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SUBJECT-PREDICATE, FOCUS-PRESUPPOSITION, AND
TOPIC-COMMENT IN BAHASA INDONESIA AND JAVANESE.

University of California, Los Angeles, Ph.D.,
1970

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Subject-Predicate, Focus-Presupposition, and Topic-Comment
in Bahasa Indonesia and Javanese

A dissertation submitted in partial satisfaction of the
requirements for the degree Doctor of Philosophy
in Linguistics

by

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ABSTRACT OF THE DISSERTATION
Subject-Predicate, Focus-Presupposition, and Topic-Comment
in Bahasa Indonesia and Javanese

by

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University of California, Los Angeles, 1970
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The analysis of three major constructions in Bahasa Indonesia and Javanese is presented within the framework of the transformational grammar. The constructions are: (a) Subject-Predicate Constructions, represented by sentences like ANAK ITU MEMBELI SEPATU KEMARIN--"The child bought shoes yesterday"; (b) Focus-Presupposition Constructions, represented by sentences like ANAK ITU JANG MEMBELI SEPATU KEMARIN--"It was that child who bought shoes yesterday"; and (c) Topic-Comment Constructions, represented by sentences like ANAK ITU, DIA MEMBELI SEPATU KEMARIN--"That child, he bought shoes yesterday."

On the basis of the restrictions on the distributions of different forms of nouns, pronouns, and question words in Bahasa Indonesia and Javanese, it is suggested that the above three constructions be generated from existential sentences. Such analysis, which is justified mostly from purely syntactical evidence, comes very close to providing the grammar with the semantic interpretation of the presupposition of FP-constructions. The derivations of SP- and FP-constructions can be accomplished by the application of meaning-preserving transformations, without assuming that formatives like Focus, Subject, etc. are present in the underlying sentences. The derivation of TC-constructions, however, can not be proven to be derived from the underlying forms by the application of meaning-preserving transformations, since one of the rules which has to be applied is an optional copying rule which changes the meaning of the sentence. In addition, as far as syntactical evidence is concerned, justifications for positing a formative like Topic in the underlying sentences have not been found.

PREFACE

Syntactical analysis of most Malayo-Polynesian languages has been the most neglected aspect of Malayo-Polynesian studies. Malayo-Polynesian linguists have generally been interested in either describing the morphological processes, i.e. derivations through affixations, or comparing the languages in terms of these processes.

The present work is a beginning of a systematic syntactical study of Bahasa Indonesia and Javanese. Since Bahasa Indonesia is a newly developed national language which is the second language for most Indonesians (second language in a sense that most Indonesians speak their regional languages like Javanese first and do not learn Bahasa Indonesia until they go to school), it may be necessary at this stage of the development of Bahasa Indonesia to state that my first language is Javanese, and thus the Bahasa Indonesia which I am using to support my claims is probably a Javanese dialect of Bahasa Indonesia. However, it should also be noted that claims which are made here are universal claims, in a sense that attempts to find supports from other related languages like Tagalog, as well as unrelated languages like English, are made.

It should go without saying that the exact formulations of these claims are highly tentative, and they should be considered as merely strong indications about certain behavior of certain parts of the language. To prove their correctness and generality, one must look into more data other than the small portion presented here, from Bahasa Indonesia and Javanese, as well as from other languages.

CHAPTER 1

INTRODUCTION

1.1. Objectives

The present work deals primarily with the relationships among three major constructions in Bahasa Indonesia and Javanese (henceforth, BI/JAV) represented by the following sentences:

- (1). ANAK ITU MEMBELI SEPATU KEMARIN
child Art. buy shoe yesterday

--"The child bought shoes yesterday."

- (2). ANAK ITU, DIA MEMBELI SEPATU KEMARIN
he/she

--"The child, he/she bought shoes yesterday."

- (3). ANAK ITU JANG MEMBELI SEPATU KEMARIN

--"It was the child who bought shoes yesterday."¹

¹Although efforts are made to give English translations which correspond as closely as possible to sentences in BI/JAV, the readers should not be misled by the translations. In most cases it has been difficult to reveal both the meaning as well as the structure of a sentence by simply giving its corresponding sentence in English. Throughout this work, structurally nonparallel sentences will be used to translate the meaning of the sentences in BI/JAV, and discussions concerning the structures of the sentences will follow.

The words in BI/JAV as well as in English which need special attention are underlined. Thus, the underlining has no semantic or syntactic significance.

Sentence (1) is a neutral, declarative sentence with ANAK ITU as its subject and the rest of the sentence its predicate. Sentence (2) consists of a NP, ANAK ITU, followed by a sentence whose subject is a pronoun DIA which refers to ANAK ITU. The first NP, ANAK ITU, is the topic, and the sentence following it, which describes or gives information about the focus, is generally referred to as the comment. Sentence (3) looks very much like (1) except that a word JANG is added before the predicate. Sentence (3) presupposes that "somebody bought shoes yesterday," while (1) and (2) do not have such presupposition.

Sentences like (4) and (5) show that the immediate constituents of (3) are [ANAK ITU][JANG MEMBELI SEPATU KEMARIN] rather than *[ANAK ITU JANG][MEMBELI SEPATU KEMARIN]:

(4). JANG MEMBELI SEPATU KEMARIN ANAK ITU

(5). SEPATU ITU JANG DIBELI ANAK ITU KEMARIN

—"The shoes were bought by the child yesterday."
 (?It is the shoes which were bought by the child.)

Sentence (4) is the stylistic variant of (3), whose order of constituents is the reverse of (3), and (5) is the passive form of (3), whose NP's (ANAK ITU and SEPATU ITU) are interchanged and whose verb marker ME[+nasal] is replaced by DI. Note that in the above cases, and any other cases, the first NP and JANG never constitute a constituent to which certain rules may or may not apply. At this stage, let us call JANG a marker which marks the phrase following it, and consider

(3) as a sentence whose second constituent is marked by JANG, and refer to this constituent as the JANG-phrase.

The NP which precedes the JANG-phrase in sentences like (3) is referred to as the focus of the sentence.

The following situations in which (1), (2), or (3) can be used should further clarify the different meanings of these three sentences: Sentence (1) can be uttered by a speaker to inform a listener in a situation when the speaker assumes that the listener has no prior knowledge about any information provided by (1).² Sentence (2) is also used when the speaker assumes that the listener has no prior knowledge about the information conveyed by the sentence he is going to utter, but when he wants to get the listener's attention to the topic on which the information is centered. So, he first states the topic and then gives further information about this topic. In addition to using sentences like (2), a speaker can get the listener's attention to the topic of the information by using phrases like: "Let me tell you about that child," "By the way, concerning that child," etc. Sentence (3) is used only when the speaker assumes that the listener has already had some part of the information which the speaker is going to convey. In other words, both the speaker and the listener share some

²It will be shown later that this is not entirely correct. Certain presuppositions have to be made about the subject, topic, and the focus of a sentence.

presupposition. When such a situation exists and the speaker wants to supply new information about what he and the listener presuppose, the speaker uses a sentence like (3) whose focus expresses the new information and the rest of the sentence restates the shared presupposition. An elaboration regarding what the "new" information is about is necessary. New information may be supplementary information to the presupposition shared by the speaker and the listener. For example, when the shared presupposition is "somebody bought shoes yesterday," a possible supplement to this presupposition is a specification about "somebody." If the new information specifies that this "somebody" is a particular child, then the speaker can use sentence (3) to convey this supplementary information. New information can also be a correction or contradiction to the shared presupposition. For example, when the shared presupposition is that "somebody other than a particular child" bought shoes yesterday, and new information states that that particular child, and not somebody else, bought shoes yesterday, then the speaker expresses this new information about the shared presupposition by using sentence (3), or, to make it more explicit, an enclitic LAH in BI and KOK in JAV may be added to the focus.

(4). ANAK ITULAH JANG MEMBELI SEPATU KEMARIN

--"It was THAT CHILD who bought shoes yesterday."

The enclitic LAH or KOK can be used only when the focus contains new information which contradicts the shared presupposition. In English this seems to be expressed by stressing the focus, but the stress is ambiguous. In (3) "that child" is also stressed, but to convey the meaning carried by (4), the stress is usually referred to as the "contrastive stress." Finally, new information can also be a confirmation of a certain part of the shared presupposition. For example, when the speaker and the listener presuppose that a particular child bought shoes yesterday and the speaker wants to state that that presupposition is in fact correct, then he can use either (3) or (3) with an additional enclitic MEMANG in BI or JA in JAV.

(5). MEMANG ANAK ITU JANG MEMBELI SEPATU KEMARIN

--"It WAS that child who bought shoes yesterday."

Note that English again utilizes stress, this time in was, or probably both was and that child, to express (5) in BI/JAV. Sentence (3) is thus three-way ambiguous.

Throughout this work, I will call sentences with subject and predicate like (1) above Subject-Predicate Constructions (henceforth, SP-constructions), sentences with topic and comment like (2) above Topic-Comment Constructions (henceforth, TC-constructions), and sentences

with focus and presupposition like (3) above Focus-Presupposition Constructions (henceforth, FP-constructions).³

1.2. Theoretical Framework

The analysis presented in this work is done within the framework of transformational grammar. Familiarity with transformational theory and the current developments in this theory, particularly with regard to the basic assumptions underlying the Interpretive Theory (represented by the works of Chomsky [1968], Jackendoff [1968a,b] etc.), Generative Semantics (represented by the works of Lakoff [1968, 1969], Postal [1969] etc.), and Case Grammar (represented by the works of Fillmore [1968]), is assumed.

One of the crucial unsettled issues in transformational theory is whether transformational rules are meaning-preserving. Regarding this particular issue, Partee (1968) states that:

The position that transformational rules don't preserve meaning is of much less inherent interest than the contrary position, since it amounts simply to the position that a certain strong hypothesis is false. [p. 10]

The present work utilizes the hypothesis of meaning-preserving transformations as a working hypothesis, but the analysis

³This paragraph implies that in this work disputes concerning the proper labeling of these constructions are considered irrelevant, as long as the suggested analysis does not depend on these labels.

is based solely on syntactical evidence, meaning that the analysis aims to provide semantic information in the underlying forms of the sentences, but certain underlying forms are not posited simply to achieve such aim. Underlying forms are posited on the basis of syntactical evidence alone.

CHAPTER 2

KATZ AND POSTAL'S QUESTION-PRESUPPOSITION

2.1. Interrogative and Declarative Sentences

Katz and Postal (1964) have shown convincingly that there are semantic as well as syntactic justifications to assume that there are close relationships between interrogative sentences and their corresponding declarative sentences containing the appropriate pro-forms like somebody, something, some reason, somewhere, etc. The present work assumes that their semantic justifications are essentially correct. The following cases show that syntactical evidence similar to their evidence in English--to show that a question morpheme, abstractly represented as Q, occurs in the underlying form of the sentence--can also be found in BI/JAV:

(a). Certain adverbials which occur in declarative sentences can not occur in interrogative sentences. For example:

(6). $\left. \begin{array}{l} *TENTU \text{ SADJA} \\ \text{certainly} \\ *MUNGKIN} \right\} \text{SIAPA JANG MEMBELI SEPATU KEMARIN?}$
probably

--" { *Certainly }
 { *Probably } who bought shoes yesterday?"

(7). { TENTU SADJA } ANAK ITU MEMBELI SEPATU
 { MUNGKIN }

--" { Certainly }
 { Probably } that child bought shoes yesterday."

(b). Certain modifiers can occur only in the interrogative sentences. For example:

(8). SIAPA SADJA JANG MEMBELI SEPATU KEMARIN?
 (SADJA = WAE in JAV)

--"[Who in particular] bought shoes yesterday?"⁴

(9). *ANAK ITU SADJA MEMBELI SEPATU KEMARIN

--"?That child in particular bought shoes yesterday."

(10). SIAPA LAGI JANG MEMBELI SEPATU KEMARIN?
 (LAGI = MENEH in JAV)

--"Who else bought shoes yesterday?"

(11). *ANAK ITU LAGI MEMBELI SEPATU KEMARIN

--"*That child else bought shoes yesterday."⁵

⁴SADJA used in this context is very difficult to translate into English. With SADJA sentence (8) requests an exhaustive list of the persons who bought shoes yesterday. Probably the English translation should be "?Who exhaustively bought shoes yesterday?" or, in Southern dialect, "Who-all bought shoes yesterday?"

⁵LAGI meaning "else" as in (10) and (11) is homophonous with LAGI which means "again."

(c). There is a question morpheme KAH in BI (but not in JAV) which can be optionally deleted if a pro-form APA (see below) is present. For example:

(12). ANAK ITU MEMBELI SEPATUKAH?

--"Did that child buy shoes?"

(13). APA(KAH) ANAK ITU MEMBELI SEPATU?

--"Did the child buy shoes?"

(14). SIAPA(KAH) JANG MEMBELI SEPATU KEMARIN?

--"Who bought shoes yesterday?"

Note that without KAH (12) is a declarative sentence (1), and when APA is present, as in (13), KAH can be optionally attached to the pro-form. Similarly, when SIAPA is present, as in (14), KAH can also be optionally attached to this pro-form.

(d). It may be of interest to state that negative preverbs like hardly and scarcely, which Katz and Postal claim can not occur in the interrogative sentences, can occur in the interrogative sentences in BI/JAV as evidenced from the grammaticalness of (15) as well as (16) below:

(15). ANAK ITU DJARANG MEMBELI SEPATU
 hardly

--"The child hardly bought shoes."

(16). ANAK ITU DJARANG MEMBELI SEPATUKAH?

--"?Does/Did the child hardly buy shoes?"

Stockwell, Schachter, and Partee (1968) claim that sentences like (16) "for some speakers . . . appear to be grammatical in a suitable context" (p. 628).

It seems clear that the presence of a question formative Q in the underlying forms of the interrogative sentences is syntactically justified for BI/JAV as well as for English.

2.2. Some Important Details

2.2.1. The status of WH:⁶ On the basis of the general contrast between two possible kinds of WH-questions, i.e. questions with what, who, etc. in contrast to questions with which, when (i.e. which time), where (i.e. which place), etc.--which suggests that these two types of questions be correlated with definite-indefinite article contrast--Katz and Postal assume that WH is attached to the article. Recently, however, Postal (1967) suggests that articles be represented in the deep structure as syntactical features on the head noun, which makes a node ART in the deep structure unnecessary, and so there is nothing to which the WH can be attached. It will be shown below that the description of nouns and noun-phrases in BI/JAV is simpler if nouns are characterized by features. WH is then assumed to be not attached to the ART. Furthermore, see 2.2.2. below.

⁶Although BI/JAV do not utilize morphemes which contain WH sounds, it is convenient to refer to questions with question-words like APA, SIAPA, DIMANA, etc. as WH-questions, in contrast to Yes/No-questions.

2.2.2. Q and WH: Katz and Postal consider sentences like (17) a paraphrase of (18) (see Katz and Postal [1964, pp. 86-87]):

(17). WHO SAW SOMEONE?

(18). I REQUEST THAT YOU ANSWER "X SAW SOMEONE."

and that I REQUEST AN ANSWER is the meaning given to Q. In addition to Q, another formative, WH, is needed because to generate WH-questions the constituents which are questioned have to be marked in the deep structure, otherwise a string [Q[X,Y,Z]_S] will be multiply ambiguous. They thus argue that both Q and WH are needed in the deep structure. Malone (1967) argues that one formative should be sufficient, because the difference between Yes/No-questions and WH-questions depends on where Q is attached. If Q is attached directly under the topmost S, Yes/No-questions are generated, but if Q is attached to the noun, WH-questions will result. Stockwell, Schachter, and Partee (1968) argue further that if Q and WH can be generated independently, strings containing WH without Q will not yield a surface structure, and so, although their analysis on WH-questions is different from Malone's, they agree with Malone that a single formative will do the job. The cases in BI/JAV clearly show that a single formative is sufficient to generate both Yes/No-questions as well as WH-questions. First,

the following "paradigm" shows that APA is a pro-form of the root:⁷

- (19). SIAPA --"who"
SI JOHN --"John" (SI is a person marker)
- APAMU --"which of yours"
SEPATUMU --"your shoe" (SEPATU is a root)
- MENGAPA --"do what" as in "What did you do?"
MEMBELI --"to buy" (ME[+nasal] is a verb marker;
 BELI is a root.)

Proforms like APA will be entered in the lexicon as a pro-form root. In addition, the morpheme KAH (which is a question morpheme) will generate different interrogatives, depending on where it is attached. Consider the following:

- (20). [ANAK ITU MEMBELI SEPATU]+KAH?
 --"Did the child buy shoes?"

⁷I am assuming that lexical entries for BI/JAV contain only roots whose categories are unspecified, and that the lexical rules will contain rules like:

Affix-l + root-m ---> [+C-x]

where C-x is a category like Verb, Noun, etc., and Affix-l and root-m are complex symbols. Such an assumption seems reasonable since roots like ADJAR for example can have the following derivations:

- MENGADJAR --"to teach" (intransitive)
MENGADJARKAN --"to teach" (transitive)
PENGADJAR --"a teacher"
PENGADJARAN --"education"
BELADJAR --"to study"
PELADJAR --"a student"
PELADJARAN --"a lesson"
MEMPELADJARI --"to research on something"
MENGADJARI --"to train"
ADJARAN --"a teaching, philosophy"
TERPELADJAR --"educated"
TERADJARKAN --"teachable"

(21). [[SIAPA+KAH]_{NP} [JANG MEMBELI SEPATU]]_S

--"Who bought the shoes?"

(22). [ANAK ITU [MENGAPA]_{VP}+KAH?]_S

--"What did the child do?"

(23). [ANAK ITU [MEMBELI[[APA]_{NP}+KAH]?]_S

--"What did the child buy?"

Sentence (20) has KAH attached to S and it is a Yes/No-question. Sentences (21), (22), and (23) each contain a proform APA to which KAH is attached. The result is WH-questions which ask about different parts of the sentence. Note that to generate WH-questions, KAH is attached to a proform. In addition, KAH can also be attached to non-proform roots. When this happens, interrogative sentences, which I will call semi-Yes/No-questions, are generated. Such interrogative sentences are parallel to interrogative sentences with stressed constituents in English, such as: "Did JOHN buy shoes?" or "I want to know whether John or Mary bought shoes," or "Is it JOHN who bought shoes?" etc. Observe the following:

(24). [[ANAK ITU]+KAH]_{NP} JANG MEMBELI SEPATU?_S

--"Is it the child who bought shoes?"

(25). [ANAK ITU [MEMBELI SEPATU]+KAH]_{VP}_S

--"Did the child BUY SHOES?"

So, because of the availability of proforms in BI/JAV, and also because different types of interrogative sentences are generated depending on the placement of Q, it seems clear that for BI/JAV a single formative Q is sufficient.

Note that Q in BI/JAV has the function of converting a sentence containing APA into an interrogative sentence with a WH-question-word. Thus, it corresponds with AUX-attraction in English, and not with the derivation of WH-question words.

2.3. The Application of Katz-Postal's Analysis to BI/JAV

Sentences like (26), (27), and (28) below seem to indicate that WH-questions in BI/JAV can be generated from strings which contain a node which dominates a pro-form APA and Q:

(26). ANAK ITU MEMBELI APA?
child buy what

--"What did the child buy?"

(27). ANAK ITU MENGAPA?

--"What did the child do?"

(28). ANAK ITU MENGAPAKAN ALI?

--"What did the child do to Ali?"

The rules to generate (26)-(28) above seem to be much simpler than their corresponding English rules to generate the English sentences (26)-(28), since fronting and

AUX-movement are not needed for BI/JAV. Such rules are simple until we come to the peculiar behavior of WH-questions in which the subject of the sentence is questioned. Compare sentences (1) and (3) duplicated below with (29) and (30) respectively:

(1). ANAK ITU MEMBELI SEPATU

--"The child bought shoes."

(3). ANAK ITU JANG MEMBELI SEPATU

--"It is the child who bought shoes."

(29). *SIAPA MEMBELI SEPATU?
who

--"Who bought shoes?"

(30). SIAPA JANG MEMBELI SEPATU?

--"Who is it who bought shoes?"

Notice that (1) is an SP-construction, and when the subject is questioned, the sentence is ungrammatical, which is (29) above, but for sentence (3), which is an FP-construction, it is permissible to question its topic, since (30) is grammatical. Notice that an analysis which simply states that a subject of a sentence in BI/JAV should not be a question word seems ad hoc. A less ad hoc analysis is the one which states the restriction (29) in terms of a restriction which is applicable for other cases, besides subject, as well. It will be shown that the restriction which disallows (29) is a

very general constraint which disallows the generation of some other ungrammatical sentences. To be able to arrive at such an analysis, we need first of all to observe the behavior of the subject, topic, and focus of a sentence, and more generally, the behavior of nouns in these languages compared to a language like English.

CHAPTER 3

ON THE NOTION [\pm Specific]

3.1. Simple Nouns

A simple noun in BI/JAV can have one of the following forms:⁸

- (a). Root by itself: such as RUMAH--"house," MOBIL
 --"car," ANAK--"child."
- (b). Root + NJA: such as RUMAHNJA, MOBILNJA,
 ANAKNJA.
- (c). Root + NJA + ITU: such as RUMAHNJA ITU, MOBILNJA
 ITU, ANAKNJA ITU.
- (d). Root + ITU: such as RUMAH ITU, MOBIL ITU,
 ANAK ITU.

The meaning of each can be illustrated by their uses in sentences like (30)-(33) below:

(30). AMAT INGIN MEMBELI RUMAH
 want buy house

--"Amat wants to buy a house."

⁸Since the English translation of the nouns other than the roots will be misleading at this stage, the translation for only the roots is given. Similarly, the readers should not be misled by the forms of the nouns in English used to translate the different forms of nouns in BI/JAV in sentences (30)-(33) and other sentences containing nouns having the forms (a), (b), (c) or (d).

(31). RUMAHNJA APA SUDAH KAMU KUNTJI?
already locked by you

--"Have you locked the house?"

(32). RUMAHNJA ITU SAMPAI SEKARANG BELUM ADA JANG MEMBELI
until now not yet buy

--"Up to now, nobody has bought the house."

(33). RUMAH ITU AKAN DIPAKAI UNTUK MENAMPUNG ANAK PIATU
will be used for receive orphans

--"The house will be used to house orphans."

RUMAH in (30) refers to any house; RUMAHNJA in (31) refers to a specific house the speaker assumes the hearer knows; RUMAHNJA ITU in (32) also refers to a specific house the speaker assumes the hearer knows, but it also indicates that that specific house has been mentioned before. In other words, (32) can be used only when a sentence like (34) below has been said previous to (32) within a discourse:

(34). AJAH TELAH MEMUTUSKAN BAHWA RUMAHNJA HARUS DIDJUAL
father has decided that must be sold

--"Father has decided that the house has to be sold."

Because (34) contains RUMAHNJA, the second mentioned of this noun requires the addition of ITU, so RUMAHNJA ITU is used in (32). Sentence (33), which contains RUMAH ITU,⁹ can be a continuation of (30), which contains RUMAH. In this case,

⁹ITU is homophonous with demonstrative ITU--"that." In the sentences cited in this work ITU is never used as a demonstrative.

RUMAH ITU is used in (33) because the noun RUMAH is mentioned in (30). Note that RUMAH is used when the speaker has no particular referent in mind and he assumes that the hearer does not either. The second mention of RUMAH in (33) still does not provide the hearer or the speaker with a particular referent. In other words, RUMAH ITU in (33) refers to whatever house Amat buys, assuming that he will eventually succeed in buying one.

The forms of the nouns in (30)-(34) indicate that NJA is a marker of a specific noun, and ITU is added as a result of a process of anaphora. We can characterize these nouns in terms of feature notations as follows:

(35).	<u>BI</u>	<u>JAV</u>	<u>Feature Specifications</u>
	N	N	[-anaphoric;-spec]
	N+NJA	N+E	[-anaphoric;+spec]
	N+NJA+ITU	N+E+KUWI	[+anaphoric;+spec]
	N+ITU	N+KUWI	[+anaphoric;-spec]

Since a root does not have to be a noun, I will use N to denote a noun root from now on. The difference between the features [anaphoric] and [specific] used to characterize nouns in BI/JAV and the features [definite] and [specific] used by some linguists to characterize nouns in English is discussed in section 3.2 of this chapter.

In sentences like (36), an N can also refer to a specific noun whose referent is assumed known to the hearer by the speaker:

- (36). ANAK KETJIL ITU BELUM DAPAT MEMBEDAKAN ANTARA BULAN
child small not yet can distinguish between moon

DAN MATA-HARI
and sun

--"The little child can not distinguish between
the moon and the sun."

Roots like BULAN and MATA-HARI can be conceived as N+NJA with NJA deleted, since there are sentences like (37) as well:

- (37). BULANNJA PENUH MALAM INI
full tonight

--"The moon is full tonight."

The [+spec]-marker NJA can also be deleted in cases where (37) below is used as a continuation of (35):

- (35). AJAH TELAH MEMUTUSKAN BAHWA RUMAHNJA HARUS DIDJUAL

--"Father has decided that the house has to be sold."

- (37). RUMAH ITU TERLALU KETJIL
too small

--"The house is too small."

RUMAH ITU in (37) and RUMAHNJA in (35) refer to the same specific house the speaker assumes the hearer knows. ITU is added since the noun is mentioned for the second time.

3.1.1. Proper Nouns: Proper nouns in BI/JAV have exactly the same forms as regular nouns. Observe the following:

(38).	BI	JAV	Features Specifications	English
	AMAT	AMAT	[-anaph;-spec]	} Amat
	AMAT <u>NJA</u>	AMATE <u></u>	[-anaph;+spec]	
	AMAT <u>NJA</u> <u>ITU</u>	AMATE <u>KUWI</u>	[+anaph;+spec]	
	AMAT <u>ITU</u>	AMAT <u>KUWI</u>	[+anaph;-spec]	

As is the case with regular nouns, a root by itself refers to any noun having a particular name, and AMATNJA refers to a specific person the speaker assumes the hearer knows, and NJA can be deleted if AMAT refers to a specific person. When the speaker assumes that the hearer knows who AMAT is and it turns out that the speaker's assumption is wrong, the hearer may ask AMAT JANG MANA?--"Which Amat?" or SIAPA AMAT ITU?--"Who is Amat?". Note that ITU has to be added in the second question since AMAT has been mentioned before. The form AMATNJA ITU is used when a sentence containing AMATNJA precedes it, and NJA in AMATNJA ITU can also be deleted when the speaker assumes that the hearer knows who AMAT is.

3.1.2. Relativized Nouns: The following sentences show that a noun with a restrictive relative clause¹⁰ which

¹⁰The relative clause in BI/JAV is inserted between a noun and an article when the relative clause is a

contains a [+spec]-morpheme always gets a [+spec] interpretation, and a noun with a restrictive relative clause containing no [+spec]-morpheme always gets a [-spec] interpretation.

(39). AMAT INGIN MENANGKAP ULAR [JANG LEWAT KEMARIN],
 want catch snake which passed by yesterday

TETAPI ULARNJA ITU BERATJUN
 but poisonous

--"Amat wants to catch the snake which passed by yesterday, but the snake is poisonous."

(40)[JAV]. AMAT KEPINGIN NJEKEL ULANE [SING LEWAT WINGI],
 NANGING ULANE KUWI DUWE RATJUN

--(the same meaning as (39))

(41). *AMAT INGIN MENANGKAP ULAR [JANG LEWAT], TETAPI
ULARNJA ITU BERATJUN

--"?Amat wants to catch a snake which passed by but the snake is poisonous."

The relative clause in (39) contains KEMARIN--"yesterday", referring to a specific time, and the second mention of the noun is expressed by N-NJA-ITU, which is [+anaph;+spec], so ULAR JANG LEWAT KEMARIN has to be [-anaph;+spec]. In BI,

restricted relative clause and is attached after a noun and its article when it is a non-restrictive relative clause. In other words, we have the following surface structures:



there seems to be an obligatory rule which deletes NJA when the relative clause contains [+spec], but in Javanese the deletion is optional, since E, which corresponds to NJA in BI, can occur with a relative clause containing [+spec], as in (40). In (41), the second-mentioned ULAR in ULAR [JANG LEWAT] can not be expressed by N-NJA-ITU, which means that ULAR [JANG LEWAT] is [-anaph;-spec]. Compare (41) with (42) and (43) below, where the second-mentioned ULAR is expressed by N-ITU, which is [+anaph;-spec]:

(42). AMAT INGIN MENANGKAP ULAR, MESKIPUN ULAR ITU BERATJUN

---"Amat wants to catch a snake, although the snake is poisonous."

(43). AMAT INGIN MENANGKAP ULAR [JANG LEWAT], MESKIPUN ULAR ITU BERATJUN

---"Amat wants to catch a snake which passed by although the snake is poisonous."

I will refer to a relative clause containing [+spec] a Specific-Relative Clause (abbreviated as Spec-REL) and the one which contains no [+spec] as Non-specific Relative Clause (abbreviated as Nonspec-REL). In (39), instead of ULARNJA ITU, ULAR [JANG LEWAT KEMARIN] ITU can be used; in (40), instead of ULANE KUWI, ULANE [SING LEWAT WINGI] KUWI can be used; and in (43), instead of ULAR ITU, ULAR [JANG LEWAT] ITU can be used. So, relativized nouns can have the following forms:

(44).

BI	JAV	Features
N+NonspecREL	N+NonspecREL	[-anaph;-spec]
N+NonspecREL+ <u>ITU</u>	N+NonspecREL+ <u>KUWI</u>	[+anaph;-spac]

N+SpecREL	{ N+SpecREL N+ <u>E</u> +SpecREL }	[-anaph;+spec]
N+SpecREL+ <u>ITU</u>	{ N+SpecREL+ <u>KUWI</u> N+ <u>E</u> +SpecREL+ <u>KUWI</u> }	[+anaph;+spec]

3.1.3. Pronouns and Pronominalizations: The pronouns in BI/JAV can have one of the following forms:

(44a).

BI	JAV	English
--	DEWE	self
DIA	DEWE <u>KE</u>	he/she
DIA <u>ITU</u>	DEWE <u>KE</u> <u>KUWI</u>	

Observe the cases in JAV which clearly show that DEWEKE comes from DEWE (the K is a glottal stop inserted between geminate vowels), and E, which corresponds to NJA in BI, is a [+spec]-marker, which means that the pronouns DEWEKE and DIA are [-anaph;+spec]. DIA in BI is already [+spec], which explains why *DIANJA does not occur, and that a pronoun has to be [+spec] is also evidenced from the ungrammaticalness

of *DEWE KUWI in JAV, since *DEWE KUWI is [+anaph;-spec]. Cases in (44a) indicate that there is a lexical rule which states that a pronoun has to be [+spec]. In other words, when we use [+PRON] to mark a pronoun, the rule can be stated as follows:

(45). [-spec;+PRON] ----> [+spec;+PRON]

Let us consider how the above pronouns are used by observing the following sentences:

(46). AMAT MEMUKUL ORANG, PADAHAL DIA TIDAK BERSALAH
hit person despite he not guilty

--"Amat hit a person despite the fact that he is not guilty."

(47). AMAT MEMUKUL ORANG, PADAHAL DIA ITU TIDAK BERSALAH

--(the same meaning as (46))

(48). AMAT MEMUKUL ORANG, KEMUDIAN DIA LARI

(49). AMAT MEMUKUL ORANG, KEMUDIAN DIA ITU LARI
then run

--"Amat hit a person, then he ran away."

(50). AMAT MEMUKUL ORANG ITU, PADAHAL DIA TIDAK BERSALAH

(51). AMAT MEMUKUL ORANG ITU, PADAHAL DIA ITU TIDAK
BERSALAH

--"Amat hit the person, despite the fact that he is not guilty."

(52). AMAT ITU MEMUKUL ORANG, KEMUDIAN DIA LARI

(53). AMAT ITU MEMUKUL ORANG, KEMUDIAN DIA ITU LARI

--"(That) Amat hit a person, then he ran away."

- (54). DIA MEMUKUL ORANG, KEMUDIAN DIA ITU LARI }
 (55). DIA ITU MEMUKUL ORANG, KEMUDIAN DIA ITU LARI }

--"He hit a person and then he ran away."

The relationships between the pronouns and their antecedents in (46) through (55) in terms of feature notations are as follows:

Antecedent	Pronoun
(46). [-anaph;-spec;-PRON]	[-anaph;+spec;+PRON]
(47). [-anaph;-spec;-PRON]	[+anaph;+spec;+PRON]

(48). [-anaph;+spec;-PRON]	[-anaph;+spec;+PRON]
(49). [-anaph;+spec;-PRON]	[+anaph;+spec;+PRON]

(50). [+anaph;-spec;-PRON]	[-anaph;+spec;+PRON]
(51). [+anaph;-spec;-PRON]	[+anaph;+spec;+PRON]

(52). [+anaph;+spec;-PRON]	[-anaph;+spec;+PRON]
(53). [+anaph;+spec;-PRON]	[+anaph;+spec;+PRON]

(54). [-anaph;+spec;+PRON]	[+anaph;+spec;+PRON]
(55). [+anaph;+spec;+PRON]	[+anaph;+spec;+PRON]

Each of the sentences (46)-(55) above is ambiguous because each pronoun can have either the subject or the object of

the sentence as its antecedent. For simplicity of exposition, only the relationships between the underlined nouns and pronouns are discussed, and since the feature changes shown in (46)-(55) above are all the possible changes, the relationships between a pronoun and the non-underlined noun in each sentence should involve either one of the possible changes shown in (46)-(55).

In addition to the lexical rule (45) above, (46)-(55) seem to involve "pronominalization proper" and "anaphora." From the features in (46)-(55) we can see that when pronominalization proper is applied, [-PRON] is converted into [+PRON], and rule (45) gives the [+spec]. Usually, anaphora should be applied when a noun is "afore-mentioned," but cases like (46), (48), etc. indicate that anaphora does not apply, and moreover, in (50) and (52), [+anaph] is converted into [-anaph]. How can we account for these cases? What is happening is that "pronominalization proper" and "anaphora" are applied conjunctively, and lexical rule (45) is applied after pronominalization proper. If we abbreviate "pronominalization proper" as PP and "anaphora" ANAPH, and lexical rule (45) LEX, the pronominalization rules to generate (46)-(55) can be stated as follows:

(56). PRONOMINALIZATION:

$$(a). \left\{ \begin{array}{l} \text{PP: } [-\text{PRON}] \text{ ----} \rightarrow [+ \text{PRON}] \\ \text{ANAPH: } [-\text{anaph}] \text{ --} \rightarrow [+ \text{anaph}] \end{array} \right\} (**)$$

(b). LEX: [-spec;+PRON] ----> [+spec;+PRON]

Condition: the noun is "afore-mentioned"

I put (**) after (a) to indicate that in the second application of (56) - (a) may or may not be applied. In other words, the following are the possible applications of (56):

(1). First application of (56):

(56a). Apply PP.

(56b). Apply LEX.

Second application of (56):

(56a). Apply ANAPH

(56b). LEX does not apply.

(2). First application of (56):

(56a). Apply ANAPH.

(56b). LEX does not apply.

Second application of (56):

(56a). Apply PP.

(56b). Apply LEX.

(3). First application of (56):

(56a). Apply PP.

(56b). Apply LEX.

Second application of (56): Does not have to be done.

(4). First application of (56):

(56a). Apply ANAPH.

(56b). LEX does not apply.

Second application of (56): Does not have to be done.

The following are sample derivations:

[...1st noun...]S [...2nd noun.....3rd noun...]S

Base: \emptyset [-an;-spec;-P] [-an;-spec;-P]
 PP.....[-an;-spec;+P]
 LEX.....[-an;+spec;+P]
 Result:(46): N ----- DIA

2nd application of (56):
 ANAPH.....[+an;+spec;+P]
 Result:(47): N ----- DIA ITU

Base: \emptyset [-an;+spec;-P] [-an;+spec;-P]
 PP.....[-an;+spec;+P]
 Result:(48): N+(NJA) ----- DIA

2nd application of (56):
 ANAPH.....[+an;+spec;+P]
 Result:(49): N+(NJA) ----- DIA ITU

Base: [-an;-spec;-P] [-an;-spec;-P] [-an;-spec;-P]
 ANAPH.....[+an;-spec;-P].....[+an;-spec;-P]

2nd application of (56):
 PP.....[+an;-spec;+P].....[+an;-spec;+P]
 LEX.....[+an;+spec;+P].....[+an;+spec;+P]
 Result:(55): DIA+ITU ----- DIA+ITU

(52) and (53) are generated in the same manner as (51) and (52) except that the base has to be [+spec]. To get (54),

only ANAPH is applied, and the application of (56) to (55) does not change any features.

Notice that in the first row (between the first double solid lines and the first single line) ANAPH can be applied instead of PP, and the result will be:

$N \leftarrow \rightarrow N+ITU$ as in (46a):

(46a). AMAT MEMUKUL ORANG, PADAHAL ORANG ITU TIDAK BERSALAH

--"Amat hit a man, despite the fact that the man was not guilty."

and in the second application of (56), PP can be applied, which gives us the same (47): $N \leftarrow \rightarrow DIA ITU$. A similar application of the rule can also be applied in the second row (between the second and the third double lines). When ANAPH is applied first instead of PP, the result will be $N+(NJA) \leftarrow \rightarrow N+(NJA)+ITU$, as in (48a):

(48a). AMAT MEMUKUL ORANG, KEMUDIAN AMAT ITU LARI

--"Amat hit a man then (that) Amat ran away."

and to get (49), i.e. $N+(NJA) \leftarrow \rightarrow DIA ITU$, PP can be applied in the second application of (56). In the third row, when ANAPH only is applied, we will get: $N+ITU \leftarrow \rightarrow N+ITU$, as in (50a):

(50a). AMAT MEMUKUL ORANG ITU, PADAHAL ORANG ITU TIDAK BERSALAH

--"Amathit the man, despite the fact that the man was not guilty."

and when PP is applied in the second application of (56), (51) is the result. So, a slight modification of (56) will give us both pronominalization and simple anaphora as in (46a) and (48a). Rule (56) can be modified into (56'):

(56'). PRONOMINALIZATION AND ANAPHORA

(a). $\left\{ \begin{array}{l} \text{PP: } [-\text{PRON}] \text{ ---} \rightarrow [+ \text{PRON}] \\ \text{ANAPH: } [-\text{anaph}] \text{ ---} \rightarrow [+ \text{anaph}] \end{array} \right\}$

(b). LEX: $[-\text{spec}; +\text{PRON}] \text{ ---} \rightarrow [+ \text{spec}; +\text{PRON}]$

Conditions: (1). the noun is "afore-mentioned"

(2). the second application of the rule is optional

3.2. Comparison between [anaph], [spec], and Pronouns in BI/JAV and [def], [spec], and Pronouns in English

Recent works in English grammar, such as Baker (1966 a,b), Fillmore (1966), Karttunen (1968), Dean (1968), and Stockwell, Schachter, and Partee (1968) have indicated that an indefinite noun like A PIANO in (57) and (58) below have different meanings:

(57). JOHN TRIED TO FIND A PIANO.

(58). JOHN LIFTED A PIANO.

A PIANO in (57) is [-spec], meaning that A PIANO may be roughly paraphrased with ANY PIANO, and A PIANO in (58) is [+spec], meaning that A PIANO may be roughly paraphrased

with A CERTAIN PIANO. Karttunen (1968, pp. 7-8) gives the following explanation on the meaning of [+spec] and [-spec] for English: (additional underlinings are mine):

Assume that a speaker of (20) spent some time in the morning talking to his friend Rudolf Carnap and later refers to this event by uttering (20):

(20). I talk with a logician.

(21). I talked with Rudolf.

(22). I talked with the author of Meaning and Necessity.

(23). I talked with a famous philosopher.

In the specific sense, i.e. "a certain logician", the utterance is replaceable by (21)-(23), which in this case would all constitute an equally honest answer to the question "Who did you talk with this morning?". The speaker has a certain referent in his mind; and, in his knowledge, there also are some properties associated with that particular individual. Any of these properties could presumably be used to describe the individual; in a sense, the speaker has a choice of how informative he wants to be. As far as the speaker is concerned, it is not clear how (20)-(23) could be claimed to be anything but paraphrases of each other.

In the non-specific sense, (20) could be an answer to the question "What kind of person did you talk with this morning?". This version of (20) could not be paraphrased by (21)-(23), since it is not the particular individual that matters, but rather the class to which he belongs.

Comparing such use of [spec] for English with the use of [spec] for BI/JAV illustrated in the previous sections of this chapter, we have the following:

[+spec] in English is used when the speaker has a certain referent in his mind.

[+spec] in BI/JAV is used when the speaker assumes that the hearer knows the referent the speaker has in mind.

[-spec] in English is used when the speaker does not have any particular referent in mind.

[-spec] in BI/JAV is used when the speaker assumes that the hearer does not know the referent which the speaker may or may not have in mind. Karttunen (1968, p. 6) also pointed out that "it is something about the meaning of the verb LIFT which suggests that A PIANO describes some specific object." In BI/JAV, however, sentences corresponding to (57) and (58) above each can contain [-spec] or [+spec]:

(57a). JOHN BERUSAHA MENTJARI PIANO

(57b). JOHN BERUSAHA MENTJARI PIANONJA
try find

(58a). JOHN MENGANGKAT PIANO

(58b). JOHN MENGANGKAT PIANONJA
lift

PIANO in (57a) is [-spec], because the speaker assumes that the hearer does not know which particular piano John tried to find, and the speaker may not either: PIANONJA in (57b) is [+spec], the speaker assumes that the hearer knows which piano the speaker has in his mind. The meaning of the verb FIND = MENTJARI changes, since (57b) assumes that a piano which both the speaker and the hearer know had been lost. In JAV, the verb to translate MENTJARI in (57a) is NGGOLEK

and the verb to translate MENTJARI in (57b) is NGGOLEKI, so NGGOLEK can only be used when the object is [-spec] and NGGOLEKI can only be used when the object is [+spec]. Such selectional restriction is applicable to certain verbs only, since the translation of (58a) which has [-spec] object and the translation of (58b) which has [+spec] object into JAV use the same verb NGANGKAT. Again, PIANO in (58a) is [-spec] because the speaker assumes that the hearer does not know the referent, but the speaker may or may not know the referent. (The situation where the speaker does not know the referent is when, for instance, someone else told the speaker (58a) and the speaker is retelling (58a) to the hearer.) PIANONJA in (58b) is [+spec] because the speaker assumes that the hearer knows the referent which the speaker has in mind. In English, a definite article THE is used when the speaker assumes that the hearer knows the referent the speaker has in mind:

(57c). JOHN TRIED TO FIND THE PIANO.

(58c). JOHN LIFTED THE PIANO.

THE PIANO in (57c) and (58c) is [+def;+spec]. (57a) then is the proper translation for (57), but (58a) is not the exact translation of (58) because in (58a) the speaker may or may not know the referent, while in (58) the speaker knows the referent (at least according to Baker and Karttunen).

Another case which demonstrates the difference between [+spec] in BI/JAV and [+spec] in English clearly is the form of the "non-linguistic anaphoric" nouns like THE MOON, THE SUN, etc., which is [+def;+spec] in English but in BI/JAV the form is N+NJA (BULANNJA, MATAHARINJA, etc.) which is [-anaph;+spec]. In English, the nouns are [+def] because the speaker assumes that the hearer knows the referent, and [+spec] because the speaker has a specific referent in mind. In BI/JAV, the nouns are [+spec] because the speaker assumes that the hearer knows the referent, but there is no overt morpheme which indicates that the speaker has a specific referent in mind.

The difference between [+spec] in BI/JAV and [+spec] and [def] in English can be summarized as follows:

(59).

	Speaker	Speaker assumes that the hearer	Features	
			ENGLISH	BI/JAV
(a)	knows referent	knows referent	[+def]	[+spec]
(b)	does not know the referent	does not know the referent	[-spec]	[-spec]
(c)	knows the referent	does not know the referent	[+spec]	[-spec]
(d)	does not know the referent	knows the referent	{ [+def]? [-spec]? }	[+spec]

Note that the value of the feature [spec] in English is consistent from the point of view of the speaker's knowledge

about the referent, and the value of [spec] in BI/JAV is consistent from the point of view of the speaker's assumption about the hearer's knowledge about the referent. Situation (d) in English is [+def] in cases like: "DID YOU FIND THE HOUSE YOU WERE LOOKING FOR?", but at the same time THE HOUSE seems to be [-spec] as well.

The anaphoric use of [+def] in English corresponds to [+anaph] in BI/JAV, but [+def] in English is always assumed to be [+spec] (but see below), while [-anaph] in BI/JAV can be either [+spec] or [-spec]. In other words, a process of anaphora in English always converts [-spec] into [+spec], but a process of anaphora in BI/JAV does not. In BI/JAV, [-spec] is converted to [+spec] when pronominalization is applied.

Kuroda (1965, 1966) and Postal (1966) claim that in English pronominalization is always preceded by definitization, which means that (63) is derived from (61) through an intermediate step (62):

- (61). JOHN HIT A MAN. [-def;+spec;-PRON]
(62). JOHN HIT THE MAN. [+def;+spec;-PRON]
(63). JOHN HIT HIM. [+def;+spec;+PRON]

A pronoun in English, then, is always [+def;+spec]. The [+def] in (62) corresponds to [+anaph] in BI/JAV, but BI/JAV have [+anaph;+spec;+PRON] as well as [-anaph;+spec;+PRON]. In other words, corresponding to (61)-(63),

BI/JAV have the following:

(61a). JOHN MEMUKUL ORANG(NJA). [-anaph;+spec;-PRON]

(62a). JOHN MEMUKUL ORANG(NJA) ITU. [+anaph;+spec;-PRON]

(63a). JOHN MEMUKUL DIA. [-anaph;+spec;+PRON]

(63b). JOHN MEMUKUL DIA ITU. [+anaph;+spec;+PRON]

The derivations of the pronominalization in BI/JAV can be either (61a) ----> (63a), (61a) ----> (62a) ----> (63a) ----> (63b), or (61a) ----> (63a) ----> (63b).

Gleitman (1961), unlike Postal and Kuroda, allows the derivation of (61) ----> (63) as well as (62) ----> (63).

The difference between [anaph] and Pronouns in BI/JAV and [def] and Pronouns in English can be summarized as follows:

(64).

BI/JAV	ENGLISH
[+anaph;+spec;-PRON] = N(<u>NJA</u>) <u>ITU</u>	[+def;+spec;-PRON] = <u>THE</u> N
-----	-----
[-anaph;+spec;-PRON] = N <u>NJA</u>	[-def;+spec;-PRON] = <u>A(N)</u> N
-----	-----
[+anaph;+spec;+PRON] = <u>DIA</u> <u>ITU</u>	[+def;+spec;+PRON] = <u>HE/SHE</u>
-----	-----
[-anaph;+spec;+PRON] = <u>DIA</u>	does not exist

3.3. Extended Specifier NJA or E

It has been shown that NJA in BI, and E in JAV, are used when the noun is [+spec]. Notice that, in a sense, a [+spec]-noun refers to a particular member of a class or set, i.e. when one says I WANT TO CATCH A FISH and uses A FISH [+spec]-ly, he is referring to a particular member of all the members of a set whose members are fish. This notion is extended in sentences like (65) and (66) below:

(65). AMAT AKAN MEMBELI DJAM DAN RADIO
 will buy clock

$$\left\{ \begin{array}{l} \text{RADIO NJA} \\ * \text{RADIO } \underline{\text{ITU}} \\ \text{RADIO NJA } \underline{\text{ITU}} \end{array} \right\} \text{ BAGUS} \\ \text{beautiful}$$

--"Amat will buy a clock and a radio. The radio is beautiful."

(66). AMAT AKAN MEMBELI DJAM DAN RADIO ITU

$$\left\{ \begin{array}{l} * \text{RADIO NJA} \\ * \text{RADIO } \underline{\text{ITU}} \\ \text{RADIO NJA } \underline{\text{ITU}} \end{array} \right\} \text{ BAGUS}$$

--"Amat will buy the clock and the radio. The radio is beautiful."

In (65), DJAM and RADIO each can be either [-anaph;-spec] or [-anaph;+spec], so (65) is four-way ambiguous. In (66), DJAM and RADIO each can be either [+anaph;-spec] or [+anaph;+spec]. Note that in (65) RADIO ITU is not allowed, and yet according to what we have learned so far an anaphoric process should be allowed to get [+anaph;-spec] from [-anaph;-spec]. Similarly, RADIO ITU is not allowed either

in (66) to repeat [+anaph;+spec] RADIO ITU. (RADIONJA is not allowed according to a general rule, RADIO in the first sentence is [+anaph;+spec], so it can not be made into [-anaph;+spec].) It is interesting to note that the English sentence in (65) does not allow pronominalization either and neither does it in (66). This phenomenon is also observed by Stockwell, Schachter, and Partee (1968, pp. 227-228), but they "have no explanation to offer to this curious fact." They cite the following cases: Sentence SSP(148) can be followed by any of SSP(149), but can not be followed by any of SSP(150):

SSP(148). A WOMAN WALKED INTO A RESTAURANT CARRYING A LITTLE GIRL IN ONE ARM AND A PARCEL IN THE OTHER.

- SSP(149). a). SUDDENLY SHE STUMBLED AND DROPPED THEM.
b). SUDDENLY SHE STUMBLED AND DROPPED BOTH OF THEM.
c). SUDDENLY SHE STUMBLED AND DROPPED ONE OF THEM.
d). SUDDENLY SHE STUMBLED AND DROPPED THE LITTLE GIRL.
e). SUDDENLY SHE STUMBLED AND DROPPED THE PARCEL.

- SSP(150). a). *SUDDENLY SHE STUMBLED AND DROPPED HER.
b). *SUDDENLY SHE STUMBLED AND DROPPED IT.
c). *SUDDENLY SHE STUMBLED AND DROPPED BOTH HER AND IT.

What is happening in BI/JAV is that conjoined nouns constitute a set whose members are the different nouns being

conjoined. A reference to any one of them is a reference to a particular member of a set having more than one members, which makes that particular set a [+spec] noun, and a set is always considered [-anaph;-spec]. So for BI/JAV, only NJA can be used.

Such extended specification is applicable to proper nouns as well. Observe the following:

(67a). STOCKWELL, SCHACHTER, DAN PARTEE MENULIS BUKU
 write book

---"Stockwell, Schachter, and Partee wrote a book."

(67b). STOCKWELL-NJA MENULIS BAGIAN-1, SCHACHTER-NJA
 part-1

KE-2, DAN PARTEE-NJA KE-3.
the 2nd

or

(67c). [STOCKWELL DAN SCHACHTER]-NJA MENULIS BAGIAN-1 DAN
 PARTEE-NJA KE-2.

and so on.

CHAPTER 4

WH-SUBJECT QUESTIONS AND EXISTENTIAL SENTENCES

We have observed in Chapter 2 that when the subject of a sentence is questioned, the sentence has to be in FP-construction, as shown in (29) and (30) repeated below:

(20). *SIAPA MEMBELI SEPATU?
who

--"Who bought shoes?"

(30). SIAPA JANG MEMBELI SEPATU?

--"Who was it who bought shoes?"

Sentence (29) is an SP-construction like (1), and (30) is an FP-construction like (3):

(1). AMAT MEMBELI SEPATU

--"Amat bought shoes."

(3). AMAT JANG MEMBELI SEPATU

--"It was Amat who bought shoes."

It has also been pointed out that if the ungrammaticalness of (29) is accounted for by stating that there is a rule which changes an SP-construction into an FP-construction when the subject of the SP-construction is questioned,

it has to be shown that the rejection of SIAPA in (29) follows a general constraint on subjects, semantic and/or syntactic, otherwise the rule is very ad-hoc. To discover the constraints on subjects, we can start by observing the forms of the nouns in subject positions.

4.1. Constraints on Subjects

It is well known that sentences like (68) are ungrammatical in BI/JAV:

(68). *ANAK MEMBELI SEPATU KEMARIN

---"*Any child bought shoes yesterday."

Sentence (68) is like (1) except that the subject of (1) is ANAK ITU and the subject of (68) is ANAK. This fact has been accounted for by Indonesian linguists by stating that the subject of a sentence must be definite. Further observations show that the definite requirement for a subject is not entirely true. Observe the following:

(68). *ANAK MEMBELI SEPATU KEMARIN

---"*Any child bought shoes yesterday."

(69). ANAKNJA MEMBELI SEPATU KEMARIN

(70). ANAKNJA ITU MEMBELI SEPATU KEMARIN

(71). ANAK ITU MEMBELI SEPATU KEMARIN

---"The child bought shoes yesterday."

(72). *ANAK [JANG LEWAT] MEMBELI SEPATU KEMARIN
pass by

--"*Any child who passed by bought shoes
yesterday."

(73). ANAK [JANG LEWAT TADI PAGI] MEMBELI SEPATU KEMARIN
this morning

--"The child who passed by this morning bought
shoes yesterday."

(74). ANAK [JANG LEWAT] ITU MEMBELI SEPATU KEMARIN

--"The child who passed by bought shoes yesterday."

(75). ANAK [JANG LEWAT TADI PAGI] ITU MEMBELI SEPATU KEMARIN

--"The child who passed by this morning bought
shoes yesterday."

(76). DIA MEMBELI SEPATU KEMARIN

--"He/She bought shoes yesterday."

(77). DIA ITU MEMBELI SEPATU KEMARIN

--"(That) he bought shoes yesterday."

Translating the forms of the nouns in the subject positions
in (68)-(77) above into feature notations, we get the fol-
lowing:

	Nouns	Features
(68).	*N	[-anaph;-spec;-PRON]
(69).	N+NJA	[-anaph;+spec;-PRON]
(70).	N + NJA + ITU	[+anaph;+spec;-PRON]
(71).	N + ITU	[+anaph;-spec;-PRON]

(72).	*N + NonspecREL	[-anaph;-spec;-PRON]
(73).	N + SpecREL	[+anaph;+spec;-PRON]
(74).	N + NonspecREL + ITU	[+anaph;-spec;-PRON]
(75).	N + SpecREL + ITU	[+anaph;+spec;-PRON]
(76).	DIA	[-anaph;+spec;+PRON]
(77).	DIA + ITU	[+anaph;+spec;+PRON]

Note that (68) and (72) are ungrammatical because the subjects are [-anaph;-spec]. Notice also that (71) and (74) have [-spec] subject and the sentences are grammatical, but the subject of (71) and (74) is [+anaph]. The restriction on the subject is thus a restriction in terms of a conjunction of [-anaph] and [-spec]. Constraint on subjects:
 "A subject must not be [-anaph;-spec]."

4.2. Existential Sentences

It seems that semantically there is nothing wrong with a sentence with [-anaph;-spec] subject since it is fairly easy to give an interpretation to such a sentence. Usually, a language utilizes another construction to express semantically well-formed sentences which are syntactically ill-formed. In BI/JAV, existential sentences are used to express a sentence with [-anaph;-spec] subject.

Before going any further, let us recall the difference between [-spec] in English and [-spec] in BI/JAV. According to Prof. Partee (personal communication), ANAK in (68) can

not be interpreted as [-spec] in English, because of cases like the following:

(78). *ANY CHILD BOUGHT SHOES.

(79). ANY CHILD CAN BUY SHOES IN THAT STORE.

If ANY is [-def;-spec], the ungrammaticalness of (78) is relevant, since there is no grammatical sentence in English which would be equivalent to (78), which means that (78) is semantically ill-formed. We must look back at the diagram (59) which shows the overlapping use of the feature [spec] in BI/JAV and in English to provide the English speakers with a better "feel" of the [-spec]-ness of ANAK in (68), and the non-equivalents of (68) and (78).

(59).

	Speaker	Speaker assumes that the hearer	Features	
			ENGLISH	BI/JAV
(a)	knows referent	knows referent	[+def]	[+spec]
(b)	does not know the referent	does not know the referent	[-spec]	[-spec]
(c)	knows the referent	does not know the referent	[+spec]	[-spec]
(d)	does not know the referent	knows the referent	{ [+def]? [-spec]? }	[+spec]

Notice that in English [-spec] interpretation is given when the speaker has no specific referent in mind. ANY in (78) and (79) seem both to get [-spec] interpretation, i.e. the

situation is (59b) in the diagram. ANAK in (68), however, gets [-spec] interpretation in a sense that the speaker assumes that the hearer does not know the referent the speaker may or may not have in mind. Note that when the speaker has a specific referent in mind the English interpretation is [+spec], i.e. situation (59c) above, where [-spec] in BI/JAV corresponds to [+spec] in English. In BI/JAV the corresponding morpheme for ANY is SETIAP (in JAV: ANGER) and SETIAP can be used only when the noun is [-spec] but in a sense of (59b), so the proper translation for (78) is not (68) but (80):

(80). *SETIAP ANAK MEMBELI SEPATU KEMARIN

--"*Any child bought shoes yesterday."

SETIAP and ANY followed by a noun make the NP generic, i.e. (79) has a generic subject. The proper translation for (68) is not (78) but (78a):

(78a): "?A child bought shoes yesterday."
 [+spec]

(Note: [+spec,-def] in English
 = [-spec] in BI/JAV.)

Note, by the way, that the reason why [-spec]-nouns in English and [-spec]-nouns in BI/JAV are very difficult to distinguish from generic nouns becomes clear. In English [-spec] in (59b) is generic, and [-spec] in (59d) is non-generic, but since in English (59b) and (59d) overlap, i.e.

because [-spec] interpretation in (59d) is given when the speaker does not know the referent, and no assumption about the hearer's knowledge is made, meaning that the hearer may or may not know the referent, while [-spec] in (59b), which is generic, has to be used in a situation where the speaker and the hearer have no specific referent in mind. A similar situation occurs in BI/JAV. The [-spec] in (59b) is generic, but the [-spec] in (59c) is not. The [-spec] in (59c) is used when the speaker assumes that the hearer does not know the referent, but the speaker may or may not have a specific referent in his mind, while the generic [-spec] in (59b) has to be used in a situation where both the speaker and the hearer have no specific referent in mind. Let us modify (59) to clarify the point just made, and to include generic interpretation of [-spec] nouns in BI/JAV and in English:

(59').

A. ENGLISH:

The speaker	The speaker assumes hearer	
(a) knows the referent	knows the referent	= [+def]
(b) does not know the referent	does not know the referent	= [-spec]-GENERIC
(c) knows the referent	may or may not know referent	= [+spec]

(d) does not know the referent	may or may not know the referent	= [-spec]
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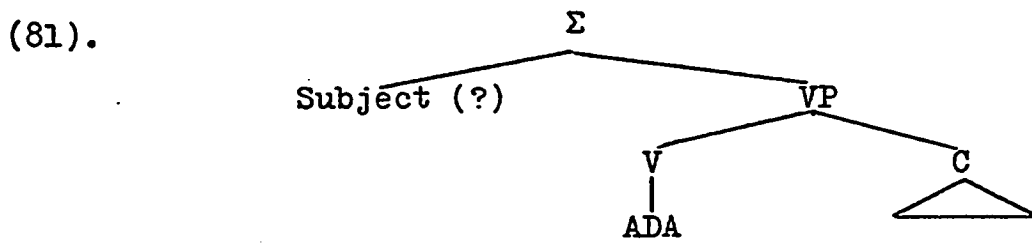
B. BI/JAV:

The speaker	The speaker assumes hearer	
(a) knows the referent	knows the referent	= [+spec]
(b) does not know the referent	does not know the referent	= [-spec]-GENERIC
(c) may or may not know referent	does not know the referent	= [-spec]
(d) may or may not know referent	knows the referent	= [+spec]

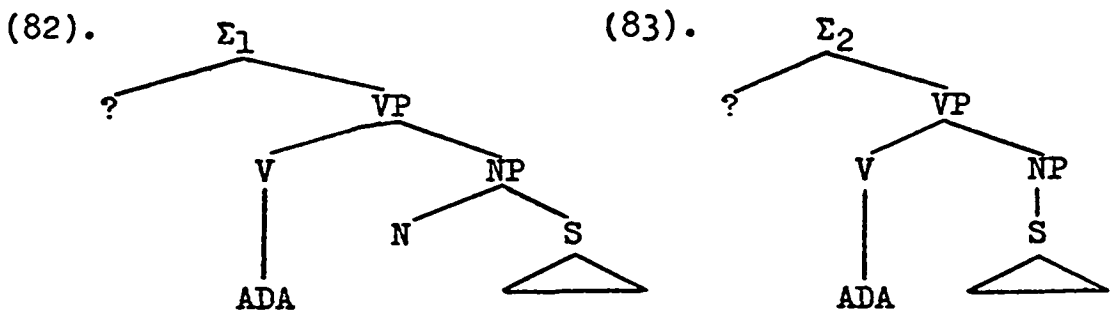
Note: Every time the semantic interpretation contains may or may not the noun is syntactically unmarked.

Going back to (68), (78), and (78a), it is now clear that the difference between English and BI/JAV is that in English (78a) A CHILD BOUGHT SHOES is the paraphrase of an existential THERE WAS A CHILD WHO BOUGHT SHOES (at least according to Baker (1966a,b), where A CHILD in both sentences are [+spec]. In BI/JAV, (68) *ANAK MEMBELI SEPATU is the paraphrase of the existential ADA ANAK MEMBELI SEPATU and ANAK in both sentences are [-spec].

The surface structure of existential sentences in BI/JAV can be represented by a tree diagram (81) below, where Σ stands for existential sentence, C stands for a constituent to be specified later, and ADA is the existential verb in BI (in JAV the verb is ANA):



The questions as to whether Σ is subjectless or not is not crucial at the moment. First, let us observe the characteristics of Σ . Another interesting fact about BI/JAV is that they have two kinds of existential sentences. The distinction is not equivalent to stressed and unstressed THERE in English. The two kinds of Σ in BI/JAV can be represented by the following tree diagrams:



(82) consists of ADA followed by a relativized NP and (83) consists of ADA followed by a nominalized \tilde{S} . (84) below is Σ_1 and (85) is Σ_2 :

(84). ADA[ANAK[JANG MEMBELI SEPATU]]

--"There was a child who bought shoes."

(85). ADA [ANAK MEMBELI SEPATU]

--"There was a child buying shoes."

I will use the English sentence with gerund to translate Σ_2 simply because it has similar surface structure. The appropriate translation for (85) is probably "There was an event. The event was 'A child bought shoes.'" The surface difference between (84) and (85) is that (84) has JANG and (85) does not.

The constraints on Σ can be illustrated by the following sentences:

(86). ADA ANAK (JANG) MEMBELI SEPATU

--"There was a child buying/who bought shoes."

(87). *ADA ANAKNJA (JANG) MEMBELI SEPATU

--"*There was the child buying/who bought shoes."

(88). *ADA ANAKNJA ITU (JANG) MEMBELI SEPATU

--"*There was the child buying/who bought shoes."

(89). *ADA ANAK ITU (JANG) MEMBELI SEPATU

--"*There was the child buying/who bought shoes."

(90). ADA ANAK [JANG LEWAT] (JANG) MEMBELI SEPATU

--"?There was a child who passed by buying/
who bought shoes."

(92). *ADA ANAK [JANG LEWAT] ITU (JANG) MEMBELI SEPATU

--"*There was the child who passed by buying/
who bought shoes."

(93). *ADA ANAK [JANG LEWAT KEMARIN]ITU (JANG) MEMBELI
SEPATU

--"There was the child who passed by yesterday
buying/who bought shoes."

(94). *ADA DIA (JANG) MEMBELI SEPATU

--"*There was him buying/who bought shoes."

(95). *ADA DIA ITU (JANG) MEMBELI SEPATU

--"*There was (that) him buying/who bought shoes."

Note that only (86) and (90) are grammatical, and the restriction on Σ_1 and Σ_2 are the same:

Constraints on Σ : "The head noun of Σ_1 and the subject of S in Σ_2 have to be [-anaph;-spec;-PRON]."

4.3. Interrogative and Existential Sentences

In the previous sections of this chapter the following facts were observed:

(a). Interrogative sentences are related to their corresponding declarative sentences with the appropriate proforms.

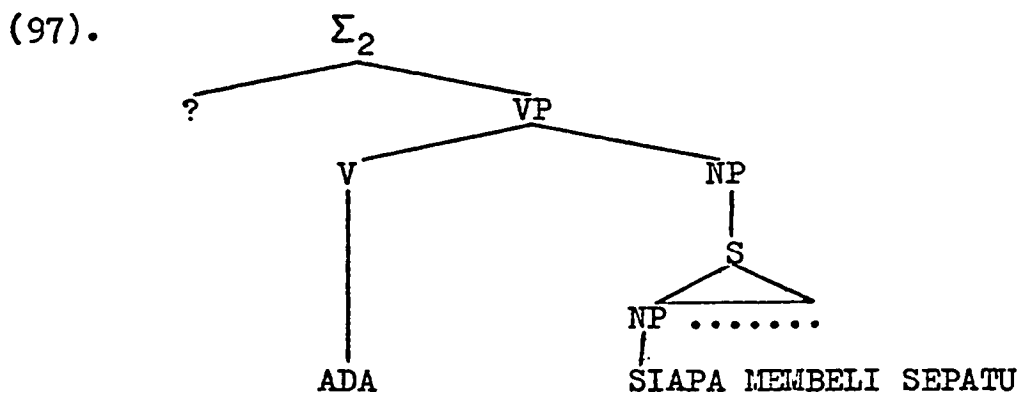
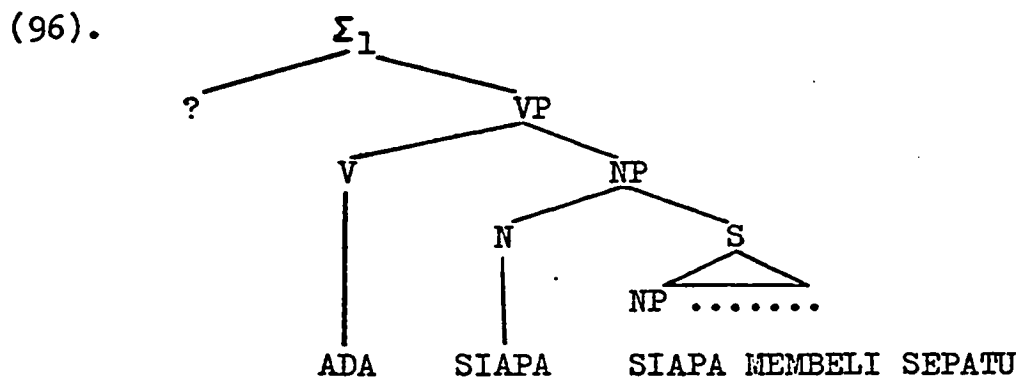
(b). The subject and the focus of a sentence can not be [-anaph;-spec].

- (c). Existential sentences can contain only [-anaph;-spec].
- (d). There are two types of existential sentences in BI/JAV, one with a relativized NP and the other contains a nominalized sentence.

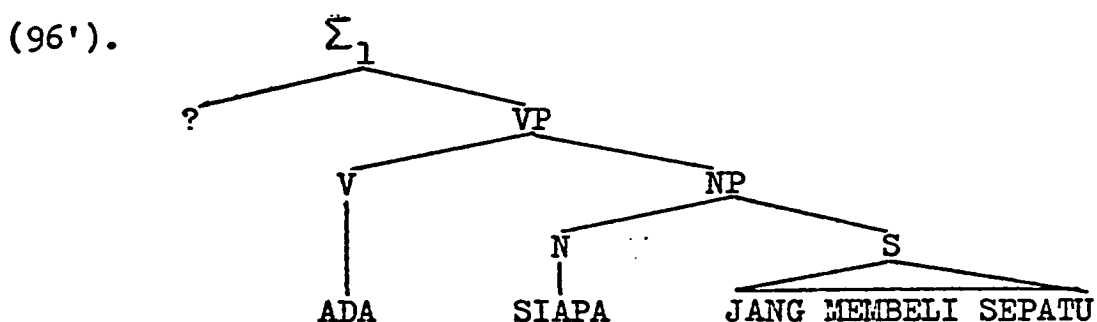
4.3.1. Pro-forms: There are words in BI whose meanings are equivalent to something, someone, etc. For example: SESUATU--"something," SESEORANG--"somebody," SUATU TEMPAT--"someplace," SUATU WAKTU--"some time," etc. However, the absence of such words in JAV (and in Tagalog, if I am not mistaken) makes it a little suspicious for these words to be considered the pro-forms of WH-questions. In addition to that, there is another morpheme whose phonological shape is the same as the question-words which also occur in JAV. This morpheme is APA. APA is a root which can be lexically derived into SIAPA--"where SI is a person marker," MENGAPA--(ME[+nasal] is a verb marker), etc.

4.3.2. The Underlying Structure of WH-subject interrogatives: Recall that we have rejected the analysis which assumes a declarative SP-construction as the underlying form of an interrogative sentence which questions the subject on the ground that the requirement for WH-subject interrogatives to be in FP-construction can not be naturally explained, i.e. ad hoc.

Since SIAPA is a lexical item, the grammar will generate Σ with SIAPA, and we get the following:



Relativization can be applied to (96) and we get:



(96') looks like the structure from which we want to derive WH-subject interrogatives. The question is why is it that Q can be attached to or occur with only Σ_1 but not Σ_2 . We

immediately notice that the difference between (96) and (97) is that SIAPA as the head noun of the relativized NP is a constituent of Σ while SIAPA in (97) is a constituent of an embedded sentence S, and there is a need for a general constraint which disallows interrogative sentences in the imbedded sentences to block the generation of sentences like:

(98). *ANAK ITU MENJATAKAN BAHWA SIAPA JANG DATANG?
state that who come

---"*The child stated that who came?"

(99). *SAJA MENGHARAPKAN KALAU SIAPA JANG DATANG?
expect that

---"*I expected that who came?"

(98) and (99) are grammatical if they are echo-questions. I assume at the moment that echo-questions are different from WH-questions. For initial treatments of echo-questions in English, see Malone (1968) and Stockwell, Schachter, and Partee (1968, pp. 650-651).

This constraint is applicable to the occurrence of Q in relative clauses as well, since the following sentences are ungrammatical:

(100). *ANAK [JANG APANJA PATAH] DATANG

---"*The child whose what broke came?"

(101). *SIAPA [SIAPA JANG MEMBELI SEPATU] JANG DATANG?

---"*Who who bought shoes came?"

It seems that indirect questions like (102) and (103) below are exceptions, but recall that the constraint is not on the WH placement, i.e. for BI/JAV the constraint is not on the derivation of SIAPA in the embedded sentence, but on the occurrence of Q, which, for English to trigger AUX-attraction. In BI/JAV, Q triggers the rising intonation. The constraint is equivalent to the blocking of sentences like (104):

(102). JOHN WANTED TO KNOW WHO WAS GOING.

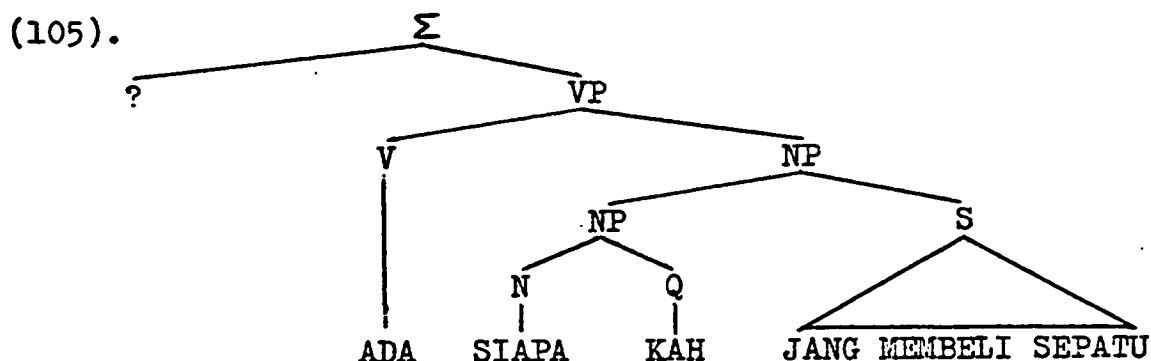
(103). HE TOLD ME WHAT TIME IT WAS.

(104). *JOHN TOLD ME WHAT TIME WAS IT?

Q-constraint can roughly be stated as follows:

Q-constraint: "Q can not occur in the embedded sentence."

Applying this constraint to (96') and (97) above, we now reduce the possible candidate for WH-subject questions to (96') only. When Q occurs in (96'), we have (105):



Now that we have (105), what we need is a justification for fronting the head noun. The following sentences show that

a question word SIAPAKAH is [-anaph;+spec]:

(106). *ANAK JANG MEMBELI SEPATU

--"*It was any child who bought shoes."

(107). SIAPAKAH JANG MEMBELI SEPATU?

--"Who was it who bought shoes?"

(108). SEPATUNJA JANG MAHAL

--"The shoes are expensive."

(109). APANJA JANG MAHAL?

--"Which is expensive?"

(110). ANAK ITU JANG MEMBELI SEPATU

--"It was the child who bought shoes."

(111). *SIAPA ITU JANG MEMBELI SEPATU?

--"*(The) who bought shoes?"

Sentence (106) is ungrammatical because the focus is [-anaph;-spec], but (107) is grammatical, so SIAPAKAH is not [-anaph;-spec]. Sentence (109) and (108) are grammatical because the focus is [-anaph;+spec] (recall that NJA is a [+spec] marker), so the question word in (109) is [-anaph;+spec], and (110) is grammatical because the focus is [+anaph;-spec], but (111) is ungrammatical, so the focus must not be [+anaph;-spec]. A question word is [-anaph;+spec], not [-anaph;-spec], nor [+anaph;-spec].

Looking back at (105) above, SIAPAKAH in (105) is [-anaph;+spec], and it has been known that Σ must not contain [+spec], so SIAPAKAH has to be fronted. The fronting of [+spec] is not a unique rule, since when two existential sentences occur in a discourse and both contain the same noun in the head nouns, the second head noun is pronominalized, which makes the noun [+spec], and when the second existential contains [+spec] the second existential has to be expressed in non-existential sentence. For example:

(112). ADA ANAK MEMBELI SEPATU. KEMUDIAN ADA ANAK
 buy shoes then
 MEMBELI DJAM.
 watch

--"There was a child who bought shoes. Then, there was a child who bought a watch."

When ANAK in the first existential is identical with ANAK in the second existential, pronominalization applies, and ANAK in the second existential becomes DIA -he/she. The paraphrase of (112) with identical ANAK is (113) below:

(113). ADA ANAK MEMBELI SEPATU. KEMUDIAN DIA MEMBELI DJAM.
 --"There was a child who bought shoes. Then he
 bought a watch."

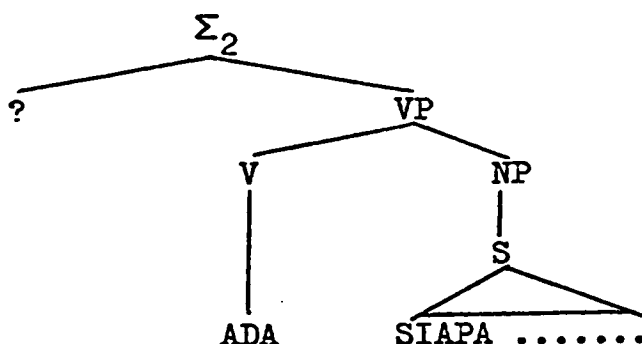
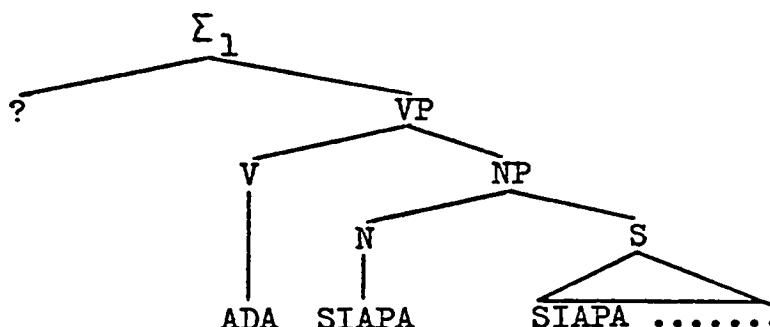
So, fronting of [+spec] in existential seems to be a general rule. When SIAPAKAH in (105) has been fronted, to get the appropriate surface structure we simply delete ADA. There are justifications for the existence of ADA in the underlying

forms and the derivation of the JANG-phrase from the relative clause. These justifications will be given later in a more appropriate context. What needs to be stated now is that ADA deletion is obligatory in interrogative sentences.

Let us recapitulate what we have discovered so far in this sub-section:

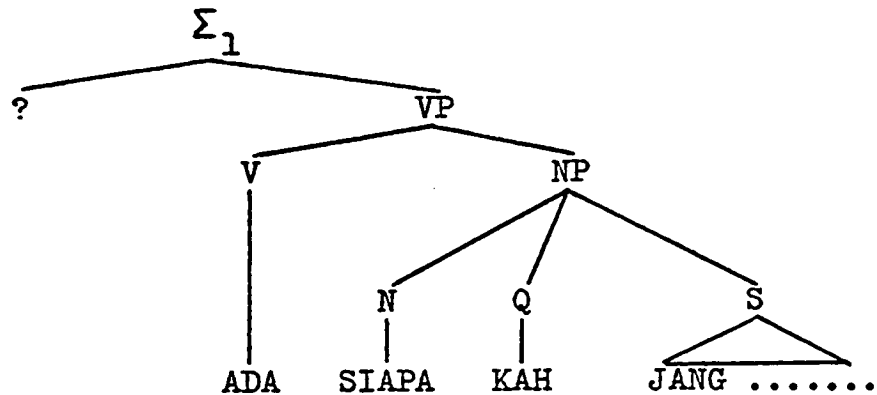
(A). The grammar will generate two kinds of existential sentences Σ_1 and Σ_2 whose formatives may be pro-forms.

(B). Since SIAPA is a lexical item, the grammar will generate existentials with SIAPA, and we get the following:



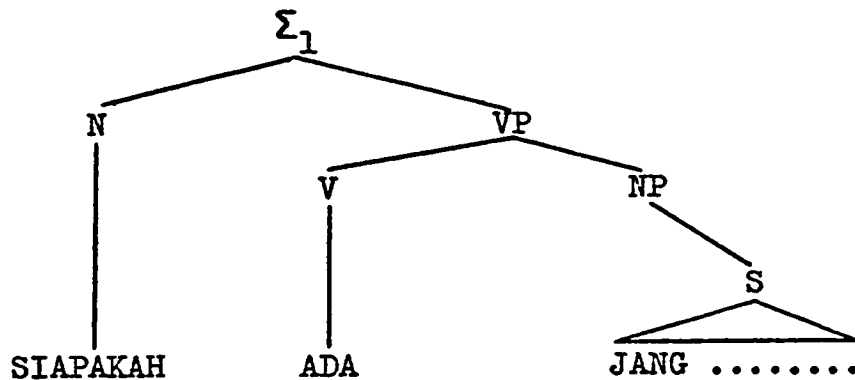
(C). There is a general constraint which disallows Q in the embedded sentence, which automatically disallows Q

in Σ_2 , so we get Σ_1 which contains Q. The Q should be after the pro-form because this Q is realized as KAH in BI, and we have SIAPAKAH. This KAH, however, can later be optionally deleted provided that the rising intonation has been assigned. We now have the following:

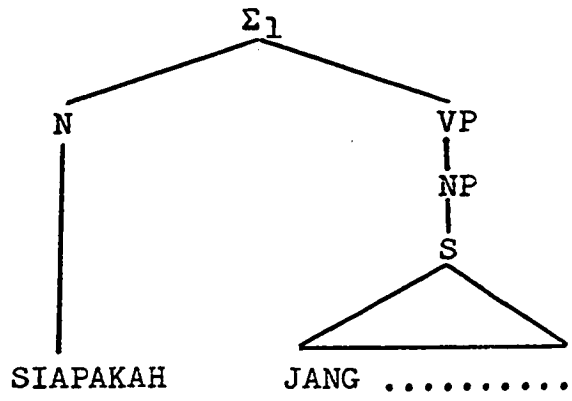


where JANG is a relative pronoun as a result of relativization rule.

(D). Since existential can not contain [+spec], and SIAPAKAH is [+spec], SIAPAKAH is fronted. This gives us:



(E). ADA can then be deleted, and we get:



CHAPTER 5

FOCUS AND PRESUPPOSITION CONSTRUCTIONS

5.1. General Characteristics of FP-Constructions

The general characteristics which distinguish SP from FP-constructions in terms of their different surface structures and usage, have been presented in Chapter 1. It might help to understand the difference between these two constructions if we compare the use of the terms focus and presupposition in this work with those of other linguists, like Chomsky, Lakoff, and Halliday.

5.1.1. Chomsky's focus and presupposition: Chomsky (1968) cites the following sentences:

CH(38)(a). Is it JOHN who writes poetry?

(b). It isn't JOHN who writes poetry.

CH(39). No, it is BILL who writes poetry.

He then states that "under normal intonation the capitalized word receives main stress and serves as the point of maximal inflection of the pitch contour. A natural response to (38) might be, for example, (39). The sentence (39) is a possible answer to (38a) and corroboration of (38b). The semantic representation of (38) must indicate, in some manner,

that John is the focus of the sentence and that the sentence expresses the presupposition that "someone writes poetry." In the natural response, (39), the presupposition of (38) is again expressed, and only the focus differs. On the other hand, a response such as (40) does not express the presupposition of (38)." (p. 30)

CH(40). No, John writes only short STORIES.

Comparing Chomsky's notion of focus and presupposition with mine presented in Chapter 1, we can immediately see that the terms are used in a very similar, if not exactly the same, manner. To express CH(38a), (38b), and (39) in BI, we have to use FP-constructions (114), (115), and (116) respectively:

(114). APA JOHN JANG MENULIS PANTUN?

--"Is it John who writes poetry?"

(115). BUKAN JOHN JANG MENULIS PANTUN
not

--"It isn't John who writes poetry."

(116). BUKAN, BILL JANG MENULIS PANTUN

--"No, it is Bill who writes poetry."

Sentences (114)-(116) have the structure:

$$[\{ \begin{matrix} Q \\ NEG \end{matrix} \} [NP[JANG-VP]_{\text{jang-phrase}}]_S]_S$$

and the focus of (114) and (115) is JOHN, while the focus of (116) is BILL, and all three sentences presuppose that "someone writes poetry."

5.1.2. Lakoff's focus and presupposition: Lakoff (1969) says the following about focus:

"Focus" is another traditional notion in grammar. Halliday (1967) describes the information focus as the constituent containing new rather than assumed information. The information focus often has heavy stress. Thus in JOHN washed the car yesterday, the speaker is assuming that the car was washed yesterday and telling the addressee that the person who did it was John. [p. 4]

Lakoff seems to use the terms assume and presuppose interchangeably. And his use of the word "assuming" in the quoted passage above corresponds to Chomsky's presupposition. Furthermore Lakoff states that "Halliday's account of focus has been adopted by Chomsky (1968)" (p. 29). So, it seems clear that my use of the terms focus and presupposition corresponds to the ones used by Halliday, Chomsky, as well as Lakoff.

5.2 Constraints on Focus:

It was shown in Chapter 4, section 4.1 that the subject of an SP-construction must not be [-anaph;-spec]. The following sentences show that the constraint on subject is also applicable to focus:

(117). *ANAK JANG MEMBELI SEPATU

--"?It was any child who bought shoes."

(118). ANAKNJA JANG MEMBELI SEPATU

--"It was the child who bought shoes."

(119). ANAKNJA ITU JANG MEMBELI SEPATU

--"It was the child who bought shoes."

(120). ANAK ITU JANG MEMBELI SEPATU

--"It was the child who bought shoes."

(121). *ANAK [JANG LEWAT] JANG MEMBELI SEPATU

--"?It was any child who passed by who bought shoes."

(122). ANAK [JANG LEWAT TADI PAGI] JANG MEMBELI SEPATU

--"It was the child who passed by this morning who bought shoes."

(123). ANAK [JANG LEWAT] ITU JANG MEMBELI SEPATU

--"It was the child who passed by who bought shoes."

(124). ANAK[JANG LEWAT TADI PAGI]ITU JANG MEMBELI SEPATU

--"It was the child who passed by this morning who bought shoes."

(125). DIA JANG MEMBELI SEPATU

--"It was he who bought shoes."

(126). DIA ITU JANG MEMBELI SEPATU

--"?It was (that) he who bought shoes."

Sentences (117) and (121) are ungrammatical because ANAK in (117) is [-anaph;-spec], and so is ANAK in (121), because

the relative clause is a non-specific relative clause.

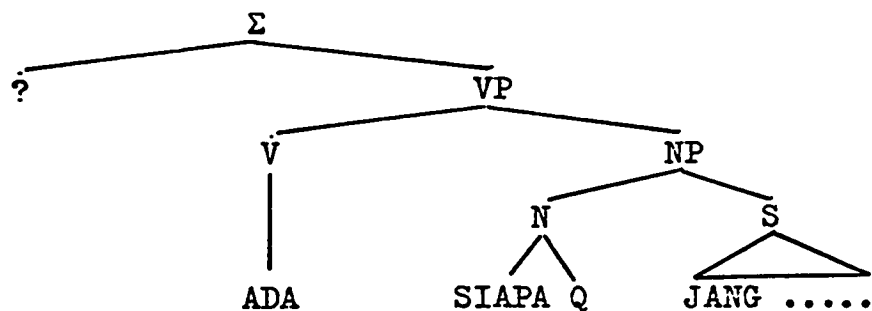
Focus Constraint: "The focus of an FP-construction must not be [-anaph;-spec]."

Note again that the constraint should be stated in terms of the conjunction of the feature [-anaph] and [-spec], because an [-anaph]-noun can be a focus, as in (118), (122), and (125), and so can a [-spec]-noun, as in (120) and (126).

5.3. The Underlying Forms of FP-constructions:

Recall that WH-questions have been shown to be derived from existential sentences of the following type:

(127).



Since SIAPAKAH (KAH=Q) is [-anaph;+spec], SIAPAKAH is fronted, and after ADA is deleted, WH-subject questions-- which are in FP-construction like (128)--are generated:

(128). SIAPAKAH JANG MEMBELI SEPATU KEMARIN?

--"Who was it who bought shoes yesterday?"

The following arguments seem to give justifications for deriving FP-constructions from existential sentences like (127) above:

(a). In addition to generating (127) with proforms like APA, SIAPA, etc. the grammar will also generate (127) with regular non-proform nouns as the head noun and the subject of the relative clause. When the head noun and the subject of the relative clause are [-anaph;-spec], existential sentences like (129) are generated:

(129). ADA MAHASISWA JANG TERTEMBAK

--"There was a student who was shot."

When the head noun and the subject of the relative clause are [-anaph;+spec], ungrammatical existential sentences like (130) are generated:

(130). *ADA MAHASISWA [JANG KAMU TEGUR KEMARIN]_{yesterday} SpecREL

JANG TERTEMBAK

--"There was the student who was addressed by you yesterday who was shot."

If (130) is allowed to be generated and the fronting rule for N+Q which is [-anaph;+spec] is obligatorily applied to (130), a grammatical FP-construction is generated:

(131). MAHASISWA [JANG KAMU TEGUR KEMARIN] JANG TERTEMBAK

--"It was the student who was addressed by you who was shot."

However, if (131) were to be generated from an underlying form other than (130), the grammar would have to have a device to block the generation of (130) and consider (130) and

(128) two distinct constructions.

It seems that the grammar will be simpler if the fronting rule is applied to sentences like (130) as well, which increases the generality of the fronting rule.

(b). There is a semantic argument which supports the derivation of (131) from (130), namely that the ungrammatical sentence (130) can be easily given the interpretation whose meaning is the same as (131). The complementary distributions of [-spec] and [+spec] charted below support such a claim:

<u>Focus of FP</u>	<u>Head noun in Σ</u>
*[-spec]	[-spec]
[+spec]	*[+spec]

(c). That the underlying structures of FP-constructions contain ADA is evidenced from the presence of ADA in the sentences like (132) and (133).

(132). MURIDMU ADA JANG SAKIT
student-your sick

--"Some/one of your students are/is sick."

(133). PEKERDJAAN JANG KAMU TAWARKAN KEMARIN ADA JANG
job offered by you yesterday

MENGINGINI
wanted

--"The job you offered yesterday is wanted."

ADA in sentences like (132) can not be deleted if the focus contains an implied partitive, since (132) without ADA will become (134) and the meaning of (134) does not indicate that the focus contains an implied partitive.

(134). MURIDMU JANG SAKIT

--"It is your student(s) who are/is sick."

ADA in (133) can not be deleted, otherwise the sentence is ungrammatical. (133) is the paraphrase of the existential sentence (135):

(135). ADA ORANG JANG MENGINGINI PEKERDJAAN JANG KAMU
 person want job offered

TAWARKAN KEMARIN
 by you

--"There was somebody who wanted the job you offered yesterday."

Again, since sentences like (132) and (133) are FP-constructions, the grammar will be simpler if the underlying forms of (132), (131), and (129) are in the same construction, i.e. the existential sentences having the structure (127) above.

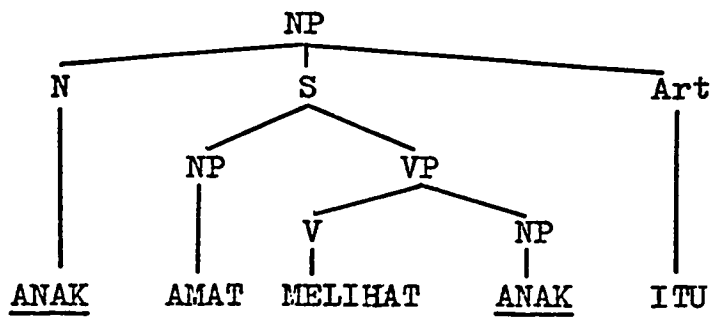
(d). The derivation of FP-constructions from existential sentences containing a relativized noun implies that the JANG-phrase is derived from a relative clause. There is a syntactical argument which suggests that that should be the case.

There is a constraint in BI/JAV (and Tagalog as well) which disallows relative clauses of the following type:

(136). [*ANAK[JANG AMAT MELIHAT]_{Rel} ITU]_{NP}

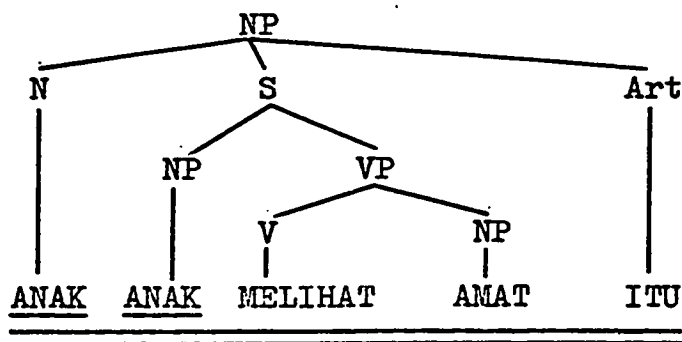
--"The child Amat saw."

(136) has the following structure:



The constraint is that the head noun has to be identical with the subject of the embedded sentence for relativization to apply. (136) has a head noun ANAK which is identical with object of the embedded sentence, so relativization is disallowed. This kind of constraint apparently does not exist in English, since the English NP in (136) is well-formed. In other words, both (136) and (137) below are well-formed in English, but only (137) is well-formed in BI/JAV and Tagalog.

(137).



[ANAK [JANG MELIHAT AMAT] ITU]

The same constraint has to be imposed on JANG-phrases as well, as shown from the following contrast:

(138). [ANAK ITU]_{Focus} [JANG MELIHAT AMAT]_{JANG-P}

--"It is the child who saw Amat."

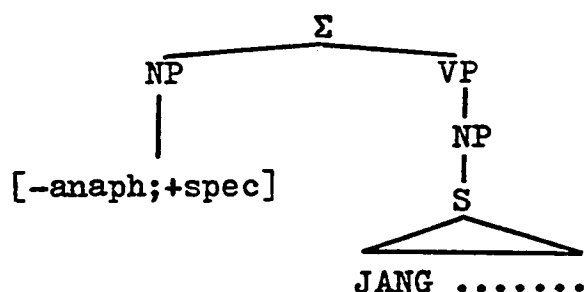
(139). *[ANAK ITU] [JANG AMAT MELIHAT]

--"It is the child who Amat saw."

Cases (136)-(139) constitute a strong indication for the appropriateness of deriving JANG-phrase from the underlying relative clause.

As a result of deriving FP-constructions from existential sentences, the surface structure of FP-constructions is (140):

(140).



We shall see if this is the proper surface structure. There is an optional rule in BI/JAV which allows the order of certain constituents to be reversed. These are the subject-predicate and focus-presupposition. Since the rule is to derive stylistic variants, nothing is changed, including the intonation. We thus allow the following variants:

(141). [ANAK ITU] [MELIHAT AMAT] = [MELIHAT AMAT][ANAK ITU]
 --"The child saw Amat."

(142). [ANAK ITU][JANG MELIHAT AMAT] = [JANG MELIHAT AMAT][ANAK ITU]
 --"It is the child who saw Amat."

Given the surface structure (140) and [NP+VP]_{SP} the rule can simply be stated as:

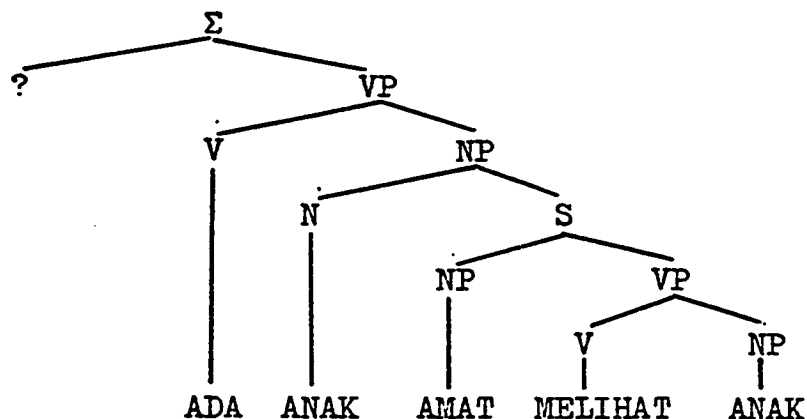
[NP, VP] ----> [VP, NP] (Optional)

which is more general than having separate structural description for SP and FP-constructions. In addition, it is appropriate to not consider the JANG-phrase a relative clause any more in the surface, because a head noun and a relative clause can not undergo this stylistic variant rule. In other words, [N[Rel]] can not be reversed into *[[Rel] N].

(e). Recall that to block WH-subject questions in SP-construction we use a constraint which allows only the constituents of Σ , and not the constituents of the embedded

sentence S, to be fronted. Such a constraint is also needed to block the generation of other ill-formed sentences below. The grammar will generate strings like (141):

(141).



The constraint states that only the head noun of the relativized noun above can be fronted, otherwise the subject of S can be fronted and we get an ungrammatical sentence (142):

(142). *AMAT [ANAK MELIHAT ANAK]

and similarly, the fronting of the object of S will also derive an ungrammatical sentence (143):

(143). *ANAK [ANAK AMAT MELIHAT]

Recall also that there is a constraint on relativization, i.e. that the head noun has to be identical with the subject of the embedded sentence. (141) does not satisfy this constraint. But, if a passive rule is applied first, the subject and object of S will be interchanged, in addition to changing the active verb-marker ME[+nasal] with the

passive verb-marker DI. As a result ANAK becomes the subject of S, and it is identical with the head noun ANAK, thus relativization applies. When the head noun ANAK is fronted, and ADA is deleted, we get the appropriate sentence (144):

(144). ANAK ITU [JANG DILIHAT AMAT]
 is seen

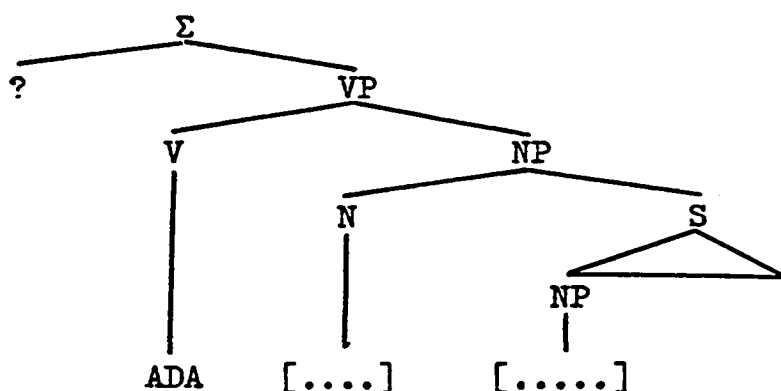
--"It is the child who was seen by Amat."

It thus seems safe to conclude that the underlying forms of FP-constructions are existential sentences containing a relative noun like (127).

5.4. The Derivation of FP-Constructions from the Underlying Existential Sentences

The grammar will generate existential sentences like (127):

(127).



When the lexical items attached to the head noun and the subject of the relative clause in (127) are

[-anaph;-spec;-PRON], existential sentences like (86) and (90) are generated. When the lexical items are [-anaph;+spec;-PRON] the head noun should be fronted, after relativization which deletes the subject of S and add JANG has been applied. Then ADA can be deleted when certain presently unspecified conditions are met. The result is the generation of FP-constructions like (118) and (122).

Note that the anaphoric process may convert [-anaph;-spec;-PRON] and [-anaph;+spec;-PRON] into [+anaph;-spec;-PRON] and [+anaph;+spec;-PRON] respectively, and when (127) contains these items, ungrammatical existential sentences like (88), (89), (92), and (93) will be generated. But if after relativization the [+anaph] head noun is fronted, the result is the generation of FP-constructions like (119) and (124). So, the fronting rule should roughly be stated as follows:

Fronting: "When the head noun of an existential sentence contains a noun which is not [-anaph;-spec;-PRON], the noun has to be fronted."

Pronominalization will convert [-anaph;-spec;-PRON] into [-anaph;+spec;+PRON], and when the latter is fronted, the result is FP-constructions like (125).

When pronominalization and anaphora are applied, [-anaph;-spec;-PRON] is converted into [+anaph;+spec;+PRON],

and the fronting of the latter will result in the generation of FP-constructions like (126).

5.5. The Semantic Interpretation of Focus and Presupposition

It has been stated before that FP-constructions have some presuppositions. For example, in sentences like:

(3). ANAK ITU JANG MEMBELI SEPATU

--"It is the child who bought shoes."

the sentence presupposes that a [-anaph;-spec]-child bought shoes, and the focus simply specifies the child which is presupposed to buy shoes. The analysis of FP-constructions presented in this chapter seems to come very close to giving such meaning to FP-constructions. The presupposition is the embedded sentence S, and the new information is supplied by the feature [spec] in the head noun.

In chapter 1 we learned that BI/JAV have some markers which indicate that focus may either supplement the information given by a presupposition, contradict the presupposition, or confirm the presupposition. Notice that this may be explainable in terms of the values of [spec] in the head noun and the subject of the relative clause. Since roots can be either [-spec] or [+spec], we can have the following situations:

	Head noun	Subject of Rel
(a).	[+spec]	[-spec]
(b).	[+spec]	[+spec]
(c).	[-spec]	[-spec]
(d).	[-spec]	[+spec]

(a) seems to be a situation in which the focus specifies the presupposition, (b) seems to be a situation in which the focus confirms the presupposition, (c) is the existential sentence, and (d) seems to be a situation where the focus contradicts the presupposition. In other words, situation (a) gives the meaning of (155) as: "A child who you presuppose bought shoes is that specific child," and situation (b) gives the meaning of (155) as: "I confirm that the specific child who you presuppose bought shoes is this specific child," situation (c) is probably the meaning of the existential sentence, and situation (d) generates sentences like: "I don't know who it is who bought shoes, but not that particular child."

All these are still speculations which need further confirmations from observation of much more data.

What I want to say in this section is that the derivation of both SP as well as FP-constructions from their corresponding existential sentences seems to have semantic justifications as well. Of course this is only valid when the association of presupposition and the features [spec]

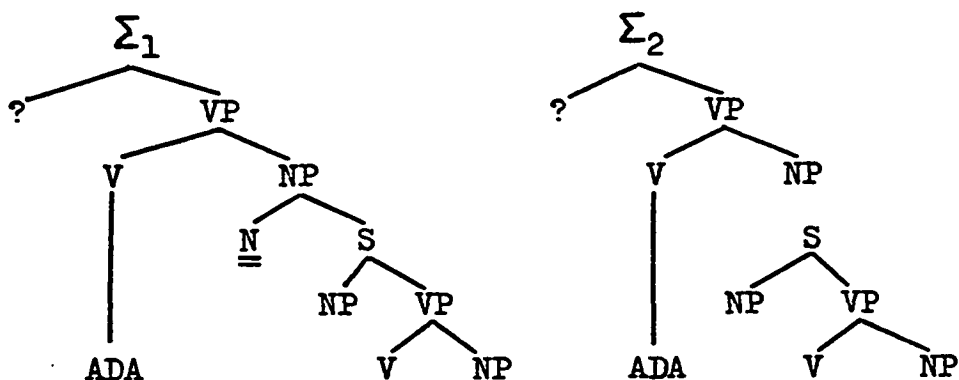
.. can be accounted for in a more general way. Such an account is beyond the scope of the present work.

CHAPTER 6

SUBJECT-PREDICATE CONSTRUCTIONS

6.1. SP-Constructions and Existential Sentences

In Chapter 2, section 3, we noticed that WH-subject questions have to be in FP-construction. After observing the characteristics of nouns in general in Chapter 3, we concluded in Chapter 4 that, on the basis of the constraints on the subject of a sentence, the requirement of FP-construction in WH-subject-questions can be syntactically explained by the use of a general constraint on the occurrence of Q. This constraint disallows the attachment of Q to the subject of S which is embedded in Σ . Let us look at the two types of Σ 's again, since it is crucial at this stage:



In order to generate WH-subject questions in FP-construction, and not in SP-construction, the Q-constraint only

allows the attachment of Q to N in Σ_1 , which I double-underlined. This is the crucial part: Q can not occur in the subject of S in Σ_1 by the fact that S is embedded in Σ . This means that SP-constructions have to be derived from this Σ , since if S is the initial, top-most S, it is no longer embedded, and Q can occur, and WH-subject questions in SP-construction are generated. We thus have no choice, unless, of course, we can suggest another underlying form for SP-constructions where S is an embedded sentence.

The following arguments, similar to the ones which support the derivation of FP-constructions from existential sentences of type Σ_1 , seem to support the derivation of SP-constructions from existential sentences of type Σ_2 :

(a). The SP-construction with [-spec] (145) below is the paraphrase of the existential sentence with [-spec] (146), and the SP-construction with [+spec] (147) is the paraphrase of the existential sentence with [+spec] (148):

(145). *ANAK MEMBELI SEPATU

--"A child bought shoes."

(146). ADA ANAK MEMBELI SEPATU

--"There was a child buying shoes."

(147). ANAKNJA MEMBELI SEPATU

--"The child bought shoes."

(148). *ADA ANAKNJA MEMBELI SEPATU

--"*There was the child buying shoes."

Note that [+spec] and [-spec] are in complementary distributions:

Subject of SP	Subject of S in Σ_2
*[-spec]	[-spec]
[+spec]	* [+spec]

(b). There is a dialect of BI which allows ADA in SP-constructions. For example, compare the following:

- (149). a. ANAK ITU MEMBUAT PAKAIAN
 b. ANAK ITU ADA MEMBUAT PAKAIAN }
 --"The child made a dress."

- (150). a. MURIDMU MEMBELI RADIO
 b. MURIDMU ADA MEMBELI RADIO }
 --"Your student bought a radio."

Even if sentences like (149b) and (150b) are non-standard BI, such a variant would be impossible to explain unless we assume that ADA is present in the underlying forms of (149a) and (150a).

6.1.1. The Derivation of SP-Constructions from Σ_2 :

It has been shown in section 5.2 of chapter 5 that the subject of FP-constructions must not be [-anaph;-spec], and the subject of S in Σ_1 must be [-anaph;-spec]. This means

that when the subject of S is either [+anaph;-spec], [+anaph;+spec] or [-anaph;+spec], it has to be fronted, and after ADA has been deleted, FP-constructions are generated.

It was also stated in chapter 5 that only certain constituents which meet certain conditions can be fronted to derive the appropriate FP-constructions. At that stage, we simply used the same requirement for the presence of Q for a constituent to be qualified for fronting, i.e. that the constituent must not be the constituent of an embedded sentence. Actually, as far as fronting is concerned, what we want is to allow only the double-underlined N in Σ_1 to be fronted. Instead of using the Q-constraint which is stated in terms of embedded sentence, we can change the requirement by stating that only the left-most node which is not [-anaph;-spec] can be fronted. Remember, this is only for fronting, not Q-constraint, so Q-constraint is stated in terms of embedding and fronting-constraint is in terms of left-most node.

Given the above fronting-constraint, when the subject of S in Σ_2 is not [-anaph;-spec] it is qualified for fronting, and after the deletion of ADA, we get SP-constructions, whose derivations are the same as when we derive FP-constructions. The only difference is that the underlying forms of SP-constructions are Σ_2 and the underlying forms of FP-constructions are Σ_1 .

Notice that the fronting-constraint will block the fronting of the object of S, if it is not [-anaph;-spec], since unless passive rule is applied first, so that the object is moved to the subject position, the object will not be the left-most constituent. Without the fronting-constraint above, ungrammatical sentences like (151) and (152) will be generated, but with this constraint only sentences like (153) and (154) will be derived:

(151). *MURIDMU ORANG LELAKI MEMUKUL
 your student man hit

---"*Your student a man hit."

(152). *ORANG LELAKI ITU MURIDMU DIPUKUL

---"*The man your student was hit."

(153). MURIDMU DIPUKUL ORANG LELAKI

---"Your student was hit by a man."

(154). ORANG LELAKI ITU MEMUKUL MURIDMU

---"The man hit your student."

6.2. Summary

So far, we have the following situations:

- A. The grammar generates two kinds of Σ 's, one with a relativized noun and the other with a complement structure.
- B. A subject or a focus must not be [-anaph;-spec], but the head noun in Σ_1 and the subject of S in

Σ_2 must be [-anaph;-spec].

- C. There is a constraint on the occurrence of Q, which can be stated as follows:

Q-Constraint: "Q should not occur in the embedded sentence."

This constraint allows only the occurrence of Q in the FP-constructions. N+Q is [-anaph;+spec].

- D. There is a constraint on the fronting, which can be stated as follows:

Fronting Constraint: "A noun can be fronted if this noun is the left-most constituent which is not [-anaph;-spec]."

- E. When a Σ contains a noun other than [-anaph;-spec] and this noun is the left-most constituent, one of the following can be generated:

- E.1. WH-subject questions in FP-constructions, which should now be called WH-focus questions. If passive rule is applied, the focus can also be the object of S, or more generally, the surface focus can be the deep subject or the deep object.
- E.2. FP-constructions whose focus can be either the deep subject or the deep object, depending on whether the passive rule is applied or not.
- E.3. SP-constructions whose surface subject can be either the deep subject or the deep object,

pending on whether the passive rule is applied.

- F. Sentences whose focus or subject is [+anaph] acquire [+anaph] from anaphoric processes.
- G. Sentences generated so far only involved the deep subject and object. It will be shown later that sentences involving other constituents, like the verbs, can be generated without any special rules.
- H. SP and FP-constructions have different underlying forms, but the rules to generate these constructions are exactly the same.
- I. There is no need to have a special node Focus, Subject, Presupposition, or Predicate.
- J. The rules to generate these two constructions are meaning-preserving transformations.

CHAPTER 7

TOPIC-COMMENT INSTRUCTIONS

7.1. Terminology

TC-constructions in BI/JAV are represented by sentence (2), repeated below:

(2). ANAK ITU, DIA MEMBELI SEPATU
child Art. he/she buy shoes

--"The child, he/she bought shoes."

(2) consists of a NP followed by a sentence whose subject is DIA which refers to the first NP. ANAK ITU in (2) is called the topic and the sentence following the topic is called the comment. Let us first compare my use of these labels with those used by other linguists, for example Hockett (1958) and Lakoff (1969).

7.1.1. Hockett's Topic and Comment: In talking about Predicative Constructions Hockett (1958, p. 201) states that "The most general characterization of predicative constructions is suggested by the terms 'topic' and 'comment' for their IC's: the speaker announces the topic and then says something about it." He then gives the following sentences:

(156). JOHN RAN AWAY.

(157). THAT NEW BOOK BY THOMAS GUERNSEY, I HAVEN'T READ
IT YET.

and says further that "in English and the familiar languages of Europe, topics are usually also subjects, and comments are predicates; so in JOHN RAN AWAY. But this identification fails sometimes in colloquial English, regularly in certain special situations in formal English, and more generally in some non-European languages." (p. 201). Hockett further states that the THAT NEW BOOK BY THOMAS GUERNSEY in (159) above "is spoken first because it specifies what the speaker is going to talk about: it is the topic of the sentence."

Hockett distinguishes (156), which is SP-construction in this work, and (157), which is considered TC-construction in this work, but he also assumes that (156) and (157) share something in common. We can suspect that Hockett would treat FP-constructions the same way. In a sense he is right that all three constructions have a lot in common, which agrees with the analysis given in this work. The difference is that this work formally spells out their syntactical and semantic differences, as well as their similarities. The striking similarities among these three constructions are the set of transformational rules which they all share.

7.1.2. Lakoff's Topic: Lakoff (1969) has the following to say about topic: "The notion of 'topic' is an ancient one in the history of grammatical investigation. Grammarians have long recognized that sentences have special devices for indicating what is under discussion" (p. 4). He then cites the following sentences:

(158). JOHN, MARY HATES HIM.

(159). MARY, SHE HATES JOHN.

He calls JOHN in (158) and MARY in (159) the topics, but does not label the constituents following the topics. He also discusses sentences like the following, which he cites from Klima, without specific reference (pp. 30-31):

L(39). a. IT IS EASY TO PLAY SONATAS ON THIS VIOLIN.

b. THIS VIOLIN IS EASY TO PLAY SONATAS ON.

c. SONATAS ARE EASY TO PLAY ON THIS VIOLIN.

He considers (a) is neutral with respect to topic, (b) has THIS VIOLIN as its topic, and (c) has SONATAS as its topic. He further cites the following sentences (underlinings are mine):

L(41). a. CONCERNING SONATAS, IT IS EASY TO PLAY THEM ON THIS VIOLIN.

b. CONCERNING SONATAS, THEY ARE EASY TO PLAY ON THIS VIOLIN.

c. SONATAS ARE EASY TO PLAY ON THIS VIOLIN.

- L(42). a. ABOUT THIS VIOLIN, IT IS EASY TO PLAY SONATAS ON IT.
 b. ABOUT THIS VIOLIN, IT IS EASY TO PLAY SONATAS ON.
 c. THIS VIOLIN IS EASY TO PLAY SONATAS ON.

He states that "predicates 'be about' and 'concern' are two-place relations, whose arguments are a description of a proposition or discourse and the item which is the topic of that proposition or discourse." Conflicts in topics will result in the following ill-formed sentences:

- L(43). ?*ABOUT SONATAS, THIS VIOLIN IS EASY TO PLAY THEM ON.
 L(44). ?*ABOUT THIS VIOLIN, SONATAS ARE EASY TO PLAY ON IT.

He notices that (43) and (44) are grammatical for those speakers who admit more than one topic in such sentences.

My notion of topic is very close to, if not the same as, that of Lakoff. Sentence (2) can be elaborated to mean:

- (2). CONCERNING THE CHILD (I ASSUME YOU KNOW WHICH ONE I AM REFERRING TO), I HAVE THE FOLLOWING COMMENT: HE BOUGHT SHOES.

7.2. Constraints on Topics

Let us observe the following sentences to discover the types of nouns which can constitute a topic. As is the case with SP and FP-constructions, we shall limit our observation to topics which correspond to the subjects of the

comments first. In the next chapter, more cases will be discussed.

(160). *ANAK, DIA MEMBELI SEPATU

--"*A child, he bought shoes."

(161). *ANAKNJA, DIA MEMBELI SEPATU

--"The child, he bought shoes."

(162). ANAKNJA ITU, DIA MEMBELI SEPATU

--"The child, he bought shoes."

(163). ANAK ITU, DIA MEMBELI SEPATU

--"The child, he bought shoes."

(164). *ANAK [JANG LEWAT], DIA MEMBELI SEPATU

--"?A child who passed by, he bought shoes."

(165). *ANAK [JANG LEWAT TADI PAGI], DIA MEMBELI SEPATU

--"?The child who passed by this morning, he bought shoes."

(166). ANAK [JANG LEWAT] ITU, DIA MEMBELI SEPATU

--"?The child who passed by, he bought shoes."

(167). ANAK [JANG LEWAT TADI PAGI] ITU, DIA MEMBELI SEPATU

--"?The child who passed by this morning, he bought shoes."

(168). *DIA, DIA MEMBELI SEPATU

--"He, he bought shoes."

(169). ?DIA ITU, DIA MEMBELI SEPATU

--"* (That) he, he bought shoes."

(170). *[SIAPA MEMBELI SEPATU?]_{SP}

--"Who bought shoes?"

(171). [SIAPA JANG MEMBELI SEPATU?]_{FP}

--"Who was it who bought shoes?"

(172). *[SIAPA, DIA MEMBELI SEPATU?]_{TC}

--"*Who, he bought shoes?"

(173). *[SIAPA, SIAPA MEMBELI SEPATU?]_{TC}

--"*Who, who bought shoes?"

(160)-(173) show that only [+anaph]-nouns can be the topic of a sentence. (169) is definitely grammatical when a phrase like SAJA KIRA--"I think" is in between the topic and its comment. For example:

(169a). DIA ITU, SAJA KIRA DIA MEMBELI SEPATU

--"?He, I think he bought shoes."

As a matter of fact TC-constructions are generally used with short phrases like "I think" between the topic and its comment. In other words, the addition of phrases like SAJA KIRA increases the acceptability of TC-sentences, although the grammaticality of sentences like (162) seems unquestionable.

The following is a comparison between the constraint in topic of TC-constructions and the subject of SP-constructions and the focus of FP-constructions:

Topic	Subject/Focus
1. *[-anaph;-spec]	*[-anaph;-spec]
2. *[-anaph;+spec]	[-anaph;+spec]
3. *[-anaph;+spec;+PRON]	[-anaph;+spec;+PRON]
4. [+anaph;+spec;+PRON]	[+anaph;+spec;+PRON]
5. [+anaph;-spec]	[+anaph;-spec]
6. [+anaph;+spec]	[+anaph;+spec]
7. *[-def;+spec]+Q	*[[-anaph;+spec]+Q] _{Subject} [[-anaph;+spec]+Q] _{Focus}

Note that a topic must be [+anaph]-noun and a subject or a topic must not be [-anaph;-spec]. The topic is different from subject and focus in that (2) and (3) are not allowed to be topics, but they are allowed to be subjects or foci, and that only a focus can be questioned.

7.3. The Properties of Comments

The comment of a TC-construction is a full sentence, and so far we have distinguished two types of sentences: SP and FP-constructions. The following sentences show that the comment of a TC-construction can be either SP-construction or FP-construction:

(174). ANAK ITU, {
 DIA MEMBELI SEPATU
 --"That child, he bought shoes."
 DIA JANG MEMBELI SEPATU
 --"That child, it was he who bought shoes."

(175). *ANAK, {
 DIA MEMBELI SEPATU
 --"*A child, he bought shoes."
 DIA JANG MEMBELI SEPATU
 --"*A child, it is he who bought shoes."

Notice also that the type of comment in a TC-construction does not affect its topic; the requirement for a topic remains the same: a topic has to be [+anaph].

The following sentences show that the subject or the focus of a comment must be [-anaph;+spec;+PRON]:

(176). a. *ANAK ITU, DIA ITU MEMBELI SEPATU
 --"*That child, (that) he bought shoes."

b. *ANAK ITU, DIA ITU JANG MEMBELI SEPATU
 --"*That child, it was (that) he/him who bought shoes."

(177). a. *ANAK ITU, ANAK (JANG) MEMBELI SEPATU
 --"*That child,
 { a child bought shoes."
 it was a child who bought shoes." }

b. *ANAK ITU, ANAKNJA (JANG) MEMBELI SEPATU

--"?That child,

{the child bought shoes."
it was the child who bought shoes."}

c. *ANAK ITU, ANAKNJA ITU (JANG) MEMBELI SEPATU

--"?That child,

{the child bought shoes."
it was the child who bought shoes."}

The subject of the comment in (176a) is DIA ITU which is [+anaph;+spec;+PRON], and so is the focus of the comment in (176b). The subject and the focus of the comment in (177a) is ANAK, which is [-anaph;-spec;-PRON], the subject and the focus of the comment in (177b) is ANAKNJA, which is [-anaph;+spec;-PRON], and the subject and the focus of the comment in (177c) is ANAKNJA ITU, which is [+anaph;+spec;-PRON], and (176a,b) and (177a,b,c) are all ungrammatical. Notice that the grammatical sentences in (160)-(173) are the ones whose subject of the comment is [-anaph;+spec;+PRON].

7.4. The Derivation of TC-Constructions

Let us first of all observe more carefully the possible nouns which can be a topic and the nouns which can be a subject or a focus of the comment:

A topic must be either:

(a). [+anaph;-spec;-PRON] as in (163) and (166),

- (b). [+anaph;+spec;-PRON] as in (162) and (167), or
- (c). [+anaph;+spec;+PRON] as in (169).

A subject or a focus of a comment must be:

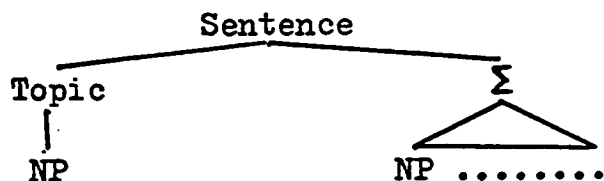
- (d). [-anaph;+spec;+PRON].

It is obvious that the topic and the subject or the focus of the comment have to have the same referent, which means that (c) is the anaphoric form of (d), or that (d) is the antecedent of (c). Furthermore, (d) must be a result of a pronominalization, which means that the underlying form of (d) must be either:

- (e). [-anaph;-spec;-PRON], or
- (f). [-anaph;-spec;-PRON].

Note that (e) is the antecedent of (a) and (f) is the antecedent of (b). The relationship between (a), (b), (c) and (d), (e), and (f) clearly shows that the topic is the anaphoric form of the subject or focus in the comment, which means that the underlying form of a TC-construction is not something like (178):

(178).



Given (178) there is no way to get (a)-(e), (b)-(f), and (c)-(d) relationships, where (e), (f), and (d) are the

antecedents of (a), (b), and (c) respectively. The only way that I know of, which intuitively seems correct, is to consider the first NP in (178) the copy of the second NP, which means that the underlying forms of TC-constructions are SP- and FP-constructions. Since it will be simpler to derive TC-constructions from the underlying existential sentences rather than from the surface SP- and FP-constructions, i.e. the latter will require an intermediate step while the former does not, I will assume that TC-constructions are directly derived from the existential sentences which underlie SP- and FP-constructions. To acquire the appropriate forms and surface structures anaphoric rules, pronominalization, copying, and fronting should be applied in a certain order, and two different domains have to be distinguished: Σ - domain and VP-domain. If a rule is to be applied within the VP-domain, then the rule must not be applied to constituents outside VP. If a rule is to be applied within Σ - domain, then anything under Σ is affected by the rule. Given the Σ_1 which underlies SP-constructions and Σ_2 which underlies FP-constructions, the rules to generate TC-constructions consist of the following, in the order given:

TC-RULES:

TC-1: Copying: [...NP...]_{VP} ---> [...NP-NP...]_{VP}

TC-2: Anaph: [...NP-NP...]_{VP} --> [...NP-NP+ITU...]_{VP}

TC-3: $\left\{ \begin{array}{l} \text{Fronting: } [\dots\text{ADA, NP-NP+ITU}] \longrightarrow \\ \qquad \qquad \qquad [\dots\text{NP+ITU, ADA, NP}\dots] \\ \text{VP-Pronom: } [\dots\text{NP-NP+ITU}\dots]_{\text{VP}} \longrightarrow \\ \qquad \qquad \qquad [\dots\text{NP - DIA+ITU}\dots]_{\text{VP}} \end{array} \right\}$

TC-4: Σ -Pronom: $[\dots\text{NP+ITU, ADA, NP}\dots] \longrightarrow$
 $[\dots\text{NP+ITU, ADA, DIA}\dots]$

TC-5: Fronting: $[\dots\text{ADA, NP, } \left\{ \begin{array}{l} \text{NP-ITU} \\ \text{DIA-ITU} \end{array} \right\} \dots] \longrightarrow$
 $[\dots \left\{ \begin{array}{l} \text{NP-ITU} \\ \text{DIA-ITU} \end{array} \right\}, \text{ADA, NP}\dots]$

Note that TC-3 is a conjunctive rule, and TC-5 will not apply if Fronting is selected in TC-3, but TC-5 will apply if VP-Pronom is applied for TC-3.

Application:

(1). To get (a)-(d) combination, the rules to be applied are:

Base:[-an;-spec;-P]
 TC-1: Copying: [-an;-spec;-P] [-an,-spec;-P]
 TC-2: Anaph: [-an;-spec;-P] [+an;-spec;-P]
 TC-3: Fronting: ... [+an;-spec;-P] [-an;-spec;-P]
 TC-4: Σ -Pronom: ... [+an;-spec;-P] [-an;+spec;+P]
 TC-5: Fronting: ... does not apply.
 Result: (163): N - ITU DIA ...

(2). To get (b)-(d) combination, the rules to be applied are:

Base:[-an;+spec;-P]
 TC-1: Copying: [-an;+spec;-P] [-an;+spec;-P]

- TC-2: Anaph: [-an;+spec;-P] [+an;+spec;-P]
 TC-3: Fronting: ... [+an;+spec;-P] [-an;+spec;-P]
 TC-4: Σ -Pronom: ... [+an;+spec;-P] [-an;+spec;+P]
 TC-5: Fronting: ... does not apply.

Result: (162): N - NJA - ITU DIA ...

(3). To get (c)-(d) combination, the rules to be applied are:

- Base:[-an;±spec;-P]
 TC-1: Copying: [-an;±spec;-P] [-an;±spec;-P]
 TC-2: Anaph: [-an;±spec;-P] [+an;±spec;-P]
 TC-3: VP-Pronom: .. [-an;±spec;-P] [+an;+spec;+P]
 TC-4: Σ -Pronom: does not apply, since NP's are within VP, and no antecedent for the first NP.
 TC-5: Fronting: ... [+an;+spec;+P] [-an;±spec;-P]

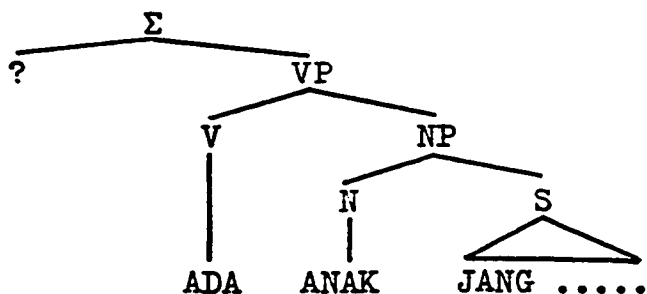
Second application of TC-rules:

- TC-1, TC-2, TC-3 do not apply.
 TC-4: Σ -Pronom: ... [+an;+spec;+P] [-an;+spec;+P]
 TC-5: Fronting: does not apply.

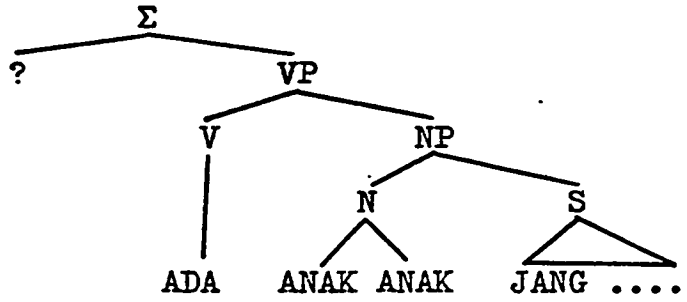
Result: (169): DIA ITU DIA ...

7.4.1. Sample Derivations:

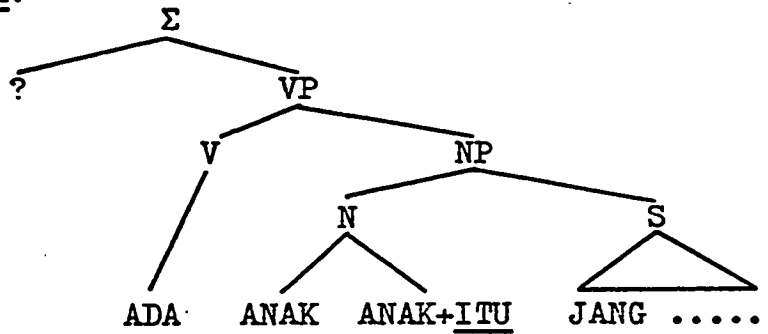
Base:



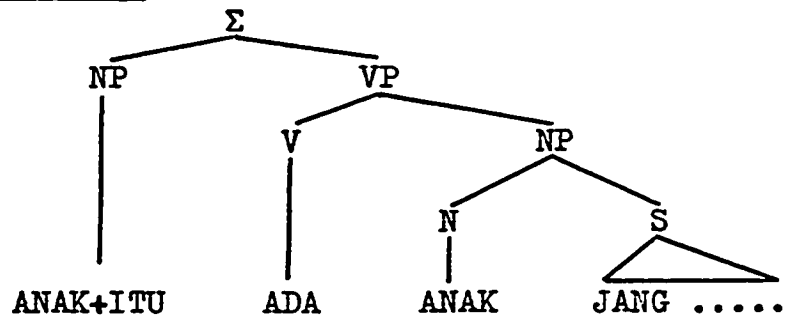
TC-1: Copying:



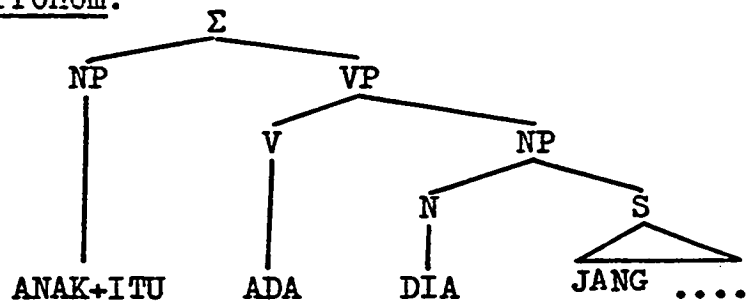
TC-2: Anaph:



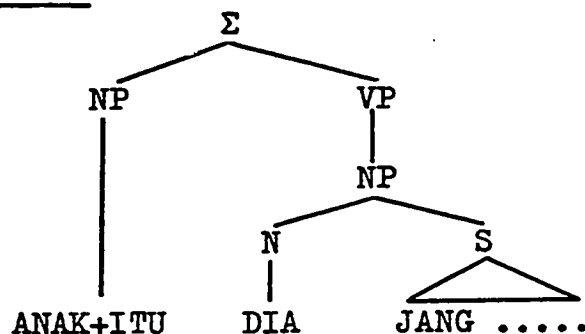
TC-3: Fronting:



TC-4: Σ-Pronom:



ADA-deletion:



(174). ANAK ITU, DIA JANG MEMBELI SEPATU

--"That child, it was he who
bought shoes."

7.5. The Implication of Copying Transformation to the Hypothesis of Meaning-Preserving Transformations

From purely syntactical evidence, we are forced to assume that TC-constructions are derived from the underlying forms of SP- and FP-constructions by applying a copying transformation. The copying transformation is optional and non-meaning-preserving.

There is a way to maintain the hypothesis of meaning-preserving transformations by positing a formative like TOP in the underlying forms whose function is like Q, i.e. to trigger a transformation. For TOP, it triggers copying transformation. To do that, however, we have to look for semantic as well as syntactical justifications for the assumption that TOP is present in the underlying forms of TC-constructions. Lakoff (1968) seems to imply that the presence of the sentences like: CONCERNING THAT CHILD, HE

BOUGHT SHOES, or ABOUT THAT VIOLIN, IT IS EASY TO PLAY A SONATA ON, etc., may indicate that the presence of TOP in the underlying forms is justified. At the moment, I have not been able to find any syntactical or semantic evidence to support such assumption, and so I will assume that the generation of TC-constructions have to make use of non-meaning-preserving transformation, i.e. copying transformation.

CHAPTER 8

EXISTENTIAL ANALYSIS OF BAHASA INDONESIA AND JAVANESE

Our observation on the behavior of WH-focus questions, subject, focus, and topic of a sentence has provided us with strong indications that the underlying forms for all three major constructions in BI/JAV, i.e. SP, FP, and TC-constructions, are existential sentences. Let me refer to this analysis as an existential analysis. The evidence for such an analysis presented in previous chapters has been based solely on subject and later also object of the sentence embedded in the existential sentence. In this chapter we will observe the other parts of the sentence and find out if the analysis presented in the previous chapters can handle other cases without extra ad hoc rules.

8.1. Interrogative Sentences

8.1.1. WH-subject, WH-focus, and WH-topic: It has been shown that among the subject, focus, and topic of a sentence, only the focus can be questioned. Let us briefly review how the existential analysis generates one and blocks the other two:

(a). The Base rules generate two kinds of existential sentences; one is ADA followed by a relativized noun

and the other is ADA followed by a sentence complement. The generation of WH-subject is blocked by a general constraint which disallows the presence of Q in the embedded sentence. The requirement for fronting is that an element should be the left-most node which is not [-anaph;-spec], and since N+Q is [-anaph;+spec], they can be fronted if they are in the head noun of the relativized NP, since the head noun is the left-most constituent. The result is the proper generation of WH-focus questions. Because a passive rule can be applied (the rule is optional), the element which is fronted can also be the object of the embedded sentence. So we can generate both WH-subject-focus questions as well as WH-object-focus questions.

(b). To generate TC-constructions, the requirement is that the left-most node has to be a node which is not [-an;-spec]. Depending on which existential sentence is generated, a TC-construction may have an SP-comment or FP-comment. After copying, an anaphoric rule which makes the copy [+anaph] is obligatory. Recall that Q can occur only with [-anaph]-noun, and when the anaphoric rule makes the N of N+Q into [+anaph], this [+anaph]-noun is no longer compatible with the strict-subcategorization feature of Q, and so the [+anaph]+Q are marked ill-formed by the general rule.

So, general constraints on Q, fronting, and copying allow the generation of WH-focus questions (both subject and

object) and prevent the questioning of a subject and a topic.

8.1.2. JANG MANA (---"Which") Questions: The following sentences show that only JANG MANA-focus occurs in BI/JAV and not JANG MANA-subject or JANG MANA-topic:

(179). *ANAK JANG MANA MEMBELI SEPATU?
child which

---"Which child bought shoes?"

(180). ANAK JANG MANA JANG MEMBELI SEPATU?

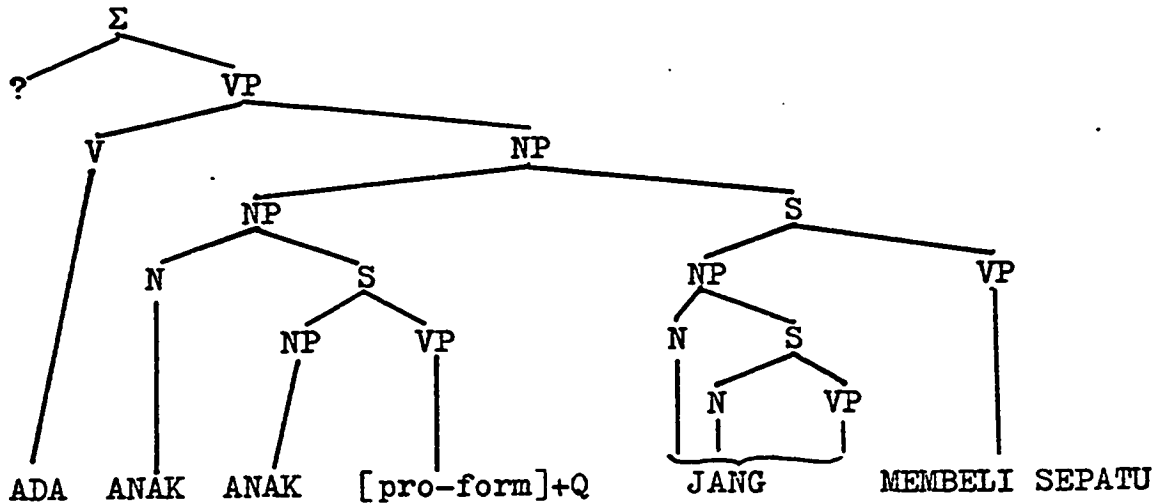
---"WHICH CHILD bought shoes?"

(181). *ANAK JANG MANA, DIA MEMBELI SEPATU?

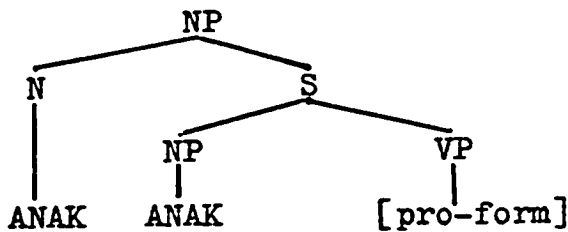
---"*Which child, he bought shoes?"

JANG MANA is only allowed in (180), which is an FP-construction, i.e. the focus is ANAK JANG MANA. Let us see if we can generate the appropriate sentence and block the ill-formed ones.

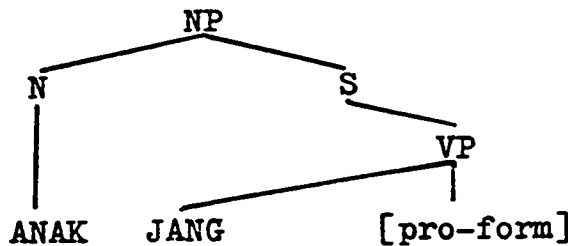
(a). To get JANG MANA questions we have to have a relativized focus, so we should start with the following:



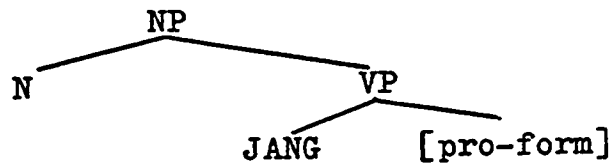
The Q-constraint disallows the realization of proform+Q into a question-word, since the only pro-form is in the embedded sentence. (VP is actually a phrase consisting of one or more pro-forms). But if we apply the relativization rule which attaches JANG to the main VP and apply the pruning of S, the proform will come out from an embedded sentence. Let us look at the relativized NP only:



Relativization
----->



Pruning
----->



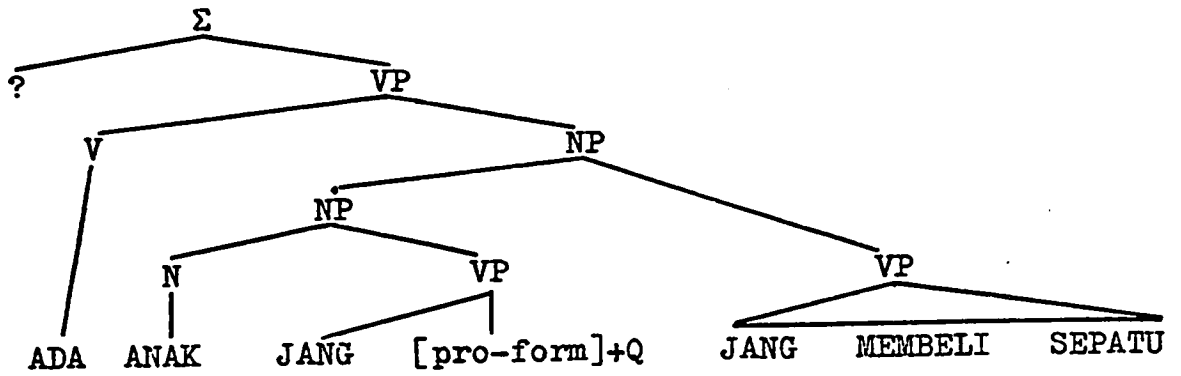
Let me first show how this Q-constraint ought to be formally stated. Recall that question-words such as SIAPAKAH, APAKAH, etc. are [-ANAPH;+spec], but APA, which is a root, is always [-anaph;-spec]. This means that Q has the same effect on the noun as SpecREL: Q converts [-spec] into [+spec]. The constraint can be viewed as the condition which should be met for the conversion of [-spec] into [+spec] as follows:

Q-constraint:

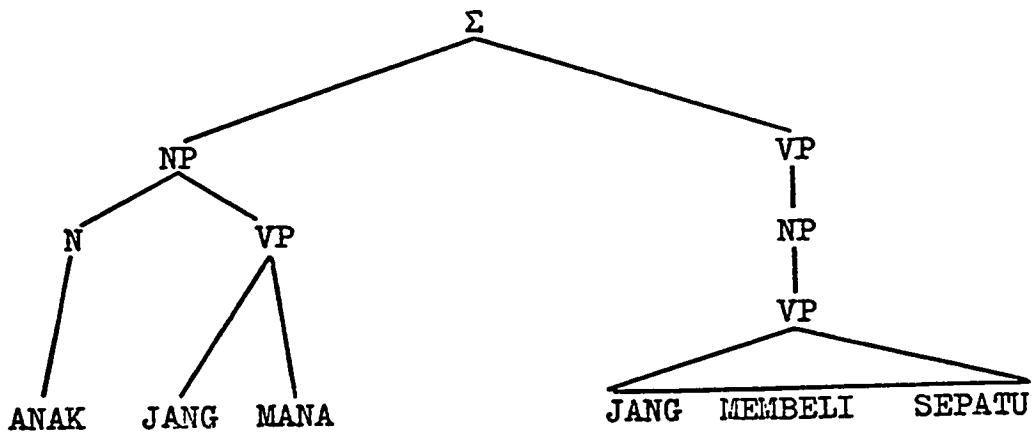
$$\left[\begin{array}{l} +\text{pro-form} \\ -\text{anaph} \\ -\text{spec} \end{array} \right] + Q \quad \text{WH} \quad \longrightarrow \quad \left[\begin{array}{l} +\text{pro-form} \\ -\text{anaph} \\ +\text{spec} \end{array} \right] + Q \quad \text{WH}$$

Condition: "WH is not an element of an embedded sentence."

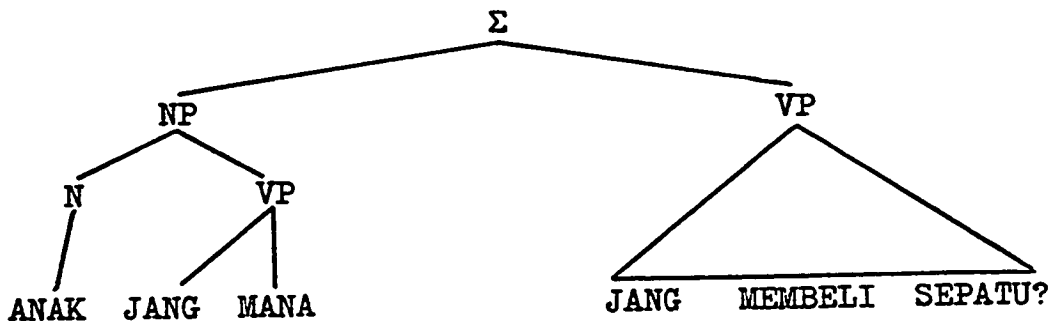
This means that Q is already attached to pro-form in the underlying form, since semantic interpretation is given to this underlying form, but the "spreading transformation which converts [-spec] into [+spec] can not be applied until pro-form + Q comes out from the embedded sentence. This can be accomplished by the application of relativization and pruning. The result of the application of these two rules is as follows:



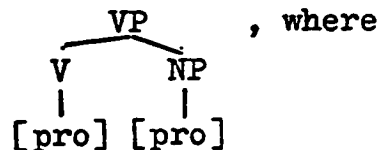
[ANAK JANG [pro-form]+Q]_{NP} is now the left-most [+spec] constituent which qualifies the NP to be fronted, and we get the following, after ADA deletion:



and the VP-NP-VP string of dominance in the JANG-phrase cancels the NP, and the final surface structure is as follows:

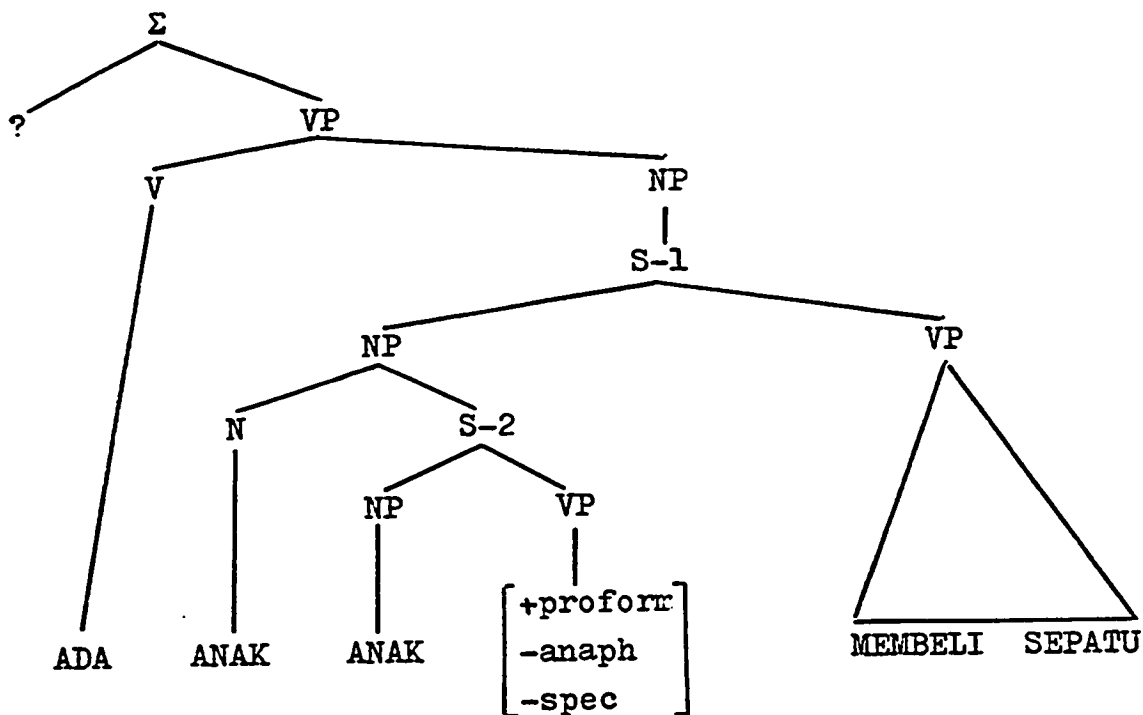


The proform MANA is a phonetic realization of a string of APA's, i.e. the details should be:



[pro][pro] becomes MANA. MANA is also used in DIMAMA-- "where," which comes from DI + Locative + APA, where Locative can be DALAM--"inside," LUAR--"outside," etc. Compare: DIDALAM APA?--"inside what?," DIMANA?--"where?," but *DIDALAM MANA?, which show that Loc + APA ---> MANA.

Let us now see how JANG MANA-questions in SP-constructions are blocked: We start with SP-existential below:



Note that there is no way to prune S-1, and [+proform] will still be in an embedded S-1, even after the relativization rule is applied. So, the general Q-constraint disallows

the derivation of the ungrammatical sentence (179) above.

Will JANG MANA in topic be blocked too? The answer is yes. When JANG MANA occurs in FP-existential, as in Σ on the previous page, although VP is no longer under an embedded sentence as a result of relativization, after copying is applied [-anaph;-spec;-proform] is made [+anaph] by anaphoric rule which disallows Q to occur with it. When JANG MANA occurs in SP-existential above, it can never be copied because the VP will never become the left-most constituent.

The derivation of the proper JANG MANA-questions as well as the blocking of the improper JANG MANA-questions are taken care of by the same constraints on Q, requirements for fronting, and requirements for copying. The only addition is the application of Ross's tree pruning stated in Ross (1963).

8.1.3 WH-Verbs: The verb phrase in BI/JAV can also be questioned, and all three constructions can contain WH-verb, as shown from the following sentences:

(182). ANAK ITU MENGAPA?

--"What did the child do?"

(183). ANAK ITU JANG MENGAPA?

--"What did THE CHILD do?"

(184). ANAK ITU, DIA MENGAPA?

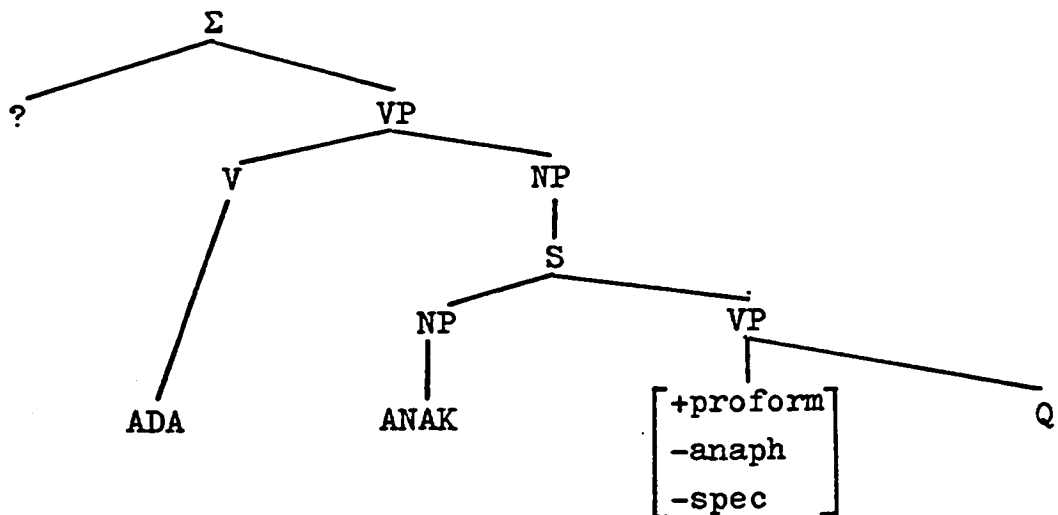
--"That child, what did he do?"

(185). ANAK ITU, DIA JANG MENGAPA?

--"That child, what did HE do?"

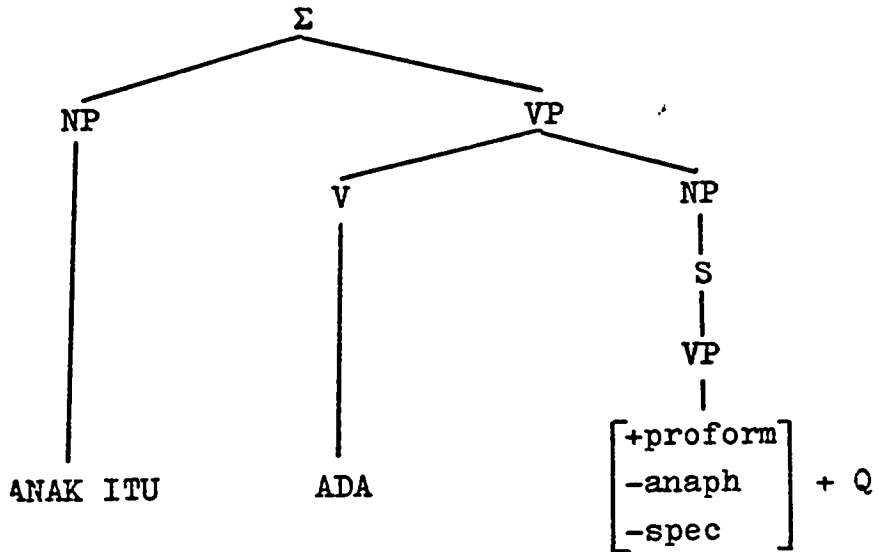
Note that (182) is an SP-construction, (183) is an FP-construction, (184) is a TC-construction with SP-comment, and (185) is a TC with FP-comment. We shall see why all four of them can be generated, or how the present analysis can generate all four.

Let us start with an SP-existential sentence below:

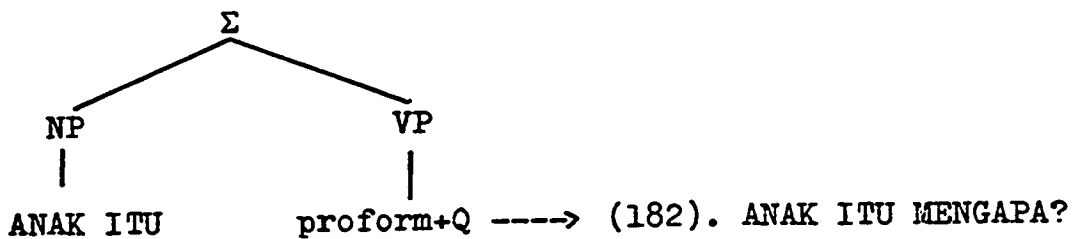


The Q-constraint prevents the realization of proform + Q into a question-word because VP is in the embedded sentence. So, how are we going to get the VP out? Let us take another look at WH-verb questions above. Note that ANAK ITU in (182)-(185) is either a subject, focus, or topic, and each of them can not be [-anaph;-spec], which means that the only

way to get (182)-(185), ANAK in the existential sentences must not be [-anaph;-spec]. Now, if ANAK is not [-anaph;-spec], it is qualified to be fronted, so we get:

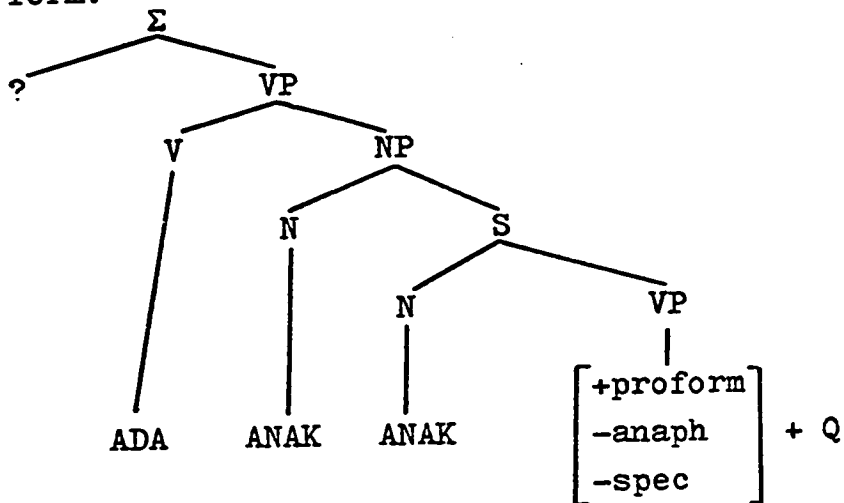


After the fronting, ADA can be deleted. The nodes between the top-most VP and the lowest VP, and the lowest VP can be deleted, since VP dominates NP which dominates S which in turns dominates VP. The pro-form + Q can now be realized into a question word, and we get:

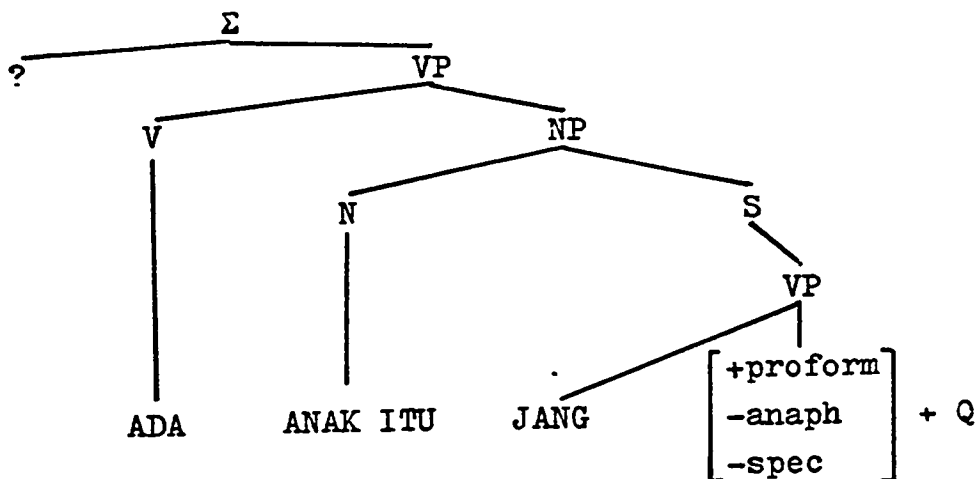


Let us now look at an FP-existential sentence, and see whether WH-verb in FP-construction can be generated:

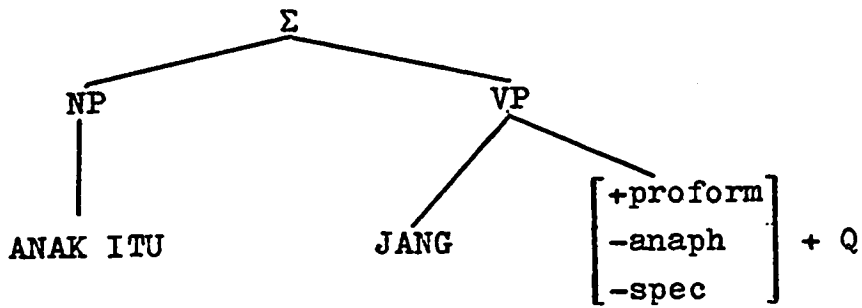
Underlying form:



Q-constraint disallows the realization of proform + Q, because VP is in the embedded S. But ANAK can be [+anaph], and after relativization is applied we get:



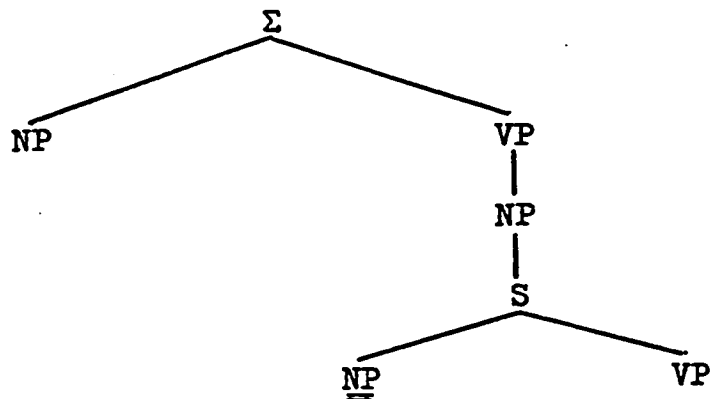
ANAK ITU can be fronted, ADA is deleted, NP and S under VP are deleted, and we get:



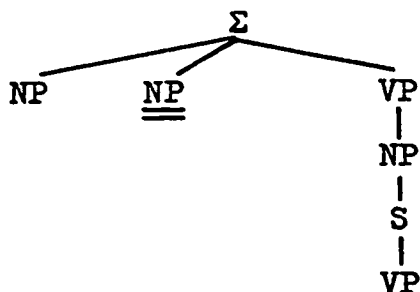
and proform + Q can now be realized, because VP is no longer under an embedded sentence and we get:

(183). ANAK ITU JANG MENGAPA?

We come now to TC-constructions. Note that even after copying and fronting of ANAK ITU, VP can never get out of S. This suggests that the surface structure for TC constructions given before is not exactly correct; as is the case with relativized NP, the rule should also front the original NP rather than letting it remain under S. Observe the following after copying is applied, and ADA is deleted.



Instead of the above structure, the structure should be:



Given the second surface structure, tree pruning can now be applied and the lowest VP will no longer be in the embedded S.

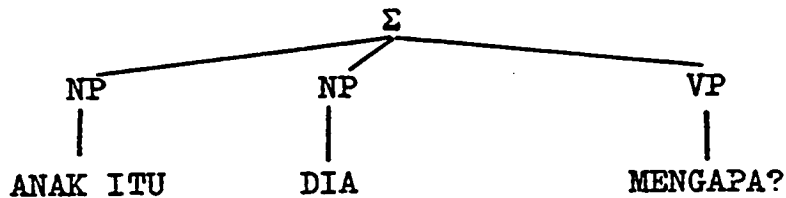
Let us pause and justify the modifications for the surface structures of NP-Rel and TC-constructions. Notice that there is nothing wrong to modify the surface this way. In fact it has to be done, since the surface structures given before are given without justification, i.e. before there was no reason given for NP to remain under S. Actually, the modification on the surface structure of TC-constructions can be accomplished by allowing the fronting rule to be applied first before copying. This means that our simplicity argument in chapter 7 is wrong. An intermediate step is necessary to acquire the appropriate surface structure of TC-constructions.

From the above SP-existential sentence we thus get sentences like:

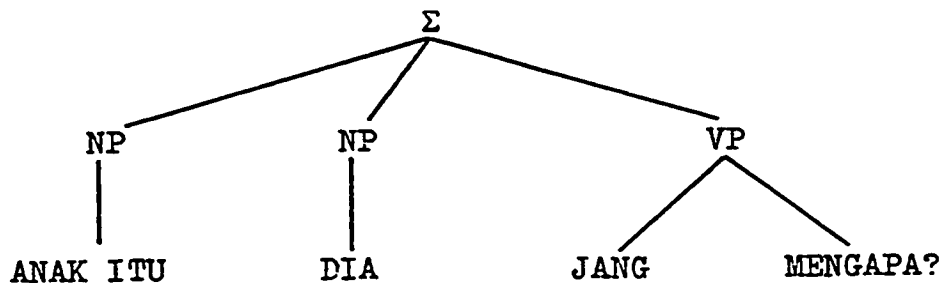
(184). ANAK ITU, DIA MENGAPA?

--"That child, what did he do?"

and the surface structure of (192) is:



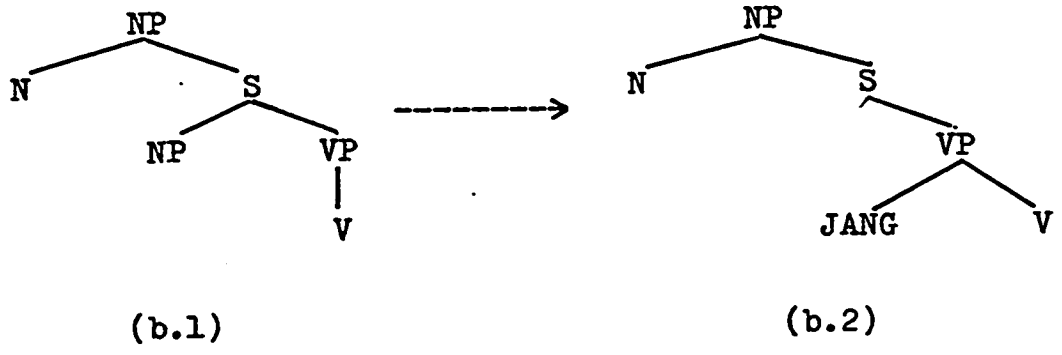
Exactly the same modification has to be done to generate TC with FP-comment. There seems to be no need to go through the derivations in details. The surface structure for (184) is as follows:



8.1.4. Summary: Before looking at other cases, it is helpful to recapitulate what we have considered so far:

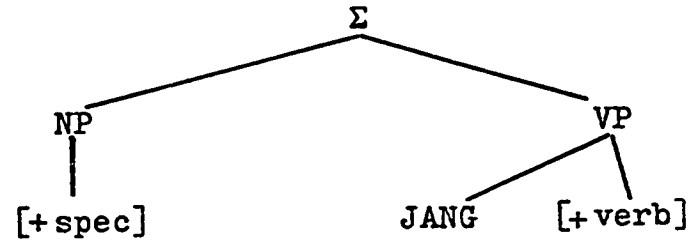
(a). Two types of existential sentences can be generated: SP-existential sentence and FP-existential sentence.

(b). When the left-most constituent is not [-an;-spec], this constituent can be fronted. If this constituent is in SP-existential sentence, we generate SP-sentences. For FP-existential, however, relativization has to be applied first. A relativization rule transforms b.1 into b.2:



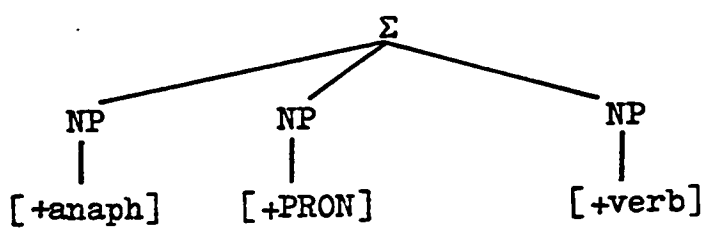
After relativization, the head noun is fronted, and the "unnecessary" nodes can be deleted, we get an FP-sentence with the following surface structure:

FP-construction:



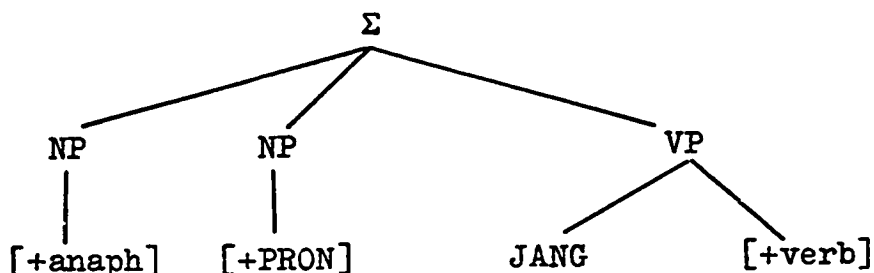
(c). When the left-most constituent is not [-anaph;-spec] and it is in an SP-existential, this constituent is fronted first, then copying transformation is applied. After anaphoric rule, pronominalization, and ADA deletion have been applied, we get the following surface structure:

TC with SP-comment:



When the left-most constituent is in an FP-existential, relativization applies first, then fronting and copying apply, and we get the following surface structure:

TC with FP-comment:



(d). When a proform + Q occurs in the head noun of an FP-existential sentence, that head noun is [-anaph;+spec], and proform + Q can be realized into a question word, because the head noun is not in the embedded sentence, which satisfies the Q-constraint.

Q-constraint: $[[\text{-spec}] Q]_{\text{WH}} \text{---}\rightarrow [[\text{+spec}] \text{KAH}]_{\text{WH}}$

Condition: "WH is not in the embedded sentence."

Since this head noun is [+spec] and the left-most constituent, it is qualified for fronting. WH-focus is thus generated.

But when the proform + Q is in the subject of S of an SP-existential sentence, the condition on Q-constraint

is not met, and WH-subject can not be generated.

Regardless of whether proform + Q is attached to the head noun of FP-existential or the subject of the SP-existential, WH-topic can never be generated, because Q can only occur with [-anaph] and anaphoric rule (TC-2) after copying makes [-anaph]-proform into [+anaph].

(e). In an SP-existential, when the subject of S is not [-anaph;-spec] and the verb is a proform + Q, the condition on Q-constraint can not be met until the fronting is done and VP is out from S. But once the VP is out of S, WH-verb in SP can be generated. Similarly, when the object is a proform + Q and the passive is not applied, then after fronting we generate sentences like (185):

(185). ANAK ITU MEMBELI APA?

--"What did the child buy?"

Note, however, that when the passive is applied, the object of S which becomes the subject can not be fronted, because the condition on Q-constraint can not be met, so we prevent the generation of ungrammatical sentences like (186):

(186). *APA DIBELI ANAK ITU?

--"What was bought by the child?"

(f). In an FP-existential, when the head noun is not [-anaph;-spec] and the verb under S is proform + Q, the condition on Q-constraint can not be met until the head noun

is fronted, i.e. after relativization, so that the verb is out from S, i.e. S is deleted. When this verb is no longer in the embedded sentence, the condition on Q-constraint is met and we get sentences like (183) above. Similarly, when the object of S is a proform + Q, and the head noun is not [-anaph;-spec], Q-constraint can not be applied until relativization and fronting have been applied. When fronting has applied, the object of S is out from S, since S is deleted, and now the condition on Q-constraint can be met, which gives us sentences like:

(187). ANAK ITU JANG MEMBELI APA?

--"What did THAT CHILD buy?"

Note that when the head noun and the object of S are proform + Q, the Q-constraint applies to the head noun first, then once the object is out from S, Q-constraint applies to the object as well, so we get sentences like:

(188). SIAPA JANG MEMBELI APA?

--"Who is it who bought what?"

But in SP-existential, the subject can never be fronted if it is proform + Q, since the condition on Q-constraint is never met, which prevents the derivation of the ungrammatical sentences like:

(189). *SIAPA MEMBELI APA?

--"Who bought what?"

Now, if the head noun, the subject, the verb, and the object are all proform + Q, after the fronting of the head noun, all proform + Q meet the condition on Q-constraint, which makes them question words, and we get sentences like:

(190). SIAPA JANG MENGAPAKAN APA?

--"Who did what to what?"

and (191) is still properly prevented--which is what we want--since it is an SP-construction:

(190). *SIAPA MENGAPAKAN APA?

(g). In an SP-existential, when the subject of S is not [-anaph;-spec] and the verb is a proform + Q, the condition on Q-constraint will be met after fronting transformation which deletes the S, and the verb will no longer be under an embedded sentence, and we get sentences like (184) above. By the same procedure, we can also get TC whose object of the comment is questioned, as in:

(191). ANAK ITU, DIA MEMBELI APA?

--"That child, what did he buy?"

and if the verb is also proform + Q, we get:

(192). ANAK ITU, DIA MENGAPAKAN APA?

--"That child, HE did what to what?"

But note that the topic and the subject of the comment can never be questioned, because they are [+anaph], while proform + Q is always [-anaph].

(h). In an FP-existential, when the head noun is not [-anaph;-spec], and the verb phrase is proform + Q, the condition on Q-constraint is met after fronting and sentences like (185) is generated. When the object of S is proform + Q, we get:

(193). ANAK ITU, DIA JANG MEMBELI APA?

--"That child, what did HE buy?"

and when both verb and object are pro-form + Q, we get:

(194). ANAK ITU, DIA MENGAPAKAN APA?

--"That child, HE did what to what?"

We have now discussed the generations of the majority of interrogative sentences by simply using the same key operations. This seems to support very strongly the correctness of the existential analysis given so far.

8.2 Focused Constituents Other Than the Deep Subject

In this section I will show how other focused constituents can be generated using practically no new rule.

8.2.1. FP-Focus: The following sentences show that VP-focus occurs only in the form of SP-construction, and NOT in FP-construction:

(195). [MEMBELI SEPATU][ANAK ITU]

--"The child BOUGHT SHOES."

(196). [JANG MEMBELI SEPATU][ANAK ITU]

--"THE CHILD bought shoes."

(197). *[MEMBELI SEPATU][ANAK ITU][JANG]

(198). [ANAK ITU]_{Top} [[MEMBELI SEPATU][DIA]]_{Comm}.

--"That child, ?buying shoes is what HE did."

(199). [ANAK ITU]_{Top} [[JANG MEMBELI SEPATU][DIA]]_{Comm}

--"That child, HE bought shoes."

(200). *[ANAK ITU]_{Top} [[MEMBELI SEPATU][DIA][JANG]]_{Comm}

Compare the above sentences with the constructions we have observed before:

(1). ANAK ITU MEMBELI SEPATU

--"The child bought shoes."

(2). ANAK ITU JANG MEMBELI SEPATU

--"THE CHILD bought shoes." = "It is THE CHILD
who bought shoes."

(3). ANAK ITU, DIA MEMBELI SEPATU

--"That child, he bought shoes."

Note that at its surface (195) looks like (1) with different order of IC's. In fact, (195) is ambiguous, depending on

the intonation. One of them has been mentioned before, namely the stylistic variant of (1), but the intonation should remain the same. The VP in (195) is the focus when it is spoken with the same intonation when the IC's are not reversed. In addition, there are those morphemes I mentioned in chapter 1 which can only be attached to a focus, which disambiguate the ambiguities of a focus. Thus, compare the following:

(195). a. [MEMBELI SEPATU SADJA][ANAK ITU]

--"(Contrary to your assumption,) the child BOUGHT SHOES."

(195). b. [MEMANG MEMBELI SEPATU][ANAK ITU]

--"(I confirm that) the child BOUGHT SHOES." =
"The child DID buy shoes."

(195). c. [MEMBELI SEPATU][ANAK ITU]

--"?It is buying shoes that the child did."

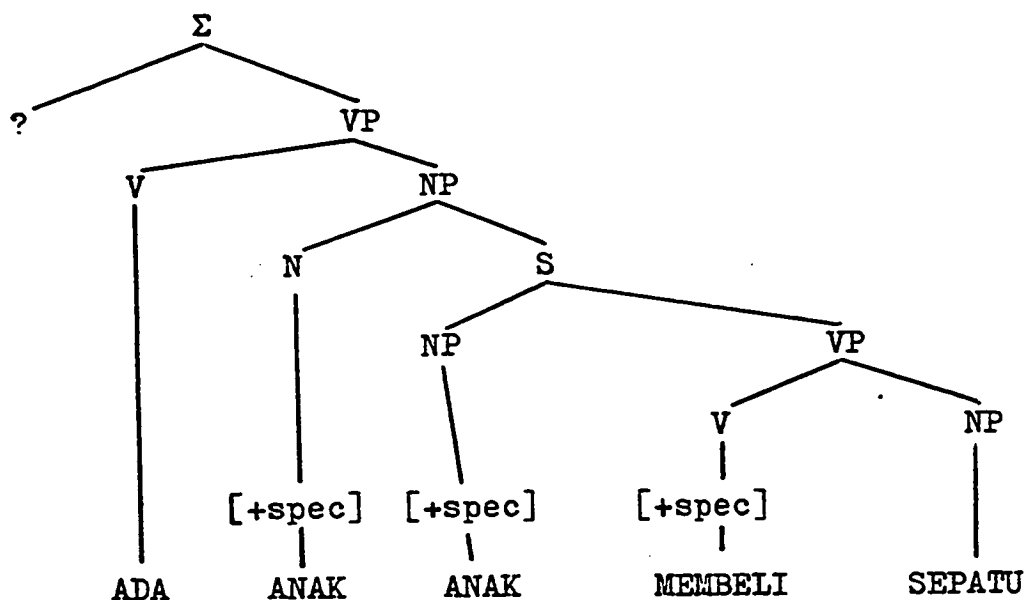
Sentences (195) a, b, and c all have a VP-focus. Sentence (196), however, can not be interpreted as having JANG-phrase-focus, only the variant of (2).¹¹

¹¹(196) unfortunately is ambiguous in another way. It can also mean an NP-NP construction meaning: "The one who bought shoes is that child," and the reversal of it can also be the focusing of its predicate. The test to distinguish NP-NP and FP is that one is the answer to questions like: "Who is that child?" and FP is the answer to "Who bought shoes?"

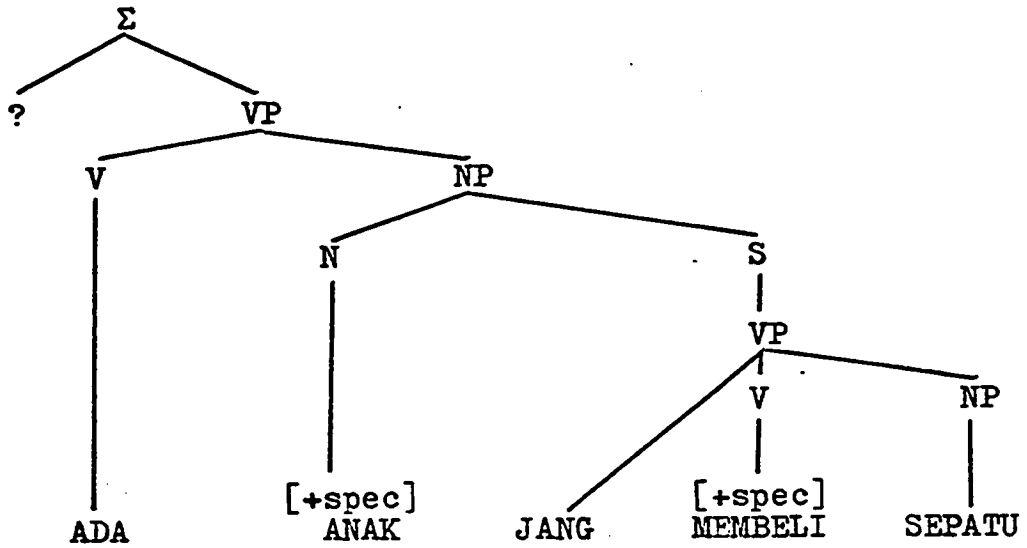
(197) is ungrammatical, because JANG-phrase or part of it can never become focus; the comment of (198) has VP-focus; (199) is grammatical but the JANG-phrase in the comment is not a focus; (200) is ungrammatical because JANG-phrase or part of it can not be a focus.

Now let us see how the existential analysis generates the proper forms and blocks the ill-formed sentences:

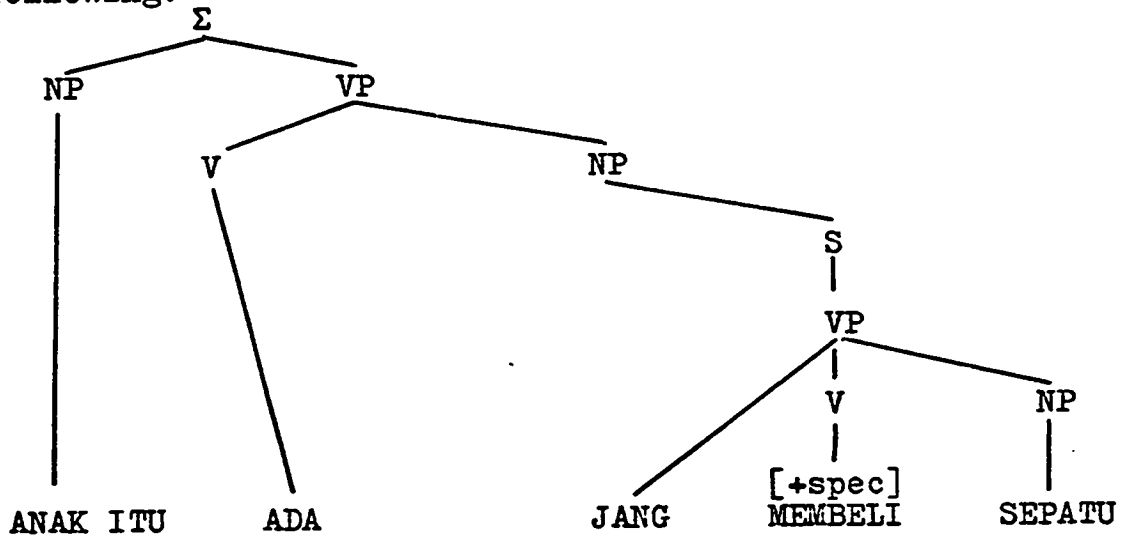
Let us start with FP-construction. First we generate an FP-existential as follows:



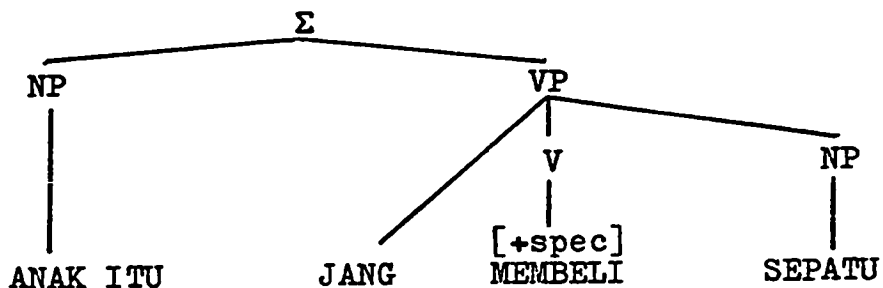
Relativization is applied, we get:



The head noun is the left-most [+spec], so it can be fronted. When the head noun has been fronted, we have the following:

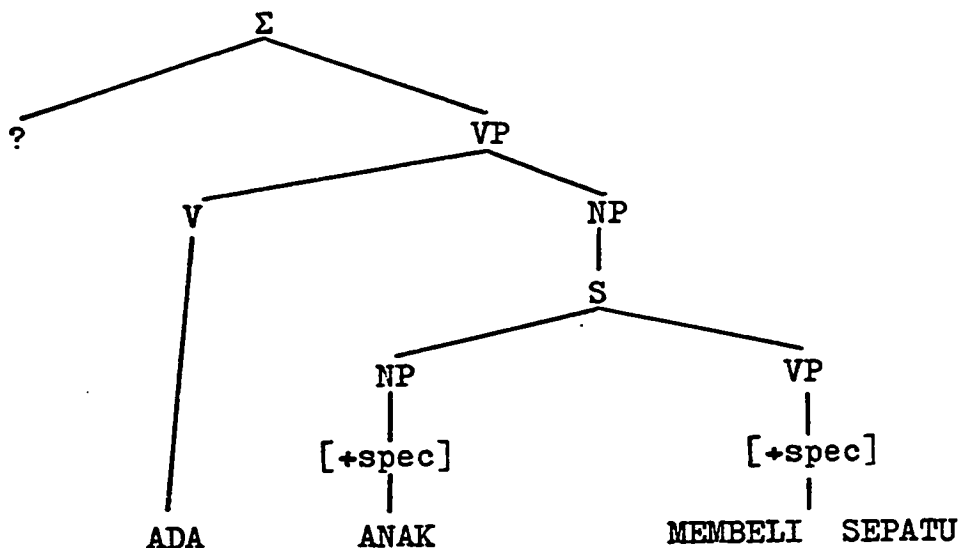


Then, NP, S. and ADA can be deleted, and we get:

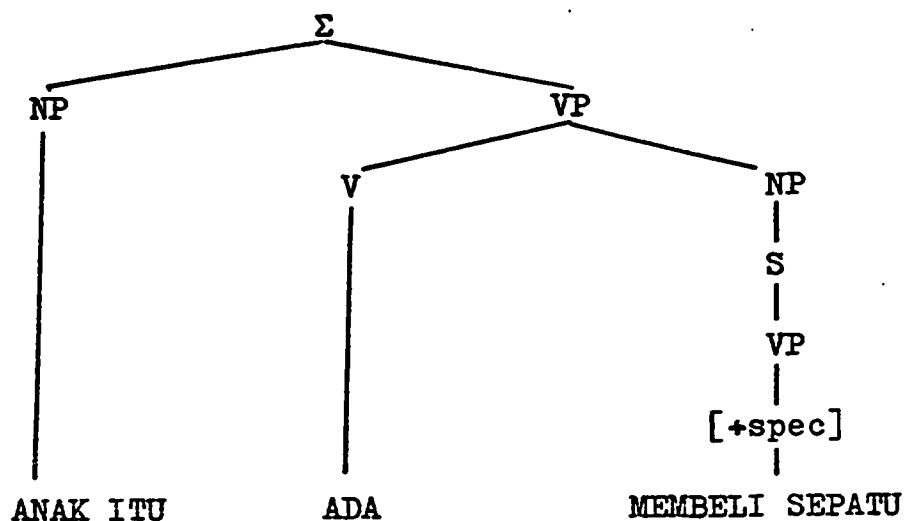


Note that MEMBELI SEPATU is not the left-most constituent, since JANG is more left than V - NP = MEMBELI SEPATU, and JANG can never meet the condition for fronting, i.e. JANG is not a root. So, the generation of sentences like (197) is blocked, properly.

Now, let us see what happens when we start with an SP-existential:



The subject of S is the left-most [+spec], so it is fronted, and we get:



Now, VP is the left-most [+spec], and it can be fronted, and after ADA deletion, we get the appropriate (195c).

8.2.2. Special triggered VP-focus: Some words like SADJA--"even" and PUN--"even too" trigger VP-focus. The presence of these words with a verb requires the verb to be focused. Consider the following sentences:

(201). ANAK ITU TIDAK DAPAT MENARI
 not can dance

---"The child can not dance."

(202). *ANAK ITU TIDAK DAPAT MENARI SADJA

(203). ANAK ITU MENARI SADJA TIDAK DAPAT

---"The child can't even dance."

(204). *ANAK ITU TIDAK DAPAT MENARIPUN

(205). ANAK ITU MENARIPUN TIDAK DAPAT

--"The child can't even dance either."

Words like these seem to dominate the verbs only rather than the entire sentence, so these words should be attached to VP in S rather than the VP under Σ . These words then have to be marked [+spec], and when they occur with [-spec] verb under S the [-spec]-verb is changed to [+spec] and thus fronting is obligatory. Horn (1969) and Fillmore (1965) discuss the presupposition of a sentence with even. Further comparison between the behavior of even in English and BI/JAV may be fruitful, but such a task is beyond the scope of the present work. What is being demonstrated in this section is simply that constraints like Q-constraint, Fronting-constraint, Copying constraint, etc. seem to be needed to derive the different types of foci.

8.3. Other Topicalized Constituents

In chapter 7, the derivation of TC-constructions whose topic is the deep subject or object has been presented. We shall now discuss other types of topics.

8.3.1. Topicalized VP: Topicalized VP is always in the form of nominalized VP, and this nominalized VP is used as a subject of SP-construction or the focus of FP-construction. The derivation of topicalized VP then is the same as the topicalization of subject or topic. Instead of the head

noun in the FP-existential, what we have to have is a head nominal, and similarly, instead of a noun as the subject of S, we have a nominal. Using the same rules to get TC with FP-comment and TC with SP-comments, we will get TC with nominalized VP as topic.

8.3.2. Topicalized Possessive Nouns: TC-constructions with possessive nouns as topic are the constructions which have the highest frequency of usage in BI/JAV. This kind of TC can occur in SP as well as in FP-constructions. For example:

(206). ANAK ITU, IBUNJA MEMBELI SEPATU
 mother-poss

--"That child, his mother bought shoes."

(207). ANAK ITU, IBUNJA JANG MEMBELI SEPATU

--"That child, HIS MOTHER bought shoes."

Before we look at the derivation of (206) and (207) let us look at the structure of NP with possessives. The possessive nouns in BI/JAV behave like modifiers and relative clauses. Consider the following possible constructions:

(208). a. [[IBU][ANAK]]
 mother child

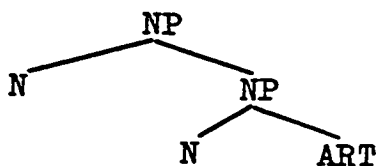
--"a mother of a child"

b. [[IBU][ANAK ITU]]

--"a mother of the child"

- c. [[[IBU][ANAK]] ITU]
 --"(I do not know how to translate this:)
 ?The child's mother"
- d. *[[IBU ITU][ANAK]]
 --"the mother of a child"
- e. *[[IBU ITU][ANAK ITU]]
 --"the mother of the child"
- f. *[[[IBU ITU][ANAK ITU]] ITU]
 --"?the mother of the child"

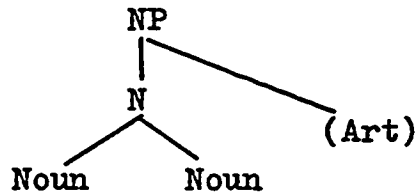
Note that the structure of NP-Possessives is not [NP][NP], because the first NP, the possessed, can not take an Art, as evidenced from (208) d, e, and f. The structure then has to be the one like N-Rel:



As shown from the above configuration, we can stack possessives indefinitely, since NP can be N - NP again. We can have something like: [MEDJA [IBU[ANAK[AJAH[.....]]]]

--"a table of a mother of
 a child of a father . . ."

However, since (208f) is also ill-formed, in contrast with (c), we also have a structure:

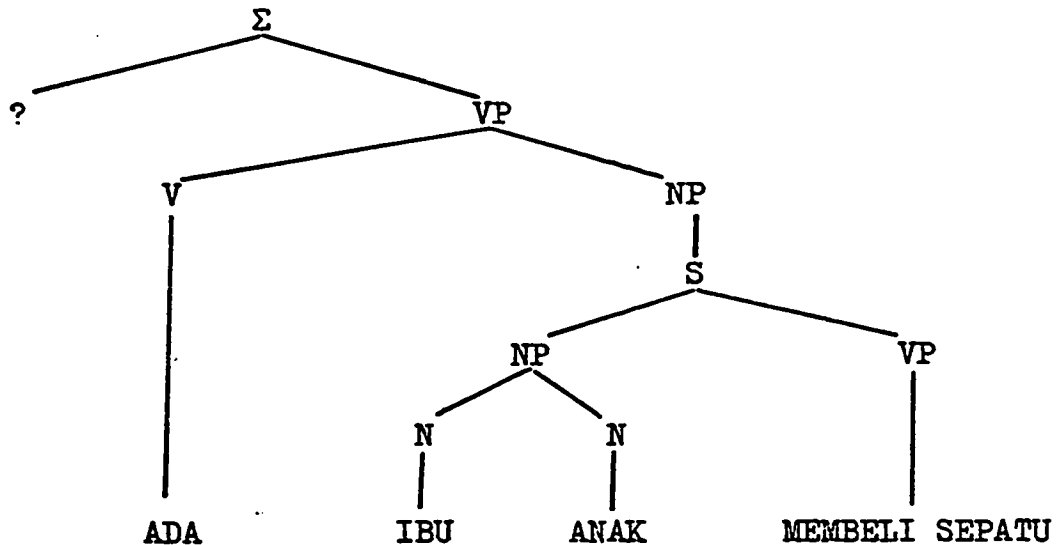


There are two important phenomena which should be kept in mind about these two structures of NP-Possessive:

(a). When ART is present, it can only "modify" either the second noun (i.e. the possessor) or the entire NP, never the first noun alone (i.e. the possessed noun).

(b). When the second noun contains ART, i.e. when the structure of NP-Possessive is the one shown on the previous page, the second noun is always [-anaph].

Let us look at the derivation of TC with SP-comment first:



Note that IBU is [-anaph;-spec] and it is the left-most constituent. Can IBU be fronted? The answer is no, because IBU can not take ART, so it can not be made [+anaph],

because recall that the possessed noun can never be [+anaph] unless both the possessed and the possessor are [+anaph]. However, the possessor ANAK is always [+anaph] when only this noun has ART, so ANAK [+anaph] (i.e. where IBU is [-anaph]) can be copied because it is the left-most [+anaph]. When ANAK ITU is copied and possessive pronominalization is applied, we get:

(206). ANAK ITU, IBUNJA MEMBELI SEPATU

--"That child, his mother bought shoes."

When the structure of the NP-Poss is [[[Noun][Noun]_N ART]]] and both are [+spec], then the entire NP is fronted, since it is the left-most [+spec] which can take ART, and we get an SP-construction with NP-Poss subject:

(209). IBU ANAK ITU MEMBELI SEPATU

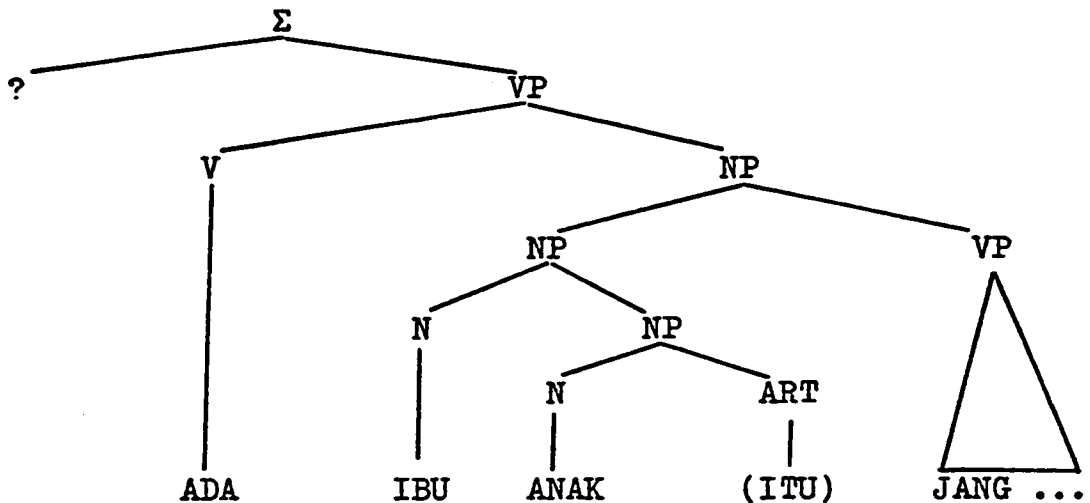
--"The child's mother bought shoes."

When the structure of NP-Poss is as above, this NP is also qualified for copying, since it is the left-most [+spec]. After copying, anaphoria, deletion of ADA, and possessive pronominalization, we get (210):

(210). IBU ANAK ITU, DIA MEMBELI SEPATU

--"That child's mother, she bought shoes."

The derivation for different foci with possessive nouns is very similar:



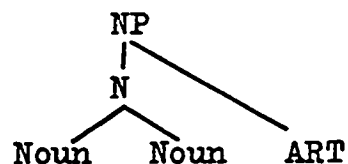
Assuming relativization has been applied, we have the above form.

When ANAK is [+spec] it can be copied and after anaphora, deletion of ADA, and possessive pronominalization we get:

(207). ANAK ITU, IBUNJA JANG MEMBELI SEPATU

--"That child, HIS MOTHER bought shoes."

When the NP-Poss is



then the entire

NP can be [+spec] and it can be fronted, and we get:

(211). IBU ANAK ITU JANG MEMBELI SEPATU

--"THE CHILD'S MOTHER bought shoes."

When NP is [+spec], this NP can also be copied. And after deletion of ADA and possessive pronominalization, we get:

(212). IBU ANAK ITU, DIA JANG MEMBELI SEPATU

--"That child's mother, SHE bought shoes."

To summarize, with NP-Poss we can get the following sentences:

(a). SP-construction:

(209). IBU ANAK ITU MEMBELI SEPATU

--"The child's mother bought shoes."

(b). FP-construction:

(211). IBU ANAK ITU JANG MEMBELI SEPATU

--"THE CHILD'S MOTHER bought shoes."

(c). TC-construction:

(210). IBU ANAK ITU, DIA MEMBELI SEPATU

--That child's mother, she bought shoes."

(212). IBU ANAK ITU, DIA JANG MEMBELI SEPATU

--"That child's mother, SHE bought shoes."

(206). ANAK ITU, IBUNJA MEMBELI SEPATU

--"That child, his mother bought shoes."

(207). ANAK ITU, IBUNJA JANG MEMBELI SEPATU

--"That child, HIS MOTHER bought shoes."

8.4. Yes/No-questions

The following sentences show that the domain of Yes/No-questions is Σ . In other words, Q, which is realized as KAH, should be attached to Σ rather than any lower constituents:

(213). [[ADA ANAK MEMBELI SEPATU]-KAH?] Σ _{SP}

--"Is there a child buying shoes?"

(214). [[ADA ANAK JANG MEMBELI SEPATU]-KAH?] Σ _{FP}

--"Is there a child who bought shoes?"

(215). [[ANAK ITU MEMBELI SEPATU] Σ -KAH?] Σ _{SP}

--"Did the child buy shoes?"

(216). [[ANAK ITU JANG MEMBELI SEPATU] Σ -KAH?] Σ _{-FP}

--"Was it the child who bought shoes?"

(217). *[[ANAK ITU, DIA MEMBELI SEPATU] Σ -KAH?] Σ _{TC}

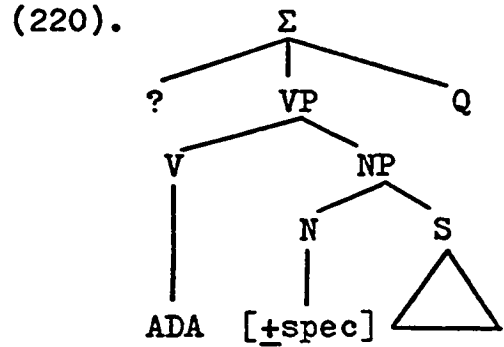
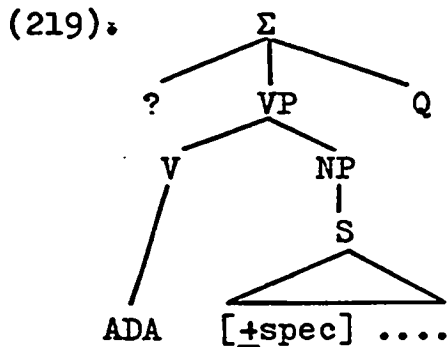
--"*Is it the child, did he buy shoes?"

(218). *[[ANAK ITU, DIA JANG MEMBELI SEPATU] Σ -KAH?] Σ _{TC}

--"*Is it the child, was it he who bought shoes?"

Furthermore, note that the constraint for Q is still the same, i.e. the NP of Σ has to be [-anaph], which is why

(217) and (218) above are ungrammatical, because the NP of Σ contains [+anaph]. The deep structure for (213) and (215) is (219) below, and the deep structure for (214) and (216) is (220):



When (219) contains [-spec], Yes/No-questions with Σ_{SP} are generated, and when it contains [+spec], Yes/No questions in SP are generated. When (220) contains [-spec], Yes/No questions in Σ_{FP} are generated, and when it contains [+spec], Yes/No-questions in FP-construction are generated.

In addition, instead of adding KAH, (213)-(216) can also be expressed by adding APA-KAH in front of the sentences. I will assume at the moment that to generate Yes/No-questions with APA-KAH instead of KAH at the end, the subject of Σ is a proform APA.

8.5. Semi-Yes/No-Questions

As stated before, certain lower constituents can contain Yes/No-questions. Interrogative sentences of this type are referred to as semi-yes/no-questions. Observe the following:

(221). *ADA ANAK-KAH MEMBELI SEPATU?

(222). *ADA ANAK-KAH JANG MEMBELI SEPATU?

(223). *ANAK ITU-KAH MEMBELI SEPATU?

--"*Is it the child bought shoes?"

(224). ANAK ITU-KAH JANG MEMBELI SEPATU?

--"Is it the child who bought shoes?"

(225). *ANAK ITU-KAH, DIA MEMBELI SEPATU?

--"*Is it the child, he bought shoes?"

(226). *ANAK ITU, DIA-KAH MEMBELI SEPATU?

--"*The child, is it he bought shoes?"

(227). ANAK ITU, DIA-KAH JANG MEMBELI SEPATU?

--"The child, is it he/him who bought shoes?"

Notice that the realization of Q into KAH follows the same Q constraint. (221) and (222) are ungrammatical because ANAK in both sentences is [-spec]; (223) is ungrammatical because ANAK is a constituent of an embedded S; (224) is grammatical, because ANAK is [-anaph;-spec] and it is not a constituent of an embedded S; (225) is ungrammatical because ANAK is a constituent of an embedded S; (226) is ungrammatical because DIA is a constituent of an embedded S. After copying, anaphora, and pronominalization, DIA in (227) is no longer a constituent of an embedded S, so the condition on Q-constraint is met.

This last section demonstrates the generality of the condition on Q-constraint, which further indicates that the blocking of WH-subject questions in terms of this condition is correct.

CHAPTER 9

CONCLUSION

This work starts with an observation of the relationships among three major constructions in BI/JAV: (a) The Subject-Predicate Constructions, (b) The Focus-Presupposition Constructions, and (c) The Topic-Comment Constructions. Among these three, (b) is somewhat a new label that has not been used before to label a type of sentence construction. The notion of focus, however, has been used by many linguists before. (b) is essentially referring to sentences which have a focus.

As a working hypothesis, the analysis starts with the assumption that the base component of a grammar should supply all the necessary semantic information for a semantic interpretation of the sentences in the language, which means that the transformational rules which map base structures into their surface structures should not add any semantic information. Note that this is not necessarily saying that one should not try to give the analysis without using such an assumption.

One of the striking differences among these three constructions is their susceptibility to certain WH-questions.

One phenomenon which, semantically speaking, seems illogical occurs in BI/JAV, namely the fact that the subject of a sentence can not be questioned, but the focus can. It seems natural that the topic of a sentence can not be questioned. This leads us to the observation of the behavior of the subject of a sentence. Since the subject of a sentence is mostly a noun phrase, the observation of the properties of articles is inevitable.

In Chapter 3, the different forms of the nouns and pronouns were described. It was suggested that the features [anaphoric] and [specific] could be used to characterize these different forms. It was also observed that there is a principal difference between the semantic interpretations of the overtly marked nouns and pronouns in BI/JAV and English (I am indebted to Prof. Partee for this observation).

In Chapter 4, we discovered that a subject of a sentence must not be [-anaph;-spec]. We found that existential sentences express meaning of a sentence with [-anaph;-spec]-subject, and we also learned that there are two kinds of existential sentences in BI/JAV; one consists of a verb-phrase with the existential verb ADA followed by a relativized noun, and the other ADA followed by a sentence complement. The former has a structure which looks very much like an FP-construction and the latter an SP-construction. Since proforms are also generated in existentials, and since we

accept Katz-Postal claim about the relationships between interrogatives with declaratives containing proforms like someone, we looked for the explanation why the pro-form in SP-existentials can not be made into a question word. We found that there is a general constraint in interrogatives, namely that elements in the embedded sentence can not be questioned. Applying this general constraint to the two existentials with proforms will block the generation of WH-subject question and allow WH-focus question. So, to properly generate the existing interrogatives, interrogatives can be generated from existential sentences.

In Chapter 5, it was argued that the same rules to derive interrogative sentences can also be used to derive FP-constructions, and it was also shown that there are other cases which support the derivation of FP-constructions from existential sentences. Such analysis does not require the assumption that a formative like Focus is needed in the underlying forms of FP-constructions.

In Chapter 6, SP-constructions were also claimed to be derived from existential sentences.

In Chapter 7, it was shown that the subject or the focus of the comment in TC-constructions is the antecedent of its topic, and it was suggested that TC-constructions be derived from the same existential sentences which underly SP- and FP-constructions by applying an optional,

non-meaning-preserving transformation, i.e. copying transformation. Thus, as far as syntactical evidence gathered so far is concerned, it is very difficult to maintain the meaning-preserving hypothesis, which is the working hypothesis of the present work, to account for the phenomena observed in TC-constructions.

In Chapter 8, it was shown that the same rules which are used to generate the sentences whose surface subject, focus, or topic, is the subject or object of the embedded sentence in the existential sentences, can also be used to generate other types as well.

The evidence which supports the analysis given in this work so far seems to be very convincing. However, the data observed are limited to a very small portion of the cases in the language. It still remains to be seen whether, given more complicated constructions, the analysis can still account for these other cases in a natural way.

Prof. A. Teeuw (1961, p. 66) refers to the syntactical study of Bahasa Indonesia as "this virgin field." It still is.

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