however, the missing subject of the embedded clause which follows the verbs such as *meksa, ngajak, ngijinake* is coreferential with the object of the matrix clause. Consider the following sentences.

(42)

d. Bambang m-(p)eksa bocah iku lungguh kanthi bener
   Bambang force child that sit with right
   Bambang forced that child to sit properly

b. Sri ng-ajak aku lunga menyang pantai
   Sri invite I go to beach
   Sri invited me to go to the beach

To recapitulate the discussion in this section, here I give a list of the Javanese subject properties. Javanese subjects have these properties: (i) they are expressed in bare NPs; (ii) their normal position in the sentence structure is in the initial position
but they can be inverted with respect to the verb phrase; (iii) they have a definite interpretation (or if they are not definite, they are generic); (iv) they can undergo the syntactic operations of relativizations, clefts, and questions with wh-movement; (v) Javanese subjects agree with the predicate in term of number; (vi) they control the referent of a reflexive pronoun; (vii) if they are a possessive NP the possessor can be topicalized; (viii) they can be raised; and (ix) they tend to be ellipsed in multi-clause sentence structure.

4. Objects and Second Objects

The properties of Javanese subjects have been described in section 3. In this section I will describe the properties of other grammatical relation terms: objects and second objects. First, I will describe the properties of Javanese objects. Here I use the term "object" in the same meaning with the term "direct object" in the linguistic literature.

Javanese objects have three properties: (i) they are expressed in bare NPs (prepositionless), (ii) they come immediately after the verb in the sentence structure, and (iii) they can be promoted to subjects via the syntactic process of passivization. Unlike subjects, objects may be definite or indefinite. The postverbal NPs bukuku 'my book', kembang 'a flower', kucing 'a cat' in the following sentences are examples of Javanese objects.

(43)

a. Bambang arep n-jilih buku-ku
Bambang will borrow book-my
Bambang will borrow my book

b. Sri m-(p)ethik kembang ing taman
Sri pick flower in park
Sri picked a flower in the park
c. Asu-ne ng-uyak kucing  
   dog-Def chase cat  
   The dog chased a cat

Objects must come immediately after the verb, they cannot be fronted or be inverted. Their position in the sentence structure is fixed. For example, the object of the sentence (43b), the NP *kembang*, cannot be put in the initial position or be separated from the verb; the two sentences in (44) are ungrammatical sentences. It has been shown in section 2 that verbs and their objects form a VP node.

(44)
   a. *Kembang Sri m-(p)ethik ing taman  
      flower Sri pick in park
   b. *Sri m-(p)ethik ing taman kembang

   (Sri picked a flower in the park)

The most distinctive property of Javanese objects is that they can be promoted to subjects via the syntactic process of passivization. Passive turns an object into a subject. Consider the active sentences in (45) and their passive counterparts in (46).

(45)
   a. Sri n-jiwit Bambang  
      Sri pinch Bambang  
      Sri pinched Bambang
   b. Aku ng-gawa buku-mu
      I carry book-your  
      I carried your book
   c. Kowe n-jupuk buku-ne Sri
      you take book-Def Sri  
      You took Sri's book

(46)
   a. Bambang di-jiwit (dening/karo) Sri
      Bambang pinch by Sri  
      Bambang was pinched by Sri
b. Buku-mu tak-gawa  
   book-your I-carry  
   Your book was carried by me

c. Buku-ne Sri kok-jupuk  
   book-Def Sri you-take  
   Sri's book was taken by you

The NPs *Bambang*, *bukumu*, and *bukune Sri* bear the object relation of the sentences (45a), (45b) and (45c) respectively. These NPs have been promoted to subjects in (46) via the syntactic process of passivization. That the NPs *Bambang*, *bukumu*, *bukune Sri* in (46) bear the subject relations (not objects), for example, they can be inverted (47), they can be clefted (48), or they can be questioned with wh-movement (49). In other words these NPs have all subject properties described in section 3.

(47)

a. Di-jiwit (dening/karo) Sri, Bambang  
   pinch by Sri Bambang  
   Bambang was pinched by Sri

b. Tak-gawa, buku-mu  
   I - carry book-your  
   Your book was carried by me

c. Kok-jupuk, buku-ne Sri  
   you-take book-Def Sri  
   Sri's book was taken by you

(48)

a. Bambang sing di-jiwit (dening/karo) Sri  
   Bambang COMP pinch by Sri  
   It is Bambang who was pinched by Sri

b. Buku-mu sing tak-gawa  
   book-your COMP I - carry  
   It is your book that was carried by me

c. Buku-ne Sri sing kok-jupuk  
   book-Def Sri COMP you-take  
   It is Sri's Book that was taken by you
In the passive constructions the verb does not take the prefix $N\text{-}$. This prefix is replaced by the prefix $di$- when the underlying subject is a third person (46a), the proclitic $tak$ when the underlying subject is a first person singular (46b), and the proclitic $kok$ when the underlying subject is a second person (46c). The passive construction will be described later in the discussion of relation-changing processes.

My main point here is that objects have a syntactic characteristic: they can be promoted to subjects via the syntactic process of passivization. This syntactic characteristic is important in identifying the object relation.

Next I will describe the properties of second object relations. I use the term "second object" to identify the grammatical relation of second postverbal NPs such as those in the following sentences.
In the sentences (50) there appear two postverbal NPs. They are the NPs *Sri* and *surat iki* in (50a); the NPs *bocah cilik iku* and *dolananku* in (50b); and the NPs *aku* and *buku iki* in (50c). For the first postverbal NPs, it is clear that they bear the object relation since they come immediately after the verb and they can undergo the syntactic process of passivization, as can be seen in (51).

\[(51)\]
\[\begin{align*}
\text{a. } & \text{Sri di-kirim-i surat iki dening Bambang} \\
& \text{Sri send letter this by Bambang} \\
& \text{Sri was sent this letter by Bambang} \\
\text{b. } & \text{Bocah cilik iku di-paring-i dolanan-ku dening ibu} \\
& \text{child small that give toy-my by mother} \\
& \text{That small child was given my toy by mother} \\
\text{c. } & \text{Aku di-gawa-ake buku iki dening dhoweke} \\
& \text{I carry book this by he/she} \\
& \text{He carried this book for me (passive!)}
\end{align*}\]

For the second postverbal NPs in (50), it is not reasonable to identify them as objects because they have no object properties: they do not come immediately after the verb, and they cannot be promoted to subject. Attempting to promote them to subjects via the syntactic process of passivization produces the ungrammatical sentences in (52).

\[(52)\]
\[\begin{align*}
\text{a. } & \text{*Surat iki di-kirim-i Sri dening Bambang} \\
& \text{letter this send Sri by Bambang} \\
& \text{(This letter was sent to Sri by Bambang)} \\
\text{b. } & \text{*Dolananku di-paring-i bocah cilik iku dening ibu} \\
& \text{toy - my give child small that by mother} \\
& \text{(My toy was given to that small child by mother)} \\
\text{c. } & \text{*Buku iki di-gawa-ake aku dening dhoweke} \\
& \text{book this carry I by he/she} \\
& \text{(This book was carried for me by him/her)}
\end{align*}\]
Therefore, another grammatical relation term is needed to be used to identify the second postverbal NPs such those the NPs surat iki, dolananku, buku iki in (50). Such NPs can be identified as "second objects". Thus, second object relations have properties: (i) they are expressed in bare NPs, (ii) they come mediately after the verb (they come after objects) in the sentence structure, and (iii) they cannot undergo the syntactic process of passivization.

Using the properties of objects and second objects described above, Javanese postverbal NPs can be identified as objects or second objects. They are objects if they come immediately after the verb and can undergo the syntactic process of passivization; and they are second objects if they come mediately after the verb and cannot undergo the syntactic process of passivization. However, there is another kind of postverbal NP in Javanese that cannot be identified as objects or second objects. Consider the postverbal NPs in the following sentences.

(53)

a. Aku krungu lagu iku
   I hear song that
   I heard that song

b. Dheweke lali kowe
   he/she forget you
   He/she forgot you

c. Bambang tresna Sri
   Bambang love Sri
   Bambang loved Sri

The postverbal NPs lagu iku in (53a), kowe in (53b), and Sri in (53c) are similar to objects in the surface form in that they come immediately after the verb. Identifying them as objects, however, is incorrect since they cannot be promoted to subject via the syntactic process of passivization. Attempting to passivize the sentences in (53) produces the ungrammatical sentences (54).
(54)

a. *Lagu iku tak-krungi
   song that I-hear
   (That song was heard by me)

b. *Kowe di-lali dening dheweke
   you forget by he/she
   (You were forgotten by him/her)

c. *Sri di-tresa dening Bambang
   Sri love by Bambang
   (Sri was loved by Bambang)

Since the postverbal NPs in (53) cannot be promoted to subjects, they are similar to
second objects. Identifying them as second objects, however, is also incorrect
because they differ from second objects. The presence of second objects in a
sentence implies the presence of objects, but the presence of postverbal NPs such as
those in (53) does not imply the presence of objects.

The postverbal NPs such as those in (53) have certain properties that do not
belong to objects and second objects. They can be separated from the verb by
inserting the preposition marang as can be seen in (55).

(55)

a. Aku krungi marang lagu iku
   I hear to song that
   I heard that song

b. Dheweke lali marang kowe
   he/she forget to you
   He/she forgot you

c. Bambang tresna marang Sri
   Bambang love to Sri
   Bambang loved Sri

Besides that, the postverbal NPs in (53) can be preposed to the beginning of the
sentence. When they are preposed, they are set off from the rest of the sentence by
an intonational break. Davies (1993) identifies this syntactic operation as a
topicalization. Consider the sentences in (56) in which the postverbal NPs in (53) have been preposed at the beginning of the sentence.

(56)
a. Lagu iku, aku krungu
   song that I hear
   I heard that song

b. Kowe, dhoweke lali
   you he/she forget
   He/she forgot you

c. Sri, Bambang tresna
   Sri Bambang love
   Bambang loved Sri

Objects and second objects cannot undergo this syntactic operation. Attempting to prepose the object and second object of the sentence (57a) at the beginning of the sentence, for instance, produces the ungrammatical sentences (57b) and (57c) respectively.

(57)
a. Ibu m-(p)undhut-ake Sri jam tangan anyar
   mother buy Sri watch hand new
   Mother bought a new wristwatch for Sri

b. *Sri, ibu m-(p)undhut-ake jam tangan anyar

c. *Jam tangan anyar, ibu m-(p)undhut-ake Sri

It is important to note that the syntactic operation of topicalization differs from passivization; the sentences (56) are not passive sentences. The preposed NPs in these sentences are not subjects; the subject of the sentences (56) remain the NPs *aku for (56a), dhoweke for (56b), and Bambang for (56c). That the preposed NPs in (56) are not subjects, for instance, they cannot be clefted. Attempting to cleft the preposed NPs in (56) produces the ungrammatical sentences (58).
(58)

a. *Lagu iku sing aku krungu
song that COMP I hear
(It is that song that I heard)

b. *Kowe sing dheweke lali
you COMP he/she forget
(It is you who he/she forgot)

c. *Sri sing Bambang tresna
Sri COMP Bambang love
(It is Sri who Bambang loved)

Looking at their properties, I tend to identify the postverbal NPs such as those in (53) as obliques (oblique relations are described in section 5). The evidence that supports identifying them as obliques are: (i) they may be expressed in PPs as can be seen in (55) above, (ii) they can be preposed at the beginning of the sentence as can be seen in (56) above, and (iii) they can be promoted to objects via the syntactic process of applicative as can be seen in (59) below (the syntactic process of applicative will be discussed in section 6.2).

(59)

a. Aku ng-(k)rungu-a ke lagu iku
I hear song that
I heard that song

b. Dheweke ng-lali-a ke kowe
He/she forget you
He/she forgot you

c. Bambang n-(t)resna-ni Sri
Bambang love Sri
Bambang loved Sri

The NPs _lagu iku, kowe, Sri_ in (59) do not bear oblique relations anymore, they have been promoted to object relations. Note that the morphology of the verbs in (59) differ from those in (53), in (59) the verbs have affixes. As a proof that the
postverbal NPs in (59) bear object relations, they can be promoted to subjects via the syntactic process of passivization as can be seen in (60).

(60)
a. Lagu iku tak-rungu-a ke
song that I-hear
That song was heard by me

b. Kowe di-lali-a ke dening dhe weke
you forget by he/she
You were forgotten by him/her

c. Sri di-tresna-ni dening Bambang
Sri love by Bambang
Sri was loved by Bambang

Therefore, it is clear that the postverbal NPs such as those in (53) are obliques not objects or second objects. The verbs in which the NP obliques appear, such those in (53), commonly have no prefix $N_{-}$, meanwhile the verbs in which objects appear commonly have the prefix $N_{-}$. In other words, if the prefix $N_{-}$ is regarded as a characteristic of transitive verb, we may say that bare NPs which appear after transitive verbs are objects, whereas bare NPs which appear after intransitive verbs are obliques. Compare the postverbal NPs in (53) and (59); the postverbal NPs in (53) are obliques but the postverbal NPs in (59) are objects. The verbs *krungu, lali,* and *tresna* in (53a), (53b) and (53c) respectively are intransitive verbs; meanwhile the verbs *ngrungokake* in (59a), *nglalekake* in (59b), and *nresnani* in (59c) are transitive verbs.

To summarize the discussion in this section, it can be said that there are three possibilities for postverbal NPs in Javanese in terms of grammatical relations. They may be objects, second objects, or obliques. They are objects if they come immediately after the verb in the sentence structure and they can undergo the syntactic process of passivization. They are second objects if they come mediatly after the verb in the sentence structure and they cannot undergo the syntactic
process of passivization. They are obliques if they come immediately after the verb in the sentence structure and they cannot undergo the syntactic process of passivization; but they can take a preposition, they can be preposed at the beginning of the sentence, and they can undergo the syntactic process of applicative.

5. Oblique Relations

Oblique relations have been mentioned briefly in section 4. The surface characteristic of obliques which distinguishes them from other grammatical relations is that they are expressed in PPs, except the kind of obliques that have been discussed in section 4 above. Other grammatical relations: subjects, objects, and second objects are expressed in NPs. Javanese obliques include what are generally called indirect objects, benefactives, locatives, and instrumentals. Indirect objects are classified as obliques because both in form and function they are more similar to the obliques than to other grammatical relations. Like other oblique relations, Javanese indirect objects are expressed in PPs and they can undergo the syntactic process of applicative. This classification is similar to the oblique relations in Bahasa Indonesia as described by Kana (1986).

The prepositions that characterize Javanese obliques are marang for indirect objects, kanggo for benefactives, nganggo for instrumentals, and ing for locatives. Other prepositions, however, may be used for obliques. For example, indirect objects and locatives may take the prepositions menyang, nyang, neng or nang; benefactives and instrumentals may take the preposition nggo especially in the spoken language. Examples of Javanese obliques are given in (61): the PP marang Sri 'to Sri' in the sentence (61a) is an example of indirect object, the PP kanggo bocah iku 'for that child' in the sentence (61b) is an example of benefactive, the PP nganggo tombake 'with the spear' in the sentence (61c) is an example of

*In traditional grammar indirect objects are generally defined as constituents that bear recipient semantic roles; Javanese indirect objects are generally expressed in PPs.*
instrumental, and the PP *ing kamarku* 'in my room' in the sentence (61d) is an example of locative.

(61)
a. Bambang m-(w)eneh-ake buku iku marang Sri
   Bambang give book that to Sri
   Bambang gave that book to Sri

b. Aku ng-gawa buku kanggo bocah iku
   I carry book for child that
   I carried a book for that child

c. Bambang n-(t)ujes babi iku nganggo tombak-e
   Bambang stab pig that with spear-Def
   Bambang stabbed that pig with the spear

d. Bocah cilik iku turu ing kamar-ku
   child small that sleep in room-my
   That small child slept in my room

There are different distributions among Javanese obliques. The distribution of obliques with *marang* such as *marang Sri* in (61a), for instance, differs from the distribution of obliques with *ing* such as *ing kamarku* in (61d). Obliques with *marang* appear only in sentences with certain verbs such as *menehake* 'to give', *masrahaake* 'to entrust', *ngajarake* 'to teach' etc. It seems that the distribution of obliques with *marang* is governed by potentially idiosyncratic specification of verbs. What type of verbs can take obliques with *marang*, however, remains to be investigated. Obliques with *ing*, on the other hand, appear in any sentences whenever they would be semantically appropriate.

In addition, as noted in section 2, obliques with *marang* also differ from obliques with *ing* in terms of their position in the sentence structure. All speakers accept placing obliques with *ing* in the position after the subject of the sentence, but for obliques with *marang* not all speakers accept placing it after the subject of the
sentence. Thus, the sentence (62a) is absolutely grammatical but (62b) is considered grammatical only by some speakers.

(62)

a. Bocah cilik iku ing kamar-ku turu
   child small that in room-my sleep
   That small child slept in my room

b. ?Bambang marang Sri m-(w)eneh-ake buku iku
   Bambang to Sri give book that
   Bambang gave that book to Sri

There are also deletable obliques and undeletable obliques in Javanese. The oblique *ing kamarku* in (61d) above, for instance, can be deleted and the sentence remains grammatical, but the oblique *marang Sri* in the sentence (63a) below cannot be deleted. Attempting to delete it produces the ungrammatical sentence (63b).

(63)

a. Bambang ny-(c)okot-ake asu-ne marang Sri
   Bambang bite dog-Def to Sri
   Bambang held out the dog to bite Sri

b. *Bambang ny-(c)okot-ake asu-ne

Since the oblique *marang Sri* in (63a) cannot be omitted, it must be the argument of the verb *nyokotake*. A further investigation is needed to determine what kind of verbs may take an oblique as the argument. Here I simply point that there is an oblique that can be the argument of a verb. I think there would be a semantic regularity for the verbs that may take an oblique as their argument.

On the basis of their distribution, it seems reasonable to classify Javanese obliques into two classes: complements and adjuncts. The distribution of complements is governed by the verb, meanwhile the distribution of adjuncts is free. Adjuncts can appear in any sentences whenever they would be semantically
appropriate. Thus, the oblique marang Sri in (63a) is an example of complement and the oblique ing kamarku in (61d) is an example of adjunct.

It should be noted, however, that the test of placing an oblique in the position after the subject of the sentence as in (62) cannot be used to identify whether an oblique is a complement or an adjunct. Benefactives that can be classified as adjuncts, since they can appear in any sentence whenever they would be semantically suitable, are not accepted by some speakers if they are put in the position after the subjects. Likewise, instrumentals also are not accepted by some speakers if they are put in the position after the subject. Some speakers accept the sentences (64) but other speakers consider them as ungrammatical sentences.

(64)

a. ?Aku kanggo bocah iku ng-gawa buku
   I for child that carry book
   I carried a book for that child

b. ?Bambang nganggo tombak-e n-(t)ujes babi iku
   Bambang with spear-Def stab pig that
   Bambang stabbed that pig with the spear

The classification of Javanese oblique into complements and adjuncts, however, needs to be further investigated. This is because, in some cases, the distinction between complements and adjunct are not always clear. Since my main concern here is the properties of Javanese obliques that distinguish them from other grammatical relations, the differences between complements and adjuncts are not discussed in more detail. I simply suggest that Javanese oblique seems to fall into two main classes: complements and adjuncts.

The normal position of obliques in sentence structure is in final position. This position, however, is not fixed. Obliques can be preposed to the beginning of the sentence, even as noted above, some obliques can be placed in the position after the subject of the sentence. When there are two obliques in a sentence, one is a
complement and the other is an adjunct, the complement most commonly occurs before the adjunct. For instance, sentence (65a) is more common than (65b).

(65)  
a. Bambang m-(w)eneh-ake buku iku marang Sri ing omah-mu  
   Bambang give book that to Sri in house-your  
   Bambang gave that book to Sri at your house  

b. ?Bambang m-(w)eneh-ake buku iku ing omah-mu marang Sri  

Besides their positions which are not fixed in the sentence structure, another syntactic characteristic of Javanese obliques is that they might be promoted to objects via the syntactic process of applicative. When obliques are promoted to objects, the preposition is deleted and the morphology of the verb changes. If the obliques in (61) are promoted to objects, for instance, the verb menehake in (61a) becomes menehi; the verb nggawa in (61b) becomes nggawakake; the verb nujes in (61c) becomes nujesake; and the verb turu in (61d) becomes nuroni as can be seen in (66a), (66b), (66c) and (66d) respectively.

(66)  
a. Bambang m-(w)eneh-i Sri buku iku  
   Bambang give Sri book that  
   Bambang gave Sri that book  

b. Aku ng-gawa-ake bocah iku buku  
   I carry child that book  
   I carried a book for that child  

c. Bambang n-(t)ujes-ake tombak-e marang babi iku  
   Bambang stab spear-Def to pig that  
   Bambang stabbed that pig with the spear  

d. Bocah cilik iku n-(t)uru-ni kamar-ku  
   child small that sleep room-my  
   That small child slept on my room
The obliques in (61) have been promoted to objects in (66) so they do not bear oblique relation anymore. As a proof that *Sri, bocah iku, tombake, and kamarku in (66) bear the object relation, they can be promoted to subject via the syntactic process of passivization. The passive counterparts of the sentences in (66) can be seen in (67).

(67)

a. Sri di-weneh-i buku iku dening Bambang
   Sri give book that by Bambang
   Sri was given that book by Bambang

b. Bocah iku tak-gawa-ake buku
   child that I-carry book
   A book was carried by me for that child

c. Tombak-e di-tujes-ake marang babi iku dening Bambang
   spear-Def stab to pig that by Bambang
   The spear was stabbed to that pig by Bambang

d. Kamar-ku di-turu-ni dening bocah cilik iku
   room-my sleep by child small that
   My room was slept in by that small child

Obliques cannot be promoted directly to subjects. Attempting to promote the obliques in (61) directly to subjects, for example, produces the ungrammatical sentences (68).

(68)

a. *Sri di-weneh-ake buku iku dening Bambang marang
   (Sri was given that book by Bambang)

d. *Bocah iku tak-gawa buku kanggo
   child that I-carry book for
   (I carried a book for that child)

c. *Tombak-e di-tujes marang babi iku dening Bambang nganggo
   spear-Def stab to pig that by Bambang for
   (The spear was stabbed in that pig by Bambang)
d. *Kamar-ku di-turu dening bocah cilik iku ing room-my sleep by child small that in (My room was slept in by that small child)

It is important to note, however, that not all obliques can be promoted to objects. It seems that whether or not an oblique can be promoted to object depends on the idiosyncrasy of the verb; this problem remains to be investigated. The syntactic process of applicative will be discussed later in the discussion of relation-changing processes. My point here is that obliques may be promoted to object via the syntactic process of applicative.

To recapitulate the discussion in this section, it can be said that obliques have these properties: (i) they are expressed in PPs, (ii) their normal position in sentence structure is in the final position but they can be preposed at the beginning of the sentence, and (iii) some of them can be promoted to object via the syntactic process of applicative. It seems that Javanese obliques fall into two classes: complements and adjuncts.

6. Relation-Changing Processes

In this section I will describe three kinds of syntactic processes in Javanese: passives, applicatives, and causatives. These syntactic processes are described in terms of relation-changing. A passive is a relation-changing from object relations to subject relations; an applicative is a relation-changing from oblique relations to object relations; and a causative is a relation-changing from subject relations to object relations. The three kinds of relation-changing processes are described in subsections 6.1, 6.2, and 6.3 respectively. In subsection 6.4 I discuss briefly the suffixes -ake and -(n)i, the two suffixes that play an important role in the relation-changing processes.
6.1 Passive

The passive in Javanese (and in other western Austronesian languages such as Bahasa Indonesia) has provoked controversy. The question of whether or not there is justification in Javanese to postulate the existence of active versus passive sentences has been debated for along time with no final conclusion reached (Dardjowidjojo, 1983:85). I think to decide whether or not passive sentences exist in a language, it is necessary to have a clear definition of what a passive is. In this paper I define a passive as a relation-changing from an object to a subject. Following the definition of passives in relational grammar, a passive is a 2-1 advancement from a transitive stratum. On the basis of this definition I conclude that Javanese does have passive constructions.

I have mentioned briefly the Javanese passive constructions in section 4 when I discussed object relations. Examples of active sentences and their passive counterparts were given in (45) and (46) respectively. A passive turns an object to a subject. Below I give other examples of Javanese active sentences and their passive counterparts in (69) and (70) respectively.

(69)

a. Wong lanang kae ng-gebuk asu iku
   person male that hit dog that
   That man hit that dog

b. Dheweke n-(t)ulung-i aku
   he/she help I
   He/she helped me

c. Aku uwis m-(w)aca surat-mu
   I already read letter-your
   I have already read your letter

d. Kita n-(t)unggu keputusan-mu
   we wait for decision-your
   We waited for your decision
e. Kowe durung n-jawab pitakon-ku
   you not yet answer question-my
   You have not answered my question yet

(70)

a. Asu iku di-gebuk (dening/karo) wong lanang kae
   dog that hit by person male that
   That dog was hit by that man

b. Aku di-tulung-i (dening/karo) dheweke
   I help by he/she
   I was helped by him/her

c. Surat-mu uwis tak-waca
   letter-your already I-read
   Your letter has been already read by me

d. Keputusan-mu kita-tunggu
   decision-your we-wait for
   Your decision was waited for by us

e. Pitakon-ku durung kok-jawab
   question-my not yet you-answer
   My question has not been answered yet by you

The objects of the active sentences in (69) have been turned into subjects in (70). The surface subject of the passive sentences in (70) has all properties of subjects discussed in section 3. For example, they can be inverted, they can be clefted, they can be relativized, etc. Here I do not test the subjecthood of the preverbal NPs in (70) since I have discussed it in section 4.

The passive sentences in (70) can be classified in two groups. The first group includes the sentences (a) and (b) in which the underlying subject comes after the verb; and the second group includes the sentences (c), (d) and (e) in which the underlying subject comes before the verb in clitic form. Following Chung (1976a) for the Bahasa Indonesia analogue, I will refer to the first group as the canonical passive and the second group as object preposing (at the end of this section, however, I argue that this distinction is unnecessary). The distribution of the two groups is governed by the person of the underlying subject. The canonical passive is
supposed to be used when the underlying subject is a third person; while the object preposing is supposed to be used when the underlying subject is a first person or second person pronoun.

In the canonical passive the verb appears with the prefix *di*- which replaces the prefix *N*- of the active verb. The underlying subject comes after the verb in a prepositional phrase with *dening* or *karo* 'by'. The presence of this preposition, however, is optional. In other words, the underlying subject can be expressed either in a PP or in a bare NP. When the underlying subject is expressed in a PP, it can be separated from the verb; but when the underlying subject is expressed in a bare NP, it must come immediately after the verb. For instance, the passive sentence (71a) is grammatical but (71b) is ill-formed since the underlying subject which is expressed in a bare NP is separated from the verb.

(71)

a. Asu iku *di-*gebuk nganggo tongkat *dening* uwong lanang kae
dog that hit with stick by person male that
That dog was hit with a stick by that man

b. *Asu iku *di-*gebuk nganggo tongkat uwong lanang kae
dog that hit with stick person male that
(That dog was hit with a stick by that man)

In the object preposing constructions the verb appears prefixless and the underlying subject does not come after the verb, but it criticizes to the verb. The underlying subject appears as the clitic *tak* when it is a first person singular; the clitic *kita* when it is a first person plural; and the clitic *kok* when it is a second person both singular and plural. The clitic cannot be separated from the verb; attempting to separate the clitic from the verb will produce ungrammatical sentences. The passive sentences (70c), (70d) and (70e), for example, cannot be changed in (72a), (72b), and (72c) respectively.
(72)
a. *Surat-mu tak uwis waca
   letter-your I already read
   (Your letter has already been read by me)

b. *Keputusan-mu kita lagi tunggu
   decision-your we Prog wait for
   (Your decision is being waited for us)

c. *Pitakon-ku kok durung jawab
   question-my you not yet answer
   (My question has not been answered yet by you)

Unlike contemporary Bahasa Indonesia in which the canonical passive is not restricted to third persons but is allowed for all types of underlying subjects, in Javanese the canonical passive is restricted to third persons. First and second person pronouns are incompatible with the canonical passive. The sentences in (73), for instance, are ungrammatical sentences.

(73)
a. *Surat-mu uwis di-waca dening aku
   letter-your already read by I
   (Your letter has already been read by me)

b. *Keputusan-mu di-tunggu dening kita
   decision-your wait for by we
   (Your decision was waited by us)

c. *Pitakon-ku durung di-jawab dening kowe
   question-my not yet answer by you
   (My question has not been answered yet by you)

Likewise, a third person is incompatible with the object preposing construction. The sentences in (74), for instance, are ungrammatical.

(74)
a. *Asu iku wong lanang kae gebuk
   dog that person male that hit
   (That dog was hit by that man)
b. *Aku dheureke tulung-i
   I he/she help
   (I was helped by him/her)

Does Javanese have two separate passive rules: the canonical passive and the object preposing? Chung claims that in Bahasa Indonesia the canonical passive and the object preposing are two separate passive rules. Kana (1986), however, does not agree with Chung. Kana says that there is only a single rule of passive in Bahasa Indonesia and it seems that Kana’s analysis can be applied adequately to Javanese passives.

I tend to conclude that the canonical passive and the object preposing in Javanese are a single rule of passive not two separate passive rules. My reasons are as follows. First, the preposed object in object preposing constructions is a subject as a subject in the canonical passive constructions, so the term of "object preposing" itself seems misleading. The preposed object in object preposing constructions has all properties of subjects, for example, it can be relativized, clefted, or questioned, as can be seen in (75).

(75)
a. buku sing kok-waca
   book COMP you-read
   the book that you read

b. Buku iku sing kok-waca
   book that COMP you-read
   It is that book that you read

c. Apa sing kok-waca
   what COMP you-read
   What did you read

The main difference between the two kinds of passive lies on the position of the underlying subject. In the canonical passive constructions the underlying subject comes after the verb; meanwhile in the object preposing constructions the
underlying subject comes before the verb. This difference could lead one to conclude that the object preposing and the canonical passive are two separate passive rules. If the prefix *di*- in the canonical passive is regarded as the realization of the underlying subject for third persons (as the clitics *tak, kita, kok* in the object preposing constructions), however, in both the canonical passive and the object preposing constructions the underlying subject comes before the verb. The assumption that the prefix *di*- in the canonical passive is a realization of the underlying subject for a third person is supported by the incompatibility of first and second persons with the canonical passive constructions, as proved by the ungrammaticalness of (73), and the incompatibility of third persons with the object preposing constructions, as proved by the ungrammaticalness of (74) above. Thus, the clitics *tak, kita, kok* and the prefix *di*- are mutually exclusive member of a single paradigm. In Javanese passive constructions, therefore, verbs are obligatory preceded by the underlying subject (the agent). The realization of the underlying subject is the prefix *di*- when it is a third person; the clitic *kok* when it is a second person; the clitic *tak* when it is a first person singular; and the clitic *kita* when it is a first person plural. In the case of the passive *di-*, the identity of the underlying subject may be further specified by an NP or a PP following the verb. In the case of the passive *tak, kita, kok* the identity of the underlying subject does not need to be further specified because the referent of the underlying subject has been clear.

Therefore, if the assumption that the prefix *di*- in the canonical passive is a realization of the underlying subject for a third person is accepted, there is only a single rule of passive in Javanese. What is called the canonical passive and the object preposing construction are in fact variants of a single construction. The distinction between the canonical passive and the object preposing is unnecessary. The Javanese passive formations then can be formulated as follows. Turn the underlying object into a subject; delete the prefix *N*- on the active verb; put the underlying subject in front of the verb in the forms: *di*- if it is third persons both
plural and singular, *kok* - if it is second persons both plural and singular, *tak* - if it is a first person singular, and *kita* - if it is a first person plural. When the underlying subject is a third person, the identity of the underlying subject is further specified by an NP or a PP following the verb. The specification of the underlying subject (agent) in an NP or a PP, however, is optional since, although in Javanese it is rarely the agent NP/PP to be omitted, if the agent NP/PP is omitted, the sentence remains grammatical.

### 6.2 Applicative

The syntactic process of applicative has been mentioned briefly in section 4 and 5 in the discussion of oblique relations. This syntactic process promotes an oblique to an object. Using the relational grammar terminology, an applicative is a 3-2 advancement; or in transformational tradition it is called dative movement. As stated in section 5 Javanese oblique relations include indirect objects, benefactives, instrumentals, and locatives. In this section I will observe how these grammatical relations are promoted to objects via the syntactic process of applicative. First I will observe the promotion of indirect objects to objects.

The Javanese indirect objects are expressed in PPs with *marang.* When an indirect object is promoted to an object, the P *marang* is deleted and the verb takes a different suffix. Let us see the following sentences.

(76)

a. Bambang ng-ajar basa Inggris marang Sri
   Bambang teach language English to Sri
   Bambang taught English to Sri

b. Dheweke ng-(k)irim buku iku marang aku
   he/she send book that to I
   He/she sent that book to me
c. Sri ng-kandha-ake jawaban-e marang uwong lanang iku
   Sri  tell answer-Def to person male that
   Sri told the answer to that man

(77)

a. Bambang ng-ajar-i Sri basa Inggris
   Bambang teach Sri language English
   Bambang taught Sri English

b. Dheweke ng-(k)irim-i aku buku iku
   he/she  send I book that
   He/she sent me that book

c. Sri ng-(k)andha-ni uwong lanang iku jawaban-e
   Sri  tell person male that answer-Def
   Sri told that man the answer

The indirect objects of the sentences (76), the PPs marang Sri, marang aku, marang
uwong lanang iku, have been promoted to objects in (77). In (77) the preposition
marang is omitted; the underlying indirect object comes immediately after the verb;
and the verb takes the suffix -i in (a), (b) and -ni in (c) (-i and -ni are allomorphs of
the suffix -i, this suffix will be discussed in section 6.4). The underlying indirect
objects in (77) have all the object properties discussed in section 4. They are
expressed in bare NPs, come immediately after the verb, and they can be promoted
to subject via the syntactic process of passivization as can be seen in (78).

(78)

a. Sri di-ajar-i basa Inggris dening Bambang
   Sri teach language English by Bambang
   Sri was taught English by Bambang

b. Aku di-kirim-i buku iku dening dheweke
   I send book that by he/she
   I was sent that book by him/her

c. Uwong lanang iku di-kandha-ni jawaban-e dening Sri
   person male that tell answer-Def by Sri
   That man was told the answer by Sri
Indirect objects cannot be promoted to subject if they are not previously promoted to objects. Attempting to promote directly the indirect objects in (76) to a subject produces the ungrammatical (79).

(79)

a. *Sri di-ajar basa Inggris (marang) dening Bambang  
   Sri teach language English to by Bambang  
   (Sri was taught English (to) by Bambang)

b. *Aku di-kirim buku iku (marang) dening dheweke  
   I send book that to by he/she  
   (I was sent that book (to) by him/her)

c. *Uwong lanang iku di-kandha-ake jawaban-e (marang) dening Sri  
   person male that tell answer-Def to by Sri  
   (That man was told the answer (to) by Sri)

The underlying objects in (77) no longer bear the object relations. They cannot be promoted to subject by the rule of passive. Attempting to promote them to subject produces the ungrammatical sentences (80).

(80)

a. *Basa Inggris di-ajar-i Sri dening Bambang  
   language English teach Sri by Bambang  
   (English was taught Sri by Bambang)

b. *Buku iku di-kirim-i aku dening dheweke  
   book that send I by he/she  
   (That book was sent me by him/her)

c. *Jawaban-e di-kandha-ni uwong lanang iku dening Sri  
   answer-Def tell person male that by Sri  
   (The answer was told that man by Sri)

Thus, once an indirect has been promoted to object, the old object does not bear the object relation anymore, because the promoted indirect object takes over this relation. The old object is put after the new object, and it has all properties of second object relations discussed in section 4: it comes after the object; it is
expressed in a bare NP; and it cannot undergo the syntactic process of passive. Therefore, it can be said that when an indirect object is promoted to an object via the syntactic process of applicative, the indirect object takes over the object relation and the old object then bears the second object relation.

Next I will observe the applicatives which are based on benefactives. As is noted in section 5, Javanese benefactives are characterized by the preposition kanggo. The applicative turns a benefactive into object: the preposition kanggo is deleted, and the verb takes the suffix -ake. Consider the sentences in (81) and (82).

(81)

a. Bapak m-(p)undut sepeda anyar kanggo adik
   father buy bike new for sibling
   Father bought a new bike for my young brother/sister

b. Bambang gawe dolanan iku kanggo bocah kae
   Bambang make toy that for child that
   Bambang made that toy for that child

c. Sri masak kue kanggo bapak
   Sri cook cake for father
   Sri cooked cakes for father

(82)

a. Bapak m-(p)undut-ake adik sepeda anyar
   father buy sibling bike new
   Father bought my young brother/sister a new bike

b. Bambang ng-gawe-ake bocah kae dolanan iku
   Bambang made child that toy that
   Bambang made that child that toy

c. Sri masak-ake bapak kue
   Sri cook father cake
   Sri cooked cakes for father

The benefactives in (81) take the preposition kanggo. In (82) the benefactives have been promoted to object; the preposition kanggo is deleted and the verb takes the suffix -ake. Evidence that the benefactives in (82) are objects: they come
Immediately after the verb and they can be promoted to the subject relation via the syntactic process of passive as can be seen in (83).

(83)

a. Adik di-pundut-ake sepeda anyar dening bapak
   sibling buy bike new by father
   My young brother/sister was bought a new bike by father

b. Bocah kae di-gawe-ake dolanan iku dening Bambang
   child that made toy that by Bambang
   That child was made that toy by Bambang

c. Bapak di-masak-ake kue dening Sri
   father cook cake by Sri
   Father was cooked cakes by Sri

In addition, in (81) the benefactives are optional in that they can be omitted from the sentence and the sentence remains grammatical. But, once they have been promoted to objects as in (82) they cannot be omitted. Attempting to delete adik in (82a), bocah kae in (82b) and bapak in (82c) produces the ungrammatical sentences (84a), (84b), and (84c) respectively.

(84)

a. *Bapak m-(p)undhut-ake sepeda anyar
   father buy bike new
   (Father bought a new bike)

b. *Bambang ng-gawe-ake dolanan iku
   Bambang make toy that
   (Bambang made that toy)

c. *Sri masak-ake kue
   Sri cook cake
   (Sri cooked cakes)

As in the case of the applicative based on indirect objects, in the applicative based on benefactives the old object also bears the second object relation. Thus, the NPs sepeda anyar, dolanan iku and kue in (82a), (82b), and (82c) respectively are
second objects. These NPs come after the object, and they cannot be promoted to the subject via the syntactic process of passivization.

Another oblique relation, the instrumentals, can also be promoted to an object via the syntactic process of applicative. As in the case of indirect objects and benefactives, when an instrumental is promoted to object the preposition nganggo which characterizes the instrumental relation is deleted. The applicative of instrumentals can be seen in the following sentences.

(85)

a. Polisi-ne n-(t)embak para demonstran nganggo bedhil-e police-Def shoot PL demonstrator with rifle-Def
   The police shot the demonstrators with the rifle

b. Sutawijaya ny-(s)uduk Penangsang nganggo tombak-e Sutawijaya stab Penangsang with spear-Def
   Sutawijaya stabbed Penangsang with the spear

c. Sri n-(th)uthuk Bambang nganggo garisan iku Sri hit Bambang with ruler that
   Sri hit Bambang with that ruler

(86)

a. Polisi-ne n-(t)embak-a ke bedhil-e marang para demonstran police-Def shoot rifle-Def to PL demonstrator
   The police shot the demonstrators with the rifle

b. Sutawijaya ny-(s)uduk-a ke tombak-e marang Penangsang Sutawijaya stab spear-Def to Penangsang
   Sutawijaya stabbed Penangsang with the spear

c. Sri n-(th)uthuk-a ke garisan iku marang Bambang Sri hit ruler that to Bambang
   Sri hit Bambang with that ruler

The PPs nganggo bedhile, nganggo tombake, nganggo garisan iku in (85a), (85b), (85c) respectively bear oblique relations. These obliques have been promoted to the object in (86): the preposition nganggo is deleted and the verb takes the suffix -ake. As a proof that bedhile in (86a), tombake in (86b), and garisan iku in (86c) bear the
object relation, they can be promoted to the subject via the syntactic process of passivization. The passive counterparts of the three sentences in (86) can be seen in (87).

(87)

a. Bedhil-e di-tembak-ake marang para demonstran dening polisi-ne rifle-Def shoot to PL demonstrator by police-Def
   The rifle was used by the police to shoot the demonstrators

b. Tombak-e di-suduk-ake marang Penangsan dening Sutawijaya spear-Def stab to Penangsan by Sutawijaya
   The spear was used by Sutawijaya to stab Penangsan

c. Garisan iku di-thuthuk-ake marang Bambang dening Sri ruler that hit to Bambang by Sri
   That ruler was used by Sri to hit Bambang

   Above we see that when the oblique relations of indirect objects and benefactives are promoted to objects, they take over the object relations, and the old objects become second objects. When instrumentals are promoted to objects, the instrumentals also take over the object relations but the old objects do not become second objects. In (86) the old object takes the preposition marang; and as we have seen in section 5, this preposition characterizes the oblique relation: indirect objects. Therefore, we might say that when an oblique instrumental is promoted to an object, the old object bears an oblique relation with the preposition marang. This preposition is obligatory; the sentences in (86), for example, cannot be changed into (88); the sentences (88) are ill formed.

(88)

a. *Polisi n-(t)embak-ake bedhil-e para demonstran police shoot rifle PL demonstrator
   (The police used the rifle to shoot the demonstrators)

b. *Sutawijaya ny-(s)uduk-ake tombak-e Penangsan Sutawijaya stab spear Penangsan
   (Sutawijaya used the spear to stab Penangsan)
c. *Sri n-(th)uthuk-ake garisan iku Bambang
   Sri hit ruler that Bambang
   (Sri hit Bambang with that ruler)

It seems that the old objects in the applicative constructions based on instrumentals are obligatory. If the old objects marang para demonstran in (86a), marang Penangsang in (86b), and marang Bambang in (86c) are deleted, the sentences become ungrammatical, although some speakers say that they can understand them.

Semantically, in the constructions in which the instrumental is not promoted to object such as those in (85), the object bears the semantic role 'patient or goal'; but when the instrumental is promoted to object such as those in (86) the object bears the semantic role 'instrumental' and the goal is expressed in the oblique relation. It seems that there is a slight semantic difference between the goal in the applicative constructions and the goal in the non-applicative constructions in terms of the affect in which they got an action performed by the subject of the sentence. In the applicative constructions in which the goal is expressed in an oblique, the goal is less affected than the goal in the non-applicative constructions which is expressed in an object. To clarify this, consider the two sentences in (89).

(89)
a. Sri ny-(s)iram Bambang nganggo banyu ing ember iku
   Sri pour Bambang with water in pail that
   Sri poured the water in that pail on Bambang

b. Sri ny-(s)iram-ake banyu ing ember iku marang Bambang
   Sri pour water in pail that to Bambang
   Sri poured the water in that pail on Bambang

Both the two sentences in (89) relatively describe the same situation in which Sri did an action to Bambang by pouring the water in the pail to him. The information which is focused on in (89a), however, differs from that of (89b). The sentence (89a) focuses on the action done by Sri to Bambang, meanwhile the sentence (89b)
focuses on the action done by *Sri* to the water in the pail. As the result of *Sri*'s action, *Bambang* in (89a) is more affected than *Bambang* in (81b). In (89a) *Bambang* of course gets wet meanwhile in (89b) *Bambang* might get wet but not intensively as in (89a). In short, oblique goals are less affected than object goals in terms of the action done by the subject of the sentence. It seems that the semantic difference between object goals and oblique goals needs to be further analyzed.

Finally I will describe applicatives which are based on locatives. As mentioned in section 5, locatives are characterized by the preposition *ing*. This preposition is also deleted when applicatives are applied to them. The applicative based on locatives can be seen in the following sentences.

(90)

a. Pak Marta n-(t)ulis aksara Jawa ing gepura desa
   Mr Marta write script Java in gate village
   Mr Marta wrote the Javanese script on the gate of the village

b. Presiden ng-(k)alung-ake medali iku ing gulu-ne sang juara
   president hang medal that on neck-Def Art champion
   The President placed that medal around the neck of the champion

c. Bambang n-(t)empel-ake stiker iku ing mobil-e
   Bambang stick stiker that on car-Def
   Bambang stuck that sticker on the car

(91)

a. Pak Marta n-(t)ulis-i gepura desa nganggo aksara Jawa
   Mr Marta write gate village with script Java
   Mr Marta wrote on the gate of the village with the Javanese script

b. Presiden ng-(k)alung-i gulu-ne sang juara nganggo medali iku
   president hang neck-Def Art champion with medal that
   The president placed that medal around the neck of the champion

c. Bambang n-(t)empel-i mobil-e nganggo stiker iku
   Bambang stick car-Def with sticker that
   Bambang stuck that sticker on the car
In (90) the locatives are expressed in PPs: *ing gepura desa, ing gulune sang juara, ing mobile*. In (91) these locatives have been promoted to objects: the preposition *ing* is deleted, the verb takes the suffix *-i*, and they come immediately after the verb. Since the locatives in (91) are objects, they can be promoted to subject via the syntactic process of passivization as can be seen in (92).

(92)  
a. Gepura desa di-tulis-i (nganggo) aksara Jawa dening Pak Marta  
gate village write with script Java by Mr Marta  
The gate of the village was written with the Javanese script by Mr Marta  

b. Gulu-ne sang juara di-kalung-i (nganggo) medali iku dening Presiden  
eck-Def Art champion hang with medal that by president  
The neck of the champion was placed around with that medal by the President  

b. Mobil-e di-tempel-i (nganggo) stiker iku dening Bambang  
car-Def stick with sticker that by Bambang  
The car was affixed with that sticker by Bambang  

As in the case of the applicatives based on instrumentals, when a locative is promoted to object the old object does not bear a second object relation. In (91) the old objects appears in PPs with *P nganggo: nganggo aksara Jawa, nganggo medali iku, nganggo stiker iku*. The preposition *nganggo* characterizes the oblique relation of instrumentals. Therefore, it can be concluded that when a locative is promoted to object via the syntactic process of applicative, it takes over the object relation and the old object then bears an oblique relation with *P nganggo* (an instrumental).

There are different distributions among old objects in the applicative constructions based on locatives. For example, in (91a) the old object *nganggo aksara Jawa* can be deleted, but in (91c) the old object *nganggo stiker iku* cannot be deleted. The sentence (93a) is grammatical, but (93b) is ill formed.

(93)  
a. Pak Marta n-(t)ulis-i gepura desa  
Mr Marta write gate village  
Mr Marta wrote on the gate of the village
b. *Bambang n-(t)empel-i mobil-e  
   Bambang stick car-Def  
   (Bambang stuck something on the car)

The semantic features of the verb seem to have a crucial role in determining whether or not an old object in the applicative constructions based on locatives can be deleted. This needs to be further investigated.

In terms of the relation-changing which occurs to the old object, the applicatives based on indirect objects is similar to the applicative based on benefactives. In these two kinds of applicatives, the old objects change to second object relations. The applicative based on instrumentals, on the other hand, is similar to the applicative based on locatives in which the old objects change to oblique relations. The applicative based on indirect objects and benefactives is also more productive than those based on instrumentals and locatives. Most (but not all) of indirect objects and benefactives can be promoted to object, but only some instrumentals and locatives can be promoted to object.

It is important to note that the syntactic process of applicatives is verb governed. Whether or not an indirect object, a benefactive, an instrumental and a locative can be promoted to object depends on the idiosyncrasy of verbs. For example, the verb nembak 'to shoot' in (85a) allows the instrumental nganggo bedhile 'with the rifle' to be promoted to object; meanwhile the verb nyuci 'to wash' in (94a) does not allow the instrumental nganggo sabun 'with soap' to be promoted to object, (94b) is an ungrammatical sentence.

(94)
a. Sri ny-(c)uci sandhangan-e nganggo sabun  
   Sri wash cloth-Def with soap  
   Sri washed the cloth with soap

b. *Sri ny-(c)uci-ake sabun marang sandhangan-e  
   Sri wash soap to cloth-Def  
   (Sri washed the cloth with soap)
Instrumentals can be promoted to object if the predicates of the sentence are verbs such as *nembak* 'to shoot'; *nyoblos, nyocok, nyolok, njojoh, nyubles, nyuduk, nujes, nusuk* 'to stab, prick, pierce, stick, crush'; *nggebuk, nggitik, nuthuk* 'to strike, beat, knock, hit'; *nyabet, nyeblak* 'to swing (a whip) at/onto'; *mathak, mbalang, nyawat, nyawuri* 'to throw, hurl something at'. It seems that these verbs show a semantic regularity and this needs to be further investigated. For the shake of convenience, if these verbs are given a label as a class of stabbing verbs, we might say that instrumentals can be promoted to object if the predicates of the sentence are stabbing verbs.

The promotion of obliques to objects effects changes in the morphology of the verb. In terms of the changes to the verb, the applicative based on indirect objects is similar to that of locatives; and the applicative based on benefactives is similar to that of instrumentals. In the applicative based on indirect objects and locatives, the verb takes the suffix -i; meanwhile in the applicative based on benefactives and instrumentals, the verb takes the suffix -ake. In other words the suffix -i marks the relation-changing from indirect objects and locatives to objects, and the suffix -ake marks the relation-changing from benefactives and instrumentals to objects.

It should be noted that the syntactic process of applicative might be applied to obliques that appear after intransitive verbs. The oblique *ing rapat iku* 'at that meeting' in (95a) and the oblique *marang aku* in (95b), for instance, can be promoted to object as can be seen in (96a) and (96b) respectively.

(95)

a. Bambang teka ing rapat iku  
Bambang come at meeting that  
Bambang came to that meeting

b. Sri lali marang kewajiban-e  
Sri forget to duty-Def  
Sri forgot her duties
The obliques *ing rapat iku* and *marang kewajibane* in (95) have been promoted to object in (96): they are expressed in bare NPs, and the morphology of the verb changes. In (95) the obliques *ing rapat iku* and *marang kewajibane* can be omitted from the sentences, but once they have been promoted to object as in (96) they cannot be eliminated. In this case the intransitive verbs *teka* and *lali* in (95) become transitive verbs *nekanı* and *nglalekake* in (96).

### 6.3 Causative

The last syntactic process that I will describe in terms of relation-changing is causatives. In the linguistic literature the term of causative is used to cover a wide range of constructions which commonly are determined from the semantic point of view. Comrie (1985) classifies causative constructions into three classes: analytic, morphological, and lexical causatives. In this paper I do not describe all types of Javanese causative constructions, I just describe Javanese causative constructions that might be regarded as morphological causatives. This type of causatives involves a relation-changing from a subject to an object. To begin with let us consider the sentences in (97).

(97)

a. *Asu-ne m-(p)ati*  
   dog-Def die  
   The dog died
b. Bambang m-(p)ati-ni asu-ne
   Bambang  kill   dog-Def
   Bambang killed the dog

In both (97a) and (97b) it is the dog that died; yet in (97a) asune 'the dog' is the subject of the sentence, appearing preverbally; whereas in (97b) asune is the object, appearing immediately after the verb. In other words, the subject of (97a) has been turned into the object of (97b) and the new subject Bambang is introduced in (97b). The sentence (97b) has the meaning causative in that Bambang caused the dog to die. The verb mati 'die' in (97a) takes the suffix -i in (97b) so it becomes mateni 'to kill'. In this case, the suffix -i marks the relation-changing from the subject in (97a) to the object in (97b).

Besides the suffix -i, another suffix that marks a relation-changing from a subject to an object is the suffix -ake. The sentences in (98) illustrate the use of the suffix -ake as a marker of relation-changing from a subject to an object.

(98)
a. Bayi-ne turu
   baby-Def sleep
   The baby slept

b. Bu Marta n-(i)uru-ake bayi-ne
   Mrs Marta  sleep   baby-Def
   Mrs Marta made the baby sleep / put the baby to bed

The subject of (98a), the NP bayine, has been turned into an object in (98b). The sentence (98b) has the meaning causative as the sentence (97b). The causative verb of (98b), however, differs from the causative verb of (97b) in that in (98b) the verb does not take the suffix -i, but it takes the suffix -ake which is combined with the prefix N- so the verb turu 'to sleep' in (98a) becomes nurokake 'to make someone sleep'. Thus the suffix -ake (together with the prefix N-) marks the changing relation of the NP bayine from the subject of (98a) to the object of (98b).
In the causative construction (99b) below, the marker of the relation-changing from a subject to an object is neither the suffix -i nor -ake but another morpheme.

(99)

a. Bocah cilik iku n-(t)angis
cild small that cry
That small child cried

b. Sri ne-n(t)angis bocah cilik iku
Sri cry child small that
Sri made that small child cry

The subject of (99a) has been turned into the object of (99b) and the sentence (99b) has the meaning causative as the sentences (97b) and (98b) above. Unlike the causative sentences (97b) and (98b), however, in (99b) the verb does not take any suffix but the first syllable of the verb is reduplicated with the vowel /a/ which changes to /e/ so the verb nangis 'to cry' in (99a) becomes nenangis 'to make someone cry' in (99b). In this case the reduplication of the first syllable of the verb in (99b) marks the changing relation of the NP bocah cilik iku from the subject of (99a) to the object of (99b).

Thus, there are three morphemes that can be regarded as markers of relation-changing from subjects to objects. They are the suffix -i, the suffix -ake and the reduplication of the first syllable of the verb. Among the three morphemes, the reduplication of the first syllable of the verb is less productive than the other two in that only a few verbs take the reduplication of the first syllable in their causative forms. The verb mbengok 'to shout' is another example of the verb that takes the reduplication of the first syllable in the causative form.

(100)

a. Bocah cilik iku m-bengok
child small that shout
That small child shouted
b. Bambang m-bebengok bocah cilik iku
   Bambang shout child small that
   Bambang made that small child shout

   Commonly, verbs only have one causative form, take one of the three
causative morphemes: the suffix -ake, the suffix -i or the reduplication of the first
syllable. However, there are some verbs which have two causative forms. If a verb
has two causative forms, there is a semantic difference between the two causative
forms. The verb turu 'to sleep' is an example of a verb which has two causative
forms. As noted in (98) the verb turu takes the suffix -ake in the causative form, but
this verb might also take the reduplication of the first syllable, so the verb turu has
two causative forms: nurokake as in (98b) above and nenuru as in (101b) below.

(101)
   a. Bayi-ne turu
      baby-Def sleep
      The baby slept
   b. Bu Marta ne-(t)nuru bayi-ne
      Mrs Marta sleep baby-Def
      Mrs Marta put the baby to sleep

   Poedjosoedarmo (1974) says that nurokake and nenuru may both refer to the same
situation, but nurokake concentrates on the conveyance of the child to the bed while
nenuru concentrates on making him enter the state of sleep.

   Another example of a verb which has two causative forms is the verb pecah
   'to break'. Consider the following sentences.

(102)
   a. Piring-e pecah
      plate-Def break
      The plate was broken
   b. Bambang m-(p)ecah-ake piring-e
      Bambang break plate-Def
      Bambang broke the plate
c. Bambang m-(p)ecah-i piring-e
   Bambang break plate-Def
   Bambang broke the plates

The subject of the sentence (102a), the NP *piringe*, has been turned into the object in (102b), and (102c). Both the sentences (102b) and (102c) have the meaning causatives but they are different. The sentence (102b) describes the situation in which Bambang broke the plate; he might do it intentionally or unintentionally and the plate(s) that he broke might be singular or might be plural. The sentence (102c) besides describes the situation in which Bambang broke the plates, it also gives other information that Bambang intentionally did it and the plates are plural. The sentences in (103) clearly illustrate the semantic difference between *mecahake* and *mecahti*. Note that the sentences (c) and (d) are ill formed.

(103)
a. Bambang ora sengaja m-(p)ecah-ake piring-e
   Bambang not intentionally break plate-Def
   Bambang unintentionally broke the plate

b. Bambang m-(p)ecah-ake piring siji
   Bambang break plate one
   Bambang broke one plate

c. *Bambang ora sengaja m-(p)ecah-i piring-e
   Bambang not intentionally break plate-Def
   (Bambang unintentionally broke the plate)

d. *Bambang m-(p)ecah-i piring siji
   Bambang break plate one
   (Bambang broke one plate)

It seems that although the suffix -ake, the suffix -i, and a reduplication of the first syllable all form causative verbs, they have semantic differences so they are not a single morpheme. It seems that what type of verbs can have one or two causative forms and which morphemes are used depend upon the semantic features
of the verb, but this problem remains to be investigated. Since here I discuss causatives in terms of a relation-changing process, I do not discuss causatives in terms of a semantic point of view in more detail. My main point here is that the relation-changing from subjects to objects are marked by the suffix -i, the suffix -ake and the reduplication of the first syllable.

The Javanese causative constructions discussed so far are formed from intransitive verbs in that the subject of intransitive verbs is turned into the object of the causative counterpart. Javanese also has causative constructions from transitive verbs. Consider the following sentences.

(104)

a. Asu-ne ng-uyak Bambang
   dog-Def chase Bambang
   The dog chased Bambang

b. Sri ng-uyak-ake asu-ne marang Bambang
   Sri chase dog-Def to Bambang
   Sri held out the dog to chase Bambang

The subject of (104a), asune, has been turned into the object in (104b). In (104b) the new subject, Sri, is introduced; the object of (104a), Bambang, bears the oblique relation with P marang; and the verb takes the suffix -ake. Here the suffix -ake marks the relation-changing as in the case of causative from intransitive verbs discussed above. The causative from transitive verbs might also marked with the suffix -i. Consider the sentences below.

(105)

a. Kucing-e ng-ombe susu iku
   cat-Def drink milk that
   The cat drank that milk.

b. Sri ng-ombe-ni kucing-e nganggo susu iku
   Sri drink cat-Def with milk that
   Sri gave the cat that milk to drink
In both (105a) and (105b) it is *kucinge* 'the cat' that drank the milk. In (105a) *kucinge* is the subject, but in (105b) it has been turned into the object: the new subject *Sri* is introduced, the old object *susu iku* 'that milk' is changed into the oblique with P *nganggo* 'with', and the verb takes the suffix *-i*. The suffix *-i* marks the changing relation of *kucinge* from the subject in (105a) to the object in (105b).

Based on the evidence described in (104) and (105), it can be said that in the relation-changing from subjects to objects which involves transitive verbs the old object changes into an oblique and the verb takes either the suffix *-i* or *-ake*. In the causatives formed from transitive verbs I have not found a verb which takes a reduplication of the first syllable as in the case of causatives formed from intransitive verbs. A further investigation is needed to determine what type of verbs will take the suffix *-i* and what type of verbs will take the suffix *-ake*.

The Javanese causative constructions based on transitive verbs described above do not agree with Comrie's generalization. Comrie (1985:338) says that in causatives of monotransitive verbs the direct object of the basic verb remains as direct object of the causative. In Javanese causatives (104b) and (105b) the direct objects of basic verb do not remain as direct objects of the causative, but in (104b) the direct object of basic verb appears as oblique with P *marang*; and in (105b) the direct object of basic verb appears as oblique with P *nganggo*. Thus in both (104b) and (105b) the direct objects of basic verb appear as obliques, not remain as direct object. Indeed, in Javanese there are also causatives based on transitive verbs in which the direct object of basic verb remains as direct object of the causative as Comrie's generalization, but I do not discuss them since this type of causative does not involve a relation-changing from subject to object.

It should also be noted that not all subjects can be changed to objects via the syntactic process of causatives. Whether or not a subject can be changed to an object depends on the verb. In other words, the syntactic process of causatives is verb governed.
All relation-changing processes described above are marked on verbs. This means that when a relation-changing occurs in a clause, the morphology of the verb in the clause will change. The verb may take a different suffix or another morphological change depending on the relation-changing which occurs.

All relation-changing processes described above are also lexically governed by verbs in that whether or not a relation-changing, say the applicative, can occur in a clause depends on the verb of that clause. This process differs from other syntactic process which are not lexically governed by verbs such as relativization, question formation, cleft, and the others.

6.4 The suffixes -ake and -i

As noted above, the relation-changing processes of applicatives and causatives are marked by the suffix -ake or the suffix -i (for causatives there is another mark that is the reduplication of the first syllable). Thus, these suffixes play a crucial role in the two syntactic processes. In this subsection I will discuss briefly the main function of the suffixes -ake and -i.

Both the suffixes -ake and -i have two allomorphs; they are [-?ake], written -kake, and [-ake] for the suffix -ake; and [-ni] and [-i] for the suffix -i. The allomorphs [-?ake] and [-ni] appear when the stems end in vowels, meanwhile [-ake] and [-i] appear when the stems end in consonants. Stems ending in vowels [+high] become [-high] when -i or -ake attach to them; for example, from the stem turu 'sleep' we have [nuro?ake] and [nuroni].

Poedjosoedarmo (1974) discusses the suffixes -ake and -i in terms of a semantic point of view. She says that -ake has several meanings, among others, one is to focus on an object which is conveyed by an agent as source or vehicle to a goal. The other meaning of -ake is that the event described involves an agent, a patient, and a benefactive; and of course she also point outs that -ake has the
meaning causative. The meaning of -i, besides causative, is to focus on a goal, range, source, referent, or concomitant, that is on the significant non-object.

Describing the suffixes -ake and -i by listing their meanings is useful in its own right, but such description may lack a generalization since realizations of the meanings vary somewhat depending on what sort of stem is involved. Thus, such description does not tell, for instance, when -ake has the meaning benefactive or when it has the meaning causative, even such description may raise a problem whether -ake is one morpheme or more since it represents not only one meaning. Here I try to make a generalization about the functions of -ake and -i in terms of grammatical relations.

First I discuss the suffix -ake. As I have shown, the conditions in which the suffix -ake occurs on a verb are when oblique relations: benefactives and instrumentals are promoted to objects via the syntactic process of applicative; or when subject relations are promoted to objects via the syntactic process of causative. On the basis of this condition, the rule in which a verb is suffixed with -ake can be formulated as follows. A verb is obligatorily suffixed with -ake when it undergoes the syntactic process of applicative based on benefactives and instrumentals, or when it undergoes the syntactic process of causative.

For the suffix -i, the conditions in which this suffix occurs on a verb are when oblique relations: indirect objects and locatives are promoted to objects via the syntactic process of applicative; or when subject relations are promoted to objects via the syntactic process of causative. Therefore, the rule in which a verb is obligatorily suffixed with -i can be formulated as follows. A verb is obligatorily suffixed with -i when it undergoes the syntactic process of applicative based on indirect objects and locatives, or when it undergoes the syntactic process of causative.

The generalizations above do not mention the meanings of the two suffixes. For instance, the generalizations do not say that the function of -i is to focus on a

\* Both the suffixes -ake and -i mark the relation-changing process of causative (see subsection 6.3, page 62)
goal, or that the suffix -ake has a meaning 'benefactive'. A verb with the suffix -i will have a meaning to focus on a goal when it undergoes the syntactic process of applicative which promotes an oblique bearing a semantic role 'goal' to an object; if the promoted oblique does not bear a semantic role 'goal' but 'locative', for instance, the suffix -i will have a meaning 'locative' not 'a goal'. A verb with the suffix -ake will have a meaning 'benefactive' when it undergoes the syntactic process of applicative which promotes a benefactive to an object; but if it undergoes the syntactic process of applicative which promotes an instrumental to object, it will not have a meaning 'benefactive'. In other words the meanings of the suffix themself depend on the semantic role of the promoted constituents. Constituents still keep their original semantic roles when they are promoted to other relations. Thus the generalization of the functions of the suffixes -ake and -i in terms of grammatical relations avoids the necessity of referring to the various meaning of the two suffixes. In Bahasa Indonesia such generalization has been done by Kana (1986) when she discusses the suffixes -kan and -i.

It should be noted, however, there is another using of -ake that is not accounted for by the generalization above. Consider the following sentence.

(106) Bambang m-(w)eneh-ake buku iku marang Sri
     Bambang     give     book that to Sri
     Bambang gave that book to Sri

There is no a syntactic process which occurs in sentence (106), but the verb takes the suffix -ake. The verb menehake itself never appeared in suffixless forms (without suffixes), for example, I do not find the forms meneh or diweneh in the contemporary Javanese. I have a hypothesis that meneh or diweneh did exist in the language, so the sentence (106) might be derived from (107).
In the hypothetical sentence (107) *nganggo buku iku* bears an oblique relation: instrumental. This instrumental then is promoted to an object via the syntactic process of applicative, so this produces sentence (106) in which the verb takes the suffix -ake and the old object *Sri* bears an oblique relation with *marang* (indirect object). That the sentence (106) is derived from (107) seems reasonable, although the sentence (107) never appeared in the actual utterance.

7. Conclusion

This work starts with an observation of characteristics of grammatical relations: subjects, objects, second objects, and obliques in Javanese. Among these four relations, obliques are marked (with a preposition) while the others are expressed in bare NPs. Javanese subjects have these properties: their normal position in the sentence structure is in the initial position; they have a definite interpretation; they are the only constituent that can undergo the syntactic operations of relativization, clefts, and questions with wh-movement; when they are plural NPs the predicate of the sentence may optionally be marked for plural; when they are possessive NPs the possessor can be topicalized; they control the referent of reflexive pronouns; and only subjects can be raised. There are two types of objects: objects (direct objects) and second objects. Objects differ from second objects in that the former can undergo passivization while the later cannot undergo this syntactic process. Compared with the other relations, obliques have relatively free positions in the sentence structure. This work is not a final solution about grammatical relations in Javanese, the data used in this work are limited.
Those who are familiar with western Austronesian languages will not find something new in this work since some Javanese facts described in this paper are also found in other western Austronesian languages (for example see grammatical relations in Bahasa Indonesia discussed by Kana (1986)). This work proves that in Javanese grammatical relations can be identified independently on the basis of syntactic properties, rather than by semantic roles for instance. This does not mean, however, that semantics should be separated from grammar. The fact that I find from this work is that the notions of grammatical relations such as subjects, objects, second objects, and obliques are useful for a descriptive work of the grammar of Javanese. Some syntactic operations such as passive, applicative, and causative can be explained using the notions of grammatical relations.

From the theoretical point of view, however, there are questions about the notions of grammatical relations that need to be answered by further investigations. For instance, if it is right that a passive is a relation-changing process from object to subject, there must be proof that initially a child learns an active sentence before he/she is able to produce a passive sentence. In other words, information of how a child acquires passive, applicative, causative sentences is important to decide whether or not grammatical relations and relation-changing processes exist in the human cognition.
BIBLIOGRAPHY


