CONTROL IN ADJUNCT AND COMPLEMENT CLAUSES

IN BAHASA INDONESIA

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WIWIN TRIWINARTI

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I hereby declare that this sub-thesis is my own work and all sources used have been acknowledged.

Wiwin Triwinarti
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## CONTENTS

<table>
<thead>
<tr>
<th>Acknowledgments</th>
<th>i</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contents</td>
<td>ii</td>
</tr>
<tr>
<td>Abbreviations</td>
<td>iv</td>
</tr>
</tbody>
</table>

### Chapter 1 Introduction and Review of the Literature
- **1.1 Introduction** 1
- **1.2 An Overview of Non-Overt NPs** 1
- **1.3 Pro Drop Phenomena** 12
- **1.4 Non-Overt NPs in Bahasa Indonesia** 14

### Chapter 2 Basic Grammar of Bahasa Indonesia
- **2.1 Personal Pronouns in Bahasa Indonesia** 22
- **2.2 Basic Active Sentences in Bahasa Indonesia** 27
- **2.3 Passive Sentences in Bahasa Indonesia** 31
- **2.4 The Distribution of Null Pronominals in Bahasa Indonesia** 36

### Chapter 3 Control in Adjunct Clauses
- **3.1 Adjunct clauses which are introduced by a complementizer** 45
  - **3.1.1 Adjunct clauses which do not allow an overt subject** 46
    - **3.1.1.1 Adjunct clauses introduced by words which function either as prepositions or subordinators** 46
    - **3.1.1.2 Adjunct clauses introduced by a word which functions only as a subordinator** 51
  - **3.1.1.3 The controller of a non-overt NP subject** 53
  - **3.1.2 Adjunct clauses which allow an overt subject** 58
    - **3.1.2.1 Adjunct clauses introduced by words which function either as preposition or subordinators** 59
    - **3.1.2.2 The controller of a non-overt NP subject** 64
3.1.2.3 Adjunct clauses introduced by words which function only as subordinators
67

3.1.2.4 The controller of a non-overt NP subject
72

3.2 Adjunct clauses which are not introduced by a complementizer
74

3.1.2 The controller of a non-overt NP subject
77

3.3 Summary
78

Chapter 4 Control in Complement Clauses
80

4.1 Introduction
80

4.2 Subject Control
81

4.3 Object Control
87

4.4 Subject/Object Control
91

4.5 Control in "Raising" Constructions
95

4.6 Summary
108

Chapter 5 Conclusion
112

Bibliography
117
ABBREVIATIONS

1 first person
2 second person
3 third person
Adj adjective
ADJ adjunct
AUX auxiliary
CLASS classifier
COMP complementizer
DET determiner
DUR durative
e empty category
exc. exclusive
FUT future
G grammatical function
GB Government and Binding
IMPERF imperfective
inc. inclusive
INFL inflection
LFG Lexical Functional Grammar
MOD modal
N noun
NEG negative
NP noun phrase
OBJ object
OBJ2 second object
OBL oblique
PERF perfective
pl plural
PossP possessive phrase
PRED predicate
PREP preposition
Q quantifier
RED reduplication
sg singular
SUBJ subject
CHAPTER 1

INTRODUCTION AND REVIEW OF THE LITERATURE

1.1 Introduction

This sub-thesis focuses on the study of the distribution and the interpretation of non-overt NPs in the subject position in Bahasa Indonesia. In this study I will attempt to find out whether Bahasa Indonesia distinguishes between finite and non-finite clauses, since the finiteness of a sentence is not marked morphologically in the language, and the verbs show neither tense nor agreement. In this study I do not attempt to follow one specific theory, because this study is descriptive only. In what follows, however, I will present theories which are related to the discussion and analysis to follow in the later chapters.

1.2 An Overview of Non-Overt NPs

In English, as in many other languages, we often find a type of construction which is incomplete, in the sense that some constituent that is expected to appear in a complete clause is missing. One of the most common forms of missing argument phenomena is the absence of the subject as illustrated in the following examples.

1. John tried to win.
2. To solve the problem is not easy.
3. John saw Mary while crossing the street.

The italicized constructions in examples (1) and (2) play the role of complement, while in sentence (3) the subordinate clause plays the role of an adjunct.
in the containing clause. The unexpressed NPs in all the examples above are in the subject position of the italicized constructions.

It is assumed in Government and Binding Theory (see Haegeman 1994 for the GB theory) that the non-overt NP subject of the italicized constructions in the examples above is syntactically active, hence syntactically represented, but it has no overt manifestation. It is represented as PRO, with the features [+anaphor, +pronominal].

In GB, the features anaphor and pronominal are assumed to explain the type of contrast shown in (4a) and (4b).

4a. John shaved himself.
   b. John shaved him.

Sentence (4a) contains two NPs: John and himself. Reflexives such as himself cannot refer independently. Regardless of the context, himself must be interpreted as referentially dependent on the antecedent, in this case the subject John. GB theory uses the general label anaphor to refer to the referential dependent NP types such as reflexives and reciprocals. According to GB, an anaphor must be bound in its governing category.

Sentence (4b) contains two NPs: John and the pronoun him. A full nominal expression John refers independently. Such an NP selects a referent from the universe of discourse. Pronouns, on the other hand, do not select a referent from the universe of discourse. In (4b), him refers to an entity that is characterized by features [+singular] and [+male]. However, we cannot freely choose any entity which is male as referent for him: him cannot be used to refer to John, but it must refer to an entity different from the subject John. Whereas the reflexive in the same position must be bound in (4a), the pronoun in (4b) must be free in its governing
category. It is distinguished from the (anaphoric) reflexive pronoun by the feature +pronominal.

The combination of features [+anaphor, +pronominal] for PRO shows that PRO is subject to contradictory requirements. It must be both bound and free in its governing category. The claim that GB PRO is an anaphor as well as a pronominal motivates the assumption that it is ungoverned, therefore PRO can only be found in ungoverned positions. PRO can be the subject of a non-finite clause, because there is no INFL to govern the subject, but it cannot be the object of any clause, because this position is governed by the verb, or the subject finite clause which is governed by INFL (Bresnan 1982:328).

Looking back at example (2), the unrealized subject is equivalent to a pronoun in GB sense. Depending on the context, PRO may refer to a specific referent ('you', 'they', etc) or it may be interpreted as equivalent to the arbitrary pronoun one. In sentences (1) and (3), on the other hand, the unrealized subjects will be understood as identical with the subject of the matrix clause. In this case, PRO is like an anaphor: it is dependent on another NP for its interpretation. On the basis of the interpretations of PRO in sentences (1)-(3), it can be proposed that PRO is both pronominal and anaphoric.

The module of grammar which regulates the distribution and the interpretation of PRO is called control theory. In general, control refers to a relation of referential dependence between a lexically unrealized grammatical function in an embedded clause and another grammatical function in the matrix clause. In example (1), the unrealized subject of win is interpreted as the subject of tried namely John. In example (3), the non overt subject of crossing the street is interpreted as the subject of the matrix clause John, while in sentence (2), as mentioned before, the subject is generic or arbitrary. GB distinguishes between obligatory control and
optional control. Sentences (1) and (3) are examples of obligatory control, while sentence (2) is an example of optional control in GB terms.

All the examples above show that the target of control is the embedded subject. The example (5a) below shows that the non overt element PRO cannot be used as a direct object. In GB sense, it is a governed position. Objects, but not subjects, are governed by the verb. The ungrammaticality of the sentence is due to the presence of PRO in the object position of \textit{try}. If we replace the non-overt element PRO by an overt NP, the sentence becomes grammatical, as is shown in example (5b) below:

\textbf{5a.} *John tried to invite PRO.}
\textbf{b.} John tried to call invite someone/him.

In English, PRO cannot appear as the subject of finite clauses, whether they be main clauses (6a) or subordinate ones (6b). Subjects are governed by the finite inflectional morpheme in INFL (or by certain superordinate verbs and prepositions that are exceptionally permitted to govern the subjects of a subordinate clause. As mentioned before, according to GB theory, the controlled NP 'PRO' cannot occur in the governed position; it can occur only in the ungoverned position of subject of a non-finite clause.

\textbf{6a.} *PRO should invite someone.
\textbf{b.} *John wondered whether PRO should invite someone.

The sentence becomes grammatical if we replace PRO by an overt NP, illustrated in sentence (7).
7a. He should invite someone.
   b. John wondered whether he should invite someone.

It is assumed in GB that PRO is distinct from non-overt NPs called *pro* having the features [-anaphor, +pronominal]. It is assumed that *pro* is a pure pronominal. This 'pronoun' must be free in its governing category and may be specific in reference like any ordinary overt NP.

Languages like Italian allow *pro* generally for subjects. Since the agreement marking on a verb, in a language like Italian, determines the person, number and/or gender of *pro*, the reference of *pro* is not free to the extent that it must be determined by agreement. The non-overt NPs in the Italian examples below have definite reference. Their interpretation is like that of an overt pronoun. So, like a pronoun they may refer to an entity in the non-linguistic context (8b), or they may be coindexed with an element in the linguistic context. In (8c), one possible interpretation is that the non-overt subject *ha parlato* is identical to that of the overt subject *ha detto*. The other interpretation is that the non-overt subject *ha parlato* may refer to somebody else in the context. This is due to the fact that if an expressed pronoun is present in this position, it could have more than one interpretation here. The sentences below are taken from Haegeman (1994:451).

8a. Gianni ha parlato.
   Gianni has spoken.

b. - Ha parlato.
   - has (3sg) spoken.
c. Gianni ha detto che - ha parlato.

Gianni has said that - has spoken.

Bresnan's (1982) theory of control is quite different from that of GB theory. Bresnan's theory does not allow the unexpressed PRO in the syntax, while GB does. Bresnan does not distinguish between GB PRO and pro. Bresnan's control theory, in terms of Lexical Functional Grammar (LFG), on the other hand, draws a fundamental distinction between two types of control, namely Functional and Anaphoric Control. In functional structure, the controller is identified in terms of a control equation, a functional schema which equates the f-structure of the controller and the controlled element. In other words, it entails identity of functional features of the controller and the controlled element. Anaphoric control, on the other hand, entails identity of reference (only referential dependence). It involves sharing only of semantic indices.

In functional control relations, the controlled element is SUBJ function and the controlled clauses are designed by the open grammatical function XCOMP and XADJ. The term controlled clause refers to a clause at the level of functional structure, which is the level of grammatical relations. (see Kaplan and Bresnan (1982) for the nature of f-structure).

According to Bresnan, functional control relations are either lexically induced or constructionally induced, depending on whether the control equation is part of a lexical entry or a c-structure rule annotation. The range of possible controllers depends upon whether the functional control relation is lexically or constructionally induced.

In lexically induced functional control, the control is part of a lexical entry. The controlled clause is XCOMP (the predicative or open complement). The controller is specified by a control equation of the form \( \uparrow \text{G} = \downarrow \text{XCOMP SUBJ} \), which is attached to the lexical entry of the item. The values of G are only SUBJ,
OBJ, and OBJ2. In constructionally induced functional control, the control equation is part of c-structure rule annotation. The controlled clause is the XADJ (the predicative or open adjunct), and the controller is specified by a functional schema of the form $(\uparrow G) = (\downarrow \text{SUBJ})$, which is added to the functional annotations of an adjunct. Because the control equation is syntactically specified, there may be a wider range of controllers. The set of possible controller functions appears to be a parameter of variation across languages. In English, functionally controlled XADJ have a range of possible controllers including SUBJ, OBJ, OBJ2, and OBL. In Malayalam the controller of functionally controlled XADJ is only SUBJ (Bresnan 1982: 321-324).

Anaphoric control involves a null pronominal that is unrealized at c-structure. As mentioned before, Bresnan makes no distinction between GB PRO and pro. In LFG terms, an anaphor is a grammatical element which may be assigned an antecedent by the rules of sentence grammar. The term anaphor as used in LFG applies both to those pronouns that are obligatorily assigned antecedents within the sentence such as reflexive pronouns, and to those pronouns that are optionally assigned antecedent within the sentence, such as the indefinite pronouns.

The functional anaphor is created by an optional functional schema of the form $(\uparrow G \text{ PRED}) = \text{'PRO'}$ for any function G. The constraints on lexical encoding of functions restrict G to be one of the set of semantically unrestricted functions {SUBJ, OBJ, OBJ2}. A language particular parameter may restrict G to a subset of the set of semantically unrestricted functions (p. 326).

The contrast between Anaphoric and Functional Control is illustrated by (9a) and (9b). The examples below are taken from Mohanan (1983:649).

9a. Peeling navel oranges repulses John.

b. Peeling navel oranges, John watched the game.
The configurational structures of (9a) and (9b) are given in (10a) and (10b).

10a. \[S[NP[VP[peeling navel oranges]]]VP[repulses] John.\]

b. \[S[S[VP[peeling navel oranges]]] S[John watched the game]].

In (10a) the missing subject is a PRO, as is shown in the f-structure below:

```
11. [SUBJ]  [SUBJ PRED PRO]  
  |   [OBJ PRED 'NAVEL ORANGES']  
  |   [PRED 'PEEL<(SUBJ) (OBJ)>'  
  |   [OBJ PRED 'JOHN']  
  |   [PRED 'REPULSE<(SUBJ) (OBJ)>']
```

In (10b), the missing subject is identified by a control equation, in this case, the control equation is (↓SUBJ) = (↑SUBJ), which identifies that the unrealized grammatical function is the matrix subject. The f-structure of (9b) is:

```
12. [SUBJ]  [PRED 'JOHN']  
  |   [OBJ PRED 'GAME']  
  |   [ADJ(UNCT) [SUBJ [ ]]]  
  |   [OBJ PRED 'NAVEL ORANGES']  
  |   [PRED 'PEEL<(SUBJ) (OBJ)>']  
  |   [PRED 'WATCH<(SUBJ) (OBJ)>']
```

The gerundive clause in (9a) is anaphorically controlled, while the participial clause in sentence (9b) is functionally controlled. The missing subject in (9a) is a PRO. This PRO gets into f-structure by being generated as part of the lexical entry of the verb. The subject of *peel* in (9a) is a PRO in the f-structure (11), but there is no corresponding NP in the configurational structure (10a). The missing subject in (9b), on the other hand is identified by a control equation of (↓SUBJ) = (↑SUBJ), which identifies the unrealized NP as the matrix subject (f-structure 12). This NP is not present in the c-structure (10b).
According to Bresnan, Anaphoric Control is subject to semantic (thematic) constraints, while Functional Control is stated in terms of a hierarchy of grammatical functions: unless a complement taking verb is exceptionally marked as taking subject control, it takes second-object (OBJ2) control (if it selects for an OBJ2), otherwise (primary-) object control (if it selects for a primary object), otherwise subject control, where there are no other grammatical functions associated with the verb.

Furthermore, it is assumed in LFG that only [±FIN] lexical items permit the functional anaphor, and that the value of the feature [αFIN] is a language particular parameter. In English the functional anaphor 'PRO' arises only as the subject of a non-finite verb (Bresnan 1982:326)

Huang (1989) collapses the entities GB PRO and pro into a single empty category type. He attempts to reduce the distribution of GB PRO/pro to a generalized theory of control. According to Huang, in Chinese, any sentence can have a null subject, but only those that are finite may have overt subjects. Clauses with obligatory null subject in Chinese correspond and act similarly to the clauses under control like in English and many other languages. Huang, however, shows that some finite clauses that allow an overt subject are nonetheless susceptible to control when the subject is allowed to be null. For example, in sentence (13 and 14) (Huang's sentences are 18 and 19) the empty subjects in the resultative clauses are controlled. In these examples, Huang uses the symbol e to represent the null subject;

that is, e shows where an expressed subject would go.

13. Zhangsan qi ma qi de [e hen lei]. (18)
   Z ride horse ride till very tired
   Zhangsan rode a horse until he got tired.

14. Zhangsan ku de [e hen shangxin]. (19)
   Z cry till very sad
   Zhangsan cried until he got very sad.
In each of these sentences, the embedded null subject must be controlled. According to Huang, these are instances of controlled *pro* (not PRO) within standard GB theory, because the position of the null subject can be filled with a lexical category.

15. Zhangsan qi ma qi de [ma hen lei]. (20)  
   Z ride horse ride till horse very tired  
   Zhangsan rode a horse till the horse got very tired.

16. Zhangsan ku de [Lisi hen shangxin]. (21)  
   Z cry till L very sad  
   Zhangsan cried till Lisi got very sad.

Under certain circumstances a Chinese *pro* may also be arbitrary in reference. This is a property shared by PRO.

17. [e xiyan] you hai. (24b)  
   smoke have harm  
   Smoking is harmful.

A Chinese *pro*, like GB PRO can occur only as subject of a sentence, but not as an object.

Due to several similarities of GB PRO and Chinese *pro*, Huang treats them on a par.

According to Huang, there is a clear correlation between the possibility of having a lexical subject and the finiteness of a sentence. A non-finite clause can never have a lexical subject, but a lexical subject is optional for a finite clause. In Chinese, finite and non-finite clauses are distinguished on the basis of the potential occurrence of any element of the AUX category such as an aspect marker or modal.
18. (ta) kanjian (ta) le. (2a)
   he see he PERF
   (He) saw (him).

19a. wo bi Lisi [e lai]. (8a)
   I force L come
   I forced Lisi to come.

b. *wo bi Lisi [e hui/neng/yinggai lai]. (8b)
   I force L will/can/should come

c. *wo bi Lisi [e lai zhe]. (8c)
   I force L come DUR

Examples (19a)-(19c) show that a sentence embedded under a control verb
cannot be finite (i.e. cannot take any element of (AUX). Huang also shows that the
subjects of such sentences must be null.

An NP in the object position in Chinese may also be unexpressed as is shown
in sentence (18). According to Huang, a null object must not be regarded as a
genuine null pronominal (GB pro), but it is analyzed as a variable A-bound by an
operator that is itself null. Consider the following examples (taken from Huang)

20a. Zhangsan shou [Lisi kanjian e le]. (3a)
   Z say L see PERF
   Zhangsan said that Lisi saw (him).

b. [OP;[Zhangsan shou[Lisi kanjian e le]]]. (3b)

Furthermore Huang claims that although an embedded null subject may be
bound by a matrix subject (like any overt pronominal), a null object may not (unlike
an overt pronominal).
21a. Zhangsan_j shou [ej_j hen xihun Lisi]. (4a)
Z say very like L
Zhangsan_j said that [he_j] liked Lisi.

b. Zhangsan_j shou [Lisi hen xihun ej_j]. (4b)
Z say L very like
Zhangsan_j said that Lisi liked [him+ej].

In (21a), the unexpressed subject may refer to the matrix subject or to some other person whose reference is understood in discourse. The unexpressed subject here is like a pronominal, because an overt pronoun in the same position has the same range of interpretations. In (21b), however, the unexpressed object must refer to the discourse topic, but not to the matrix subject. The unexpressed object here is a variable (A-bound by an empty operator), since condition C of Binding Theory requires it to be A-free, preventing it from being A-bound by the matrix subject (Huang 1989: 187-188).

1.3 Pro Drop Phenomena

Pro Drop is a linguistic phenomenon in which, under certain conditions, a NP may be unexpressed, giving rise to a pronominal interpretation. Generally, languages allow the subject to be missing under certain circumstances, described in a theory of control. On the other hand, not all languages allow free omission of subjects, as described by the GB theory of pro. English and French, for example, do not allow a non-overt element NP subject within a finite clause. On the other hand, languages like Italian and Spanish allow a subject pronoun to be dropped, and some languages allow other NPs such as objects to be dropped (see Haegeman 1994:455)

According to GB there is a correlation between the inflectional paradigm of the language with the pro drop phenomena. Languages which have rich inflectional
are often pro drop languages. In the case of Italian, every number/person combination has a different ending. As a result, the inflectional paradigm distinguishes all the persons. The ending of the verb can identify the subject. So, when the verb inflection is rich we can recover the content of the subject by virtue of the inflection and the pronoun would not add information. On the other hand, in languages with poor inflection, such as English, the verb inflection does not suffice to recover the content of the subject and the pronoun is needed (Haegeman 1994:24).

As mentioned above, languages which have rich inflection are often pro drop languages. However, rich inflection is not restricted for pro-drop. In his discussion of the Malayalam language which exhibits no agreement of any kind (subject-verb, object-verb, etc.), Mohanan (1983) claims that the correlation between the richness of inflection and pro drop is at best a tendency, not an absolute principle. Furthermore, he also points out that Japanese, Korean and Chinese which lack agreement are pro drop languages. In other words, the expression of the subject in finite clauses is optional. Chinese sentences, for example, which are not marked for tense any more than they are for agreement, allow the subject, and also the object of a finite clause to be unrealized, as is illustrated in example (18). However, a subject which is embedded under a control verb must be null (19a).

In Huang's account, the missing subject property is related to the distribution of overt auxiliaries. Huang, Jaeggli and Safir believe that there are two processes involved in identifying the null subject in Chinese: one a null topic analysis, which involves Wh-movement of a null operator leaving a Wh-trace (variable) in subject position, the other involving a sort of control of pro. This type of null subject in the first process is interpreted as disjoint in reference from all other C-commanding NPs in the relevant structure. In the second process, a C-commanding NP must provide
an antecedent (Huang 1989:36). So, pro drop is a descriptive term which does not necessarily refer to a unitary process.

1.4 Non-Overt NPs in Bahasa Indonesia

There are not many studies concerned with the distribution and interpretation of non-overt NPs in Bahasa Indonesia. As far as I am aware, only Gibson (1978) and Kana (1986) have discussed and analyzed the problem at some length. Both of them, and also Chung (1976), discussed this phenomenon in terms of Equi NP deletion. Some others discuss this phenomenon as a part of a more general discussion of Bahasa Indonesia syntax or grammar.

Gibson (1978) distinguishes two types of deletion, Stylistic Deletion and Equi, in Bahasa Indonesia purpose clauses. According to her, they are two different kinds of processes.

Stylistic Deletion is a low level phenomenon sensitive to phonetic repetition and proximity. The subject of the matrix clause and the purpose clause may be different, but when they are identical, the subject of the purpose clause may be omitted. In other words, the deletion of the subject in the purpose clause is not obligatory. The complementizer used in this kind of deletion is supaya 'so that'. The numbers in parentheses indicate her sentence numbers.

22a. Mereka j mencari kamu j supaya bisa menolong mereka j. (8)  
3pl meN-look for 2sg COMP MOD meN-help 3pl  
Theyj looked for youj so that [youj] could help themj.

The source of the sentence above is:

22b. Mereka j mencari kamu j supaya kamu j bisa menolong  
3pl meN-look for 2sg COMP 2sg MOD meN-help
According to Gibson, sentence (22b) is not fully acceptable due to the close repetition of the same word *kamu*. For myself and my informant, however, there is nothing wrong with the sentence. Sentence (22a) is also acceptable.

The other kind of deletion is what she labelled 'Equi'. The complementizer used in Equi is *untuk* 'to'. The subject of the purpose clause in the example below is interpreted as coreferential to the matrix object. The deletion in this case is based on coreference and is obligatory.

23a. Mereka mencari kamu untuk menolong mereka.

They looked for you to help them.

Sentence (23a) becomes ungrammatical if there is an NP subject in the purpose clause.

23b. *Mereka mencari kamu untuk kamu menolong mereka.

Another difference between Stylistic Deletion and Equi arises in the area of controllers. Matrix subjects, direct objects, indirect objects, and other obliques can control Stylistic deletion. In Equi, on the other hand, indirect objects and other obliques cannot be the controllers of the sentence.

Although the two processes are distinct, they are similar in certain respects. In both types of deletion, the target of deletion is always the subject of the purpose clause. Direct objects, and also other NPs cannot be the target of deletion, as is
shown in the ungrammaticality of sentences (24b and 24c) which attempt to delete
the direct object. Sentence (24a) is the same as sentence (22a).

24a. Mereka\textsubscript{i} mencari kamu\textsubscript{j} supaya jbisa menolong mereka\textsubscript{i}.

They\textsubscript{i} looked for you\textsubscript{j} so that you\textsubscript{j} could help them\textsubscript{i}.

b. *Mereka\textsubscript{i} mencari kamu\textsubscript{j} supaya jbisa menolong\textsubscript{i}.

c. *Mereka\textsubscript{i} mencari kamu\textsubscript{j} untuk jmenolong\textsubscript{i}.

So Gibson concludes that direct objects are not targets for deletion. Based
on hierarchies of grammatical roles it can be predicted that indirect objects and other
oblique NPs would not be targets for deletion either.

In her analysis of Equi in Bahasa Indonesia, Kana (1986) discusses verb-
governed Equi and non-verb governed Equi. Verb-governed Equi falls into two
basic types. Verbs of persuasion are Object Control, while verbs like mencoba 'try',
mau 'want', mulai 'begin' are Subject Control. When Equi does not occur the
complementizer supaya or agar 'so that' connects the two clauses, but when Equi
occurs, the complementizer untuk 'to' optionally connects the two clauses. She
mentions that for verbs of persuasion, untuk is a sign of Equi. In other words, Equi
is obligatory with the complementizer untuk 'to'.

25a. Ia menyuruh supaya saya pulang.

S/he ordered (that) I go home. (VIII. 3a)

b. Ia\textsubscript{j} menyuruh saya juntuk jpulang.

S/he\textsubscript{i} ordered me\textsubscript{j} to go home.
As in English, there is a restriction on finiteness in the embedded clauses when Equi occurs. Words which Kana refers to as tense and aspect words cannot occur in the embedded clause when Equi is applied and the complementizer is *untuk* 'to'. The glosses in these sentences are Kana's.

26. *Ia* menyuruh saya untuk *akan* pulang. (VIII. 8)
   3sg *meN*-order lsg COMP FUT go home

27. *Ia* mengijinkan kami untuk *telah* berbicara. (VIII. 9)
   3sg *meN*-permit lpl.inc COMP PERF beR-speak

However, when Equi does not apply, and the complementizer is *supaya*, the future marker *akan* is allowed (28). The perfective marker, however, is not possible in (29), because the perfective marker is semantically incompatible with the persuasion predicate in the matrix clause.

28. Ia menyuruh saya supaya saya akan pulang.
   3sg *meN*-order lsg COMP lsg FUT go home.
   S/he ordered that I go home. (VIII. 10)

29. *Ia* mengijinkan kami supaya kami *telah* berbicara. (VIII. 11)
   3sg *meN*-permit lpl.inc COMP lpl.inc PERF beR-speak

In sentences with verbs of persuasion, only direct objects of the matrix clause may control Equi and, as Gibson mentioned, the target of Equi is the subject of the embedded clause. Direct objects, indirect objects, benefactives are not eligible Equi targets (Kana 1986:273-274).

What Kana called non-verb-governed Equi has to do with Equi in purpose clauses. She claimed that any matrix verb is possible, except that purpose complements require a matrix verb which involves the notion of agency. Like verb-
governed Equi, in non-verb-governed Equi, only subjects may be the target for Equi. Subjects, direct objects, subject-chomeurs, direct object-chomeurs, and possessives are eligible controllers. Indirect objects and benefactives are only marginal controllers. (p. 298-299). However, Chung (1976:228) says that only nominals which are initial or final subjects and direct objects (including a passive subject) are eligible controllers. Gibson (1978) appears to concur. As mentioned before, Gibson says that indirect objects and other obliques cannot be the controllers.

In her study, Kana observes that *untuk purpose complements do not allow aspect markers, but allow modals such as *bisa 'can'. Gibson (1978), however, claims that *untuk is always preverbal. According to Gibson no other element such as modal *bisa 'can' can intervene between the complementizer *untuk and the complement verb. Gibson gave what she considered to be an ungrammatical sentence in which *untuk is followed by the modal *bisa.

30. *Dia; pergi untuk *bisa bermain. (31)
   3sg go COMP MOD beR-play
   He went in order to be able to play.

According to Kana, as well as myself and my informant, the sentence is grammatical, although semantically the sentence seems odd.

In addition, Kana also discusses adverbial clauses including temporal, causal, manner, and reason clauses. As with the other type of Equi, only a subject can be the target for deletion and the controllers are nearly the same with Equi in *untuk purpose clauses. Indirect objects and other obliques can be the controllers of the unexpressed subjects in adverbial clauses. However, Kana did not show the correlation of semantic role between the matrix clause and the subordinate clause.
In the discussion of "Equi NP" constructions in Bahasa Indonesia, Gibson and Kana mention only one complementizer, i.e. untuk 'to', which is sign of Equi. In this study I will use wider data and show that dari 'from', dengan 'with', tanpa 'without', dalam 'in', or sambil 'while' requires the subject in the subordinate clause to be unexpressed.

Since there are not many studies discussing the control phenomena in Bahasa Indonesia and most scholars discuss and analyze the problem as only a minor part of a more general study of Bahasa Indonesia syntax and grammar, I think, further study is necessary. In this thesis, I will offer a discussion of control phenomena in Bahasa Indonesia with reference to theories which are more recent than the theory used by Gibson or Kana. I will also use wider data to examine control relations in Bahasa Indonesia constructions and determine the correlation between the controlled clause and the matrix clause.

The sub-thesis is divided into five chapters. Chapter 1 provides an introduction and review of the literature. Chapter 2 discusses general properties of Bahasa Indonesia Grammar. In it I will discuss personal pronouns and the basic active and passive sentences in Bahasa Indonesia. In this chapter, I will also discuss the distribution of null pronominals in Bahasa Indonesia. This chapter will provide the background for the analysis to come later. In chapter 3, I will examine control in adjunct clauses in Bahasa Indonesia. This chapter deals with adjunct clauses which are introduced by complementizers and adjunct clauses which are not introduced by a complementizer. In the discussion of adjunct clauses which are introduced by complementizers, I divide adjunct clauses introduced by complementizers into adjunct clauses which allow an expressed subject and adjunct clauses which do not allow an expressed subject. In chapter 4, I will examine control in complement clauses in Bahasa Indonesia. In both chapter 3 and 4, I will discuss the interpretation
of the controller of the unexpressed subject. Chapter 5 provides a general summary and conclusion of the study.
CHAPTER 2

BASIC GRAMMAR OF BAHASA INDONESIA

In this section we will look at the basic grammar of Bahasa Indonesia, a member of the Austronesian family, which will provide the background to the analysis to come later.

The basic word order in Bahasa Indonesia is SV(O), as is shown in example (1) below.¹

1. Tono/Saya/Anak itu membaca buku itu.
   T lsg child DET mWVread book DET
   Tono/I/The child read the book.

A noun can be modified by an adjective, a pronoun or possessive phrase and followed by a demonstrative ini 'this' or itu 'that' or a determiner itu 'the'. A noun can also be modified to the left by a classifier and preceded by a numeral. Noun modifier order is illustrated in the formula form below:²

(Q CLASS) N (Adj) (PossP) (DET)

2. tiga buah mobil merah kakak saya itu
   three CLASS car red sibling lsg DET
   those/the three red cars of my brother/sister

Verbs are not marked for person, gender, tense or aspect. Verb prefixes may indicate distinctions which fall under the heading of tense, aspect and mood. Aspect is marked by words such as telah/sudah 'already' indicating perfective aspect, sedang indicating progressive or imperfective aspect. Another marker which indicates time reference is the future marker
'akan' 'will'. These markers, according to Kana (1986) are indicators of the finiteness of construction. What Kana called a "finite clause" is one which allows an aspect marker, whether it has one or not, while non finite clauses are those which prohibit the occurrence of such a marker. For example:

3. Tono akan sedang/ telah membeli buku.
   T FUT IMPERF PERF meN-buy book
   Tono will buy/is buying/bought a book.

4a. Tono pergi untuk membeli buku.
   T go COMP meN-buy book
   Tono went to buy a book.

b. Tono akan sedang/ telah pergi untuk membeli buku.
   T FUT IMPERF PERF go COMP meN-buy book
   Tono will buy/is going/went to buy a book.

c. *Tono pergi untuk akan sedang/ telah membeli buku.
   T go COMP FUT IMPERF PERF meN-buy book

Sentence (3) and the matrix clauses of sentences (4a) and (4b) are considered finite clauses, because aspect markers and future marker may precede the verb. Embedded clauses in the sentences (4a) and (b) are considered non-finite clauses because aspect markers and the future marker 'akan' 'will' cannot occur preceding the verb, as is shown by the ungrammaticality of sentence (4c).

2.1 Personal Pronouns in Bahasa Indonesia

Bahasa Indonesia subjects can be distinguished from non-subjects by the clitic form of their personal pronouns. Most personal pronouns have both full and clitic forms.
<table>
<thead>
<tr>
<th>Pronoun</th>
<th>Full Form</th>
<th>Clitic Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>saya, aku, ku, -ku</td>
<td>(1sg) T</td>
<td>(1sg) -ku</td>
</tr>
<tr>
<td>(eng)kau, kamu, -mu</td>
<td>(2sg) 'You'</td>
<td>(2sg) -mu</td>
</tr>
<tr>
<td>dia, ia, -nya</td>
<td>(3sg) 'S/he'</td>
<td>(3sg) -nya</td>
</tr>
<tr>
<td>kami</td>
<td>(1pl.exc) 'We'</td>
<td>(1pl.exc) -nya</td>
</tr>
<tr>
<td>kita</td>
<td>(1pl.inc) 'We'</td>
<td>(1pl.inc) -nya</td>
</tr>
<tr>
<td>kalian</td>
<td>(2pl) 'You'</td>
<td>(2pl) -mu</td>
</tr>
<tr>
<td>mereka</td>
<td>(3pl) 'They'</td>
<td>(3pl) -nya</td>
</tr>
</tbody>
</table>

The full forms, except for third person may occur in any nominal position, and may bear any grammatical relation. The clitic forms are more restricted in their use than the full form. A clitic (-ku, -mu, -nya) may be a direct object if it attaches to a verb (example 5); it may be used as the object of a preposition if it attaches to a preposition (example 6); or it may be used as the possessor if it attaches to a possessed noun (example 7):

5. Tono meneleponku/-mu/-nya tadi pagi.
   T meN-call-1sg/-2sg/-3sg while ago morning
   Tono called me/you/him (her) this morning.

6. Tono menulis surat untukku/-mu/-nya.
   T meN-write letter PREP-1sg/-2sg/-3sg
   Tono wrote a letter for me/you/him (her).

7. Tono meminjam bukuku/-mu/-nya.
   T meN-borrow book-1sg/-2sg/-3sg
   Tono borrowed my/your/his (her) book.

In this section we will be concerned with the third person singular pronoun. The third person singular pronoun dia 's/he' has a variant form ia which, like dia, is not a clitic. More restricted than dia, however, ia may only be used as a subject (8). Ia may not have the object (9), the possessive (10), or object of preposition relation (11), which dia is allowed. The clitic -nya may have the object, possessive, and also object of preposition relation.
8. Ia/Dia membaca buku itu.
   S/he read the book.

9. Tini melihat dia/-nya/*ia di pasar.
   Tini saw her (him) in the market.

10. Tini membaca buku dia/-nya/*ia.
    Tini read her (his) book.

11. Tono membeli buku untuk dia/-nya/*ia.
    Tono bought a book for him (her).

Third person singular pronominal objects may have the full form or the
clitic form, as in example (9), while pronominal subjects may only have the full
form (8). *Ia* may function only as a subject and *dia* may function as a subject or
an object.

It should be noted that the clitic *-nya* can denote human or non-human,
however, the free form third person pronoun *ia, dia, or the third plural
pronoun *mereka* cannot denote a non human, as is shown in example (12c) in
which *dia* can only refer to a human such as *Dini* or *Dono*, but not to *buku*.
The ungrammaticality of *ia* in (12c) is because it occurs in the object position.
Non-human or concept nouns are stated in a different way, for example by
repeating the noun as in sentence (13).

    Tono saw Dini/Dono/the book.
b. Tono melihatnya.
   T  meN-see-3sg
   Tono saw her (him)/it.

c. Tono melihat dia/*ia.
   T  meN-see 3sg/3sg
   Tono saw her (him).

   T  meN-see one book book DET 3sg/3sg PREP desk
   Tono saw a book. The book was on the desk.

The use of the third person clitic with ditransitive verbs such as membelikan 'buy', membawakan 'bring', membuatkan 'make something for' is straightforward. The verbal morphology and semantics of these ditransitive verbs will be discussed in the next section.

14a. Tono membelikan Dini buku.
   T  meN-buy-kan D book
   Tono bought Tini a book.

b. Tono membelikannya buku.
   T  meN-buy-kan-3sg book
   Tono bought her a book.

   T  meN-buy-kan D 3sg

d.*Tono membelikan Dini dia
   T  meN-buy-kan D 3sg/3sg

Ditransitive verbs have two objects semantically designated patient and recipient. Either the patient or the recipient may appear as a clitic on the verb.
In example (14b), the recipient appears as the clitic -nya (*dia would also be acceptable). In (15b) the patient appears in clitic form. In this case, however, *dia would be ungrammatical, because buku 'book' is a non-human noun. As mentioned before, *dia can only denote human nouns. When the recipient is expressed as a NP it may follow the verb directly without a preposition (14a) or if it follows the patient, it must have a preposition(15a). Following Bresnan (1982), we use the terms 'first object', 'second object' and 'oblique'. When there are two objects in sequence in a sentence, in both English and Bahasa Indonesia, the first object is a recipient and the second object is a patient. When the recipient is in a prepositional phrase form, we call it an oblique.

15a. Tono membeli(kan) buku untuk Dini.
   T  meN-buy-kan book PREP D
   Tono bought a book for Dini

b. Tono membeli(kan)nya untuknya
   T  meN-buy-kan-3sg PREP-3sg
   Tono bought it for her.

The examples below illustrate that the recipient cannot follow the patient directly without a preposition.

   T  meN-buy-kan book D

b. *Tono membeli(kan)nya Dini.
   T  meN-buy-kan-3sg D

26
2.2 Basic Active Sentences in Bahasa Indonesia

Intransitive verbs in Bahasa Indonesia take one of three possible forms: *ber-* + base, *meN-* + base, or the verbal base alone without an affix. According to Verhaar (1984), "only a minority of *meN-* + base are intransitive." (p. 33)

Most of them are transitive. The base can be a noun, an adjective, or a verbal base.

17. Anak-anak bermain di halaman.
   child-RED *ber*-play PREP yard
   The children played in the yard.

18. Anak itu menjerit.
   child DET *meN*-scream
   The child screamed.

19. Dia datang kemarin sore.
   3sg arrive yesterday afternoon
   S/he arrived yesterday afternoon.

Transitive and intransitive verbs in Bahasa Indonesia can be related. In some cases, there is an intransitive verb with the base form and a transitive counterpart with *meN-* + base -kan. For example, the intransitive verb *menang* 'to win' which may be followed by a preposition has the counterpart transitive *memenangkan* 'to win'. In some cases, there is an intransitive verb with *ber-* + base and a transitive counterpart with *meN-* + base + -kan. For example: *berharap* 'to expect/hope', *mengharapkan* 'to expect/hope'. In some cases, the transitive sentences derived from the intransitive ones have a causative interpretation (example 22).
20a. Dia menang dalam pertandingan itu.
3sg win PREP game DET
S/he won the game.

b. Dia memenangkan pertandingan itu.
3sg meN-win-kan game DET
S/he won the game.

21a. Saya berharap dapat segera menyelesaikan pekerjaan ini.
1sg beR-expect MOD soon meN-finish-kan work DET
I expect to be able to finish the work soon.

b. Saya mengharapkan surat dari dia.
1sg meN-hope (expect)-kan letter PREP 3sg
I'm expecting a letter from him (her).

22a. Mereka telah pulang.
3pl PERF go-home
They went home.

b. Guru itu memulangkan murid-muridnya.
teacher DET meN-go home-kan student-RED-3sg
The teacher sent his (her) students home.

The (a) sentences of examples (20-22) are all intransitives, because the verbs are not followed by a NP, therefore we cannot passivize the sentence. On the other hand, the (b) sentences are all transitives. In a transitive sentence, the verb has a NP object following it, so it is possible to passivize the sentence. We will discuss passive later on in this section.

The examples above show that some transitive verb take the form meN- + base + -kan (sentences 20b, 21b, and 22b). Some transitives take meN- + base, as is shown in the example below. As mentioned before, it should be noted that a small number of intransitive verbs take the affix meN- + base.
23. Tono melihat buku itu.
   T meN-see book DET
   Tono saw the book.

Bahasa Indonesia ditransitive sentences can have several forms. In (24a and 24b), both the recipient and the patient are expressed as a full NP. For the recipient to immediately follow the verb, the suffix -kan must be used, as is illustrated by (24a) and the ungrammaticality of (24c). It is optional, however, if the recipient is expressed in a prepositional phrase in the oblique position (24b).

24a. Tono membelikan Dini buku itu.
   T meN-buy-kan D book DET
   Tono bought Dini the book.

b. Tono membeli(kan) buku itu untuk Dini.
   T meN-buy-kan book DET PREP D
   Tono bought the book for Dini.

   T meN-buy D book DET

The patient is almost always expressed, as is shown by (24d) and (24e) and the ungrammaticality of sentences (24f) and (24g). However, the recipient may be omitted. In (24d), when the suffix -kan is not used, the recipient is unspecified. For the verb beli 'buy', the recipient could be the person who bought something for himself or for someone else. However, when the suffix -kan is used, the recipient must be someone else (24e). Sentence (24h) is awkward as it seems to imply that Dini is the patient being bought as a slave.
24d. Tono membeli buku itu.
   T  meN-buy book DET
   Tono bought the book (for himself or for someone).

e. Tono membelikan buku itu.
   T  meN-buy-kan book DET
   Tono bought the book (for someone).

f. *Tono membelikan Dini
   T  meN-buy-kan D

g. *Tono membelikan untuk Dini.
   T  meN-buy-kan PREP D

h. ?Tono membeli Dini.
   T  meN-buy D

   Beside meN- + base, meN- + base + -kan, some transitive verbs in
   Bahasa Indonesia are marked by meN- + base + -i. Consider the following
   examples:

25a. Tono bertemu dengannya kemarin di perpustakaan.
   T  ber-meet PREP-3sg yesterday PREP library
   Tono met him/her in the library yesterday.

b. Tono menemuinya kemarin di perpustakaan.
   T  meN-meet-i-3sg yesterday PREP library
   Tono met him (her) in the library yesterday.

   Sentence (25a) is intransitive as indicated by the prefix beR- in the verb
   and by the use of the prepositional phrase, while sentence (25b) is transitive as
   indicated by the prefix meN- and the suffix -i attached to the verb, the use of
   the clitic objective pronoun -nya, and the lack of a preposition preceding the
   clitic objective pronoun -nya. According to Verhaar (1984) and also Kana
(1986), the role marker of the suffix -i is a 'locative', i.e. it assigns locative role meaning to the direct object NP. According to Verhaar, it seems that the locative -i cannot be added to the base already ending in -i. For example memberi 'give', but *memberii. The following are examples of a three place verb which has the suffix -i indicating the locative or goal. The verb in the (a) example has the meN- + base + (-kan). The recipient is in the prepositional phrase. The verb in the (b) example has the meN- + base + i. Here, the recipient directly follows the verb.

26a. Tono mengirim(akan) surat kepada Dini.
   T meN-send-(kan) letter PREP D
   Tono sent a letter to Dini.

b. Tono mengirimi Dini surat.
   T meN-send-i D letter
   Tono sent Dini a letter.

2.3 Passive Sentences in Bahasa Indonesia

Beside the active forms, as in all examples above, Bahasa Indonesia has passives. The passive in Bahasa Indonesia is a controversial issue. There are many studies about passives in Bahasa Indonesia written by Indonesian and non-Indonesian scholars, e.g. Chung (1976), Cartier (1979), Hopper (1983), Verhaar (1983) and Purwo (1988). Some of them, such as Mees (1950), Purwo reports, avoid using the term 'Active' and 'Passive'. Mees preferred to call them 'Subjective/Objective constructions'.

According to Chung (1976), Bahasa Indonesia has two constructions which are called "Passives", i.e. a "Canonical Passives" and the other is a construction which can be called "Object Preposing". Sentence (27a) is an example of a transitive construction. The corresponding "Passive" types are
(27b) and (27c). What Chung called "Canonical Passives" is the construction found in example (27b). In such constructions, the patient is sentence initial, the verb is prefixed with \textit{di-} which replaces the active transitive prefix \textit{meN-}, and the third person agent is either cliticized to the verb (\textit{-nya '3sg'}) or is in a prepositional phrase (\textit{oleh-nya 'by-3sg'}). In "Object Preposing" constructions (as example 27c shows), the patient is sentence initial and the pronominal agent precedes the verb. In such constructions, the verb is not prefixed with \textit{di-}, but it appears in its stem form. Chung includes this type of construction a passive, because the object of an active sentence moves to the position before the verb and it behaves like a subject.

27a. Tono/Dia/Ia/Saya membaca buku itu.
   T 3sg/3sg/1sg meN-read book DET
   Tono/he (she), I read the book.

b. Buku itu \textit{di-baca (oleh) Tono-nya}.
   book DET \textit{di-read PREP T/3sg}
   The book was read by Tono/him (her).

c. Buku itu saya baca.
   book DET 1sg read
   I read the book. (lit.: the book, I read.)

According to Chung, although the Object Preposing must be recognized as a type of passive, Object Preposing differs from Canonical Passive in several important respects. To begin with, they differ in meaning. Sentences which have undergone Object Preposing are semantically active rather than stative as is Passive. Furthermore, the underlying subject of Object Preposing cannot be a generic or an unspecified agent, while the underlying subject of a Canonical Passive can be. The underlying subject of Object
Preposing, unlike that of Canonical Passive, must appear as an overt constituent in surface structure. However, it should be noted that Chung called both constructions as Passive in the sense that the patient has the grammatical role of subject, although they have minor differences as mentioned before.

Cartier (1979), Hopper (1983), and Verhaar (1983), in their discussion of passive constructions in Bahasa Indonesia also mention the term 'Ergativity'. Cartier and Hopper argue that one of the two types of passives is 'Ergative'. According to Cartier, a piece of evidence that the construction should be classified 'Ergative' is the fact that a transitive object patterns with an intransitive subject. She gave an example of what she claimed an active sentence.

28a. Kupukul dia.
   1sg-hit 3sg
   I hit him (her).

   b. *Kupukulnya
      1sg-hit-3sg

   The object dia cannot be replaced by the clitic -nya. An intransitive subject dia cannot cliticize to clitic -nya either.

29a. Dia datang.
   3sg come
   He came.

   b. *Datangnya.
      come-3sg

   I agree with Kana (1986) who claims that sentence (28a) is in fact not active, but passive (p. 135). It is possible to replace dia with the specific
subject form *ia*. Therefore *dia* in sentence (28a) is not an object, but a subject. The ungrammaticality of sentence (28b) also shows that *dia* cannot alternate with the clitic *-nya*.

In her study of *Grammatical Relation in Bahasa Indonesia* within the Relational Grammar framework, Kana argues that in fact Bahasa Indonesia has a passive and there is only one single rule for passives in the language, not two rules for passives as is claimed by Chung. According to Kana, in passives, Bahasa Indonesia verbs are obligatorily preceded by their initial subject. Either the pronominal clitic (*ku-* '1sg', *kau-* '2sg', or the clitic *di-* for third person) or the full pronouns, but not both, may occur in this position. Furthermore Kana mentions that the full pronouns may not be separated from their verbs by modals, aspectuals, negative and so forth. So they function like verbal prefixes, in that they are strictly ordered with respect to the verb. The positions of the initial subject are the same for Chung's canonical passive and object preposing, that is preverbal (p.101). For example:

30a. Buku itu saya/ku-/(eng)kau-/mereka/Tono/ia/dia/di-/beli.
    book DET 1sg 2sg 3pl T 3sg di-/buy
    The book was bought by me/you/they/Tono/him (her).

b. Buku itu akan/harus saya/ku-((eng)kau-/mereka/Tono/ia/dia /di-/beli.
    book DET FUT/MOD 1sg 2sg 3pl T 3sg di-buy
    The book will be/should be bought by me/you/they/Tono/him (her).

According to Kana, the first and second person pronoun is incompatible with *di-* . The clitic *di-* is considered to be an affix showing third person agreement (p. 100 - 102). Verhaar claims that the clitic *di-* is not an indicator of third person agent in passives. It may also be compatible with
other persons, although non third agents are rare with *di- passive form. The
non third person may be used for reason of emphasis (Verhaar 1983: 212).**

If the sentence has two objects following the verb, only the first object
or the recipient can be the subject of a passive. An attempt to make the second
object or the patient become the passive subject directly makes the sentence
ungrammatical (31d and 31e). Sentence (31a) is the same as sentence (25a).

31a. Tono membelikan Dini buku itu.
    \[
    \begin{align*}
    \text{Tono} & \quad \text{men-buy-kan} & \quad \text{D book DET} \\
    \text{Tono bought Dini the book.}
    \end{align*}
    \]

b. Dini dibelikan buku itu oleh Tono.
    \[
    \begin{align*}
    \text{D} & \quad \text{di-buy-kan} & \quad \text{book DET PREP T} \\
    \text{or}
    \end{align*}
    \]

c. Dini dibelikan (oleh) Tono buku itu.
    \[
    \begin{align*}
    \text{D} & \quad \text{di-buy-kan} & \quad \text{PREP T book DET} \\
    \text{Dini was bought the book by Tono.}
    \end{align*}
    \]

d. *Buku itu dibelikan Dini oleh Tono.
    \[
    \begin{align*}
    \text{book DET} & \quad \text{di-buy-kan} & \quad \text{D PREP T} \\
    \text{or}
    \end{align*}
    \]

e. *Buku itu dibelikan (oleh) Tono Dini.
    \[
    \begin{align*}
    \text{book DET} & \quad \text{di-buy-kan} & \quad \text{PREP T D}
    \end{align*}
    \]

The examples above show that only the first object can function as the
subject of a passive sentence. If the agent directly follows the verb, the
preposition *oleh 'by' is optional (31c), but if it is separated from the verb by
another NP, the preposition is obligatory (31b).

As mentioned before, the recipient in active sentence as in sentence
(24e) may be left out, but not in passive as (31b) shows. Since the sentence has
only one object following the verb, as in the case of sentences (24b, 24d, and 24h), we do not have a problem in passivizing the sentence, for example:

31f. (cf.24e). Buku itu dibelikan (oleh) Tono.
   book DET di-buy-kan PREP T
   The book was bought (for someone) by Tono.

   g. (cf.24b). Buku itu dibelikan untuk Dini oleh Tono.
   book DET di-buy-kan PREP D PREP T
   The book was bought for Dini by Tono.

   h. (cf.24h) ?Dini dibeli (oleh) Tono.
   D di-buy PREP T
   Dini was bought by Tono.

2.4 The Distribution of Null Pronominals in Bahasa Indonesia

In this section we will examine the deletion of an argument in main or simple clauses and in coordinate clauses.

In general, a sentence or a clause in Bahasa Indonesia needs a subject. However, a sentence with a weather verb does not require or allow a subject as in examples (32) and (33) below.

32. Kemarin hujan.
   yesterday rain
   It rained yesterday.

33. Di sini panas sekali.
   PREP here hot very
   It is very hot here.

Sentences (32) and (33) are subjectless, because weather verbs have no argument. Consider also the examples below:
34a. Melaksanakan pekerjaan seperti ini tidak mudah.
Doing this kind of job is not easy.

b. Tidak mudah (untuk) melaksanakan pekerjaan seperti ini.
It is not easy to do this kind of job.

In sentence (34a) melaksanakan pekerjaan seperti ini functions as the subject of the sentence. Bahasa Indonesia is like English in this respect. As in English, the sentential subject melaksanakan pekerjaan seperti ini can be extraposed to the end of the sentence. Here, melaksanakan pekerjaan seperti ini does not function as the subject any more, but as a complement clause. In the English translation, we can see that the vacated subject position in sentence (34b) must be filled by the dummy subject it. In contrast, in Bahasa Indonesia the subject position remains empty. Unlike English, there is no dummy subject in Bahasa Indonesia. In general, there is no subject pro where there is no argument. According to Purwo, therefore, the subject is not essential in Bahasa Indonesia (1983:390).

In an appropriate context, a subject in a main clause may be deleted. In the discourse below, for example, B's answer is acceptable.

35. A: "Kemana Tono?"
"Where is Tono?"

B: "Sedang belajar di kamarnya."
"[He] is studying in his room."

In B's answer above, we can see that the subject of a finite clause is not overt, nor there is any agreement affix in the predicate to refer to it. The
identity of the subject in example (35) is clear from the discourse context. A sentence or a clause like B's answer is not acceptable outside the context. Consider also the example below:

36. Ketika Tono memperkenalkan diri, Budi tidak memperhatikan
   when T meN-introduce-kan REFL B NEG meN-notice-kan
   wajahnya. Hanya kepalanya yang mengangguk-angguk. Lalu mempersilakan
   face-3sg only head-3sg REL meN-nod-RED then meN-ask-kan
   Tono beristirahat.
   T beR-rest

   When Tono introduced himself, Budi did not notice his face. He only
   nodded his head.(Lit. It was only his head which was nodded). Then (he)
   asked Tono to take a rest.

   The examples (35) and (36) above show that although verbs in Bahasa
   Indonesia are not marked for agreement with the subject which determines
   the reference of a missing subject in the coordinate clause, the subject of a matrix
   clause in the discourse context can be omitted. In the third clause of sentence
   (36), the subject of the sentence is omitted. From the context, the unexpressed
   subject is understood as coreferential to Budi. In this context, there are two
   individuals who are possible referents for the unexpressed subject. It is Budi
   who asked Tono to take a rest. However, the unexpressed subject cannot be
   coreferential to some other person outside the context. English also allows
   some subject ellipsis, for instance:

37. A: "Where is Budi?"
   B: "Studying in his room."
It should be noted that the unexpressed subject is not allowed in an independent sentence. So, I think, Bahasa Indonesia is not a real 'pro drop' language, like Italian for example, because we cannot find a sentence without a subject, as the ungrammaticality of sentence (38) demonstrates. In the sentence below, the unexpressed subject does not refer to an argument mentioned in the previous context and we also cannot interpret such a null subject as coreferential to a pronoun.

38. *Melihat anak itu.  
   meN-see child DET

So far, we have seen that Bahasa Indonesia allows an NP subject to be unexpressed in certain circumstances. Does Bahasa Indonesia allow an unexpressed NP in the object position? In the discussion of ditransitive verbs, we have seen that the first object can be deleted, but it is not possible to delete the second object (see examples (24)). The object of a transitive verb in a main clause may not be omitted.

39. *Tono melihat -.  
   T  meN-see

Even in the discourse context, we cannot delete an object of a transitive verb.

40a. A: "Apakah Tono sudah membeli buku itu?"  
   Q T PERF meN-buy book DET  
   "Has Tono bought the book?"

   B: *"Ya, tadi Tono membeli - di toko itu."  
      yes second ago T  meN-buy PREP shop DET
The B' sentence is acceptable if we change the sentence to a passive form, because now it is a subject which is being deleted.

40b. B: "Ya, tadi dibeli (oleh) Tono di toko itu."  
yes second ago di-buy PREP T PREP shop DET  
"Yes, it has been already bought by Tono in the shop."

or:

40c. B: "Ya, tadi Tono beli di toko itu."  
yes second ago T buy PREP shop DET  
"Yes, it has been already bought by Tono in the shop."

In coordinate clauses in Bahasa Indonesia as in many languages, it is also possible to omit an NP in one conjunct. The examples below show that a subject of a coordinate clause may be omitted under coreference with the subject of a preceding conjunct (example 41, 42, 44, 45), or the object of a preceding conjunct (example 43). Whether the controller of a non occurring NP in the second conjunct is agent or patient is irrelevant to the non occurring NP in the constructions. In (41) both are agent, in (42) and (43) both are patient, while in (44) and (45) one is an agent and the other is a patient in each clause. However, it seems that both grammatical relations and semantic relations such as agent and patient are important in Bahasa Indonesia. Either both NPs have the same grammatical relation, as is illustrated in examples (41-42 and 44-45) or the same semantic relation, shown in example (43).

41. Tono\textsubscript{i} menelepon Dinij lalu \textsubscript{j}menemuinya\textsubscript{j}.  
T meN-call D then meN-meet-i-3sg  
Tono\textsubscript{i} called Dinij and then he\textsubscript{j} saw her\textsubscript{j} *(she\textsubscript{j} saw him\textsubscript{i})*.
42. Tonoj dipukul lalu segera dibawa ke rumah sakit.
   T di-hit then right away di-take PREP house sick
   Tonoj was hit and then he was sped to the hospital.

43. Tonoj mengambil topi lalu dipasangnya di kepala.
   T meN-take hat then di-put-3sg PREP head
   Tonoj took a hat and then it was put on his head by him.

44. Tonoj masuk ke ruangan itu dan tiba-tiba dipukul.
   T enter PREP room DET and suddenly di-hit
   Tonoj entered the room and then suddenly he was hit.

45. Tonoj dirampok tetapi tidak melapor polisi.
   T di-roh but NEG meN-notify police
   Tonoj was robbed but he didn't notify the police.

If the non occurring NP subject in a second clause does not have the same grammatical or semantic relation as the controlling NP in the first clause, the sentence is ungrammatical. We cannot interpret the non occurring NP in the second clause in sentence (41) as being coreferential with the object or the patient of the first clause. The unexpressed NP in the second clause would be in the subject position while the controller would be the object. Moreover, the unexpressed subject in the second clause would be an agent, while the controller would be a patient. This results in an ungrammatical sentence. More examples are:

46. Tonoj menemui Dinij tetapi tidak diajak makan siang.
   T meN-meet-i D but NEG di-invite eat daytime

   can be interpreted as:

   Tonoj saw Dinij but he was not invited for lunch.
Tonoj saw Dinij but shej was not invited for lunch.

The example above shows that the non occurring NP subject in the second clause may have the same grammatical relation or the same semantic relation as the controlling NP in the first clause, thus both interpretations are possible. The first interpretation shows that a grammatical function is relevant to the control relation in the coordinate clauses. Both the unexpressed NP subject in the second clause and the controlling NP in the first clause are subjects. The second interpretation, however, show a semantic role relevant to the control relation in coordinate clauses. Both the unexpressed NP subject in the second clause and the controlling NP in the first clause are patients.

Objects do not delete other objects. There are two occasions that look like objects deleting objects; one is coordinate verbs, the other is omission of an object. When neither of these things happen, removing the object produces the ungrammaticality of sentence (49). It should be noted that the same object is mentioned following the second verb, not preceding it.

   D FUT meN-take care and meN-big-kan child DET
   Dini will take care of the child and bring him (her) up.

b. *Dini akan merawat anak ituj dan membesarkanj.
   D FUT meN-take care child DET and meN-big-kan

If the sentence has two objects following the verb, both objects can be omitted in the first clause (48a).
48a. Tono membelikan j/jr dan membawakan Dinij buku itu
T meN-buy-kan and meN-bring-kan D book DET
Tono bought the book and brought it for Dini.

T meN-buy-kan D book DET and meN-bring-kan

As mentioned before, the recipient of double object verbs may be unexpressed, so it is also possible to omit the recipient in a coordinate clause. In this case, the deletion is in the second clause. It is also possible not to express the recipient in the first clause, although the sentence seems awkward, because the pronoun precedes the antecedent (example 48d).

48c. Tono membelikan Dinij buku itu dan akan membawakannya
T meN-buy-kan D book DET and FUT meN-bring-kan-3sg
besok.
tomorrow

Tono bought Dini the book and (he) will bring it tomorrow.

48d. *Tono membelikan Dann dan akan membawakan Dinij buku itu
T meN-buy-kan-3sg and FUT meN-bring-kan D book DET
besok.
tomorrow

Tono bought it and (he) will bring the book for Dini tomorrow.

T meN-buy-kan D and meN-read book DET

T men-buy-kan D book DET and meN-read
In summary, although Bahasa Indonesia verbs are not marked for agreement with the subject (or the object), subjects in main or simple clauses can be unexpressed in a certain discourse context. The interpretation of the unexpressed subject depends on a discourse topic and the unexpressed subject cannot be an indefinite pronoun outside the context. Objects in main or simple clauses, however, can never be deleted in any circumstances. In coordinate clauses, either subjects or objects of one clause can be unexpressed. Either grammatical functions or semantic roles can determine the deletion of a subject NP or pronoun in coordinate clauses. In coordinate clauses, verbs with the same number of objects can be conjoined. However, it should be noted that although it is possible not to express a subject or an object in certain circumstances, in my opinion, Bahasa Indonesia is not a real 'pro drop' language like Italian, because we cannot find an unexpressed pronoun in an independent sentence. The omission of a pronominal subject in Bahasa Indonesia is very restricted.

In subordinate clauses, as in coordinated clauses, in certain conditions it is also possible to omit a subject NP or pronoun of the subordinated clause if it is coreferential with an argument in the matrix clause. The behaviour of an unexpressed subject in subordinate clauses and in complement clauses under 'control verb' is the subject of the rest of this thesis.
As in the practice in much of the theoretical syntactic literature, I will use "complementizer" as the label for a particular word class which appears in a particular phrase structure configuration. The term is used on the basis of formal characteristics, rather than on the basis of the function of the following subordinate clause. Thus "complementizers" introduce not only complement clauses but adjunct clauses.
CHAPTER 3

CONTROL IN ADJUNCT CLAUSES

In this section we will investigate types of controlled adjunct clauses in Bahasa Indonesia. This section is divided into two parts: in the first part we will look at particular types of adjunct clauses which are introduced by a complementizer and in the second part, we will look at types of adjunct clauses which are not introduced by a complementizer. Some complementizers allow the subject to be unexpressed and some require it to be unexpressed. In this section, we will also examine the possible controller of an adjunct clause in Bahasa Indonesia.

3.1 Adjunct clauses which are introduced by a complementizer

In this part we will look at types of adjunct clauses which are introduced by a complementizer. This part is divided into two subparts according to the occurrence of an overt subject. The first subpart examines types of adjunct clauses introduced by a complementizer which do not allow an overt subject and in the second subpart we will look at types of adjunct clauses introduced by a complementizer which optionally allow an overt subject. There seems to be a correlation between type of a complementizer and the possibility of having a non-overt NP subject in adjunct clauses. Some complementizers, for example sampai/hingga 'so that/until', karena 'because', kecuali 'except/unless', sejak 'since', andaikan/seandainya/kalau/jika 'if', begitu 'as soon as', berhubung 'due to the fact', biarpun/walaupun/meskipun 'even though', ketika/sewaktu 'when/while', sementara 'while', sebelum 'before',
setelah/sesudah 'after' allow a realized subject to occur, but some others, for example dalam 'in', dari 'from', untuk 'for/in order to', tanpa 'without', dengan 'with/by', and the subordinating conjunction sambil 'while' do not allow a realized subject to occur in the adjunct clause. This is interesting since there is only one complementizer, i.e. sambil 'while' that is used as a subordinator only that requires a non-overt NP subject in the adjunct clause. Almost all complementizers which are used as subordinating conjunctions only allow an overt subject.

3.1.1 Adjunct clauses which do not allow an overt subject

3.1.1.1 Adjunct clauses introduced by words which function either as prepositions or subordinators

In Bahasa Indonesia, some words can function either as a preposition or a complementizer. The examples below illustrate the use of words which belong both the complementizer and preposition class.

1. Dini akan datang dalam satu jam lagi.
   D FUT arrive in one hour more
   Dini will arrive in an hour.

2. Tono berasal dari Jawa Tengah.
   T beR-originate from J central
   Tono is from Central Java.

3. Lelaki itu bekerja keras untuk keluarganya.
   man DET beR-work hard for family-3sg
   The man worked hard for his family.
4. Obat ini dibeli \textit{tanpa} resep.
\textit{drug DET \textit{di-buy} without prescription}
This drug is available without prescription.

5. Dia datang \textit{dengan} saya.
\textit{3sg come with 1sg}
S/he came with me.

Below are the list of complementizers functioning either as subordinators or prepositions that require a non-overt NP subject in the adjunct clause:

- \textit{dalam} 'in'
- \textit{dari} 'from'
- \textit{untuk} 'for /in order to'
- \textit{tanpa} 'without'
- \textit{dengan} 'with/by'

As a subordinating conjunction, these complementizers do not allow an expressed subject to occur in adjunct clauses. All the (a) examples below show that adjunct clauses without expressed subjects are grammatical, with the unexpressed subjects in the adjunct clauses (sentences 6a-10a) being interpreted as identical with the matrix subjects. The occurrence of an overt subject, either as a pronoun or a lexical NP makes the sentence ungrammatical. This is still the case whether the expressed clausal subject is coreferential or non coreferential with the matrix clause subject.

The referential dependency between an unexpressed subject (the controlled element) and an expressed or an unexpressed constituent (the controller) is indicated by co-indexation.

6a. Dalam \textit{menangani} persoalan itu, Tono\textsubscript{i} harus berhati-hati.
\textit{in \textit{menN-handle-i} matter DET T MOD beR-use tact}
In \textit{\_handling the matter, Tono\textsubscript{i} has to use tact.}

beR-use tact

7a. Dari berjualan koran, Tonoj dapat membiayai sekolahnya. from beR-sell-an newspaper T MOD meN-pay-i school-3sg
By selling newspapers, Tonoj can pay his school fee.

b. Dari diaj/Dini berjualan koran, Tonoj dapat membiayai from 3sg D beR-sell-an newspaper T MOD meN-pay-i sekolahnya.
school-3sg

8a. Untuk menjaga nama baiknya, Tonoj tidak pergi ke in order to meN-keep up name good-3sg T NEG go PREP tempat itu.
place DET

In order to keep up his image, Tonoj didn't go to the place.

b. *Untuk diaj/Dini menjaga nama baiknya, Tonoj tidak pergi in order to 3sg D meN-keep up name good-3sg T NEG go ke tempat itu.
PREP place DET

9a. Tanpa mengetuk pintu lebih dahulu, Tonoj tiba-tiba masuk. without meN-knock door more in the past T suddenly come in
Without knocking on the door first, Tonoj suddenly came in.

b. *Tanpa diaj/Dini mengetuk pintu lebih dahulu, Tonoj tiba-tiba without 3sg D meN-knock door more in the past T suddenly masuk.
come in
10a. Dengan bekerja keras, Tonoj berhasil dalam usahanya.
   by beR-work hard T beR-succeed PREP business-3sg
   By working hard, Tonoj succeeded in his business.

   by 3sg/ D work hard T beR-succeed PREP business-3sg

Surono (1993) mentions that according to Ramlan (1987) and the grammar book *Tata Bahasa Baku Bahasa Indonesia* (1988), the preposition and the subordinator conjunction *dengan* 'with/by' may be followed by an overt subject as the examples below.

11a. Narti duduk di tempat tidur dengan kedua kakinya ditumpangkan
   N sit PREP place sleep with two foot-3sg di-lay down-kan
di atas sebuah bangku kecil.
   PREP one chair small

   Narti sat on the bed with her feet resting on the small chair.

12a. Pemburu itu menunggu di atas bukit kecil dengan jari telunjuk
   hunter DET meN-wait PREP hill small with index finger
   melekat pada pelatuk senjatanya.
   meN-glue PREP trigger weapon-3sg

   The hunter was waiting on the small hill with his index finger glued to the trigger of his weapon.

   The "clauses" preceded by *dengan* 'with/by' in both examples above are not real clauses but, I think, NP containing a verbal modifier. The verbs following the nouns in (11a and 12a) are modifiers of the nouns because we can insert relativizer *yang* 'which/that' between the noun and the verb.
11b. ...dengan kedua kakinya yang ditumpangkan....
with two foot-3sg REL di- lay down-kan
with her/his feet which were resting on....

12b. ...dengan jari telunjuk yang melekat pada pelatuk senjatanya.
with index finger REL meN- glue PREP trigger weapon-3sg
with his index finger which was glued to the trigger of his weapon.

Adjunct clauses in Bahasa Indonesia may precede the matrix clause, as shown by the examples above, or follow it, as shown in the examples below. Like sentences (6-10) above, the following constructions with a postposed adjunct cannot have a pronoun or a lexical NP expressed, as is shown by the ungrammaticality of the (b) examples of sentences (13-17):

13a. (cf. 6a) Tono\textsubscript{i} harus berhati-hati dalam \textit{menangani} persoalan itu.
\begin{align*}
\text{T} & \text{ must } \textit{beR-use tact in } \textit{menN-handle-i matter DET} \\
\text{Tono} & \text{ has to use tact in handling the matter.}
\end{align*}

b. *Tono harus berhati-hati dalam dia\textsubscript{ij}/Dini \textit{menangani} persoalan itu.
\begin{align*}
\text{T MOD } \textit{beR-use tact in 3sg D meN-handle-i matter DET}
\end{align*}

14a. (cf. 7a) Tono\textsubscript{i} dapat membiayai sekolahnya dari \textit{j\textsubscript{ij}}/jual\textsubscript{an} koran.
\begin{align*}
\text{T MOD } \textit{meN-pay-i school-3sg from beR-sell-an newspaper} \\
\text{Tono} & \text{ can pay his school fee by selling newspapers.}
\end{align*}

b. *Tono\textsubscript{i} dapat membiayai sekolahnya dari dia\textsubscript{ij}/Dini berjual\textsubscript{an} koran.
\begin{align*}
\text{T MOD meN-pay-i school-3sg from 3sg D beR-sell-an newspaper}
\end{align*}

15a. (cf. 8a) Tono\textsubscript{i} tidak pergi ke tempat itu untuk \textit{menjaga nama baiknya}.
\begin{align*}
\text{T NEG go PREP place DET in order to meN-keep up name good-3sg} \\
\text{Tono} & \text{ didn't go to the place in order to keep up his image.}
\end{align*}

16a. (cf. 9a) Tono₁ tiba-tiba masuk tanpa mengetuk pintu lebih dahulu. Tono₁ suddenly came in without knocking on the door first.


17a. (cf. 10a) Tono₁ berhasil dalam usahanya dengan bekerja keras. By working hard, Tono₁ succeeded in his business.


3.1.1.2 Adjunct clauses introduced by a word which functions as a subordinator

There is only one subordinator, i.e. *sambil 'while' in adjunct clauses that requires an unexpressed adjunct subject. Adjunct clauses introduced by subordinator *sambil 'while' are similar to adjunct clauses introduced by *dalam 'in', *dari 'from', *untuk 'for/in order to', *tanpa 'without' or *dengan 'with/by' in that they do not allow an expressed subject to occur (18a). The position of the clause can be to the left (18b) or to the right (18c) of the matrix clause.

18a. Sambil jmembaca buku, Tono jmenonton TV. While reading a book, Tono was watching TV.
b. *Sambil diaj/Dini membaca buku, Tono jmenonton TV.
   while 3sg D  men-read book T  men-watch TV

   c. Tonoj menonton TV sambil jmembaca buku.
   T  men-watch TV while  men-read book
   Tonoj was watching TV while reading a book.

   T  men-watch TV while 3sg/ D  men-read book

   The complementizer *sambil 'while' as well as the complementizers/prepositions *dalam 'in', *dari 'from', *untuk 'for/in order to', *tanpa 'without' or *dengan 'with' require the verbs in the adjunct clause to be non-finite and do not allow an overt subject. Except for adjunct clauses introduced by *untuk 'for/in order to', adjunct clauses which do not allow a realized subject, as in all the examples above, may not take an aspect marker, either *telah indicating perfective' or *sedang for imperfective marker, the future marker *akan or a modal such as *harus 'must', or *bisa/dapat 'can/be able to'.

   19. *Dalam *akan/telah/harus/bisa menangani persoalan itu, jTono
   in  FUT PERF MOD MOD menN-handle-i matter DET T
   harus berhati-hati.
   MOD beR-use tact

   20. *Sambil *akan/sedang/ harus/bisa makan, jTono menonton TV.
   while  FUT IMPERF MOD MOD eat T  men-watch TV

   Adjunct clauses introduced by *untuk 'for/in order to' may not take an aspect marker or a future marker, but it allow modal *bisa/dapat 'can/be able to'.

   T  beR-work hard in order to MOD  menN-life-i family-3sg
b. Tono\textsubscript{j} bekerja keras untuk bisa/ dapat menghidupi keluarganya
\begin{tabular}{llr}
T & beR-work hard & in order to MOD MOD meN-life-i family-3sg \\
\end{tabular}
Tono\textsubscript{j} worked hard in order to be able to support his family.

The examples above show that the subject position in an adjunct clause cannot be filled by a lexical category. In this case, the clause may not take an aspect marker, a future marker akan or some modals such as harus 'must', bisa/dapat 'can/be able to', with the exception adjunct clauses introduced by untuk 'for/in order to' which allow modal bisa/dapat 'can/be able'. This suggests that these clauses are non-finite. Since the modal bisa/dapat 'can/be able to' may appear after the complementizers mentioned above, it seems that bisa/dapat are not indicators of a non-finite clause.

3.1.1.3 The controller of a non-overt NP subject

The non overt subjects in the adjunct clauses in the examples above must be interpreted as coreferential to the subject of the matrix sentence. In other words, it is the matrix subject which functions as the controller of the adjunct clause. When an object is present in the matrix clause and both clauses are in the active form, the controller of an unexpressed subject in the adjunct clause is the matrix subject not the matrix object. In the examples (22-23), it is Tono as the subject of the matrix clause, not Dini, as the matrix object, which is coreferential to the unrealized subject in the adjunct clause. The (a) examples show the adjunct clauses to the left of the matrix clause, while the (b) examples show the adjunct clauses to the right of the matrix clause. The (b) examples show that the unexpressed subject of the adjunct clause does not depend on the argument which is close to it, i.e. to the matrix objects. The (a) and (b) examples of sentences (22-23) have the same meaning. Nor may the
unexpressed subject be interpreted as coreferential to someone else outside the sentence.

22a. Tanpa i*j+y*memakai baju baru, Tono[i] menemui Dinij. without meN-wear clothes new T meN-meet-i D

b. Tono[i] menemui Dinij tanpa i*j+y*memakai baju baru. T meN-meet-i D without wear clothes new Tono[i] saw Dinij without i*j+y*wear new clothes.

23a. Sambil i*j+y*memejamkan matanya, Tono[i] mencium Dinij. while meN-close-kan eye-3sg T meN-kiss D

b. Tono[i] mencium Dinij sambil i*j+y*memejamkan matanya. T meN-kiss D while meN-close-kan eye-3sg Tono[i] kissed Dinij as he i*j+y*closed his eyes as she i*j+y*closed her eyes.

The matrix subject in the examples above is the only possible controller, presumably because the unexpressed complement subject and the matrix subject have both the same grammatical role and the semantic role. Both the unexpressed NP and the controller are the subject with the semantic role of agent. The object with the semantic role of patient cannot be the controller of the unexpressed subject with the semantic role of agent.

The situation is different when we passivize the adjunct clause. The controller of the unexpressed subject may be interpreted as coreferential to the subject or the object of the matrix clause.

24. Tono[i] membawa obat itu j+y*diperiksa oleh polisi. T meN-bring drug DET without di-investigate PREP police Tono[i] took the drug without i*being/j*its being investigated by the police.
The controller of an unexpressed subject is not restricted to one argument of the verb. In (24) we can see that either a subject or the object can control the adjunct, for it is possible to interpret *diperiksa oleh polisi* 'was investigated by the police' as predicated of the subject as well as the object. In this case, the object can be the controller since the unexpressed subject shares the semantic role of patient with matrix object.

The second object may also be the controller of an unexpressed subject.**

25. Tono\(i\) membawakan Dinij obat itu\(k\) tanpa \(ij/jk\) diperiksa oleh T me\(n\)-buy-\(kan\) D drug DET without di\(-\)investigate PREP

police
polisi.

Tono\(i\) took the drug\(k\) along with him\(j\) for Dinij without \(ij being/j her being/k its being investigated by the police.

The object of a preposition may also control the adjunct clause.

25a. Tono\(i\) berbicara dengan Dinij tanpa \(ij\) ditemani oleh ibun\(y\)j.

T be\(R\)-talk PREP D without di\(-\)friend-i PREP mother-3sg

Tono\(i\) talked to Dinij without his/herj being accompanied by her\(j\) mother.

Although the possible controller may be the matrix subject, first or second object, or the object of a preposition, the examples below show that the sense of the sentence can rule out one of the possible controllers.

26. Sambil \(ij\) ditemani oleh Budij, Tono\(i\) mengunjungi Dinij.

while di\(-\)friend-i PREP B T me\(n\)-call D

Tono visited Dini in the company of Budi.
27. Tonoi membeli buku itu\textsuperscript{1} tanpa \textit{di}-diperiksa lebih dahulu.
\begin{itemize}
\item\textit{meN-buy book DET without \textit{di}-examine more in the past}
\end{itemize}
Tono\textsubscript{i} bought the book without its being examined first.

When we passivize the matrix clauses but the adjunct clause is active, there is also a range of possible controllers of the unexpressed subject of the adjunct clauses. The unrealized subject may be interpreted as coreferential to the matrix subject or the oblique after passivization. However, the missing subject cannot be interpreted as coreferential to a plausible controller outside the sentence.

28. Tanpa \textit{i/j}\textsubscript{2}\textit{j/k-wear clothes new D \textit{di-see-i PREP T}}
Without \textit{i/j\textsubscript{k}} wearing new clothes, Dinij was seen by Tono\textsubscript{i}.

29. Dengan \textit{i/j\textsubscript{k}} memakai baju baru, Dinij ditemui oleh Tono\textsubscript{i}.
by \textit{meN-wear clothes new D \textit{di-see-i PREP T}}
Wearing new clothes, Dinij was seen by Tono\textsubscript{i}.

30. Sambil \textit{i/j\textsubscript{k}} memejamkan matanya, Dinij dicium oleh Tono\textsubscript{i}.
while/as \textit{meN-close-kan eye-3sg D \textit{di-kiss PREP T}}
Dinij was kissed by Tono\textsubscript{i} as she/his eyes.

When both clauses are passivized, the controller must be the matrix passivized subject. The matrix oblique or the agent cannot control the unexpressed the matrix subject with the semantic role of patient.

30a. Obat itu\textsuperscript{1} dibawa (oleh) Tono\textsubscript{i} \textit{j\textsubscript{i}-tanpa diperiksa oleh polisi.}
\begin{itemize}
\item\textit{drug DET \textit{di}-bring PREP T without \textit{di}-examine PREP police}
\end{itemize}
The drug\textsubscript{i} was brought by Tono\textsubscript{i} without its being investigated by the police.
The choice of the controller of the adjunct clauses in the examples above seems to be determined by semantic roles, not just by grammatical relation. The unexpressed subject and the controller must play the same grammatical role or they must play the same semantic role. The subject is the most likely controller, but the agent can also be the controller. Sentences (22) and (23) show that if the unexpressed subject does not play the same grammatical role or the same semantic role with the controller, the sentences are unacceptable. In these examples, the unexpressed subject is the matrix subject that has an agent role but in some cases, the contextual or pragmatic factor also determines the choice of the controller, as examples (26-27 and 31-32) illustrate.

31. Dalam menangani persoalan itu, Dinij dimintai pendapat oleh Tonoj.

In handling the problem, Dinij was asked by Tonoj for her opinion.

32. Dalam menjawab pertanyaan itu, Dinij dikritik oleh Tonoj.

In answering the question, Dinij was criticized by Tonoj.

It is not necessary for the controller or the antecedent to be physically present in the sentence; it may also be dependent on implicit argument or it is understood, as is shown in the example (33) below. The unexpressed subject in the adjunct clauses below is interpreted as identical with the understood agent of the matrix clause.

money that kind of from BER-sell on a small scale PREP

That amount of money was collected from small-scale business in the Johar market.

The matrix clause of sentence (33) is in the passive form as is indicated by prefix *di-* attached to the verb while the adjunct clause is active. The agent of the matrix clause and the agent (or the subject) of the adjunct clause are not expressed in the sentence. Although the matrix agent is not expressed, however, it can control the adjunct clause.

There also exists the case in which the entire matrix is the controller of the unexpressed subject, as shown in the example below.

34. Tonoj mencium Dinij tanpa diketahui oleh orang lain

T mEN-kiss D without di-know-i PREP person other

Tonoj kissed Dinij without its being known by other people.

In this sentence, it is the event of the kissing which is not known by other people. So, the controller is determined by the whole clause.

3.1.2 Adjunct clauses which allow an overt subject

In this section we will look at adjunct clauses which allow an overt subject. We will also examine the possible controller of the unexpressed subject in an adjunct clause.
3.1.2.1 Adjunct clauses introduced by words which function either as prepositions or subordinators

Complementizers that are used either as subordinators or prepositions in adjunct clauses that allow an expressed subject are:

- *sejak* 'since'
- *hingga/sampai* 'so that/until'
- *karena/sebab* 'because'
- *kecuali* 'except/unless'

Those complementizers may also function as prepositions, for example:

35. Tono pergi *hingga/sampai* tengah malam.
   T go until mid night
   Tono went out until midnight.

36. Dia mengundurkan diri *karena/sebab* penyakitnya.
   3sg meN-back-kan self because sickness-3sg
   S/he retired for reasons of health.

37. Semua temannya datang *kecuali* Dini.
   all friend-3sg come except/unless D
   All of his/her friends came except Dini.

38. Dia pergi *sejak* tadi pagi.
   3sg go since while ago morning
   S/he has been gone since this morning.

The adjunct clauses in sentence (39-43) below are introduced by words which can be used either as a subordinating conjunction or a preposition. Unlike adjunct clauses preceded by *dalam* 'in', *dari* 'from', *untuk* 'for the sake of/in order to', *tanpa* 'without', *dengan* 'with/by', or subordinator *sambil* 'while', adjunct clauses introduced by *hingga/sampai* 'so that', *karena/sebab*
'because', *kecuali* 'except, unless', *sejak* 'since' optionally allow an overt subject. The preference is for the subject to be non-overt, if the non-overt subject is coreferential with the matrix subject. When the subject of the adjunct clause is expressed it may be noncoreferential to the matrix subject. Adjunct clauses in this group can be to the left or the right of the main clause.

39. Tono membaca buku itu berulang kali hingga/sampai Dini tidak dapat meminjamnya.

Tono read the book many times so that Dini could not borrow it.

Since the embedded clause in example (39) is a resultative clause, the adjunct clause in this case generally occurs following the main clause. It is also possible for a resultative clause to precede the matrix clause, as example (40) demonstrates.

40. Sampai/hingga Dini lelah, Tono mengajaknya pergi sehari penuh.

Tono had Dini on the go all day long, so that Dini got tired. (Lit.: So that Dini got tired, Tono took her to go all day long.)

Adjunct clauses introduced by *hingga/sampai* can also denote a temporal meaning. In this case, the adjunct clause can precede or follow the matrix clause.

41. Sampai/hingga matahari tenggelam, Tono membaca buku itu berulang kali.

Tono has read the book several times until the sun set.
More examples of adjunct clauses that allow an expressed subject are:

42. Tono pulang lebih awal karena Dini sakit.
   T go home more early because D sick
   Tono went home earlier because Dini was sick.

43. Tono tidak datang ke pesta itu kecuali Dini diizinkan oleh orang tuanya.
   T NEG come PREP party DET except/only if D di-permit-kan
   PREP person old-3sg

   Tono didn't go to the party unless Dini was permitted by his/her parent.

44. Tono sering terlambat pulang sejak Dini dipindahkan ke tempat itu.
   T often late go home since D di-transfer-kan PREP place

   Tono often goes home late since Dini was transferred to that place.

   If the subject position in the adjunct clause is filled by a pronoun, the
   pronoun may refer to some other person whose reference can be found in the
   discourse or in the context. In other words, it is free in reference. This is true
   whether the adjunct clause precedes or follows the matrix clause, for example:

45a. Tono\(^3\) sering terlambat pulang sejak dia\(^3\) dipindahkan ke tempat itu.
    T often late go home since 3sg di-transfer-kan PREP place
    Tono\(^3\) often goes home late since Dini was transferred to that place.

b. Sejak dia\(^3\) dipindahkan ke tempat itu, Tono\(^3\) sering
    since 3sg di-transfer-kan PREP place DET T often
terlambat pulang.
late go home

Tonoj often goes home late since he/she was transferred to that place.

The above examples show that adjunct clauses introduced by sampai/hingga 'so that/until', karena/sebab 'because', kecuali 'except/unless', or sejak 'since' optionally allow an overt subject to occur. The examples below show that adjunct clauses introduced by these same complementizers can also have an unrealized subject.

46. Tonoj membaca buku itu berulang kali sampai/hingga j*bosan.
   T me N-read book DET several time so that /until bored
   Tonoj read the book several times so that/until he/she felt bored with it.

47. Tonoj pulang lebih awal karena j*sakit.
   T go home more early because sick
   Tonoj went home earlier because he/she was sick.

48. Tonoj tidak datang ke pesta itu kecuali j*dizinkan oleh
   T NEG come PREP party DET except/unless di-permit-kan PREP
   orang tuanya.
   person old-3sg

   Tonoj didn't go to the party unless he/she got permission from his/her parent.

49. Tonoj sering terlambat pulang sejak j*dipindahkan ke tempat
   T often late go home since di-transfer-kan PREP place
    itu.
    DET

   Tonoj often goes home late since he/she was transferred to that place.
Adjunct clauses in this type can be preposed, as shown in the examples (46-49) or postposed, as in example (50) below.

50. (cf.47) Karena j*sakit, Tono*j pulang lebih awal. 
   because sick T go home more early
   Because hej*s was sick, Tono went home earlier.

Adjunct clauses which allow a realized subject, either as a pronoun or NP, may also take an aspect marker, a future marker or a modal, for example:

51a. Tono*j pulang lebih awal karena jakan/harus menemui Dini.  
   T go home more early because FUT MOD meN-see D
   Tonoj went home earlier because hej would/had to see Dini.

51b. Tono*j pulang lebih awal karena diaj/k akan/harus menemui Dini.  
   T go home more early because 3sg FUT MOD meN-see-i D
   Tonoj went home earlier because hej/j/shek will/must see Dini.

52a. Tono*j membaca buku itu berulang kali sampai/hingga jtelah  
   T meN-read book DET many time so that/until PERF
   memahami isinya.
   meN-understand-i content-3sg

   Tonoj read the book many times so that hej could understand its content.

b. Tono membaca buku itu berulang kali sampai/hingga dia telah  
   T meN-read book DET many time so that/until 3sg PERF
   memahami isinya.
   meN-understand-i content-3sg

   Tono read the book many times so that hej could understand its content.
3.1.2.2 The controller of a non-overt NP subject

The non overt subject in the examples above (46-51a) must be interpreted as identical with the matrix subject; it cannot be noncoreferential to the matrix subject. Since the matrix clauses in the examples above are in an intransitive form (47-51a) or the object of the clause is inanimate (46 and 52a), there is only one possible NP which can be interpreted as the controller. In this case, we do not have a choice of interpreting the unrealized subject other than the matrix subject. However, in the right circumstances, we could interpret the unexpressed subject as something other than the matrix subject.

In the example below (53-55) the unrealized subject of adjunct clauses introduced by *karena 'because, kecuali 'except/ unless', or *sejak 'since' can be interpreted as the subject or the object of the matrix clause, although the preference is to interpret the unexpressed subject as the matrix subject. However, it cannot be interpreted as coreferential to somebody else outside the sentence. The possible controller must be within the sentence. This is true whether the adjunct clause is the left or to the right of the matrix clause.

53. Tonoj tidak akan menemui Dinij kecuali *i/*j/*k/*l diizinkan oleh orang tuanya.
PREP person old-3

Tonoj will not see Dinij unless he/j/*k/*l was permitted by his/her parents.

In sentence (53), the matrix object can be the controller since has the same semantic role of patient with the unexpressed NP subject. However, the example below shows that the object cannot be the controller if the unexpressed subject is has the semantic role of agent.
54. Tonoj menelepon Dinij karena i/*j/*k/*l mendengar berita itu.

When the main clause is passivized, the unrealized subject in the adjunct clause may be interpreted either as coreferential with the subject or the oblique, but not as coreferential with someone else outside the sentence. However, there is a preference to interpret the unexpressed subject as identical with the matrix subject.

55. Karena i/*j/ harus menghadiri acara itu, Dinij tidak dikunjungi oleh Tonoj.

Because she/*he/* must attend the meeting, Dinij was not visited by Tonoj.

56. Kecuali i/*j/*k/*l diizinkan oleh orang tuanya, Dinij akan dikunjungi oleh Tonoj.

Dinij will be visited by Tonoj only if she/*he/* was permitted by her/his parent.

57. Sejak i/*j/ dipindahkan ke tempat itu, Dinij tidak pernah dikunjungi oleh Tonoj.

Dinij was never visited by Tonoj since she/*he/* was transferred to that place.
The object of a preposition can also be the controller of unexpressed subject.

58. Tonoj tidak pernah berbicara dengan Dinij lagi sejak T NEG already beR-talk PREP D any more since

\[ iʃ/j^*/k^*/l^*/dipindahkan ke tempat itu. \]
\[ di-transfer-kan PREP place DET \]

Tonoj has never talked to Dinij since he/j/*f/she/*f/*1 was transferred to that place.

The unexpressed subject in the adjunct clause introduced by sampai/hingga 'so that/until' in (46) is coreferential with the matrix subject. Like the other adjunct clauses which optionally have an expressed subject, when there are pragmatically suitable controllers in the sentence, the unexpressed subject may also have more than one interpretation. In example (59) it is possible to interpret the unrealized subject as coreferential with the matrix subject or object, but it cannot be corefential with some other person in the discourse or in the context.

59. Tonoj akan mencintai Dinij sampai/hingga \[ iʃ/j^*/m^*/n^*/c^*/我国^*/n^*/D \] so that/until die

Tono will love Dini until he/j/*f/she/*f/*1 dies.

In the example above, it is possible that the matrix object controls the unexpressed subject, presumably because in this case mati is not a real transitive verb involving an action. Therefore, the controller can be subject with the semantic role of agent or the object with the semantic role of patient.

In certain circumstances, for pragmatic reasons, the sentence has only one interpretation. Example (60) shows that the only controller is the subject,
because it is the person who is busy looking after the sick person i.e Tono that usually neglects to eat. Moreover if Tono was careful enough in looking after Dini, she would not neglect to eat.

60. Tono merawat Dini sampai/hingga lupa makan.
Tono was so looking after Dini that he neglected to eat.

On the other hand, in example (61), it is the matrix object which is the only plausible controller. In this case, it is the sick person who is looked after until she/he gets well.

61. Tono₁ merawat Dinij sampai/hingga j/işembuh.
Tono₁ looked after Dinij until shej got well.

3.1.2.3 Adjunct clauses introduced by words which function only as subordinators

Complementizers that participate in this type of adjunct clause are:

- andaikan/seandainya/kalau/jika: 'if'
- begitu: 'as soon as'
- berhubung: 'due to the fact'
- biarpun/walaupun/meskipun: 'even though'
- ketika/sewaktu: 'when/while'
- sementara: 'while'
- sebelum: 'before'
- setelah: 'after'
In the examples below, the adjunct clauses are preceded by words that function as subordinating conjunction only. As sentences (65a-72a) show, a lexical NP may alternate with a non overt subject (65b-72b).

65a. Dini akan pergi ke pesta itu andaikan/seandainya/kalau/jika
T FUT go PREP party DET if

Tono mengizinkannya.
T meN-permit-kan-3sg

Dini will go to the party if Tono permits her.

65b. Tono j dapat lulus ujian andaikan/seandainya/kalau/jika rajin belajar
T MOD pass exam if hard study
Tono j can pass the exam if he j studies hard.

as soon as T meN-call-3sg D meN-prepare-kan eat night
As soon as Tono called her, Dini prepared the dinner.

66b. Begitu j mendengar berita itu, Tono j menonton TV.
as soon as meN-hear message DET T meN-watch TV
As soon as he j heard the news, Tono j watched TV.

due to the fact D meN-heard message DET T meN-call-3sg
Because Dini heard the message, Tono called her.

67b. Berhubung j harus menemui temannya, Tono j tidak datang ke pertemuan itu.
due to the fact MOD meN-see-i friend-3sg T NEG come PREP
Because he j had to see his friend, Tono j didn't go to the meeting.
68a. Biarpun/walaupun/meskipun Dini meneleponnya, Tono tidak even though D meN-call-3sg T NEG

tenemuinya.
meN-see-i-3sg

Even though Dini called him, Tono didn't visit her.

b. Biarpun/walaupun/meskipun telah menyelesaikan tugasnya Tono; even though PERF meN-finish-kan, work-3sg T
tidak langsung pulang.
NEG straight home

Tonoj didn't go straight home even though hej had finished his work.

69a. Dini sedang belajar ketika/sewaktu Tono datang.
D IMPERF study while/when T come
Tini was studying when Tono came.

b. Tonoj sedang menyeberang jalan ketika/sewaktu melihat Dini.
T IMPERF meN-cross street while/when meN-see D
Tonoj was crossing the street when hej saw Dini.

70a. Sementara Tono menyelesaikan pekerjaannya, Dini menunggunya.
while T meN-finish-kan work-3sg D meN-wait-3sg
While Tono was finishing his work, Dini was waiting for him.

b. Sementara menunggu Dini, Tonoj menyelesaikan pekerjaannya.
while meN-wait D T meN-finish-kan work-3sg
While waiting for Dini, Tonoj finished his work.

71a. Sebelum Tono datang, Dini menonton TV.
before T come D meN-watch TV
Before Tono came, Dini watched TV.

b. Sebelum tidur Tonoj menonton TV.
before sleep T meN-watch TV
Before sleeping, Tonoj watched TV.
72a. Setelah/sesudah Tono datang, Dini menyediakan makan malam.
After Tono came, Dini prepared dinner.

b. Setelah/sesudah belajar, Tono menonton TV.
After studying, Tono watched TV.

If the subject position in the adjunct clause is filled by a pronoun, the pronoun may refer to the matrix subject, matrix object, or to somebody else understood in the context or the discourse. In other words, the reference is free. Since the (b) examples of sentences (65-72) show that those adjunct clauses have identical control properties, I shall therefore use only one of them in the following examples. In examples (73a) and (73b) the matrix clauses are in the active form, and the antecedent of the pronoun may be the matrix subject, the matrix object, or somebody else outside the sentence. On the other hand, in example (73c) and (73d), the matrix clauses are in the passive form. Sentences (a) and (b) have the same meaning. Sentences (c) and (d) as well have the same meaning.

73a. Tono tidak pernah menemui Dinij setelah dia dipindahkan ke tempat itu.
Tono has never seen Dinij after he was transferred to that place.

b. Setelah dia dipindahkan ke tempat itu, Tono tidak pernah menemui Dinij.
Tono has never seen Dinij after he was transferred to that place.

Tono has never seen Dinij after he/she was transferred to that place.
c. Dinij tidak pernah ditemui oleh Tonoj setelah dia di-see-i PREP T after 3sg di-transfer-kan PREP place DET D NEG already ke tempat itu.

Dinij has never been seen by Tonoj after she/he was transferred to the place.

The possible antecedents of the pronoun in the adjunct clause in example (73c and 73d) are the matrix subject, the oblique, or an antecedent may be found for it in the discourse. The examples above show that the position of adjunct clauses and the form of the sentence do not have an effect to the interpretation of the pronoun.

As mentioned before, adjunct clauses which allow an expressed subject to occur may have an aspect, a future marker or a modal, as shown in the example below.

74. Ketika/sewaktu jakan menyeberang jalan, Tonoj terpeleset. When [he/his] was going to cross the street, Tonoj slipped

75. Biarpun/Meskipun/Walaupun j • harus bekerja keras, ¡Tono tidak even though MOD ber-work hard T NEG mengeluh. meN-complain

Although [he/his] had to work hard, Tono didn't complain.
3.1.2.4. The controller of a non-overt NP subject

In all the (b) examples of sentences (65-72), the non overt subject in the adjunct clauses is controlled by the matrix subject; it cannot be coreferential with someone else outside the sentence. However, if an object is present, it can also be the controller of an unexpressed subject provided that they share the same semantic role. In example (76), the matrix object cannot control the unexpressed subject with the semantic role of agent. In the example (78), however, the matrix object with the semantic role of patient can control the passivized subject with the semantic role of patient. In (77), the unexpressed subject is not the agent and the matrix clause is active. The controller can be the subject or the oblique. When both clauses are passive, the unexpressed subject is coreferential with the matrix subject. It cannot be coreferential with the oblique, since they do not share the same semantic role.

76. Andaikan/Seandainya/Kalau/Jika [hej/*k/shej/*i] telah mendengar berita itu, Tonoj akan menelepon Dinij.

77. Andaikan/Seandainya/Kalau/Jika j/j telah mendengar berita itu, Dinij akan ditelepon oleh Tonoj.

78. Begitu j/jditelepon oleh orang asing, Tonoj menemui Dinij as soon as [hej/*k/shej/*i] was called by a stranger, Tonoj saw Dinij.
As soon as [shej/*hej] was called by a stranger, Dini was seen by Tono. When the adjunct predicate is a predicative adjective, the controller can be the subject (agent) or the object (patient). The (a) examples below illustrate that the controller of the unexpressed subject in the adjunct clauses involving predicative adjectives can be the subject or the object. When the matrix clause is passivized (b examples), the unexpressed adjunct subject can be coreferential with the matrix subject or the oblique.

80a. Berhubung j/jsibuk, Tono tidak menemui Dini.  
Due to the fact busy T NEG meN-see-i D  
Due to the fact that [hej/shej was] busy, Tono didn't see Dini.

b. Berhubung j/jsibuk, Dini tidak ditemui oleh Tono.  
Due to the fact busy D NEG di-see-i PREP T  
Due to the fact that [shej/hej was] busy, Dini was not seen by Tono.

Even though busy T meN-visit-i D  
Even though [hej/shej was] busy, Tono visited Dini.

b. Biarpun/Meskipun/Walaupun j/jsibuk, Dini dikunjungi oleh Tono.  
Even though busy D di-visit-i PREP T  
Even though [shej/hej was] busy, Dini was visited by Tono.

It is also possible for the second object to be the controller in the adjunct clause which allows an expressed subject.
82. Tonoj akan membelikan Dinij buku itu seandainya/jika diperlukan.
T FUT meN-buy-kan D book DET if di-need-kan
Tonoj will buy Dinij the book if [it is] needed.

The object of a preposition may also control the adjunct clause.

83. Berhubung membutuhkannya, Tonoj mengembalikan buku itu kepada Dinij.
due to the fact meN-need-kan-3sg T meN-return-kan book DET

Due to the fact that [she] needed it, Tonoj returned the book to Dinij.

84. Walaupun sempit, Tonoj senang tinggal di rumah itu.
even though narrow T like stay PREP house DET
Tonoj likes to stay in that house although [it] is small.

The examples of adjunct clauses which optionally allow an unexpressed subject to occur show that the controller of an unexpressed subject in such adjunct clauses may be the subject, the first or second object, or the oblique depending on the context, although there is a preference to interpret the unexpressed subject as identical with the matrix subject.

3.2 Adjunct clauses which are not introduced by a complementizer

When an adjunct clause is not introduced by a complementizer, the subject cannot be expressed. The occurrence of a lexical NP or a pronoun makes the sentence ungrammatical, as is shown (b) examples of sentences (85)-(89).

go back PREP J T meN-see-i D
*Having gone back to Jakarta, Tonoj saw Dinij.
b. *Dono/dia;j kembali ke Jakarta, Tono menemui Dini.  
   D 3sg go back PREP J T meN-see-i D

86a. jTakut masuk penjara, Tono terpaksa menyerahkan sebagian gajinya.
   afraid enter jail T ter-against one's will meN-turn over-kan

   jBeing afraid to be in jail, Tono turned over some portion of his salary against his will.

b. *Dini/dia;j takut masuk penjara, Tono terpaksa menyerahkan
   D 3sg afraid enter jail T ter-against one's will meN-turn over-kan

87a. jTidak menunggu napasnya teratur, Tono segera bertanya.
   NEG meN-wait breath-3sg in order T at once beR-ask

   Without getting his breath, Tono asked at once.

b. *Dini/dia;j tidak menunggu napasnya teratur, Tono segera bertanya.
   D 3sg NEG meN-wait breath-3sg in order T at once beR-ask

88a. Tono berdiri pelan-pelan, jtakut menarik perhatian orang.
   T beR-selft slow-RED afraid meN-attract attention people

   Tono stood up slowly, jbeing afraid of attracting people's attention.

b. *Tono berdiri pelan-pelan, Dini/dia;j takut menarik perhatian
   T beR-stand slow-RED D 3sg afraid meN-attract attention

   orang.
   people

89a. jBenci melihat Tono, jDini menundukkan kepalanya.
   hate meN-see T D meN-bow-kan head-3sg

   jHating to see Tono, Dini bowed her head.
As with adjunct clauses introduced by a complementizer which do not allow any realized subject to occur, adjunct clauses which are not introduced by a complementizer may not take an aspect marker or a modal, for example:

    FUT MOD MOD go back PREP J T meN-see-i D

In some semantic types of adjuncts, the position of the adjunct clause is strictly to the left of the matrix clauses, and in other cases, they may also be both to the left or to the right of the matrix clauses. Adjunct clauses in sentences (85a) - (87a) are strictly to the left of the matrix clause. An attempt to extrapose the adjunct clauses to the right of the matrix clauses results an ungrammatical sentence.

    T meN-see-i D go back PREP J

92. *Tonoj terpaksa menyerahkan sebagian gajinya, jagakut masuk penjara.
    T against one's will meN-turn over-kan part salary-3sg afraid

However, the adjunct clauses in sentences (88a) -(89a), may be to the left or to the right of the matrix clauses.
Being afraid of attracting people's attention, Tono stood up slowly.

95. Dini menundukkan kepalanya, *benci melihat Tono.  
Dini bowed her head, hating to see Tono.

Purwo (1984) stated that when a subordinating conjunction is not mentioned in a clause and the adjunct clause denotes temporal meaning, the clauses should be ordered iconically, with the order of clauses reflecting the order of the events. It is true for sentences (85a, 86a and 87a). However, in (88a and 89a), *takut menarik perhatian orang* 'being afraid of attracting people's attention' and *benci melihat Tono* '(she) hated to see Tono', might occur before or after *mereka berdiri pelan-pelan* 'they stood up slowly', and *Dini menundukkan kepalanya* 'Dini bowed her head', respectively. Here, there is no restriction to the position of the clause. In this case, presumably because they are overlapping, there is no restriction to the position of the adjunct clauses.

3.2.1 The controller of a non-overt NP subject

In the examples (85-89 and 94-95) the unexpressed subjects in the adjunct clauses are identical to the matrix subject. Even though in sentence (85a) there are two possible arguments in an active matrix clause, namely matrix subject or matrix object, which can function as the controller, it is the matrix subject which is the only plausible controller. When we passivize the matrix, however, the possible controller can be the matrix subject or the oblique.
Having gone back to Jakarta, Dini was seen by Tono.

The controller of an unexpressed subject can also be found in a possessive pronoun, as when we passivize sentence (86a).

Hating to see Tono, she bowed her head (Lit.: her head was bowed).

Neither the unexpressed NP subject in adjunct clauses introduced by a complementizer nor the unexpressed subject in adjunct clauses which are not introduced by a complementizer can be interpreted as coreferential to an argument outside the sentence.

[As soon as he] saw Dini, Tono stood up right away.

3.3 Summary

From the discussion above, it can be concluded that in Bahasa Indonesia there seems to be a correlation between the possibility of having a lexical subject and the possibility for aspect marking in a way that suggests the existence of a finite/non-finite distinction in Bahasa Indonesia, even though there is no distinction between finite and non-finite sentences in their verb forms. Non-finite clauses do not have expressed subjects and do not have aspect markers, while finite clauses can have aspect markers and must have subjects.

When the subject position is filled with a lexical category, it can be non-coreferential to the matrix argument. When the subject
is allowed to be null, however, it must be controlled. The possible controllers of adjunct clauses in Bahasa Indonesia must be within the sentence; it cannot be coreferential to some argument outside the sentence. The subject, first or second object, and oblique can be the controller of an unexpressed subject in the adjunct clause. Both grammatical function and semantic roles seem to be relevant in identifying the controller of an unexpressed subject.
CHAPTER 4

CONTROL IN COMPLEMENT CLAUSES

4.1 Introduction

In the previous chapter we have discussed cases of control that are induced by the sentence structure. This has nothing to do with the lexical properties of their main verbs, but must be accounted for by reference to their structure, and sometimes has to do with the lexical properties of complementizers. In this chapter we will look at cases of control which are induced by the lexical properties of verbs. In this type of control, i.e. control in complement clauses, lexical properties of main verbs play an important role. Bresnan's theory (1982:322) predicts that only SUBJECT, OBJECT, and SECOND OBJECT are possible controllers in cases of lexically induced functional control.

According to Sag and Pollard (1991:65-66), grammatical treatments often stipulate control by grammatical relations, but is in fact predictable on the basis of semantics. Furthermore they give a list of classes of verbs which exhibit uniform control constraints in different languages. They classify verbs into three classes: Influence type, Commitment type, and Orientation type. Verbs such as order, permit, persuade, command, instruct which they refer to as the INFLUENCE relation take the influenced (the typically animate participant influenced by the influence) as the controller. Verbs such as promise, agree, try, intend whose relation is of the COMMITMENT type take the commitor (one who commits to performing or not performing) as the controller. Verbs such as want, desire, wish, expect which they refer to these as
the ORIENTATION type take the experiencer (the participant who experiences the appropriate orientation) as the controller. The purpose of this chapter is to test Bresnan's hypothesis and to see whether Sag and Pollard's generalization holds for Bahasa Indonesia.

This chapter deals with subject-controlled complements, object-controlled complements, subject/object-controlled complement, and control relations in "raising" constructions in Bahasa Indonesia.

In this chapter the complement clauses introduced by the complementizer bahwa 'that' is excluded from this discussion, because this complementizer requires an expressed subject in the complement clause, and therefore this is not relevant to our discussion of control phenomena in Bahasa Indonesia.

4.2 Subject Control

In this section we will discuss subject-controlled complements in Bahasa Indonesia. Consider the following examples:

1. Tonoj beijanji kepada Dinij (untuk) jsegera pulang.
   Tonoi promised Dinij to come home early.

2. Tonoj berusaha (untuk) jmemecahkan masalah itu.
   Tonoj tried to solve the problem.

3. Tonoj memutuskan (untuk) jmenikah dengan Dini.
   Tonoj decided to marry Dini.
4. Tono bermaksud (untuk) datang ke pesta itu.
   T berR-intend COMP come PREP party DET
   Tono intended to come to the party.

The examples above show that the unexpressed subject in the embedded clause is coreferential with the matrix subject. The complementizer *untuk 'to' optionally appears preceding the controlled clause. As mentioned in the previous chapter, the complementizer *untuk ** does not allow an expressed subject. The occurrence of an expressed subject, such as lexical NP or pronoun, whether it is coreferential or noncoreferential to the matrix subject, right after the complementizer *untuk 'to' makes the sentence ungrammatical, as shown in the example below.

5. *Tonoj berjanji kepada Dinij untuk Tono/Budi/dia/i/k/i segera
   T berR-promise PREP D COMP T B 3sg early
   pulang.
   go home

   In the last chapter we saw that adjunct clauses introduced by *untuk allow neither a realized subject nor an aspect marker. However, such a clause may have the modal *bisa/dapat 'can/be able to'. Complement clauses introduced by *untuk 'to' do not allow an aspect marker or some modals either, but they may also have modal *bisa/dapat 'can/be able to'.

6a. *Tonoj berjanji kepada Dinij untuk akan/harus segera pulang.
   T berR-promise PREP D COMP FUT MOD early go home

b. Tonoj berjanji kepada Dinij untuk bisa/dapat menghadiri pesta itu.
   T berR-promise PREP D COMP MOD meN-attend-i party
   DET
   Tonoj promised Dinij to be able to come to the party.
So *untuk* 'to' behaves the same in adjunct and complement clauses **

When the complementizer *untuk* 'to' does not appear introducing the controlled clause, a future marker *akan* 'will' may occur.

7. Tonoj berjanji kepada Dinij *akan* segera pulang.
   T ber-promise PREP D FUT early go home
   Tonoj promised Dinij that he would go home early.

8. Tonoj berusaha *akan* memecahkan masalah itu.
   T ber-try FUT meN-solve-kan problem DET
   Tonoj tried to solve the problem.

   T meN-decide-kan FUT meN-marry PREP D
   Tonoj decided he will marry Dini.

10. Tonoj bermaksud *akan* datang ke pesta itu.
    T ber-intend FUT come PREP party DET
    Tonoj intended to come to the party.

   It seems that *akan* does not function as a future marker only but it may also function as an irrealis marker, which indicates the potential mood. **

   However, the perfective marker such as *telah* or imperfective or progressive marker *sedang* cannot occur in the complement clause in the sentences above, because past and progressive time reference in the embedded clause are semantically incompatible with the predicate in the matrix clause. For instance:

    T meN-decide-kan PERF IMP meN-marry PREP D
Although the future marker akan 'will' may appear in a complement clause which is not preceded by a complementizer, the clause cannot have a realized subject.

12. *Tonoį berjanji kepada Dinij Tonoį/Budi/diai/kį/į akan segera
   T beR-promise PREP D T B 3sg FUT early
   pulang.
go home

   The sentence above becomes grammatical if the complement clause is introduced by the complementizer bahwa which obligatorily takes an expressed subject. If a personal pronoun appears in the complement clause, it can be coreferential with the matrix subject or it can be coreferential with somebody else outside the sentence previously mentioned in the discourse. Since the complement subject is expressed, there is no control relation here.

13. Tonoį berjanji kepada Dinij bahwa Budi/diai/kį/į* j akan segera
   T beR-promise PREP D COMP B 3sg FUT early
   pulang.
go home

   Tonoį promised Dinij that Budi/he^/shei will go home early.

According to Bresnan (1982:354), "the theory of control predicts that passivization of a verb whose matrix subject is a (lexically induced) functional controller should be impossible, for passivization shifts the semantically unrestricted function subject to the semantically restricted function oblique; this is not a possible controller in the theory." Since the matrix clauses in examples (1)-(4) and (7)-(10) do not have direct objects following the verbs, we cannot passivize the sentence. Thus they cannot be used to test Bresnan's
theory. However, *janji 'promise' appears in a transitive construction also. The stem *janji 'promise' has two derivational verb forms i.e *beR-janji and *meN-janjikan. The former is an intransitive form. It takes an oblique following the verb and a complement, while the latter, a transitive one, takes an object and a second object or a complement. When *menjanjikan 'promise' takes double objects, the first object can be the subject in the passive sentence. Passivization of *menjanjikan which takes a direct object and a complement clause such as in example (14) makes the sentence unacceptable, since *berjanji or *menjanjikan 'promise' is a subject control verb, we cannot passivize the sentence. This follows Bresnan's hypothesis.

14a. Tono menjanjikan Dini sebuah mobil baru.
   T *meN-promise-kan D CLASS car new
   Tono promised Dini a new car.

b. Dini dijanjikan (oleh) Tono sebuah mobil baru.
   D *di-promise-kan PREP T CLASS car new
   Dini was promised a new car by Tono.

15a. Tono; menjanjikan Dinij akan jsegera pulang.
   T *meN-promise-kan D FUT early go home
   Tono; promised Dinij to jgo home early.

b. *Dinij dijanjikan oleh Tono; jakan segera pulang.
   D *di-janji-kan PREP T FUT early go home

However, passivization of the matrix clause is possible if we also passivize the transitive embedded clause whose direct object is coreferential with the matrix object.
16a. Tonoj menjanjikan Dinij akan meneleponnya.
T menN-promise-kan D FUT meN-call-3sg
Tonoj promised Dinij to call her.

b. Dinij dijanjikan (oleh) Tonoj akan ditelepon.
D di-promise-kan PREP T FUT di-call
Dinij was promised by Tonoj that she will be called (by him).

17a. Tonoj menjanjikan Dinij akan membelikannya mobil baru.
T menN-promise-kan D FUT meN-buy-kan-3sg car new
Tonoj promised Dinij that he will buy her a new car.

b. Dinij dijanjikan (oleh) Tonoj akan dibelikan mobil baru.
D di-promise-kan PREP T FUT di-buy-kan car new
Dinij was promised by Tonoj that she will be bought a new car by him.

In the active sentences (16a) and (17a), the unexpressed subject of the active complement clause is controlled by the commitor as is predicted by Sag and Pollard. While in the passive sentences (16b) and (17b), the controller of the unexpressed subject of the passive complement clause is the commitee, even though menjanjikan is a commitment type verb. In this case, it seems that this shift in controller choice violates the semantically based principles of controller assignment as is proposed by Sag and Pollard. However, in their account, "these involve no control shift at all. Rather, the semantic content of the infinitival complement, a (non-intentional) state, has been 'coerced' to an action in order to achieve semantic compatibility with promising (the semantic of promise to crucially involves a commitment to act, not a commitment to truth)." The content of the clause akan ditelepon 'would be called' or akan dibelikan mobil baru 'would be bought a new car' is not an intentional action.

The interpretation of akan ditelepon or akan dibelikan mobil baru is coerced into the interpretation 'to cause X to be called' and 'to cause X to be bought a
This is not to suggest that the complementizers are in free variation, but a discussion of the factors determining the choice of complementizer goes beyond the scope of this thesis.
new car'. "The interpolated causer in the complement's semantics is identified with the appropriate matrix argument by the same semantic principles that determine controller assignment." (p.65-66) In Bresnan's accounts, such constructions might be instances of anaphoric control rather than functional control.

4.3 Object Control

The following constructions are constructions where the complement subject is controlled by the matrix object. Complementizers involved in object control are *untuk, supaya, agar (supaya). All of this can be translated into English as 'to' or 'in order to', depending on context. 1

18. Tonoj memaksa Dinij (untuk/agar/supaya) jmenemui Budi.
T meN-force D COMP meN-see-i B
Tonoj forced Dinij to jsee Budi.

19. Tonoj menyuruh Dinij (untuk/agar/supaya) jmenemui Budi.
T meN-order D COMP meN-see-i B
Tonoj ordered Dinij to jsee Budi.

Unlike complement clauses whose matrix subject is a controller, complement clauses whose matrix object is a controller do not allow an aspect marker, the future marker akan 'will' or the modal harus 'must', whether the complementizer is present or not.

20. *Tonoj memaksa Dinij (untuk/agar/supaya) jsedang/ akan/harus
T meN-force D COMP IMPERF FUT MOD
menemui Budi.
meN-see-i B

21. *Tonoj menyuruh Dinij (untuk/agar/supaya) jsedang/ akan/harus
T meN-order D COMP IMPERF/FUT MOD
menemui Budi.
meN-see-i B

Unlike the complementizer untuk 'to', the complementizers supaya, agar (supaya) 'to/in order to' allow an expressed subject, either a lexical NP or a pronoun. If a lexical NP is expressed in the embedded clause, the object in the matrix clause may be left out (example 22b). If the matrix object is expressed as a lexical NP and the complement subject is expressed as a pronoun, the pronoun must be coreferential with the matrix object, as is shown in the example (22c). The example (22d) shows that even if the matrix object is not expressed, the expressed subject pronoun in the complement clause must be coreferential with the matrix object.

22a. Tonoj menyuruh Dinij agar/supaya Dinij menemui Budi.
   T meN-order D COMP D meN-see-i B
   Tonoj ordered Dinij to jsee Budi.

b. Tonoj menyuruh j agar/supaya Dinij menemui Budi
   T meN-order COMP D meN-see-i B
   Tonoj ordered Dinij to jsee Budi

c. Tonoj menyuruh Dinij agar/supaya diaj menemui Budi.
   T meN-order D COMP 3sg meN-see-i B
   Tonoj ordered Dinij to jsee Budi.

d. Tonoj menyuruh j agar/supaya diaj menemui Budi.
   T meN-order COMP 3sg meN-see B
   Tonoj ordered (someonej) to jsee Budi.

The examples above show that Bahasa Indonesia allows an unexpressed object if it is coreferential with the complement subject, as examples (22b) and (22d) illustrate, but not if the object is a controller and the
controllee is also unexpressed, as is shown by the ungrammaticality of the example below.


Bach (1980:304) has argued that detransitivization of a clause whose object is a controller is impossible. In English, it is illustrated by the example below:

24a. I persuaded John to go.

b. *I persuaded to go.

In Bahasa Indonesia detransitivization of the matrix clause is possible if the object of the matrix clause is expressed in the embedded clause, as mentioned before in examples (22b) and (22d).

Object-controlled constructions may undergo passivization. The object of the matrix clause becomes the subject of the passive and it may control the unexpressed subject in the embedded clause.

25.(cf.18) Dinij dipaksa (oleh) Tonoŋ (untuk/agar/supaya) jmenemui Budi

26.(cf.19) Dinij disuruh (oleh) Tonoŋ (untuk/agar/supaya) jmenemui Budi
As mentioned before, Bresnan's theory states that only a subject, object and second object, but not an oblique, can be the lexically induced functional controller. In written and spoken Bahasa Indonesia, we often find an unexpressed complement subject which is controlled by a prepositional object, as is shown in example (27) below. So, it seems to violate Bresnan's theory, because an oblique can control the complement clause. However, it is possible that this construction could be treated as involving anaphoric control rather than functional control. Oblique can be anaphoric controller in Bresnan's theory.

27a. Tonoj menganjurkan kepada Dinij (untuk/agar/supaya) jsegera
   T  \textit{meN-advise-kan} PREP D COMP right away
   pulang.
go home
   Tonoj advised Dinij to go home right away.

As an oblique, it may not undergo passivization.

27b. *Dinij dianjurkan kepada (oleh) Tonoj (untuk/agar/supaya) jsegera
   D  \textit{di-advise-kan} PREP PREP T COMP right away
   pulang.
go home
   The preposition \textit{kepada} 'to' is optional in such sentences. It is also possible for the verb \textit{menganjurkan} to be followed directly by a direct object and as a direct object, it may undergo passivization.

28a. Tonoj menganjurkan Dinij (untuk/agar/supaya) jsegera pulang.
   T  \textit{meN-advise-kan} D COMP right away go home
   Tonoj advised Dinij to go home right away.
b. Dinij dianjurkan oleh Tono\textsubscript{i} (untuk/agar/supaya) jsegera pulang.

Dinij was advised by Tono\textsubscript{i} to go home right away.

As mentioned earlier, Bresnan points out that in lexically induced functional control, the second object can be a controller if there is one, in English for example (Bresnan's example is 24):

29. Tom will serve you the fish raw.

Equivalent constructions with an adjective controlled by an argument of a state predicate are not possible in BI, and there is no construction in which control is by an OBJ2, as example (30) demonstrates.

30. *Tono\textsubscript{i} membelikan Dinij ikan itu\textsubscript{k} kmentah.

4.3 Subject/Object Control

The verb *threaten* is classified by Sag and Pollard (1991) as a promise type which takes the commitor as a controller of the unexpressed subject in the embedded clause. In Bahasa Indonesia it may be subject or object control. Look at the examples below.

31a. Tono\textsubscript{i} mengancam atasannya\textsubscript{j} untuk ia\textsubscript{j} mengundurkan diri.

In example (31a), the one who resigned can be Tono or his boss. In the first interpretation, it is the commitor Tono who is coreferential with the unexpressed complement subject. In the second reading, *mengancam* 'threaten' has the *force* interpretation. In this reading, it is Tono who did something to
get his boss to resign. In this case, the embedded clause seems to be an adjunct, because it is possible to say:

31b. Tono mengancam atasannya.
   T  men-threaten boss-3sg
   Tono threatened his boss.

   However, if the complementizer is supaya or agar (supaya) 'in order to', or if neither a complementizer nor a future marker akan 'will' is present in the sentence, the unexpressed subject of the embedded clause must be interpreted as identical with the matrix object.

31c. Tono mengancam atasannya agar/mengundurkan diri.
   T  men-threaten boss-3sg COMP meN-resign-kan self
   Tono threatened his boss so that he would resign.

As an object-controlled predicate, it may undergo passivization.

31d. Atasannya diancam (oleh) Tono untuk/agar/supaya mengundurkan diri.
   boss-3sg di-threaten PREP T COMP meN-resign-kan
   His boss was threatened by Tono so that he would resign.

   If a future marker akan 'will', is present in the sentence, the unexpressed subject must be interpreted as identical with the matrix subject.

31e. Tono mengancam atasannya akan mengundurkan diri.
   T  men-threaten boss-3sg FUT meN-back-kan self
   Tono threatened his boss to resign.
Bach (1980:304) mentions that ambiguous verbs such as *beg* or *ask* in English are unambiguous without object NP's, for example:

32. I begged to go to the store.
33. I asked to be admitted.

This also holds for the case of the verb *mengancam* 'threaten' in Bahasa Indonesia. The verb *mengancam* 'threaten' belongs to two semantic classes: a commitment type verb or an influence type verb. Therefore the controller can be the commitor of the influenced. In this case, the verb *mengancam* 'threaten' can be a subject or object control predicate. Although the verb *mengancam* 'threaten' in Bahasa Indonesia may be subject or object control, when there is only one NP i.e. only a subject NP in the sentence, the unexpressed subject must be coreferential with the only NP in the sentence; it cannot be coreferential with somebody else outside the sentence.

34a. Tono\(i\) mengancam (untuk) \(\bar{i}\) mengundurkan diri.
   \(T \quad meN\)-threaten COMP \(meN\)-back-\(kan\) self

b. Tono\(i\) mengancam \(\bar{\j}akan\) mengundurkan diri.
   \(T \quad meN\)-threaten FUT \(meN\)-back-\(kan\) self

Both have the interpretation 'Tono threatened to resign'.

In examples (34a) and (34b) the only plausible controller is the matrix subject i.e. *Tono*, because there is only one possible NP as the controller of an unexpressed complement subject.
When the complementizer *agar/supaya instead of *untuk is used to introduce the complement clause, as in the example below, the sentence becomes ungrammatical.

34c. *Tono mengancam *agar/supaya mengundurkan diri.
   T meN-threaten COMP meN-back-kan self

Lapoliwa (1990:144) noted that the complementizer *untuk is used when the subject of the complement clause is not present in the surface structure, while the complementizers *supaya, *agar (supaya) are used when the subject of the complement clause is present or can be present in the surface structure. He stated that the complement subject is obligatorily unexpressed when the complement subject is identical with the matrix subject but the complement subject is optionally unexpressed when the complement subject is identical with the matrix object. Since the complement subject optionally appears when the complement subject is identical with matrix object, the complementizer *untuk is a free variant of supaya, agar (supaya).

Sentence (34c) is ungrammatical because in that sentence the complement subject is not present but it is identical with the matrix object, so the complementizer *untuk must be used introducing the complement clause.

The choice of the controller, whether it is a subject or an object, in Bahasa Indonesia seems to be determined by the morphology of the verb, for example:

35. Saya berharap (untuk) *memenangkan pertandingan itu.
   1sg beR-hope COMP meN-win-kan game DET
   I hope to win the game.
36. Saya mengharapkan Dini (untuk/agar/supaya) memenangkan pertandingan itu.

I hope that Dini can win the game.

*Harap* 'hope' in Bahasa Indonesia can be transitive or intransive. The examples above show that intransitive *harap* 'hope' with prefix *beR-* + base is a subject control verb as is expected by Sag and Pollard (1991:65), while transitive *harap* 'hope' with *meN-* + base + *-kan* is an object control verb. Since sentence (35) is intransitive and it involves subject control, therefore there is no object to be passivized. On the other hand, as an object control, sentence (36) may undergo passivization.

37. Dini diharapkan (untuk/agar/supaya) memenangkan pertandingan itu.

Dini is expected to win the game.

4.5 Control in "Raising" Constructions

In this section we will look at another type of control relation in what is called "raising" constructions in Bahasa Indonesia.

In old fashioned transformational grammar, the term raising refers to the movement of an element from a lower clause to a higher clause. The italicized NP in the examples below are referred to as "raised' NPs.

38a. John believes Mary is a good student.

b. John believes *Mary* to be a good student.

c. John believes she is a good student.
d. John believes her to be a good student.

Syntactically, Mary and she in (38a) and in (38c) respectively are elements of the complement proposition (i.e. the subject of the complement clause). Sentences (38b) and (38d) differ from sentences (38a) and (38c) in that "raising" has applied to (38b) and (38d).

In "raising" constructions like sentences (38b) and (38d), the "raised" NP is semantically an argument of the complement clause but syntactically it is a part of the matrix clause. As a syntactic direct object of the matrix clause, it may undergo passivization.

38e. Mary is believed to be a good student.

f. She is believed to be a good student.

In the GB account, sentences (38b) and (38d) are not considered to be "raising" constructions, but as instances of exceptional case-marking (ECM). This means that the verb exceptionally case-marked the subject of the subordinate clause. The finite complement clauses in (38a) and (38c) and non-finite ones in (38b) and (38d) basically mean the same thing: in all the sentences the property a good student is ascribed to the referent of NP Mary in (38a) and (38b) or her in (38c) and (38d). In the GB account, Mary to be a good student in (38b) or her to be a good student in (38d) belongs to the clausal complement. In this case, Mary or her is assumed to be in subordinate clause.

In Bresnan's account, the c-structures are as in Transformational Grammar, but there is no syntactic movement in the constructions (38b) and (38d). The situation described above is considered by Bresnan as an instance of
a control relationship. According to Bresnan, the verb in the examples above has a predicative complement whose subject is the same as the f-structure of an NP of the matrix clause. In examples (38b) and (38d), the direct object of the matrix clause is interpreted as the subject of the complement clause. Based on these properties, Bresnan treats "raising" as a type of functional control relation. The verb believe is treated as a verb which is subcategorized in the lexicon for a non-thematic object and VCOMP. This non-thematic object controls the subject of the VCOMP. According to her functional control theory, only SUBJECT of a predicative complement can be "raised' and the "raised NP can appear only as SUBJECT, OBJECT, or OBJECT2.

In what follows, we will discuss "raising" constructions in Bahasa Indonesia. We will treat the construction as a case of control as is assumed by Bresnan. The discussion deals with object-controlled complements in the "raising" construction, and then this is followed by the discussion of subject-controlled complements in the "raising" construction in Bahasa Indonesia.

Before discussing "raising" constructions in Bahasa Indonesia, we will look at non-"raising" constructions first and then compare them with "raising" constructions. Consider the following examples:

39a. Tonoj menyuruh Dini (untuk) jmewawancarai Budi.
T meN-order D 'COMP meN-interview-i B
Tonoj ordered Dini to jinterview Budi.

b. Tonoj menyuruh Budi (untuk) jdiwawancarai oleh Dini.
T meN-order B 'COMP di-interview-i PREP D
Tonoj ordered Budij to jbe interviewed by Dini.

In constructions (39a) and (39b), the matrix verb menyuruh 'to order" assigns a semantic role to the NP right after it, namely, Dini in sentence (39a)
and *Budi* in sentence (39b). The meaning of the sentence is affected by the type of voice of the complement clause. In example (39a) it is *Dini* who did something i.e. interviewed *Budi*, but in example (39b), it is *Budi* who was interviewed by *Dini*.

A noun phrase which appears right after the verb and receives a semantic role from it would be expected to be its object, therefore it can be passivized.

39c. *Dini* disuruh (oleh) *Tono* (untuk) j^n^ewawancarai *Budi*.
   D *di-order* PREP T COMP *meN-interview-i B*
   *Dini* was ordered by *Tono* to *interview* *Budi*.

d. *Budi* disuruh (oleh) *Tono* (untuk) j^n^diwawancarai oleh *Dini*.
   B *di-order* PREP T COMP *di-interview-i PREP D*
   *Budi* was ordered by *Tono* to *be interviewed by* *Dini*.

The examples above show that the object of the active matrix clauses (39a) and (39b) and the subject of the passive matrix clauses (39c) and (39d) may serve as the functional controller of the complement clause. The control is transferred under the operation of passivization.

There is another kind of construction that looks similar to constructions (39a) and (39b).

40a. *Mereka* mengira *Tono* menyelamatkan anak itu.
   3pl *meN-think T meN-save-kan* child DET
   They thought that *Tono* saved the child.

b. *Mereka* mengira anak itu diselamatkan (oleh) *Tono*.
   3pl *meN-think child DET *di-save-kan* PREP T
   They thought that the child was saved by *Tono*.
A NP after the matrix verb seems to be the subject of the complement clause. In other words, *Tono* or *anak itu* is an argument of the complement clause, but is syntactically part of the matrix clause as shown below. One might think that there is no control relationship here, because the complement subject is expressed. In fact, the NP right after the verb is the non-thematic object of the matrix verb. We can see from the sentences (40a) and (40b) that the use of the active or passive form in the embedded clause does not affect the nature of the situation described. In both examples, it is *Tono* who did something i.e. *saved the child*. So, the NP right after the matrix verb does not bear a semantic role to the matrix verb, but it has a semantic role to the lower clause. However, it is the syntactic object of the matrix clause.

A piece of evidence that the NP right after the verb is the syntactic object of the matrix clause is passivization of the matrix clause. The matrix object in the active sentences (40a) and (40b) becomes the matrix subject in the passive sentences (40c) and (40d) which shares the same value with the embedded clause.

40c. Tono\textsubscript{i} dikira (oleh) merekaj jmenyelamatkan anak itu.
   \begin{tabular}{llll}
   T & \textit{di-think} & PREP & 3pl \\
   & \textit{meN-save-kan} & child & DET \\
   \end{tabular}
   Tono was thought by them to have saved the child.

d. Anak itu\textsubscript{j} dikira (oleh) merekaj jdiselamatkan oleh Tono.
   \begin{tabular}{llll}
   child & \textit{di-think} & PREP & 3pl \\
   & \textit{di-save-kan} & PREP & T \\
   \end{tabular}
   The child was thought by them to have been saved by Tono.

In this case there is a control relationship, because the subject of the embedded clause is unexpressed. The unexpressed subject of the embedded clause is interpreted as identical with the syntactic object in the active
sentences (40a) and (40b) or the syntactic subject in the passive sentences (40c) and (40d).

It should be noted that there is no complementizer involved in such object-controlled constructions, as is illustrated by the ungrammaticality of the sentence below.

40e. *Mereka mengira Tono untuk menyelamatkan anak itu.
   3pl *meN-think T COMP meN-save-kan child DET

When "raising" does not apply, the complement clause takes the complementizer bahwa 'that'. In this case, the post verbal NP Tono and anak itu 'the child' are the arguments of the complement clause. They function as the subject of the embedded clause, but not the object of the matrix clause. Since the complement clause with bahwa requires an expressed subject, there is no control relationship here.

40f. Mereka mengira (bahwa) Tono menyelamatkan anak itu.
   3pl meN-think COMP T meN-save-kan child DET
   They thought that Tono saved the child.

40g. Mereka mengira (bahwa) anak itu diselamatkan oleh Tono.
   3pl meN-think COMP child DET di-save-kan PREP T
   They thought that the child was saved by Tono.

   Since Tono and anak itu 'the child' are not the objects of the matrix clause, constructions with bahwa cannot be passivized.

40h. *Tono dikira oleh mereka bahwa menyelamatkan anak itu.
   T di-think PREP 3pl COMP meN-save-kan child DET

40i. *Anak itu dikira oleh mereka bahwa diselamatkan oleh Tono.
   child DET di-think PREP 3pl COMP di-save-kan PREP T
Kana (1986:244-245) gave evidence that the post verbal NP is an object of the matrix clause by substituting the NP with the clitic forms of the pronoun indicating an object and by reflexivizing, a property of direct object. Reflexive direct objects in Bahasa Indonesia consist of diri 'self' and an optional possessive pronoun plus an optional emphatic sendiri 'oneself'.

41. Dia mengganggapnya jcerdik.
   1sg meN-consider-3sg clever
   He/she\_jconsiders him/her\_j\_clever.

42. Tonoj merasa dirinya (sendiri) jtidak mengerti apa-apa.
   T meN-feel self-3sg oneself NEG meN-know what-RED
   Tonoj felt that he\_j knew nothing. (Lit: Tonoj felt himself\_j to \_know nothing)

Besides referring to the subject of the complement clause, the clitic pronoun -nya and the reflexive dirinya (sendiri) are syntactic objects of the matrix clause. As a syntactic object of the matrix clause, the clitic pronoun -nya must be interpreted as non-coreferential with the matrix subject, because pronoun must be free in its governing category. The reflexive dirinya (sendiri), on the other hand, is clause bound. It is dependent on another NP within the clause for its interpretation, i.e. to the subject Tono. In the example below, the reflexive dirinya (sendiri) must be interpreted as being coreferential with the subject of merasa 'feel', but not with the subject of berkata 'say'.

42b. Dinij berkata bahwa Tonoj merasa dirinya (sendiri) jtidak mengerti apa-apa.
   D beR-say COMP T meN-feel self-3sg oneself NEG
   meN-know what-RED

   Dinij said that Tonoj felt that he\_j knew nothing.
   (Lit. Dinij said that Tonoj felt himself\_j to \_know nothing.)
As is shown in the example (40), *mengira* 'think' is an object control predicate. Reflexives and reciprocals in the embedded clause are interpreted as coreferential with the unexpressed subject in the embedded clause that is coreferential with the matrix object. Reciprocals in Bahasa Indonesia are formed with the preverbal modifier *saling* 'each other' which requires a plural subject.

43. Tono_i mengira wanita itu; _merawat dirinya_j sendiri.

Tono_i thought that the woman_j took care of herself_j/*himself_j.

44a. Tono_i dan Dinij mengira mereka^ saling_j+m mencinta.

Tono_i and Dinij thought that they^ loved each other_j^+j^+.

As an object-controlled complement, the clause may undergo passivization.

45. Wanita itu_j dikira oleh Tono_i _merawat dirinya_j sendiri.

The woman_j was thought by Tono_i to take care of herself_j/*himself_j.

46. Mereka_k dikira oleh Tono_i dan Dinij saling_k+m mencinta.

They_k were thought by Tono_i and Dinij to love each other.

In the previous section, it has been shown that in object-controlled constructions with an influence type verb, the complement does not allow an aspect marker, the future marker *akan* or a modal. Object-controlled
complements in the "raising" constructions, on the other hand, allow an aspect marker, the future marker, or a modal.

47a. Merekaı mengira Tonoj akan/telah/sedang/ dapat menyelamatkan anak itu.

They thought that Tonoj would save/had saved/was saving/could save the child.

b. Merekaı mengira anak itu akan/telah/sedang/ dapat diselamatkan oleh Tonoj.

They thought that the child would be saved/had been saved/was being saved/could be saved by Tonoj.

The passive forms of the constructions (47a) and (47b) are:

47c. Tonoj dikira oleh mereka akan/telah/sedang/ dapat menyelamatkan anak itu.

Tonoj was thought by them to go going to save/to have saved/to be saving/to be able to save/the child.

d. Anak itu dikira oleh mereka akan/telah/sedang/ dapat diselamatkan (oleh) Tonoj.

The child was thought by them that he would be/had been/was being/ could be/saved by Tono.
The examples above show that, in Bahasa Indonesia "raising" constructions, the complement clause is finite, while in English, it has to be non-finite.

Another type of "raising" constructions in Bahasa Indonesia I will discuss involves subject control. Certain adjectives in Bahasa Indonesia such as sulit/sukar 'difficult/hard', mudah/gampang 'easy', penting 'important' allow sentence embedding. Some examples are:

48. Tidak mudah bagi Tono (untuk) memecahkan masalah itu.
   NEG easy PREP T COMP meN-solve-kan problem DET
   It is not easy for Tono to solve the problem.

49. Penting bagi Tono (untuk) menghadiri pertemuan itu.
   important PREP T COMP meN-attend-i meeting DET
   It is important for Tono to attend the meeting.

As mentioned earlier in Chapter 2, unlike English, there is no dummy subject in Bahasa Indonesia. The subject position of the predicative adjective tidak mudah 'not easy' in (48) and penting 'important' in (49) is empty. The subject of the complement clause in sentences (48) and (49) is coreferential with the object of a preposition. As mentioned earlier, Bahasa Indonesia allows an oblique to be the controller of an unexpressed subject in the complement clause.

The NP complement object in (48) and (49) is the subject of the matrix clause in (50) and (51). This non-thematic subject of the matrix clause is coreferential with the unexpressed complement subject. However, unlike English, the complement clause is normally in the passive form, as is shown by the (a) examples below.
50a. Masalah itu tidak mudah (untuk) dipecahkan.
problem DET NEG easy COMP _di-soh/_-kan_
The problem is not easy to solve.

b. *Masalah itu tidak mudah (untuk) memecahkan.
problem DET NEG easy COMP _meN_/soh/_-kan_
(Lit.: The problem is not easy to solve)

51a. Pertemuan itu penting (untuk) dihadiri.
meeting DET important COMP _di-attend-i_
The meeting is important to attend.

b. *Pertemuan itu penting (untuk) menghadiri.
meeting DET important COMP _meN-/attend-i_
(Lit.: The meeting is important to attend)

In the examples above, the subject of the predicative adjective in the matrix clause is a syntactic subject but not a "logical subject" of the predicative adjective. In other words, the predicative adjective takes a nonthematic subject. The unexpressed subject in the complement clause is referentially dependent upon a subject NP of the predicative adjective.

Gibson (1978) mentions that such constructions correspond to Tough Movement in English (p. 544). Furthermore she claims that, like Tough Movement in English, the object of a complement clause can move to the matrix subject position, but, unlike in English, this object can be raised to the matrix subject only after some process has applied to make it the subject of the embedded clause. Chung (1976:68) notes that only passive subjects are eligible for raising. According to Chung, subjects of active complement clauses cannot be raised to become the subject of the adjective, as is shown by the ungrammaticality of the example below.

105
52. *Kami sulit untuk memperbaiki mobil itu.
1pl difficult COMP meN-peR-repair-i car DET
(Lit.: For us, it is hard to repair the car.)

Kana (1986:257) claims that sentences whose matrix subject is also the non-passivized subject of the active complement clause have been found. In all the examples she gave, for me, the sentences seem better if the complementizer *untuk is not present introducing the complement clause. Sentence (53a) is taken from Kana (p.257).

53a. ?Dia mudah untuk mendapatkan langganan.
3sg easy COMP meN-find-kan customer
For him it is easy to find customers.
(lit.: He is easy to find customers.)

b. Dia mudah mendapatkan langganan.
3sg easy meN-find-kan customer
For him, it is easy to find customers.
(Lit.: He is easy to find customers.)

I agree with Kana's claim that subjects other than a passive complement subject can also be identical with the matrix subject, however, for me, the complementizer *untuk seems awkward if it appears introducing the complement clause. More examples are given below.

54. Tono sulit melupakan kenangan itu.
T hard meN-forget-kan memory DET
For Tono, it is hard to put the memory behind him.
(Lit.: Tono is hard to put the memory behind him.)

55. Tono tidak sulit mencari teman kencan.
T NEG hard meN-look for friend date
Tono has no trouble getting a date.
(Lit.: Tono is not hard to find a friend for a date.)
56. Dini mudah menangis.
   D easy meN-cry
   Dini cries easily.
   (Lit.: Dini is easy to cry.)

58. Gelas itu mudah/gampang pecah.
   glass DET easy break
   The glass is easy to break)

   The examples above show that it is only the subject of the complement
   that is "raised". It is worth noting that gelas is the subject, not the object of
   pecah 'break'. The verb pecah can be used transitively when it is affixed by a
   transitivizing prefix. Therefore, it is the subject rather than the object which has
   been "raised"

   So, unlike Tough Movement in English, in Bahasa Indonesia the
   constructions mentioned above always involve the complement subject to be
   "raised". In English Tough Movement, it is the object that is "raised".

60a. It is easy to solve the problem.
   b. The problem is easy to solve.

   English also has subject-to-subject raising with certain adjectives such
   as likely. The Bahasa Indonesia construction looks like this, but uses different
   adjectives such as mudah 'easy' or sulit 'hard/difficult'.

   In "raising" constructions involving subject control, unlike that with
   object control in "raising" constructions, the complement clause cannot have an
   aspect marker, future marker or the modal harus 'must', however, the modal
   dapat/bisa 'can' may appear in such constructions, as is illustrated is the
   example (61b)
In summary, "subject-to-object raising" involves certain verbs such as *mengira* 'think/suppose'. The non-thematic object of the matrix clause is coreferential with the unexpressed complement subject. This non-thematic matrix object has a semantic role in the complement clause. "Subject-to-subject raising" has to do with certain predicative adjectives such as *mudah* 'easy', *penting* 'important', *sulit* 'hard/difficult'. The non-thematic subject of the matrix clause is interpreted as identical with the unexpressed complement subject. This non-thematic subject has a semantic role to the lower clause.

4.6 Summary

This chapter has discussed the characteristics of control relations in complement clauses in Bahasa Indonesia. In the subject-controlled complement, the matrix subject is the controller of the unexpressed complement subject, while in the object-controlled complement, the matrix object is the controller of the unexpressed complement subject. For certain matrix verbs, the controller seems to be ambiguous. The verb *threaten* in English that is classified by Sag and Pollard as a commitment type verb involves the commitor to be the controller. In Bahasa Indonesia, the verb *mengancam* 'threaten' can be either a subject or object control predicate (if the object is present in the matrix clause). It seems that this verb can be classified
as involving two types of verb, i.e. a commitment type verb or an influence type verb, therefore the controller can be the commitor or the influenced.

It has been shown that the matrix object in an object-controlled constructions can be passivized. In addition, with certain subject-controlled predicates such as menjanjikan 'promise' which must be classified in Sag and Pollard's system as a commitment type verb, the object of the matrix clause can also be passivized when the complement clause takes an object which is identical to the matrix object. It should be noted that the complement clause in such a construction is also passivized. The controller of the unexpressed subject in such a construction is the interpolated causer, as is assumed by Sag and Pollard. The theory of the syntactic and semantic representation of complements proposed by Sag and Pollard seems well suited to the analysis of my data.

In this chapter, it has also been shown that the complementizer seems to play roles in identifying the controller of the unexpressed complement subject. The interpretation of the unexpressed subject can be determined by having or not having a complementizer. The use of the complementizer untuk 'to' with the matrix verb mengancam 'threaten' gives the interpretation that the controller is the matrix subject or the object. When the complement clause is introduced by the complementizer supaya or agar (supaya), the controller is the matrix object, but when the complement clause is not introduced by a complementizer or the clause has an irrealis marker akan 'will', the controller must be the subject.

The irrealis marker akan can appear in subject-controlled complements when the complement clause is not preceded by a complementizer. Aspect markers and modals may not appear in object-controlled complements, while in subject-controlled complements, aspect markers may not appear in the
complement clause but the modal *dapat* 'can/be able to' may modify the complement clause. In subject-controlled complements, the clause has to be non-finite.

In "raising" constructions, the nonthematic subject or the object can be the controller of an unexpressed complement subject, whether it is the passivized subject or non-passivized subject. Object control verbs that participate in raising constructions includes predicates such as *mengira* 'think', *merasa* 'feel', and *menganggap* 'consider'. Subject control in "raising" constructions involves predicative adjectives such as *sulit* 'hard/difficult', *penting* 'important', *mudah* 'easy'. Such constructions are different from English "Tough Movement". In the constructions mentioned, it is always the subject that is "raised". In English "Tough Movement", it is the object that is "raised". In Bahasa Indonesia "raising" constructions involving object control, the complement clause is finite, while in "raising" constructions involving subject control, the complement clause has to be non-finite.

It has been shown in this chapter that the thing that is controlled or the controllee is always the complement subject, as is predicted by Bresnan. This chapter has also shown that the controller of an unexpressed complement subject in Bahasa Indonesia can be SUBJECT or OBJECT. OBLIQUE is also a possible controller in Bahasa Indonesia, but OBJECT 2 cannot be the controller of an unexpressed complement subject. So, data in Bahasa Indonesia seems like it might violate Bresnan's claim that only SUBJECT, OBJECT and OBJECT 2 can be a functional controller, but OBLIQUE cannot be a functional controller. However, it is possible that the verb involved in such a construction should be seen as control by OBJECT not by OBLIQUE, since the preposition following the verb is optional. It is also possible that this verb
should be treated as involving anaphoric control, rather than functional control. OBLIQUE was not excluded from anaphoric control in Bresnan's theory.
CHAPTER 5

CONCLUSION

This study has examined the distribution and the interpretation of non-overt subject in adjunct clauses and complement clauses in Bahasa Indonesia.

The omission of a pronominal subject in main or simple clauses and coordinate clauses in Bahasa Indonesia has been discussed briefly in the discussion of the basic grammar of Bahasa Indonesia in Chapter 2. Bahasa Indonesia, whose verbs are not marked for agreement with the subject or the object, allows a subject to be unexpressed in certain circumstances. Subjects in main or simple clauses can be unexpressed in certain discourse contexts. Objects in main or simple clauses, on the contrary, can never be deleted in any circumstances. Although Bahasa Indonesia allows an unexpressed subject in main or simple clauses, the language is not a real "pro drop" language like Italian, because the unexpressed subject in independent constructions cannot be interpreted as an indefinite pronoun. In coordinate clauses, only the subject of the clause can be deleted. Both the grammatical functions and the semantic roles play a part in the omission of a subject NP or a pronoun in coordinate clauses. If the unexpressed subject does not have the same grammatical role as the controller in the matrix clause, it must have the same semantic role. The matrix subject is the most likely controller. However, when the subject is not the agent then the NP with the semantic role of agent is the most likely controller.

Chapter 3 has described types of controlled adjunct clauses in Bahasa Indonesia. The characteristics of adjunct clauses that allow an unexpressed
subject or require an unexpressed subject has been examined. The possibility of having or not having an expressed subject in a complement clause seems to be determined by the complementizer. Some complementizers allow a complement subject to be unexpressed, while some others does not allow a complement subject to be expressed. Complementizers can be divided into two types. There is a correlation between type of a complementizer and the possibility of an expressed subject. There is only one complementizer that is used as a subordinating conjunction only, i.e. *sambil* 'while' that does not allow an expressed complement subject. More study is needed to figure out why the subordinating conjunction requires an unexpressed subject, because almost all complementizers that are used as subordinating conjunctions allow for an expressed complement subject. This chapter has shown that some complementizers that are used as both prepositions and subordinators may have an expressed complement subject, and some others require an unexpressed complement subject. When the position of the unexpressed subject can be filled with a lexical category, the unexpressed subject can be non-coreferential to the matrix subject. When the subject is allowed to be unexpressed, however, it must be controlled. Chapter 3 has also examined adjunct clauses that are not introduced by a complementizer. In this case, the complement subject must be unexpressed. The possible controllers of adjunct clauses in Bahasa Indonesia must be within the sentence; it cannot be coreferential to some argument outside the sentence. There is a range of possible controllers in adjunct clause. Control in both types of adjunct clauses, those that require an unexpressed subject and those that allow an expressed subject behave in the same way. Both grammatical function and semantic roles such as patient and agent seem to be relevant in identifying the controller of an unexpressed subject. The unexpressed adjunct subject must have either the
same grammatical function or the same semantic role as the controller in the matrix clause. Therefore, control of adjunct or subordinate clause non-overt subjects behaves in a similar manner as it does in coordinate subject deletion.

Chapter 4 has discussed the characteristics of control relations in complement clauses in Bahasa Indonesia. In subject controlled complements, the matrix subject is the controller of the unexpressed subject in the complement clause, while in object-controlled complements, the matrix object is the controller of the unexpressed complement subject. The interpretation of the unexpressed subject in the complement clause based on the semantic principles proposed by Sag and Pollard seems well suited to the analysis of the verb *janji* 'promise' or *ancam* 'threaten' in Bahasa Indonesia. Chapter 4 has shown that the possible functional controller of the unexpressed complement subject in Bahasa Indonesia can be SUBJECT, OBJECT, but not OBJECT 2. With certain verbs like *menganjurkan* 'advise', the OBLIQUE can be the controller of the unexpressed complement subject. It is possible that this should be seen as control by OBJECT not OBLIQUE since the preposition in such constructions is optional rather than assuming that this control is by OBLIQUE. It is also possible that such constructions should be treated as involving anaphoric control, rather than functional control. OBLIQUEs are not excluded from anaphoric control in Bresnan's theory.

Chapter 4 has also discussed the characteristics of control relations in "raising" constructions. As is predicted by Bresnan, the "raised" NP is always the subject of the lower clause but can appear in subject or object position of the matrix clause. Object control in "raising" constructions takes verbs such as *mengira* 'think', *menganggap* 'consider', while subject control takes predicative adjectives such as *mudah* 'easy', *sulit* 'hard/difficult'. In object control
constructions, no complementizer is involved. In subject control constructions, there is a preference not to use a complementizer.

There seems to be a correlation between the possibility of having a lexical subject and the possibility for aspect marking, in a way that suggests the existence of a finite and non-finite distinction in Bahasa Indonesia, even though there is no distinction between finite and non-finite clause in Bahasa Indonesia verbal morphology. In Bahasa Indonesia, finite and non-finite clauses are distinguished on the basis of the potential occurrence of an aspect marker or the modal *harus* 'must', even though they need not always contain such markers. A non-finite adjunct or complement clause can never have a lexical subject, but a lexical subject is optional for a finite clause. The modal *dapat/bisa* 'can/be able to' is not an indicator of the finiteness of a sentence, because it may appear following a complementizer that does not allow other aspect markers. As is shown in Chapter 4, the future marker *akan* 'will' that may function as an irrealis marker indicating a certain kind of potential mood may occur introducing a complement clause that is controlled by a matrix subject. The possibility of auxiliary modification is dependent on the semantics of the matrix predicate. In certain adjunct clauses that are introduced by a complementer, the clause has to be non-finite while in other types, the clause is finite. In "raising" constructions involving object control, the clause is finite. Such constructions do not involve a complementizer. In "raising" constructions involving subject control, the clause has to be non-finite. In such constructions, there is a preference not to use the complementizer. In adjunct clauses which do not take a complementizer, however, the clause has to be non-finite.

This study is only a general description of the distribution and the interpretation of non-overt NP subjects in Bahasa Indonesia. Various issues involving the characteristics of control relations still need further investigation.
Semantic classification of verbs involving control relations, for example, needs further examination. Finiteness in the language also needs more investigation.
BIBLIOGRAPHY


