

CEBUANO SUBJECTS IN TWO FRAMEWORKS

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ABSTRACT

Various investigators have proposed that verb-containing sentences in Philippine languages be analyzed as having no subject, as having the Actor as the subject, or as having the nominative nominal as the subject. In this thesis, I examine data from a Philippine language, Cebuano, to see what nominal, if any, would be analyzed as the subject in two theoretical frameworks: transformational grammar and relational grammar.

The thesis consists of four parts. In the first, I present basic data and summarize the views of earlier investigators.

In the second, I argue that according to the hypotheses of relational grammar regarding assignment of initial grammatical relations, reflexivization, coreferential nominal deletions, quantifier float, and line-drawing, the Actor is the initial Subject and the nominative nominal is the final Subject. Next I discuss the rules required to relate the initial and final Subjects. Finally I show how the analysis would be extended to data from causative constructions and various ascension rules.

In the third part of the thesis, I examine the consequences for the analysis of subjects in Cebuano of the definition of "subject-of", the Condition on Strict Subcategorization, the Sentential Subject Constraint, and the Specified Subject Condition (as modified by Fiengo and Lasnik, 1976). I reach the following conclusions:

1. If the definition of "subject of" is retained, Cebuano should be analyzed as having no subject. The conditions are compatible with such an analysis.

2. If the definition of "subject of" is abandoned, the Actor cannot be analyzed as the subject without violating the Modified Specified Subject Condition. If a convention on interpreting the condition is adopted, the nominative nominal can be analyzed as the subject without violating the Modified Specified Subject Condition. Analyzing the nominative nominal as the subject may allow one to invoke the MSSC to explain a certain restriction on topicalization and relativization, which would support abandoning the definition of "subject of" and analyzing the nominative nominal as subject, but there are some difficulties with the proposal.

In Part IV, I try to establish that the question of whether relational grammar is a notational variant of transformational grammar is not trivial. Next, looking at generalizations about subjects recently proposed, I argue that they confound different factors. Although they may be heuristically useful, they should not be taken as authorities dictating the analysis of subjects.

Most of the data in this thesis is well-known to investigators, but some new data will be found in Part II, § 7, and the data in II.6. is brought together for the first time.

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PART I: VOICE IN PHILIPPINE LANGUAGES

0. Background

Cebuano is a Malayo-Polynesian language spoken by between 7 and 10 million people in the Philippines, chiefly in the middle islands of the archipelago, the Visayas, but also in central and northern Mindanao.¹ Philippine languages are noted for their rich voice systems, and Cebuano is no exception. But what "voice" means when applied to Philippine languages is unclear and disputed. Before the difficulty in determining the meaning of "voice" can be appreciated, the voice system must be presented.

1. The voice system in Cebuano

1.1. Basic structure of verb-containing sentences

Like other Philippine languages, Cebuano is a verb-initial language. A sentence consists basically of a verb followed by a string of noun phrases (NP's).

The verb consists of a stem plus affixes which show tense (real or unreal), aspect (DURative, POTential, and VOLitional), and voice (ACTive, OBJective, LOCative, and INSTRumental).²

According to Wolff (1966), the real tense is used for present or past action. The unreal is used for habitual actions, future actions, negated past actions, and imperatives. The LOC and OBJ voices have two separate forms for the unreal tense. One form is used for future and

habitual actions. The other form, which Wolff calls the "subjunctive", is used with negated past actions and imperatives. The ACT and INS voices do not have distinct subjunctive forms. With several voices and aspects, m- is the sign of the unreal and n- is the sign of the real. In other voices and aspects, no distinct tense morpheme can be distinguished.

The durative aspect is used when an action is conceived of as extending over time. It is always used with certain verbs (bayad, 'pay', for example). It is also used in the unreal tense to express what should be done. The durative is marked principally in the ACT voice. The active durative affixes are mag- for the unreal and nag- for the real. In formal writing and speeches, but never in common speech, the affixes maga- and naga- are used. (The mag- was previously a participial prefix and maga-/naga- was the finite form. (Blake, 1904) Now, mag-, which has picked up a real tense partner nag-, is the only finite form found in common speech for the durative aspect of the active voice.) Durative aspect is not specifically marked in the non-active voices in common speech. In formal writing, it may be indicated by inserting the infix -na- after the prefix gi- in the real tense, inserting -ga- after the INS prefix i-, and adding pag(a)- to the verb stem elsewhere.

A durative verb may also be distributive. The distributive is used when an action is performed more than once, either by being performed separately by several actors or by being repeated. The distributive prefix pang(a)- is added to the verb stem to form a new stem. The ACT voice is formed by replacing the p by m for the unreal tense and by n for the real. Other affixes are added to the new stem with pang-.

In addition, in the ACT voice only, plurality of actors may be indicated by adding the infix -an- to the durative affixes, giving manag- for the unreal and nanag- for the real. Plurality is indicated only in formal writing and speech.

The volitional and potential aspects are used when an action is not considered as extending over time. When used with a verb whose action inherently extends over time, the volitional aspect indicates the beginning of the action (ex. dagan, 'run'; midagan, 'began to run, ran off'). The potential is sometimes used with such verbs to stress that the action has been completed (ex. sulat, 'write'; nakasulat, '(had) finished writing').

The volitional is used for habitual actions and for actions which the actor willingly or deliberately undertook. The potential, on the contrary, is used of accidental events, when the actor did not intend to perform the action or when the action had unexpected results. The potential is also used to express ability of the actor to perform an action or the possibility that he might do so.

In the ACT voice, the volitional affix is mo- in the unreal and mi-, ni-, ming-, or ning- in the real. There seems to be no difference between the different real prefixes. The real ACT volitional is the one affix in which n- and m- do not mark real and unreal tense. In the OBJ voice, the real affix is gi-; the unreal, -on; and the subjunctive, -a. (The gi- might be taken as the non-potential real non-active marker.) The real LOC affix is gi-...-an; the unreal, -an; and the subjunctive, -i. The real INS affix is gi-, and the unreal/subjunctive is i-. The fact that the real INS affix and the real OBJ affix are the same discourages the use of the INS voice in the real tense and forms a pitfall for

investigators. To avoid this pitfall, I sometimes use the unreal tense in examples in which the real tense would be a happier choice.

The sign of the potential aspect is ka-, added to the verb stem. The ACT prefixes are maka- and naka-. The OBJ voice is formed by replacing the k by m for the unreal and by n for the real, resulting in the affixes ma- and na-. For the subjunctive, the usual suffix -a is used in conjunction with the prefix ma-. The LOC also uses ma- and na-, adding -an for the non-subjunctive and -i for the subjunctive. The INS may use either na- for the real and ma- for the unreal and subjunctive, or gika- for the real and ika- elsewhere.

The prefix ka- is also used to form stative verbs (ex. katulog, 'sleep'; kahadlok, 'be afraid'). Such verbs have the prefix ma- for the unreal ACT and the prefix na- for the real. The usual LOC and INS affixes are added to the stem with ka-. (Some writers consider ma- and na- the potential OBJ prefixes with these verbs, claiming that the verbs have no ACT voice. If this analysis were correct, the LOC affixes would be the potential affixes ma-...-an and na-...-an. Instead, the affixes gi-...-an and -an are found. It seems to me that the coincidence of forms is a matter of homophony.)

In addition to these regular affixes, there are special derivational affixes used to form verbs with altered meanings. Examples are pakig, which indicates that the actor initiates the action (ex. sumbag, 'hit with the fist'; pakigsumbag, 'pick a fist-fight with'); mag-/nag- plus stress shift toward the front, which is used when actors do something together; and anay plus stress shift to the penult, which is used for reciprocal or alternating action (sumbaganay, 'to box, exchange blows'; sulti, 'to speak', sultihanay, 'to tell stories to each other or in turn').

The verb affixes are summarized in the table below.

Table 1. Verb Affixes

1. Active voice

Aspect	Real	Unreal
Durative	nag(a)-	mag(a)-
Volitional	ni-/mi-/ning-	mo-
Potential	ming- naka-	maka-

2. Objective voice

Aspect	Real	Unreal	Subjunctive.
Durative	gi(na)-	(pag(a)-)...-on	(pag(a))-...-a
Volitional	gi-	-on	-a
Potential	na-	ma-	ma-...(-a)

3. Locative voice

Aspect	Real	Unreal	Subjunctive
Durative	gi(na)-...-an	(pag(a)-)...-an	(pag(a)-)...-i
Volitional	gi-...-an	-an	-i
Potential	na-...-an	ma-...-an	ma-...-i

4. Instrumental voice

Aspect	Real	Unreal	Subjunctive
Durative	gi(pag(a))-	i(pag)-/ i(ga)-	i(pag)-
Volitional	gi-	i-	i-
Potential	gika-/na-	ika-/ma-	ika-/ma-

The parts of affixes in parentheses are rare except in formal writing.

The verb is followed by a string of NP's. Each NP, except for pronouns, is preceded by a case-marking particle. These particles are given in table 2 below. ³

Table 2. NP case-marking particles

		Nominative	Genitive	Oblique
Personal	name	si	ni	kang
Other NP	+definite	ang	sa	sa
	-definite	y/ø		ug

(Note that the genitive sa differs from the oblique sa in that it occurs in the same environments as ni rather than kang and in that it is not marked for definiteness.)

Pronouns have different forms for the different cases, as shown in table 3 on the next page.

Table 3. Pronouns

1. Personal Pronouns

Person	Nominative	Genitive		Oblique
		Postposed	Preposed	
Singular				
1	ako (ko)	nako' (ko')	ako'	kanako' (nako')
2	ikaw (ka)	nimo (mo)	imo	kanimo (nimo)
3	siya	niya	iya	kaniya (niya)
Plural				
1 (excl)	kami (mi)	namo' (mo')	amo'	kanamo' (namo')
1 (incl)	kita (ta)	nato' (to')	ato'	kanato' (nato')
2	kamo (mo)	ninyo	inyo	kaninyo (ninyo)
3	sila	nila	ila	kanila (nila)

The forms in () are short forms. Ka is obligatorily used instead of ikaw except when ikaw is somehow separated from the verb. Use of the other short forms is optional.

Bunye and Yap (1971) do not separate the postposed genitive forms from the short forms of the oblique pronouns, which are homophonous with them. However, the forms do seem to be different since the postposed genitive forms can always be replaced by the preposed genitive forms, while the short forms of the oblique pronouns cannot. Nor can the short forms of the postposed genitive be used in place of the short forms of the oblique pronouns.

2. Demonstratives

	Nominative	Genitive/Oblique
Near me, not near you	kiri (ri)	ni'iri
Near us	kini (ni)	ni'ini
Near you, not near me	kana' (na')	ni'ana'
Not near us	kadto (to)	ni'adto

The category called "voice" specifies the relationship between the verb and the nominative NP. Some students of Philippine languages consider the relationship between the verb and the nominative NP, the relationship marked by voice, to be a semantic relation. Schachter and Otanes (1972), for example, speak of active affixes "characteristically" forming verbs that occur with nominative NP's that express the performer of the action.⁴ The nominative NP with a verb in the objective voice characteristically expresses the goal of the action. Similarly, the other voices express different semantic relationships between the verb and the nominative NP. Other students follow McKaughan (1963) in holding that voice affixes

"mark syntactic relations" between the verb and the nominative NP. Still others (ex. Barnard and Foster, 1954) never say what sort of relation they mean. In Part II, the relation between the verb and the nominative NP which is marked by voice will be considered a syntactic relation. In Part III, it will be unnecessary to take a position on the type of relationship. The reason for the difference will become clear within the two parts.

1.2. Active sentences

In an active sentence, the nominative NP corresponds to the subject in an active sentence in English.

1. Magluto' ang babaye ug bugas sa lata.
ACT cook NOM woman OBL rice OBL can
The woman will cook rice in the can.

The nominative NP in an active sentence is commonly called the Actor. This name is unfortunate in having semantic overtones. As sentence 2 shows, the Actor need not be an agent semantically.

2. Nakadawat si Fred ug libro gikan kang Tomas.
ACT receive NOM OBL book from OBL
Fred received a book from Tomas.

Moreover, the Actor may be an abstraction, as in sentence 3.

3. Misantup sa iyang bu'tut ang usa ka sayun nga pa'agi.
ACT enter OBL his LN mind NOM one LN easy LN way
An easy way (of doing it) came to his mind.

Despite the unfortunate semantic overtones, I will retain the term 'Actor' for the NP which corresponds to the nominative NP in an active sentence, even in a non-active sentence or in a nominal.

1.3. Non-active sentences

In non-active sentences, the Actor is in the genitive case. The nominative NP follows the Actor, whatever the order in the active sentence was.

1.3.1. Objective sentences

In objective sentences, the nominative NP corresponds to an underlying direct object in English. The objective sentence corresponding to 1 is 4.

4. Luto'on sa babaye ang bugas sa lata.
cook OBJ GEN woman NOM rice OBL can
The rice will be cooked by the woman in the can.

That which is cooked (bugas, 'rice') is now nominative, while the Actor babaye is genitive.

1.3.2. Locative sentences

The locative voice is used when the nominative NP gives the location or direction of an action. Corresponding to 1, we have 5 with lata (can), the place the rice will be cooked, in the nominative case.

(In this sentence and others in which an English translation with the NP translating the nominative NP as a subject would be ungrammatical, I will simply underline the NP which translates the nominative NP, without changing the voice.)

5. Luto'an sa babaye ang lata ug bugas.
cook LOC GEN woman NOM can OBL rice
The woman will cook rice in the can.

As before, the Actor babaye is in the genitive case. Comparison of sentences 1 and 5 shows that the word order differs. In 1, sa lata follows ug bugas, while in 5 ang lata directly follows the Actor and precedes bugas.

The locative voice is also used when the nominative NP corresponds to an underlying indirect object in English. Sentence 6.a. is an active sentence with the indirect object Perla in the oblique case.

- 6.a. Mosulat si Inday ug sulat kang Perla.
ACT write NOM OBL letter OBL
Inday will write a letter to Perla.

In 6.b., the corresponding locative sentence, Perla is nominative and follows the genitive Actor Inday.

- 6.b. Sulatan ni Inday si Perla ug sulat.
 write LOC GEN NOM OBL letter
Perla will be written a letter by Inday.

With verbs which do not take an indirect object, the locative voice may generally be used when the nominative NP corresponds to the beneficiary in an active sentence. In 7.a., an active sentence, the beneficiary appears in the PP para kang Pedro (for Pedro).

- 7.a. Moluto' si Maria ug kalamay para kang Pedro.
 ACT cook NOM OBL brown-sugar candy for OBL
Maria will cook candy for Pedro.

In the corresponding locative sentence 7.b., Pedro is the nominative NP and follows the Actor Maria.

- 7.b. Luto'an ni Maria si Pedro ug kalamay.
 cook LOC GEN NOM OBL candy
Pedro will be cooked candy by Maria.

The fact that the nominative NP may underlyingly have any one of three relationships to the verb sometimes gives rise to ambiguity. For example, according to Wolff (1966), 8.a. may correspond either to 8.b., in which bata' is a source, or to 8.c., in which bata' is the beneficiary.⁵

- 8.a. Gipalitan ni Nanay ang bata' ug dulsi.
 buy LOC GEN NOM child OBL candy
 Momma bought candy for/from the child.
- b. Nagpalit si Nanay ug dulsi gikan sa bata'.
 ACT buy NOM OBL candy from OBL child
Momma bought candy from the child.
- c. Nagpalit si Nanay ug dulsi para sa bata'.
 ACT buy NOM OBL candy for OBL child
Momma bought candy for the child.

The locative voice has two additional uses. First, the nominative NP may refer to something indirectly affected by the action of the verb, as shown in the following examples from Wolff (1966, 8A4).

- 9.a. Tingalig magabhi'an ta.
 perhaps CONJ night LOC we-inclusive-NOM
 Perhaps we'll be benighted.

- 9.b. Gimahalan si Juan sa pliti ngadto sa Ormok.
 dear LOC NOM OBL fare thither OBL
 Juan considered the fare to Ormok expensive.

The nominative NP's in these sentences seem rather like on phrases in sentences such as "The dog went and ate the steak on me." They may be analogous to "datives of interest" or "ethical datives".

The locative voice may also be used when an action is accidental. The nominative NP in such accidental locative sentences may correspond to an underlying direct object or to an underlying locative. In 10.a., the seeing may be by chance or on purpose; in 10.b., it is by chance.

- 10.a. Gikita' ko' siya sa simbahan.
 OBJ see I-GEN he-NOM OBL church
 He was seen by me at church.
- b. Kit-an ko' siya sa simbahan.
 see LOC I-GEN he-NOM OBL church
 He was seen by me at church (by chance).

In these sentences, the locative voice is no longer being used to mark the relationship of the nominative NP to the verb. This use of the locative voice is also unusual in that the verb is in the unreal tense, regardless of the time of the action. Because of these peculiarities, I believe that the voice is taking over some other function in these accidental locatives, and I exclude them from my discussion.

1.3.3. Instrumental sentences

The instrumental voice may indicate that the nominative NP is an instrument. In 11.a., the instrument lapis is found in the prepositional phrase (or perhaps absolute phrase?) gigamit ang lapis (a pencil being used? with a pencil?). (Whether a preposition or not, gigamit is deverbial and governs the NOM case.)

- 11.a. Mosulat si Linda ug sulat gigamit ang lapis.
ACT write NOM OBL letter being used NOM pencil
Linda will write a letter with the pencil.

In 11.b., ang lapis has become the nominative NP of the whole sentence.

- 11.b. Isulat ni Linda ang lapis ug sulat.
INS write GEN NOM pencil OBL letter
Linda will write a letter with the pencil.

Like the locative voice, the instrumental voice is used to indicate other relations as well. It, too, is used with benefactives, chiefly in requests, to which it imparts a high degree of politeness.

- 12.a. Motawag ka ug taksi para sa ako'.
ACT call you-NOM OBL taxi for OBL I-GEN
Call a taxi for me.
- b. Itawag ra mo ako ug taksi.
INS call only you-GEN I-NOM OBL taxi
Please call me a taxi.

The instrumental voice may be used when the nominative NP gives the suitable time for an action.

- 13.a. Mogikan ang barko sa alas siyis.
ACT from NOM boat OBL hour six
The ship will leave at 6 o'clock.
- b. Igikan sa barko ang alas siyis.
INS from GEN boat NOM hour six
The ship should leave at 6 o'clock.

This use is rare, except in relative clauses. According to Wolff (1966, 10A4, p. 385), only the unreal tense is found in temporal instrumental sentences.

Finally, the instrumental voice is used when the nominative NP refers to something which is transferred or conveyed from one person or place to another.

- 14.a. Mosulod ang lalaki sa mga butang sa sakyanan.
ACT inside NOM man OBL pl thing OBL vehicle
The man will put the things into the vehicle.

- 14.b. Isulod sa lalaki ang mga butang sa sakyanan.
 INS inside GEN man NOM pl thing OBL vehicle
 The things will be put into the vehicle by the man.

- 1.4. Difficulties in determining the relationship of the nominative NP to the verb

This last use of the instrumental voice presents a problem. Take two verbs in different languages with the same meaning. The verbs and their dependent NP's will describe the same situation. Semantically, the NP's will be related to the verb in the same way in both instances. One might expect the NP's to have the same syntactic relations to the verb as well, at least underlyingly. Indeed, Postal and Perlmutter (forthcoming) have explicitly hypothesized that they will. Those working in case grammar and generative semanticists seem to accept the same hypothesis implicitly in their search for universal syntactic cases corresponding to various semantic relationships.

Now, in English and many other languages, the NP referring to the thing conveyed is the direct object of the verb. In Cebuano, on the other hand, it acts like an instrument as far as voice marking is concerned.

A precisely similar case is found with certain verbs (ex. kapot, 'grab'; hinumdum, 'remember'; kalimot, 'forget'; alinggat, 'notice') which take the locative voice with what we would expect to be underlying direct objects. For example, the sentences corresponding to the active sentence 15.a. and having bag as the nominative NP is the locative sentence 15.b., not the objective sentence 15.c.

- 15.a. Ningkapot ang kawatan sa akong bag.
 ACT grab NOM thief OBL my LN bag
 The thief grabbed my bag.

- b. Gikaptan sa kawatan ang akong bag.
 grab LOC GEN thief NOM my LN bag
 My bag was grabbed by the thief.

- 15.c. *Gikapot sa kawatan ang akong bag.
OBJ grab GEN thief NOM my LN bag
My bag was grabbed by the thief.

Several questions arise. First, do the voice affixes reflect the syntactic relations of the nominative NP to the verb? If so, do they reflect underlying or surface relations? Answering these questions differently gives at least four possible analyses.

1. The meanings of the verbs used to describe the same situation may differ slightly. What we translate as "put X into Y" might really mean "put into Y with X." Hinumdum, glossed as "remember", might really mean to find one's way in the mind, as its derivation from dumdum (to find one's way to) suggests. To determine whether such differences exist would require subtle psychological tests far beyond my abilities, if it could be determined at all.

2. The hypothesis that two verbs with the same meaning have the same set of syntactic relations to their NP dependents may be wrong. If so, the voice might accurately reflect the syntactic role of the nominative NP. The NP referring to the thing conveyed will then be syntactically an instrument of the verb of conveying, not a direct object. The rules relating syntactic and semantic relationships will state that the syntactic instrument with verbs of conveying is semantically the thing conveyed. Similarly, with certain verbs, a syntactic locative will correspond to a semantic object.

3. The hypothesis that two verbs with the same meaning have the same set of syntactic relations to their NP dependents may be correct, but the relation of the NP to the verb may be altered. For example, bag may start out as the direct object of kapot in 15.b. but somehow be changed

into a locative or an indirect object, leading the verb to be put into the locative voice.

4. The significance of the verb's voice affixes may "shift," as proposed by Wolff (1966), Kess (1967), Kerr (1965) and others. With verbs of conveying, the instrumental voice signals a direct object rather than an instrument. Similarly, with kapot (grab), alinggat (notice), and so on, the locative affixes signal a direct object rather than a locative. To look at the same thing another way, the verb is in the objective voice, but some verbs use affixes which usually belong to another affix group to indicate objective voice.

The same problem is encountered in languages rich in syntactic cases when a verb governs an unusual case. Data from Russian suggest that either the third or the fourth possibility is correct.

In Russian, the direct object of an affirmative sentence is generally in the accusative case (ACC).

16. Ja čitaju knigu.
I-NOM read-1-sg book-ACC
I am reading a book.

However, with some verbs, what would be expected to be a direct object is in some other case. For example, rukovodit' (lead) governs the instrumental case.

17. On dolgo rukovodil partijej.
he-NOM long led-M-sg party-INS
He led the party for a long time.

There is an argument that partijej is the direct object of rukovodil at some stage. Chvany (1975) shows that conjunction-reduction cannot apply to reduce a conjunct in a given case when the roles of the conjuncts in the sentence differ. In 18.a., mne is an indirect object.

- 18.a. Mne skazali o sobake.
I-DAT told-pl about dog-LOC
They told me about the dog.

In 18.b., according to Chvany's arguments, mne is the surface subject.

- 18.b. Mne žal' jejo.
I-DAT pity her-ACC
I am sorry for her.

When 18.a. and 18.b. are conjoined, mne cannot be reduced.

- 18.c. *Mne skazali o sobake i žal' jejo.
I-DAT told-pl about dog-LOC and pity her-ACC
They told me about the dog and (I) am sorry for her.

Only the unreduced form is possible.

- 18.d. Mne skazali o sobake i mne žal' jejo.
I-DAT told-pl about dog-LOC and I-DAT pity her-ACC
They told me about the dog, and I am sorry for her.

Now, suppose we conjoin 17 with 19, which has a normal accusative object partiju.

19. On sozdal partiju.
he-NOM created party-ACC
He created the party.

Reduction can occur, giving 20.

20. On sozdal i dolgo rukovodil partijej.
he-NOM created-M-sg and long led-M-sg party-INS
He created and long led the party.

If Chvany's restriction holds of direct objects, then partijej is the direct object of rukovodil at some point. The direct object's unusual case, then, is an instance of "shifted" meaning of the instrumental case or else partija is the direct object when conjunction-reduction occurs but not when case marking applies.

In Part II, both possibilities will be discussed for the analogous unexpected voice markings in Cebuano.

2. Subject or topic

The question of how underlying syntactic relations are to be determined is just one of the unresolved questions about the voice system in Cebuano and other Philippine languages. The nature of the correspondence between the verb and the nominative NP is also debated. What sort of a correspondence is "voice" in Philippine languages?

Before we try to answer this question, let us consider what is usually meant by "voice" in discussions of other languages.

2.1. Voice in general

In English, the difference between 21.a. and 21.b. is described as a difference in voice.

- 21.a. Fran baked a chocolate cake.
- b. A chocolate cake was baked by Fran.

In traditional grammars, it was commonly said that the direct object had become the subject and the verb had been put into the passive voice. Voice, then, refers to the mapping between the NP dependents of a verb and surface grammatical relations. Verbal voice refers to mappings which are indicated by changes in the verb morphology. The term "voice" may be limited to the mapping onto surface subject or may include other mappings. (For details see Kholodovich 1970, Khrakovsky 1973.)

The question of whether voice is used with the same meaning in speaking of Philippine languages reduces to the question of whether the nominative NP is the surface subject or not.

2.2. A brief summary of earlier views

Early American descriptions assumed that the nominative NP (or the nominative NP in topicalized position) was the surface subject. (Blake 1904, Bloomfield 1917) For instance, in writing about Tagalog, Bloomfield

calls ang aklat (the book) the subject of sentence 22.

22. Ibinigay niya sa akin ang aklat.
INS give he-GEN LOC I-OBL NOM book
The book was given by him to me.

Bloomfield noted that while in English the active construction is generally preferred, in Tagalog "the active construction is avoided whenever any other than the actor is available as subject." (§ 94, p. 154) He found a correlation between the nominative NP and the old information. In general, "...the definite known object [$\text{'object'} \approx \text{NP here}$] underlying the predication as starting-point of discourse is chosen as subject." (§ 93, p.154)

The predominance of the new/old information structure as a factor in selecting the voice eventually led to regarding the nominative NP as the topic or focus of the sentence rather than the subject.⁶ The topic is characterized as "the thing which the sentence is about" by Bowen (1965, p.182). It is said to be "highlighted" (Dean, 1958, p.59) or "foremost in the speaker's mind" (Bowen, 1965, p.182) or even "the most important element in the sentence" (Interchurch Language School, 1962, p.1.312). As Bloomfield's more sober statement implies, the nominative NP is "foremost in the speaker's mind" as being known, predictable, or backgrounded, not as being the most important or emphatic element. If topic refers to the bearer of old, predictable, or backgrounded information, as opposed to the comment or bearer of new information, then it certainly is true that if a sentence has a topic, the topic is the nominative NP in Philippine languages. I know of no one who would deny that the nominative NP is the topic of sentences which have topics.

However, considering the nominative NP the topic tells us nothing about whether or not it is a subject. It has frequently been noted that

the subject and topic coincide in many languages (Chvany 1975, Keenan 1974). Firbas (1966) goes so far as to claim that in English the bearer of old information is generally made the subject of the sentence if there are grammatical means available to make it one. In his view, sentence 23.a. would be normal if the conversation had just been about Swedes or various nationalities, while 23.b. would be more natural if the previous discussion had centered on bicycles or selling bicycles.

- 23.a. A Swede will buy my bicycle.
- b. My bicycle will be bought by a Swede.

Firbas allows for some variation resulting from the interaction of the choice of subject with other morphological and syntactic means of overtly marking information as old (ex. pronouns, definite articles) or new (ex. indefinite article).⁷ Within the rather broad limits permitted by other means of marking new and old information, his claim seems to me to be correct. Similar considerations, then, influence the choice of nominative NP in Philippine languages and the subject in English. The difference is that Philippine languages are much stricter in requiring the topic to be the nominative NP than English is in requiring the topic to be the subject. That the nominative NP is the topic in some sentences, then, by no means implies that it is not the subject.

Schachter and Otanes (1972) argue that in point of fact nominative NP's do differ from subjects in Tagalog. They claim that the nominative NP "never expresses a meaning of indefiniteness, while a subject may or may not." From this they conclude that the nominative NP is not a subject.⁸

To quibble about terminology for a moment, if Bloomfield (1917) is correct, the restriction seems to be on specificity rather than definiteness. Bloomfield glosses 24 as "He took a (certain) book (he know, or I know which one or what kind)." (§ 94, p.155)

24. Kinuha niya ang isang aklat.
 OBJ take he-GEN NOM one LN book
 A (certain) book was taken by him.

The nominative NP is indefinite but specific in Bloomfield's gloss. Specificity is certainly the operative parameter in Cebuano, in which 25 is grammatical.

25. Mo-abot usa ka ambungang magti'ayon sa syudad sa Manila.⁹
 ACT arrive one LN handsome LN couple OBL city GEN
 A handsome couple will arrive in Manila.

In 25, usa ka ambungang magti'ayon (which has \emptyset NOM marker) is indefinite but specific.

Quibbling aside, a difference does remain. In the Cebuano version of 25, the nominative NP is specific. In the English translation, the subject may be specific or non-specific. This difference seems to me to be a consequence of the difference in strictness of the requirement that the nominative NP be the topic in Philippine languages, as compared to the laxer tendency of the subject and topic to coincide in English. Totally new information may be non-specific, but a topic cannot be. Since the nominative NP in a verb-containing sentence is interpreted as a topic, it will not be interpreted as non-specific. Non-specific NP's occur in Tagalog, as in Cebuano, in predicate position in equative sentences or in existential sentences. If the fact that the subject in English may be either specific or non-specific while the nominative NP in Philippine languages must be specific can be traced to the fact that in English the topic and subject tend to be the same while in Philippine languages the nominative NP and topic must coincide, then Schachter and Otnes' argument does not show that the topic in Tagalog is not a subject.

Schachter and Otnes' argument is a restatement and clarification of Bowen's (1965). Except for their arguments, I know of no syntactic

arguments that the topic is the subject or is not the subject, before recent papers by Schachter (1975, 1976) and Dryer (1976) responding to earlier papers by me (Bell 1974a, 1974b) and to Keenan's lists of "subject properties." These papers will be discussed in Part II and in Part IV. Most of those who describe Philippine languages simply assume without argument that the nominative NP is the subject or that it is not the subject.

2.3. The current position

The question of whether the nominative NP is the subject is still open. It is now generally accepted that the nominative NP is the topic, when there is a topic. Some writers believe that it is the subject as well. Others consider the Actor the subject. Still others do not believe that Philippine languages have subjects at all. Schachter believes that the Actor and nominative NP taken together correspond to the subject in other languages, a position which will be discussed in Part IV.

The answer to the question obviously depends on the theoretical framework being used, especially on the meaning of "subject" in the different theories. Currently, there are three schools of thought about subjects in American linguistics.

1. In transformational grammar, the underlying subject is defined as $\sqrt{\text{NP}}, \underline{\text{S}}$; that is a/the NP introduced by a phrase structure rule of the form $\text{S} \rightarrow \text{X NP Y}$. (Chomsky, 1965) Hall (1965) suggests that the surface subject should be whichever NP ends up under the NP node in surface structure. Henceforth, "subject" in this sense will be distinguished by being preceded by a c (for configurational), being written c-subject.

2. Postal and Perlmutter believe that grammatical relations are not subject to configurational definition. They are setting up a system of relational grammar in which "subject", "direct object", and "indirect object" are primitives. Names of grammatical relations as used by Postal and Perlmutter will be written with initial capital letters: Subject, Direct Object, Indirect Object. Various generalizations about syntactic processes are stated with respect to these primitives. These "laws", in effect, provide some content for the notion of Subject, Direct Object, and Indirect Object.

3. Chvany (1973), Keenan (1974), and others are seeking to find criteria which will allow one to determine which NP's are subjects by comparing what have generally been analyzed as subjects in a great variety of languages to see what they have in common. "Subject" as used in this sense or as a traditional term will be written simply in lower case letters: subject.

In attempting to answer the question of which NP, if any, is the subject in Cebuano, I will first turn to relational grammar, as the notion of Subject is central to the theory, and argue that the Actor is the initial Subject and the nominative nominal is the final Subject. Next, I will turn to transformational grammar, in which the notion of c-subject is of marginal importance. I will examine the interaction of constraints stated with respect to c-subjects with different possible analyses of c-subjects in Cebuano. Finally, I will refer to lists of "subject properties" in the course of the comparison of the results of the two earlier parts.

While this thesis is principally an exercise in theory comparison, the discussion of reflexives has data not found elsewhere in studies of

Cebuano. The constructions discussed in the section on Ascensions have not been described before, as far as I know. The sections on Causatives collect for the first time information on causatives in a variety of Philippine languages. The reader who is interested in Cebuano rather than theories and wishes to read only the sections dealing with the matters above is advised to read Section Q of Part I as well, in order to understand the terminology being used.

Footnotes to Part I

1. Cebuano is also known as Visayan or Bisayan or Bisaya' or Binisaya'. However, since other languages, chief among them Waray and Hiligaynon, are also spoken in the Visayas, I prefer the name Cebuano, even though the language is spoken in many places besides Cebu.

The chief works on Cebuano are John Wolff's thesis Cebuano Visayan Syntax (1965), his Dictionary of Cebuano Visayan (1972), and his excellent pedagogical grammar Beginning Cebuano (Part I 1966, Part II 1967). Bunye and Yap's Cebuano Grammar Notes (1972) are more limited and less carefully done.

For the most part, I use regular Cebuano orthography. The spelling deviates from the phonemic structure in the following ways: 1) i and e are not phonemically distinct, contrasting only in some borrowed words. Neither are o and u. 2) ng represents a single phoneme /ŋ/. 3) In the usual orthography, glottal stops are represented by '-' between a C and a V and omitted elsewhere. I try to use an apostrophe for a glottal stop. (In case I ever forget, please read any VV sequence as V'V and read - as a glottal stop.) 4) Stress is phonemic and shifts when affixes are added. It is not represented in the usual orthography and I, too, omit it. 5) In borrowed words, the spelling may also be borrowed and the foreign pronunciation may be retained.

My chief informant has been Mr. Angelo Larraga. Mr. Larraga was born in Leyte and his first language was Waray. Since he was sent to school in Cebu from the time he was ten years old, he also has native competence in Cebuano. He was at one time a writer for the Bisaya magazine. He has a good imagination and can dream up contexts for otherwise improbable sentences. Because he has lived in the U.S.A. for more than 8 years, his Cebuano may be influenced by English. Mrs. Divina Lynch, who was born in Cagayan de Oro and worked in Valencia, Bukidnon, in Mindanao, Mrs. Lolita de la Pena from Cebu, and Miss Lucy Castillo from Bohol also provided judgments on some sentences.

2. I have used Wolff's names for the aspects. Bunye and Yap (1971) use "Neutral" for "Volitional", "Progressive" for "Durative", and "Aptative" for "Potential". Writers on other languages frequently use "Non-volitional" for "Potential."

3. In "Ulipon sa Lawud" ("Slave of the Sea," reading 10, Wolff, 1967, p.388), ug is used with a non-specific, non-nominative Actor, a place where the GENITIVE case should be used.

(i) ...gibangalan pa siya ug usa ka mananagat...
 come upon LOC still he-NOM GEN? one IN fisherman

He was found by a fisherman.

For a time, I believed that the genitive case too could distinguish definiteness and did not differ from the oblique. Then I asked Mr. Larraga about the sentence. He rejected it completely. The ug in the sentence seems to be an error. I mention this because I told certain other people about finding (i) and may have misled them.

4. Schachter and Otnes' statement is on p.60 of their book. I am paraphrasing them in my own terms. Where I say "voice", they say "focus", and where they say "topic", I say "nominative NP". The reason for their terms will be discussed later, so bear with me now.

5. Of my informants, only Mrs. de la Pena finds 8.a. ambiguous, because only she permits a locative to be the nominative NP with the verb palit. She finds (i) well-formed.

- (i) Gipalitan sa babaye ang mercado ug isda.
buy LOC GEN woman NOM market OBL fish

The woman bought fish at the market.

Mr. Larraga and Mrs. Lynch both find (i) semantically ill-formed, with mercado a beneficiary, "The woman bought fish for the market."

6. I have not been able to find the book or article in which the change in terminology was proposed. I believe it was proposed by workers in the Summer Institute of Linguistics in the middle 50's. The first article I found with the new terminology is McKaughan (1957), where the terms "topic" and "focus" are taken for granted.

7. Firbas's bewildering and apparently unprincipled ranking of constituents with respect to their degree of unpredictability or "communicative dynamism" should not be allowed to overshadow what is valuable in his work.

8. Schachter and Otnes present another argument, used also by Bowen (1965). They observe that the relation between the nominative NP and the verb shows great semantic variation. In (i), for instance, the nominative NP is semantically a factative.

- (i) Sinulat ko ang liham.
OBJ write I-GEN NOM letter

The letter was written by me.

In (ii), on the other hand, the nominative NP is a recipient.

- (ii) Sinulatan ko ang titser.
write LOC I-GEN NOM teacher

The teacher was written by me.

Since the performer of the action is generally the subject in English, the nominative NP is unlike a subject in having a wider range of possible semantic relationships to the verb.

This argument is invalid. The generalization about subjects in English holds only of subjects of active sentences, as I have shown in the translations of (i) and (ii). The same generalization is true of active sentences in Cebuano and, I would think, in Tagalog.

9. If Bloomfield's gloss is correct, then the correct translation of "ang isang NP" in Cebuano would be "ang usa ka NP" when the NP is definite and "usa ka NP" when the NP is specific but not definite.

In Cebuano, other numerals besides "usa" can be used with a specific, non-definite nominative NP. A nominative NP without either ang/si or a numeral can occur only as a predicate.

- (i) *Mo'abot ma'ambungang magti'ayon sa Manila.
ACT arrive handsome LN couple OBL

(A) handsome couple will arrive in Manila.

Handsome couples arrive in Manila.

PART II

Relational Analysis of Verb-containing Sentences in Cebuano

0. Sketch of relational grammar

Paul Postal and David Perlmutter (forthcoming) are proposing a theory of grammar in which the grammatical relations between a predicate and its dependent nominals are taken as primitives. The grammatical relations are divided into two main sorts: central relations and overlay relations. Overlay relations include relations such as "Topic," "Restrictive Relative," "Question," etc. The central relations are further subdivided into impure and pure relations. The impure relations include Beneficiary (Ben), Locative (Loc), Instrumental (Ins), and so on. They are the relations whose semantic value is the same with whatever predicate they are found. The pure relations are terms and chomeurs. The terms are Subject (1), Direct Object (2), and Indirect Object (3). The semantic value of the terms is not constant, but varies from predicate to predicate. Chomeurs and nominals bearing impure grammatical relations are collectively referred to as non-terms. The terms are distinguished from non-terms because there are certain syntactic processes in which only terms participate. (More of this later.) The central relations are arranged in a hierarchy in which the terms outrank the non-terms:

$$1 > 2 > 3 > \text{non-terms}$$

The proposal that grammatical relations are the primitives in the theory of grammar is the heart of Postal and Perlmutter's theory. Since

the theory of relational grammar is still being developed, different versions have been current at different times. In the earlier versions, rules applied to an underlying form consisting of a predicate and its dependents. In the latest version, such derivations have been abandoned. Instead, each clause is represented as a network of relations. Such a relational network can also be represented as a matrix whose columns are dependents of the verb and whose rows are grammatical relations. Rules are then viewed as conditions on well-formed networks or matrices. It no longer makes sense to speak of one rule as applying before or after another or to speak of the derivation of a sentence. Because the non-derivational version of the theory is not yet completely developed, and because I am not yet convinced that it has any advantages over the derivational version, I shall sketch a derivational version of relational grammar and use it throughout.

In the derivational version of relational grammar, the underlying form of a sentence consists of a predicate and nominals that bear hierarchically ranked relations to it. (Since I am discussing only verb-containing sentences, I shall hereafter speak of a verb and its dependents, rather than of a predicate and its dependents.) The relational structure of a sentence may be shown in a dependency diagram, in which branches are labelled with relations, as in figure 1.



Dependency diagrams are misleading in one way. In a diagram, the nominals appear in linear order. Postal and Perlmutter do not consider the nominals in the relational structure to be linearly ordered. Linear

order is a property of surface structures only. In diagram 1, Subject precedes Direct Object, Direct Object precedes Indirect Object, and Indirect Object precedes Time. Any other order and any other spacial arrangement would have done as well. However, to facilitate the comparison of different diagrams, dependents will generally be presented in a fixed order.

The grammatical relations of the nominals to the verb are taken as primitives. It follows that they cannot be defined. The theory is not vacuous, however. Hypotheses using these primitives are set up on the basis of an examination of the behavior of terms in a wide range of languages. One of the first hypotheses is that the initial termhood of dependents depends on the meaning of the verb. If verbs in two different languages have the same meaning, their dependents bear the same initial grammatical relations. Other hypotheses concern the behavior of nominals standing in particular grammatical relations to the verb. Grammatical relations determine how nominal dependents act in various syntactic processes. When applying the theory to a new language, the grammatical relations of various nominals can be established by examining the behavior of nominals in an array of sentences. Since the hypotheses are empirical, they can be falsified by new data. As long as they are accepted, however, they are treated as postulates of the theory and are referred to as "laws."

The laws are of two types. Certain laws say that only terms can undergo a certain process. Other laws deal with the form of rules and the manner in which rules interact. Before examples of laws can be given, the rules which they govern must be described.

The structure of a sentence is taken to consist of dependents standing in certain relations to the verb. The initial termhood of the dependents is determined by the meaning of the verb. The surface relations may differ from the initial relations. Postal and Perlmutter recognize four types of relation-changing rules: Advancements, Ascensions, Insertion, and Unions. Since one of the unions, Clause Union, is discussed at length later and Insertions are used only minimally, I will not deal with them here.

An advancement rule turns the grammatical relation of a dependent into a relation which is higher on the hierarchy. For example, the rule of Passive makes Direct Objects into Subjects. It can be formulated as $2 \rightarrow 1$.

An ascension rule raises a part of a dependent of a verb to be a dependent of the verb itself. The dependent from which a nominal ascends is called the "host." The nominal which becomes a dependent of the verb is called the "ascendee." Subject-Raising would be an example of an ascension rule.

All the relation-changing rules are subject to the Relational Annihilation Law:

RELATIONAL ANNIHILATION LAW (RAL): If a nominal nom_i assumes a grammatical relation n previously borne by a nominal nom_j , then nom_j ceases to be a term and becomes an n-chomeur (\hat{n}) (goes en chomage).

Chomeurs arise only from the RAL, according to the Motivated Chomage Law:

MOTIVATED CHOMAGE LAW: A nominal becomes a chomeur only as a result of having its grammatical relation assumed by another nominal.

A rule may specify the marking used to indicate the chomeurs it creates.

Otherwise, the chomeur's marking is determined by the Chomeur Marking Law:

CHOMEUR MARKING LAW: If a rule does not specify the marking of the chomeurs it creates, an n-chomeur undergoes the same marking rules as an n.

In addition, each type of relation-changing rule is subject to general laws. Those which will be of importance in subsequent sections are the following:

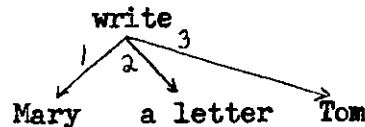
For advancement rules: THE ADVANCEE TENURE LAW: A nominal which has advanced cannot be displaced from its new grammatical relation as the result of an advancement rule.

For ascensions:

1. THE HOST LIMITATION LAW: Only terms can serve as hosts.
2. RELATIONAL SUCCESSION LAW: An ascendee takes on the grammatical relation of its host.

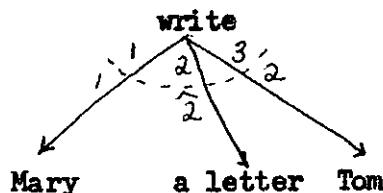
These general laws make it possible to show changes in grammatical relations fairly simply in the diagrams. Suppose a diagram is to be drawn for "Tom was written a letter by Mary." The initial relations are as shown in figure 2.

2.



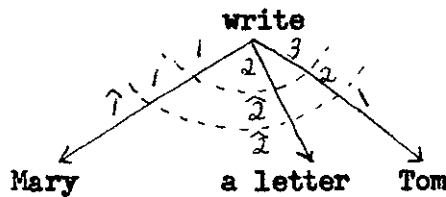
The rule of $(3 \rightarrow 2)$ advancement applies. I shall indicate the change in the grammatical relation of Tom by writing a 2 below the 3, drawing an arc to separate grammatical relations in the new stage. By the RAL, letter is now a 2-chomeur ($\hat{2}$). Since the change in grammatical relation of letter is predictable, it is unnecessary to indicate that letter is now a $\hat{2}$. For convenience and clarity, however, I shall mark chomeurs in the diagrams.

3.



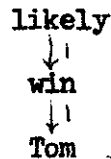
Passive ($2 \rightarrow 1$) makes Tom into a 1; so, "1" is written on Tom's branch.
Mary now becomes a $\hat{1}$ by the RAL.

4.



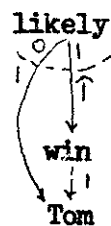
The effect of ascension rules can also be shown on diagrams. Let us set up a diagram for "Tom is likely to win." The initial relations are shown in figure 5.

5.



When Tom ascends to become the Subject of likely, we will have to add a new branch connecting likely and Tom. Since Tom initially bore no relation to likely, a zero will be written on this line in the initial stage. By the Relational Succession Law, since Tom ascends from the 1, it must become the 1. As before, for the sake of clarity, even predictable labels will be written. Note, by the way, that ascensions change dependency, not order (which is not yet defined).

6.



The diagrams preserve information about the grammatical relation of a nominal throughout the derivation. The availability of this information makes it possible to state rules which apply to a nominal which bears a particular grammatical relation at a particular stage of the derivation.

Thus, in the derivational version of the theory, one may refer to the initial grammatical relation, the relation at the end of a cycle, or the final grammatical relation. In figure 6, Tom is the initial and cyclic Subject of win, and it is the final and cyclic Subject of likely.

All of the laws mentioned so far have governed the form and application of relation-changing rules. These are not the only types of rules. Certain laws have been postulated governing other types of rules. Two of these laws will be used later.¹

COREFERENTIAL DELETION LAW: Only a term can trigger deletion of a coreferential nominal.

REFLEXIVE RANK LAW: The antecedent of a reflexive must be higher on the hierarchy than the reflexive at some designated stage.

These two laws must not be misinterpreted. That only a term can trigger coreferential deletion does not mean that every term can trigger such deletion. Similarly, being higher on the hierarchy is not a sufficient condition for a nominal to trigger reflexivization of a coreferential nominal in the same clause. A language may also specify that a rule applies only to nominals above a certain rank in the hierarchy. This is called "line-drawing." If the domain of a particular rule is restricted by line-drawing and a given language draws the line at n for that rule, then the rule can apply to nominals whose grammatical relation is higher than n in the hierarchy.

All the rules taken together form a fixed, rather small set of possible rules for human languages. Languages differ in whether or not they select a particular rule from the set. They also differ in the morphological changes which attend its application and in the conditions imposed on it. Since the types of conditions are also restricted by the theory, the choice of rules and conditions lends itself to typological classification of languages.

Cebuano voice in relational grammar: Introduction

Postal and Perlmutter claim that all verbs with a particular meaning will have the same initial grammatical relations to their dependents. For example, the initial subject of the verb meaning "cook" will be the one who does the cooking. The initial subject of the verb meaning "receive" is the one who ends up with whatever is transferred. As can be seen in sentences 1 and 2 of Part I, repeated here, their claim predicts that the Actor is the initial Subject in Cebuano.

1. Magluto' ang babaye ug bugas sa lata.
ACT cook NOM woman OBL rice OBL can
The woman will cook rice in the can.
2. Nakadawat si Fred ug libro gikan kang Tomas.
ACT receive NOM OBL book from OBL
Fred received a book from Tomas.

Testing this claim, we shall find that the Actor behaves like a Subject with respect to reflexivization and Equi. The Actor is, indeed, the initial Subject. The nominative nominal, however, acts like a Subject in quantifier float and relativization. The nominative nominal, then, is the final Subject. It follows that non-active sentences are related to active sentences by advancement rules. The form of the advancement rules is discussed next. Finally, some objections to the analysis from Schachter (1975, 1976) and Dryer (1976) are discussed.

1. That the Actor behaves like a subject in reflexivization
- 1.1. Reflexivization in general

A reflexive pronoun is one which marks unambiguous coreference between two nominals.² It can be thought of as resulting from a rule of reflexivization which marks one nominal (the target) reflexive when

it is coreferential with another (the trigger).¹ Languages differ as to which dependents they permit to trigger reflexivization. In Russian, for example, traditional grammarians claim that the reflexive pronoun "refers back to the subject of the sentence." (Stilman and Harkins, 1964) In sentence 3, for example, the pronoun sebe (self-LOC) is coreferential to Boris, the subject, not to Ivan.

3. Boris govovil c Ivanom o sebe.
 Boris-NOM spoke-M-sg with Ivan-INS about self-LOC
 Boris_i spoke with Ivan_j about himself_i. (Unambiguous)

In English, Subjects, Indirect Objects, and certain other dependents can trigger reflexivization of dependents lower on the hierarchy.

- 4.a. John shaved himself.
 b. *Himself shaved John.
 5.a. Mary_i talked to Sue_j about herself_{i,j}.
 b. *Mary_i talked to herself_j about Sue_j.
 c. *Mary_i talked about Sue_j to herself_j.
 6.a. Mary_i received a letter from Sue_j about herself_{i,j}.
 b. *Mary_i received a letter about Sue_j from herself_j.

(The ungrammaticality of 5.c. and 6.b. under the reading indicated shows that we are dealing with hierarchical relations, not just with word order.)

In view of examples like these in diverse languages, Postal and Perlmutter have proposed as a generalization the following law:

REFLEXIVE RANK LAW: In reflexivization, the trigger must be higher on the hierarchy than the target at some stage.

Of course, the converse is not true. In Russian, an Indirect Object is higher on the hierarchy than a nonterm, but an Indirect Object does not trigger reflexivization, even of nonterms. Postal and Perlmutter propose further that languages restrict reflexivization by line-drawing.

The Reflexive Rank Law has certain consequences. First, since Subjects rank highest in the hierarchy, it follows that if a language has reflexives, the Subject must be able to trigger reflexivization. Second, if a dependent is able to trigger reflexivization of Direct

Objects, which are second in the hierarchy, it must be the Subject.
Finally, if a dependent can be a reflexive, it cannot be the Subject.

1.2. Reflexivization in Cebuano

The reflexive pronoun in Cebuano is formed of the preposed genitive form of the pronoun plus ka'ugalingon (self).

When used as a ~~dependent~~ of a verb, the reflexive requires an antecedent.³

- 7.a. *Nagsulat siya sa imong ka'ugalingon.
ACT write he-NOM OBL your LN self
He was writing to yourself.
- b. Nagsulat siya sa iyang ka'ugalingon.
ACT write he-NOM OBL his LN self
He was writing to himself.

The antecedent must be a dependent of the same verb as the reflexive;
i.e., reflexivization is clause-bounded. For example, a reflexive in a pag-complement⁴ cannot have its antecedent in the main clause.

- 8.a. Naghuna'huna' ako sa pagtan'aw ni Linda sa iyang / *akong
ACT think about I-NOM OBL looking at GEN OBL her LN / my LN
ka'ugalingon.
self
I was thinking about Linda's looking at herself/*myself.

Similarly, a reflexive in a relative clause cannot refer to an antecedent in the main clause. (The relative clause is underlined.)

- 8.b. Nakita' ko' ang tawo nga nagtawag sa iyang / *akong ka'ugalingon.
OBJ see I-GEN NOM person LN ACT call OBL his LN / my LN self
The man who called himself/*myself was seen by me.

The Actor can trigger reflexivization of the initial Direct Object in both active and non-active sentences.

- 9.a. Motan'aw si Rosa sa iyang ka'ugalingon sa salamin.
ACT look at NOM OBL her LN self OBL mirror
Rosa will look at herself in the mirror.

- 9.b. Tan'awon ni Rosa ang iyang ka'ugalingon sa salamin.
 look at OBJ GEN NOM her LN self OBL mirror
 Herself will be looked at in the mirror by Rosa.

Since the Actor can trigger reflexivization of Direct Objects, it must be higher than the Direct Object on the hierarchy; that is, it must be the Subject. If so, the Actor should not be permitted to be a reflexive itself. This prediction is borne out, as is shown by comparing 10.a. and 10.b. with 7.a. and 7.b. (Rosa has been replaced by a pronoun because nominative pronouns, genitive pronominal Actors, and the short form of oblique pronouns follow the verb.⁵ The pronouns thus precede the reflexive; so, the ungrammaticality of 10.a. and 10.b. cannot be attributed to surface word order.)

- 10.a. *Motan'aw nako' ang akong ka'ugalingon sa salamin.
 ACT look at I-OBL NOM my LN self OBL mirror
 Myself will look at me in the mirror.

- b. *Tan'awon ako sa akong ka'ugalingon sa salamin.
 look at OBJ I-NOM GEN my LN self OBL mirror
 I will be looked at by myself in the mirror.

If the Reflexive Rank Law is accepted, then the Actor behaves like a Subject, as predicted.

The data also show that when reflexivization applies, the nominative nominal is not the Subject, for in 9.b. the nominative nominal is itself a reflexive.

At some stage, then, the Actor, not the nominative nominal, is the Subject.

1.3. A caution

The argument just given rests on the Reflexive Rank Law. As I have given it, the law states that the antecedent must be higher on the hierarchy than the reflexive. Postal and Perlmutter would like to add to this an even stronger statement: that only terms trigger reflexivization.

Certain sentences in Cebuano present difficulties for both versions of the law. In 11, bata' and iyang ka'ugalingon are Beneficiary and Source respectively; i.e., both are nonterms. Bata', as well as Maria, can be the antecedent of the reflexive.

11. Nagdawat si Maria ug sulat para sa bata' gikan
ACT receive NOM OBL letter for OBL child from

sa iyang ka'ugalingon.
OBL his/her LN self
Maria received a letter for the child from himself/herself.

Postal and Perlmutter do not rank nonterms hierarchically. They would not have Beneficiary rank higher than the Source, for they do not rank nonterms with respect to each other. Sentence 11 is apparently a violation of the Reflexive Rank Law. Moreover, 11 appears to be a counterexample to the stronger claim that only terms trigger reflexivization.

Two courses are open, in addition to giving up the law. First, one might propose that there is a rule changing Beneficiaries into Indirect Objects, that it has applied in 11, and that 11 is therefore not a counterexample to either the Reflexive Rank Law or the stronger claim that only terms trigger reflexivization. I shall argue later that there is indeed a rule changing Beneficiaries to Indirect Objects. However, because of sentences like 6.a. and because I believe that the rule changing Beneficiaries into Indirect Objects has different side-effects, I doubt that this is the correct alternative.

Second, one might propose that the non-terms are ranked among themselves, Beneficiaries ranking higher than Sources. If nonterms are hierarchically ranked with respect to each other, such a ranking **should** be reflected in limitations on reflexivization and other rules in other languages. The question of whether nonterms are ranked with respect to each other is, then, empirical.

2. That the Actor behaves like a Subject in the rules of Equi

2.1. The rules of Equi in general

In English, certain verbs take infinitival complements.

12.a. He expects Tom to go.

With certain verbs, the Subject of the infinitive is obligatorily absent when it is coreferential to the Subject of the main verb.

12.b. He expects to go.

Since the reflexive and its antecedent must be dependents of the same predicate, the presence of a reflexive in the infinitival clause shows that the Subject was once present in the complement.

12.c. He expects to help himself by that ploy.

d. *He expects Mary to help himself.

In early transformational grammars of English, a rule of Equi-NP-Deletion was proposed in order to generate subjectless infinitives. (Rosenbaum, 1967)

In another class of verbs, the nominal which immediately precedes the infinitive (Mary in sentence 13.a.) appears to be in the main clause, since it can be reflexivized, as in sentence 13.b.

13.a. Charles forced Mary to go.

b. Joan forced herself to work slowly.

Indeed, it acts like a Direct Object of the main verb when the rule of Passive applies.

13.c. Mary was forced by Charles to go.

In the early transformational analysis, it was proposed that the rule of Equi applied also with these verbs, deleting the Subject of the infinitive when it was coreferential with the Direct Object.

The rules of Equi are rules of Coreferential Nominal Deletion. As mentioned in Section 0 of Part II, such rules are subject to the

general condition that the dependent which triggers the deletion must be a term. Moreover, in these particular rules, the nominal which is deleted is the Subject of the infinitive.

2.2. The rules of Equi in Cebuano

In Cebuano, the rules of Equi delete the Actor in a pag-complement. With one class of verbs, the upper Actor triggers deletion. It follows that the Actor behaves like a Subject with respect to Equi.

To establish this claim, it will first be necessary to look at pag-complements, for Equi applies only to the **Actor** in pag-constructions.

2.2.1. Pag-constructions

In Cebuano, there is a deverbal form made by adding pag- to the verb stem. (Ex. pagluto', 'cooking'; pagbalik, 'returning, return'; pagulan, 'raining') The pag-form may be followed by dependent nominals. The Actor is genitive and the other nominals are oblique.

14. pagluto' ni Rosa ug bugas
cooking GEN OBL rice
Rosa's cooking of rice

Pag-forms act like nominals. They are preceded by nominal markers. In the oblique case, for example, they are frequently used as time expressions.

15. sa pag'abot ni Jose sa balay...
OBL arriving GEN OBL house
upon Jose's arriving at the house

Pag-constructions also act as nominals in ~~attributive~~ sentences.

- 16.a. lami' ka'ayo ang bebingka.
tasty very NOM bebingka (type of cake)
Bebingka is very tasty.

- 16.b. Lisod ka'ayo ang pag'adto didto.
hard very NOM going there
Going there is very hard.

Pag-constructions are also used as dependents of verbs.

17. Naghuna'huna' si Rosa sa pag'abot ni Jose sa siyudad.
ACT think about NOM OBL arriving GEN OBL city
Rosa was thinking over Jose's arrival in the city.

Finally, they can be preceded by adjective and numerals.

18. usa ka malinaw nga paghukum
one LN clear LN judging
a clear (judicial) decision

It seems reasonable to conclude that pag-forms are nominals.

2.2.2. Should pag-constructions start out as clauses?

A pag-nominal has the same set of nominal dependents as its stem verb. For example, the verb dagan (run) does not take a Direct Object.

- 19.a. Midagan ang bata'.
ACT run NOM child
The child ran.

b. *Midagan ang bata' sa kahoy.
ACT run NOM child OBL tree
The child ran the tree.

And pagdagan (running) does not take a Direct Object.

- 19.c. sa pagdagan sa bata'
OBL running GEN child
upon the child's running

d. *sa pagdagan sa bata' sa kahoy
OBL running GEN child OBL tree
upon the child's running the tree

The appropriateness of particular lexical items is also the same for a pag-nominal and for its stem verb. For example, except in fairy-tales, tu'o (believe) requires an animate Subject.

- 20.a. Nagtu'o si Juan/ #ang kahoy sa mangangahoy.
ACT believe NOM NOM tree OBL woodcutter
Juan/#the tree believed the woodcutter.

Pagtu'o (believing) has the same restriction.

- 20.b. ...pagtu'o ni Juan/#sa kahoy sa mangangahoy.
believing GEN GEN tree OBL woodcutter
Juan's/#the tree's believing the woodcutter

The fact that the stem verb and the pag-nominal take the same dependents is a consequence of the fact that except for a very few forms (ex. pagka'on means 'food' as well as 'eating'), the meaning of the pag-nominal is semantically predictable from the meaning of the stem verb.

Pag-nominals are also morphologically regular and productively formed.

One means for expressing the identity of requirements for nominal dependents, regularity, and productivity of pag-nominals would be to derive them by rule from full clauses. The following rule could be used:

PAG-NOMINALIZATION: To convert an embedded sentence used as a dependent of a verb into a pag-construction, prefix the verb with pag- and mark the Actor genitive.

This is not the only way of describing the regularities noted above. Pag-nominals might be formed by a regular morphological rule and already be nominals when they enter the realm of syntax. The predictable meaning would account for the identity of nominal dependents of the verb stem and the pag-nominal. The Subject of a nominal would be marked genitive by a rule like the one which marks the Subjects of nominals genitive in English (ex. his arrival, his arriving), Russian, and many other languages.

There is one argument for preferring the first alternative. Return for a moment to the section on reflexives. Sentence 8.a. shows that a nominal in the main clause cannot be the antecedent of a reflexive in a pag-construction. If pag-constructions are derived from sentences, we can simply limit reflexivization to applying between clause-mates. If

pag-nominals are not derived from sentences, we will need some other constraint to rule out reflexivization into pag-constructions while permitting it in other nominals, such as ug surat bahin sa iyang ka'ugalingon (a letter about herself) in sentence 21.

21. Nakadawat si Maria ug surat bahin sa iyang ka'ugalingon.
ACT receive NOM OBL letter about OBL her LN self
Maria received a letter about herself.

In order to restrict reflexivization correctly without having to add any additional constraints, it would be better to use the rule of pag-nominalization.

2.2.3. Sentential complements in Cebuano

In Cebuano, there are two types of sentential complements. One is a regular sentence linked to the main clause by nga.

- 22.a. Naka'alinggat siya nga nagka'on ang iho sa karabao.
ACT notice he-NOM LN ACT eat NOM shark OBL buffalo
He noticed that the shark was eating the waterbuffalo.

The other is the pag-construction.

- 22.b. Naka'alinggat siya sa pagka'on sa iho sa karabao.
ACT notice he-NOM OBL eating GEN shark OBL buffalo
He noticed the shark's eating the buffalo.

There is a slight difference in the meaning of the two complements. According to Mr. Larraga, the pag-complement is somehow more real, as I have tried to show in the translations.

Both types of complements act like nominals. For example, either can be the nominative nominal. When a pag-complement is nominative, it is overtly marked by ang, like any other common noun.

- 22.c. Na'alinggatan niya ang pagka'on sa iho sa karabao.
notice LOC he-GEN NOM eating GEN shark OBL buffalo
The shark's eating the waterbuffalo was noticed by him.

When a full sentence is the nominative nominal, it is still linked to the matrix by nga. No overt nominative marker appears.⁶

- 24.d. Na'alینگatan niya nga nagka'on ang iho sa karabao.
 notice LOC he-GEN LN ACT eat NOM shark OBL buffalo
 That the shark was eating the buffalo was noticed by him.

2.2.4. A note about pronoun-drop

Pronouns drop rather freely in Cebuano if the antecedent is clear, especially if the antecedent appears elsewhere in the sentence.

25. Nagsugo' siya; kang Rudolfo; nga mokuha' (siya;) sa bag.
 ACT order he-NOM OBL LN ACT get he-NOM OBL bag
 He ordered Rudolfo that he should get the bag.

This type of pronoun-drop is optional. The sentence is grammatical if the pronoun is left, even when the pronoun is not emphatic.

2.3. The Actor in Equi

With certain verbs, the Actor in the pag-complement is obligatorily absent.

- 26.a. Ningsugo' ako kang Rosa sa pagdagan { *niya }
 ACT order I-NOM OBL OBL running she-GEN
 I ordered Rosa to run.
- b. Ningsa'ad ako kang Lus sa pagluto' { *nako' } ug panihapon.
 ACT promise I-NOM OBL OBL cooking I-GEN OBL dinner
 I promised Lus to cook dinner.

The fact that the Actor must be omitted shows that we are not dealing merely with pronoun drop here.

As shown earlier (8.a.), reflexives in pag-complements are not triggered by nominals in the main clause. However, a reflexive may be found in a pag-clause in which the Actor is obligatorily absent.

27. Nagsulay ako sa pagbantay sa akong ka'ugalingon.
 ACT try I-NOM OBL looking after OBL my LN self
 I am trying to look after myself.

The generalization that **reflexivization** is clause-bounded can be retained if we suppose that the Actor was present in the initial structure and was deleted by a rule of Equi. Since the Equi rules delete the Subject

of the complement clause, the Actor must be the Subject of the pag- clause, as predicted by the hypothesis that initial assignment of grammatical relations is predictable from the meaning of the verb, if the assumption that it is the rule of Equi which deletes the Actor is correct.⁷

Another point should be mentioned regarding these constructions. The deletion trigger is the same in non-active sentences as in active sentences. For example, paired with 26.a., we find 28.a.

- 28.a. Gisugo' nako' si Rosa sa pagdagan.
OBJ order I-GEN NOM OBL running
Rosa was ordered by me to run.

In both sentences, Rosa triggers deletion. Similarly, the Actor triggers deletion in 28.b., just as it did in 26.b.

- 28.b. Gisa'aran nako' si Lus sa pagluto' ug panihapon.
promise LOC I-GEN NOM OBL cooking OBL dinner
Lus was promised by me for (me) to cook dinner.

2.4. Summary

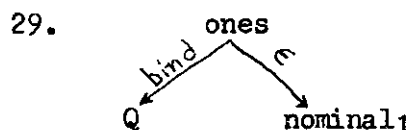
The hypothesis about the universality of the assignment of initial grammatical relations predicted that the Actor would be the initial Subject in Cebuano. We have seen that the Actor does indeed function like a Subject in the rules of reflexivization and Equi. The prediction is verified. The Actor is the initial Subject.

The next question to be asked is whether the Actor is also the final Subject. Data from quantifier float and relativization show that the nominative nominal acts like a Subject. The nominal nominal, then, should be the final Subject.

3. That the nominative nominal acts like a Subject in quantifier float

3.1. Quantifier float in general

In English, quantifiers are presumably part of the nominal at some point. Perlmutter has tentatively suggested to me that quantified nominals might have the structure shown below:



The head of the construction is an indefinite nominal which is bound by the quantifier. The other nominal_1 gives the set over which the quantification ranges. The expression says that we are talking about Q x 's such that x is the sort of thing specified by the nominal_1 . Nothing depends on the correctness of this suggested structure; all that is required for the argument is that the quantifier and the nominal_1 be dependents of the same nominal at some point.

In English, quantifiers precede the noun. (Exceptions will be noted later.)

- 30.a. All the men are coming.
- b. Every student was working on a term paper.
- c. Each man was hurrying.
- d. Both the boys will arrive tonight.

The quantifier may also appear after the noun in some instances.

- 31. Bob gave the books all to the Salvation Army.

Fiengo and Lasnik (1976) have discussed the conditions under which the quantifier can follow the noun. I take it that the quantifier is still part of the nominal. One cannot, for instance, insert an adverb between the noun and the quantifier or put in a particle.

- 32.a. *Bob gave the books recently all to the Salvation Army.
- b. *Bob gave the books away all to the Salvation Army.

In addition to following the noun within the nominal, the quantifier may be detached from the nominal. When the quantifier is detached from the nominal, it appears after the first auxiliary verb if there is one.

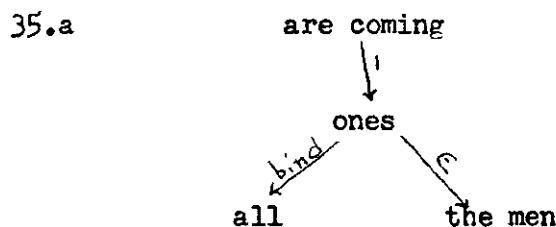
- 33.a. The men are all coming.
- b. ?The men were each helpful.
- c. The boys will both arrive tonight.

If there is no auxiliary, the quantifier may end up directly after the noun, as in 34.

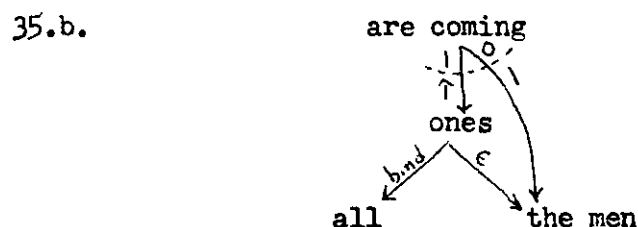
34. The men all left.

In 34, the quantifier may or may not be detached from the nominal. In the sentences in 33, it clearly is detached. A detached quantifier may be said to have "floated" from its nominal.⁸

Postal and Perlmutter consider quantifier float an ascension rule. In their analysis, 33.a. starts roughly as in 35.a., ignoring the exact structure of the verb.



In quantifier float, the men ascends to become a dependent of the verb, as shown in 35.b.



The fact that the rule making the men a dependent of the verb is an ascension rule has three consequences:

1. By the Relational Annihilation Law, the "all-ones" becomes a

chomeur. Its position in surface structure is assigned by word order conventions.

2. By the Relational Succession Law, the ascende~~e~~ assumes the grammatical relation of the host; so, the men becomes the Subject.

3. By the Host Limitation Law, the host must be a term.

Postal and Perlmutter propose further that quantifier float is one of the rules in which line-drawing comes into play. A language will not permit quantifiers to float, say, only from Direct Objects. Instead, it will draw the line at some point in the hierarchy and permit quantifiers to float from all terms above that point in the hierarchy. In English, the line is drawn at 1. Only Subjects may host quantifier float.

36. *Tom was all reading the books.

In Japanese, Postal and Perlmutter claim that the line is drawn at Direct Object, and in French, at Indirect Object.⁹

If a language has quantifier float, we can conclude that the nominals from which quantifiers float are terms, by the Host Limitation Law. If only one dependent permits quantifier float, we can conclude from line-drawing that the dependent is the Subject.

3.2. Quantifier float in Cebuano

3.2.1. A preliminary note about adjectives

In Cebuano, an adjective may precede or follow the noun. It is linked to the noun by nga in either case.

37.a. bulak nga pula
flower LN red
red flower

b. pula nga bulak
red LN flower
red flower

If nga is absent, then the adjective and noun are not part of a single nominal. In 37.c., for example, pula is the predicate.

- 37.c. Ang bulak pula.
NOM flower red
The flower, (it's) red.

3.2.2. Detached quantifiers in Cebuano

In Cebuano, the quantifier tanán (all) is generally found within its nominal. It may appear before or after the noun.

- 38.a. Ningdagan ang tanan nga bata'.
ACT run NOM all LN child
All the children ran off.

- b. Ningdagan ang batang tanan.
ACT run NOM child LN all
All the children ran off.

In both these positions, it is attached to the noun by the linker nga (ng in 38.b.), like other adjectives.

Tanan (all), but not other quantifiers, can also appear in post-verbal position.

- 38.c. Ningdagan tanan ang bata'.
ACT run all NOM child
The children all ran off.

When it follows the verb, tanán is physically outside the nominal, for it precedes the case marker ang. It is not attached to the noun by nga, showing that it is no longer part of the nominal. The quantifier is detached from its nominal. We are dealing with quantifier float.

A quantifier found in postverbal position is construed with the nominative nominal and only with it. This is true in active and non-active sentences alike.

- 39.a. Nagbasa tanán ang istudiante sa mga libro ni Rizal.
ACT read all NOM student OBL pl book GEN
The students were all reading Rizal's books.

- b. Gibasa tanán sa mga istudiante ang mga libro ni Rizal.
OBJ read all GEN pl student NOM pl book GEN
Rizal's books were all being read by the students.

- 40.a. Nagbutang tanan ang mga babaye sa mga pinggan sa mga lamisa.
 ACT place all NOM pl woman OBL pl dish OBL pl table
 The women were all putting the dishes on the tables.
- b. Gibutangan tanan sa mga babaye ang mga lamisa sa mga pinggan.
 place LOC all GEN pl woman NOM pl table OBL pl dish
 The tables were all put dishes on by the women.
- 41.a. Nagluto' tanan ang mga babaye ug dulsi para sa mga bata'.
 ACT cook all NOM pl woman OBL candy for OBL pl child
 The women were all cooking candy for the children.
- b. Giluto'an tanan sa mga babaye ang mga bata' ug dulsi.
 cook LOC all GEN pl woman NOM pl child OBL candy
 The children were all cooked candy by the women.

Occasionally, a detached tanan is found before the verb. In such sentences, tanan also goes with the nominative nominal.

- 42.a. Tanan nagluto' ang mga babaye ug dulsi para sa mga bata'.
 all ACT cook NOM pl woman OBL candy for OBL pl child
 The women were all cooking candy for the children.
- b. Tanan giluto'an sa mga babaye ang mga bata' ug dulsi.
 all cook LOC GEN pl woman NOM pl child OBL candy
 The children were all cooked candy by the women.

The detached tanan, then, comes from the nominative nominal.¹⁰

In Postal and Perlmutter's analysis, Quantifier Float is an ascension rule. The host must be a term, by the Host Limitation Law. The nominative nominal is therefore a term. Moreover, languages restrict possible hosts of quantifier float by line-drawing. If quantifier float is restricted to a single dependent, that dependent must be the highest dependent on the hierarchy, the Subject. The nominative nominal is therefore the Subject at some stage.

4. Possible support for claiming that the nominative nominal is the Subject, from relative clause formation

4.1. Keenan and Comrie's Accessibility Hierarchy

From an examination of relative clause formation in forty languages, Keenan and Comrie (1973) concluded that the grammatical relation of a

nominal had a bearing on its accessibility to relativization. In particular, nominals were found to be ranked according to the following hierarchy:

ACCESSIBILITY HIERARCHY

- (i) $\text{Subj} \geq \text{D.O.} \geq \text{I.O.} \geq \text{O. of Prep.} \geq \text{Possessor} \geq \text{O. of Comparative Prt}$
- (ii) If $X \geq Y$ and Y dominates Z , then $X \geq Z$,
where " \geq " means "greater than or equal to in accessibility."

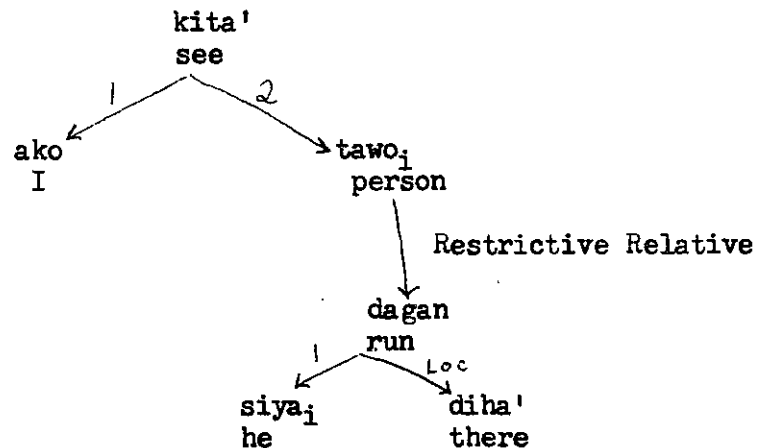
Languages draw the line at different points along the hierarchy. If a language permits relativization of a given nominal by its major relativization strategy, then it also permits relativization of a nominal which is of greater or equal accessibility by that strategy. Consequently, if relativization in a given language is restricted to a single nominal, that nominal must be the Subject, according to the Accessibility Hierarchy.

4.2. Relative clauses in Cebuano

In Cebuano, a regular relative clause is linked to its head by the general linker nga. The nominal in the relative clause coreferential to the head is deleted.¹ Thus, the source of 43.a. will be 43.b.

- 43.a. Nakakita' ako sa tawo nga nagdagan diha'.
ACT see I-NOM OBL person LN ACT run there
I saw the man who was running there.

b.



The nominative nominal may be relativized. Starting with 44.a., we can form a relative clause by relativizing the nominative nominal, ang magdadaro, as in 44.b.

- 44.a. Nagpalit ang magdadaro ug karabao.
ACT buy NOM farmer OBL buffalo
The farmer bought a buffalo.
- b. Nakakita' ko sa magdadaro nga nagpalit ug karabao.
ACT see I-NOM OBL farmer LN ACT buy OBL buffalo
I saw the farmer who had bought a buffalo.

No other nominal can be relativized. For example, we cannot form a relative clause by relativizing karabao.

- 44.c. *Nakakita' ko ug karabao nga nagpalit ang magdadaro.
ACT see I-NOM OBL buffalo LN ACT buy NOM farmer
I saw a buffalo which the farmer had bought.

In order to relativize karabao, it must be the nominative nominal, as in

45.a.

- 45.a. Gipalit sa magdadaro ang karabao.
OBJ buy GEN farmer NOM buffalo
The buffalo was bought by the farmer.
- b. Nakakita' ko ug karabao nga gipalit sa magdadaro.
ACT see I-NOM OBL buffalo LN OBJ buy GEN farmer
I saw a buffalo which had been bought by the farmer.

In 45.a., magdadaro cannot be relativized.

- 45.c. *Nakakita' ko sa magdadaro nga gipalit ang karabao.
ACT see I-NOM OBL farmer LN OBJ buy NOM buffalo
I saw the farmer by whom the buffalo had been bought.

Similarly, in the sets of sentences below, the nominative nominal and only the nominative nominal can be relativized.

- 46.a. Giluto'an niya ang lata ug bugas.
cook LOC he-GEN NOM can OBL rice
He cooked rice in the can.
- b. Hugaw ang lata nga giluto'an niya ug bugas.
dirty NOM can LN cook LOC he-GEN OBL rice
The can in which he cooked rice is dirty.

- 46.c. *Hugaw ang bugas nga giluto'an niya ang lata.
dirty NOM rice LN cook LOC he-GEN NOM can
The rice which he cooked in the can was dirty.
- 47.a. Giluto'an ko' ang bata' ug kalamay.
cook LOC I-GEN NOM child OBL candy
The child was cooked candy by me.
- b. Nagtawag siya sa bata' nga giluto'an ko' ug kalamay.
ACT call he-NOM OBL child LN cook LOC I-GEN OBL candy
He called the child for whom I had cooked candy.
- c. *Lami' ang kalamay nga giluto'an nako' ang bata'.
tasty NOM candy LN cook LOC I-GEN NOM child
The candy which I cooked for the child was delicious.
- 48.a. Ipalit ko' kining baynti ug saging.¹¹
INS buy I-GEN this-NOM LN 20 OBL banana
I will buy some bananas with this 20 centavo piece.
- b. Gihatag nako' ni Go. Abaya kining baynti nga ipalit ko' ug saging.
INS give I-OBL GEN Mr. this-NOM LN 20 LN INS buy I-GEN OBL banana
This 20 centavo piece with which I will buy some bananas was
given to me by Mr. Abaya.
- c. *Dako ang mga saging nga ipalit ko' kining baynti.
big NOM pl banana LN INS buy I-GEN this-NOM LN 20
The bananas which I will buy with this 20 centavo piece
are large.

Only the nominative nominal is accessible to relativization. If relative clause formation in Cebuano is restricted according to the Accessibility Hierarchy, the nominative nominal must be the Subject.

4.3. A caution

The argument as given assumes that relativization is restricted in accordance with Keenan and Comrie's Accessibility Hierarchy. There is some reason to doubt the universality of the hierarchy. First, Keenan and Comrie do not give the criteria according to which they judged that a nominal was the subject. Their use of "subject" may differ from that used in this part of the thesis.

Secondly, Japanese presents a problem for the Accessibility Hierarchy, if Kuno's (1973) analysis of relative clause formation is correct. Kuno

claims that in Japanese, relativization is restricted to topics. He shows that a nominal can be relativized only if the particle following it can be deleted before the topic marker wa when that nominal is the topic. For example, ni (to) can be deleted before wa, as in 49.a. and 49.b.

- 49.a. Oozei no hito ga sono mura ni kita.
 many GEN people SUBJ the village to came
 Many people came to the village.
- b. Sono mura $\left\{ \begin{smallmatrix} \text{ni} \\ \emptyset \end{smallmatrix} \right\}$ wa oozei no hito ga kita.
 the village to TOP many GEN people SUBJ came
 As for the village, many people came there.

Kara (from) cannot be deleted before wa.

- 50.a. Oozei no hito ga sono mura kara kita.
 many GEN people SUBJ the village from came
 Many people came from the village.
- b. Sono mura $\left\{ \begin{smallmatrix} \text{kara} \\ * \emptyset \end{smallmatrix} \right\}$ wa oozei no hito ga kita.
 the village from TOP many GEN people SUBJ came
 As for the village, many people came from there.

Similarly, a relative clause can be formed by relativizing the nominal with ni, but not the one with kara. Sentence 51 can mean only "the village that many people came to," not "the village that many people came from."

51. oozei no hito ga kita mura
 many GEN people SUBJ came village
 the village that many people came to

If Kuno is correct, then relativization in Japanese is restricted to topics, not to some relation in the Accessibility Hierarchy. His analysis casts doubt on the universality and, hence, on the meaningfulness, of Keenan and Comrie's Accessibility Hierarchy.

The Accessibility Hierarchy could be retained if it could be established that topicalization in Japanese is itself limited according to the hierarchy. I do not know whether such an alternative is feasible,

whether Kuno's analysis is correct, or whether the claim that relativization is restricted according to the Accessibility Hierarchy should be dropped.

In view of this uncertainty, relativization cannot be used to establish that the nominative nominal is the Subject. Given that we have other evidence for believing that the nominative nominal is the Subject, relativization does provide a test for Subjects, however.

5.0. Advancement rules in Cebuano

Let us assess our position. Postal and Perlmutter hypothesized that grammatical relations are initially assigned on the basis of the meaning of the verb. According to this hypothesis, the Actor should be the initial Subject in Cebuano. This prediction is confirmed by the behavior of the Actor in reflexivization and Equi. The Actor can be the antecedent of a Direct Object reflexive but cannot itself be a reflexive. From the Reflexive Rank Law and line-drawing, it follows that the Actor is the Subject. The Actor triggers Equi, showing that it is a term according to the Coreferential Deletion Law. It is what is deleted in the pag- construction, showing that it is the Subject. The Host Limitation Law and line-drawing show that the nominative nominal acts like a Subject in quantifier float. If relativization is restricted according to Keenan and Comrie's Accessibility Hierarchy, relative clause formation supports the conclusion that the nominative nominal is the Subject.

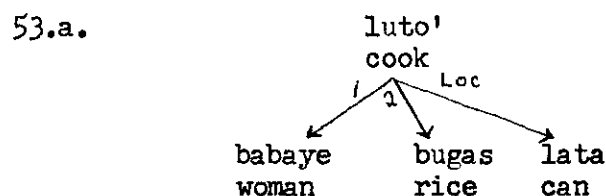
The Actor is the initial Subject, but the nominative nominal is also a Subject. I propose that nominative nominals in non-active sentences become Subjects as the result of advancement rules. In this analysis, sentences 1, 4, and 5 in Part I (repeated here as 52) have the same initial grammatical relations.

52.a. Magluto' ang babaye sa bugas sa lata.
 ACT cook NOM woman OBL rice OBL can
 The woman will cook the rice in the can.

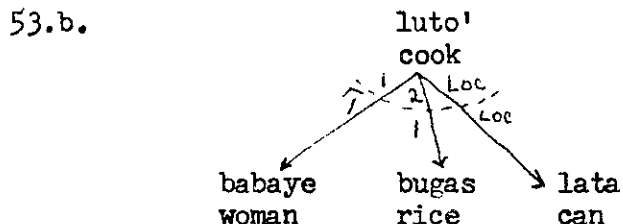
b. Luto'on sa babaye ang bugas sa lata.
 cook OBJ GEN woman NOM rice OBL can
 The rice will be cooked in the can by the woman.

c. Luto'an sa babaye ang lata sa bugas.
 cook LOC GEN woman NOM can OBL rice
 The woman will cook the rice in the can.

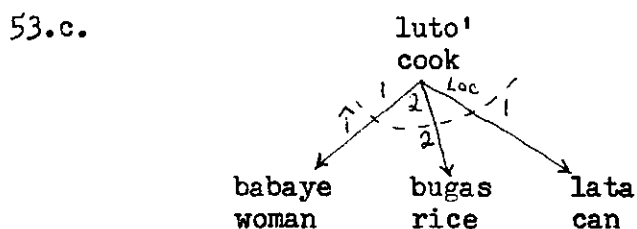
In sentence 52.a., no advancement rules apply. In the diagram of the sentence, 53.a., the initial and final grammatical relations are the same.



In sentence 52.b., the initial Direct Object is the final Subject, as shown in 53.b.



The diagram for 52.c. is less certain. The initial and final grammatical relations are as shown in 53.c., but there is some question as to whether the Locative advances to Subject directly or by stages, a question which will be discussed at length a little farther on.

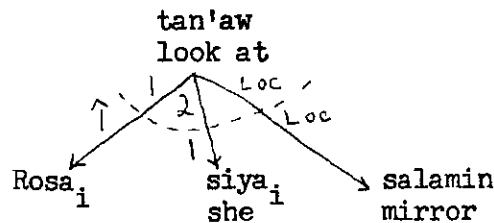


In sentences 52.b. and 52.c., the initial and final Subject differ. In each, a dependent's rank has been increased. By the Relational

Annihilation Law, the initial Subject, the Actor, has been put en chomage. As a chomeur, the Actor cannot trigger reflexivization of terms. Since voice does not affect reflexivization possibilities, it will be necessary to state that reflexivization is restricted in accordance with the initial grammatical relations. The diagram for 54.a. will be 54.b., not using the newer way of showing coreference.

- 54.a. Tan'awon ni Rosa ang iyang ka'ugalingon sa salamin.
 look at OBJ GEN NOM her LN self OBL mirror
 Herself will be looked at by Rosa in the mirror.

b.

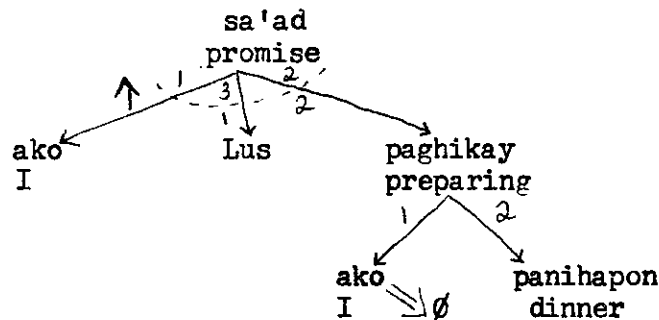


Rosa is the initial Subject. It is in virtue of its initial termhood that it triggers reflexivization of the initial Direct Object siya.

Similarly, Equi will be stated on initial grammatical relations. The diagram of 55.a. will be 55.b.

- 55.a. Gisa'aran nako' si Lus sa paghikay sa panihapon.
 promise LOC I-GEN NOM OBL preparing OBL dinner
 I promised Lus to fix dinner.

b.

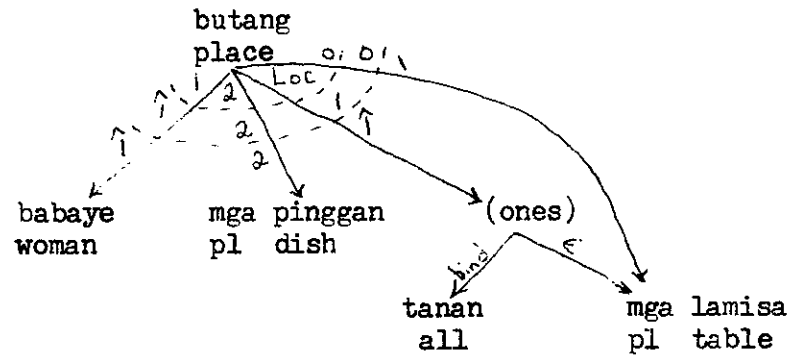


The initial Subject ako triggers the deletion.

Quantifier float and relativization, on the other hand, will look at the final grammatical relations. For example, the diagram of 56.a. will be 56.b.

- 56.a. Gibutangan tanan sa babaye ang mga lamisa sa mga pinggan.
 place LOC all GEN woman NOM pl table OBL pl dish
 The women placed the dishes on all the tables.

b.



Mga lamisa will ascend from the Locative after it has become the Subject.

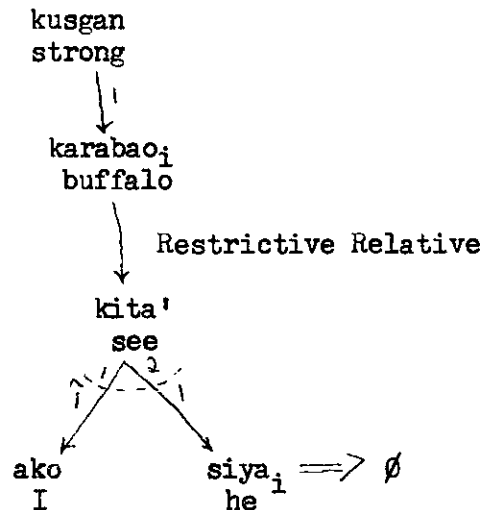
Similarly, karabao (buffalo) can be relativized in 57.a., as shown in

57.b., because it is the final Subject, as in 57.c.

- 57.a. Nakita' ko' ang karabao.
 OBJ see I-GEN NOM buffalo
 The waterbuffalo was seen by me.

- b. Kusgan ang karabao nga nakita' ko'.
 strong NOM buffalo LN OBJ see I-GEN
 The waterbuffalo which was seen by me was strong.

c.



The general proposal should be clear. The Actor is the initial Subject. The nominative nominal is the final Subject. If applied, advancement rules change the initial relations, forming non-active sentences.

5.1. Consequences of advancement rules

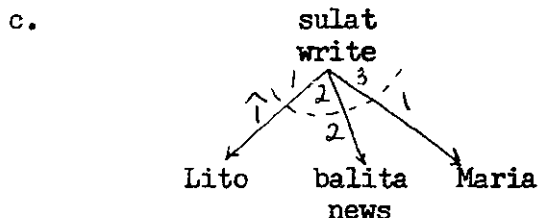
An advancement rule takes a nominal dependent of a verb standing in some grammatical relation to the verb and changes its relation to a relation which is higher on the hierarchy. Application of an advancement rule has two consequences besides changing the grammatical relation of the advancee.

First, according to the Advancee Tenure Law, no other advancement rule should be able to put the advancee en chomage. The advancement rules in Cebuano do indeed operate in accordance with the Advancee Tenure Law. Suppose we start with sentence 58.a.

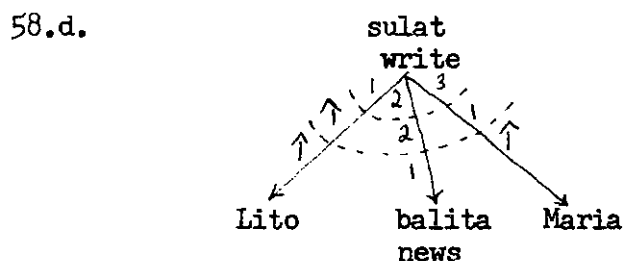
58.a. Nagsulat si Lito sa balita kang Maria.
 ACT write NOM OBL news OBL
 Lito was writing the news to Maria.

If $3 \rightarrow 1$ advancement applies, the output is 58.b., diagrammed in 58.c.

58.b. Gisulatan ni Lito si Maria sa balita.
 write LOC GEN NOM OBL news
 Maria was written the news by Lito.



By the Advancee Tenure Law, $2 \rightarrow 1$ advancement cannot now apply to 58.c. to form 58.d., which would result in 58.e., in which both chomeurs are in the genitive case and both the OBJ (gi) and the LOC (gi...an) voice affixes are present.



- 58.e. { *Gigisulatan } ni Lito ni Maria ang balita.
 (OBJ) write LOC GEN GEN NOM news
 The news was written Maria by Lito.

As predicted, 58.e. is ungrammatical whether both voice affixes or only one is present.

Second, in accordance with the Relational Annihilation Law, the Actor becomes a chomeur when another dependent advances to Subject. The only sign of this change in Cebuano is the change from nominative to genitive case. One of the case marking rules will specify that $\hat{1}$'s from advancement rules are in the genitive case.

In this connection, it is important to note that these $\hat{1}$'s are not the only Actors in the genitive case. In the discussion of pag-clauses, we saw that the Subject of a pag-clause is in the genitive case. There is another type of non-finite clause in Cebuano formed by adding inig- to a verb stem. These clauses are used as temporal expressions, always expressing a future time. The Subject of the inig-clause is in the genitive case.

59. Inig'abot ninyo sa Sansyangku, liko' sa tu'o.
 upon arriving you-GEN OBL Sanciangko turn OBL right
 Upon your arriving at Sanciangko, turn to the right.
 (Wolff, 1966, 3.a.25)

The Subject of a finite clause is nominative. The Subject of a non-finite clause is genitive. Genitive Actors have two sources. Either they are $\hat{1}$'s of advancement rules, or they are Subjects of non-finite clauses.

$\hat{1}$'s also have a special position in the sentence: They immediately follow the verb. Actually, since a detached tanang also follows the verb, it is more accurate to say that former $\hat{1}$'s follow the verb. The basic, unmarked word order in Cebuano is as shown below.

BASIC WORD ORDER CONVENTION: Verb (former $\hat{1}$'s) 1 (2) (3) (nonterms)
 Of the former $\hat{1}$'s, the tanang precedes the $\hat{1}$.

Cebuano also has two other frequent word order conventions. At the risk of disrupting the line of argument, I would like to discuss these two other word order conventions.

5.2. Digression: Other word order conventions

In the examples given, the nominative nominal followed the verb. The nominative nominal can appear also in preverbal position.

60. Ang bagong kalaha' giluto'an sa babaye sa isda'.
NOM new LN frying pan cook LOC GEN woman OBL fish
In the new frying pan, the woman cooked the fish.

This word order is felt as marked, but the nature of the marking is not clear. It is sometimes said to be "emphatic," but it seems less a matter of emphasis than of whatever is shown by topicalization in English. Since the nominative nominal is the topic when a sentence has a topic, it is not clear whether the word order convention should be stated with a preverbal Subject or preverbal topic. Despite the fact that only Subjects in Cebuano can be topics, the two ways of stating the word order have different empirical consequences, and the data to be used in deciding between them are not completely clear. This matter will be discussed in Section 7.1. For the moment, let us state the word order referring to the Subject.

TOPICALIZED WORD ORDER CONVENTION: 1 Verb (former 1's) (2) (3) (nonterms)

The other word order permits the Indirect Object and adverbial dependents to precede the verb, as shown in 61 and 62. 61.a. gives a sentence in the basic word order.

- 61.a. Mo'ani' kami ug humay sa bulan sa Nobyember.
ACT harvest we-NOM OBL rice OBL month GEN
We harvest rice in the month of November.

In 61.b., the temporal phrase precedes the verb.

- 61.b. Sa bulan sa Nobyember mo'ani' kami ug humay.
 OBL month GEN ACT harvest we-NOM OBL rice
 In November, we harvest rice.

The Direct Object cannot precede the verb.

- 61.c. *Ug humay mo'ani' kami sa bulan sa Nobyember.
 OBL rice ACT harvest we-NOM OBL month GEN
 Rice, we harvest in the month of November.

- 60.a. *Sa isda' giluto'an sa babaye ang bagong kalaha'.
 OBL fish cook LOC GEN woman NOM new LN frying pan
 The fish, the woman cooked in the new frying pan.

In 62.a., the dependents are in the basic word order.

- 62.a. Nagsulat si Lito sa balita kang Maria.
 ACT write NOM OBL news OBL
 Lito was writing the news to Maria.

Sentence 62.b. shows that the Indirect Object can precede the verb.

- 62.b. Kang Maria nagsulat si Lito sa balita.
 OBL ACT write NOM OBL news
 To Maria, Lito wrote the news.

As before, the Direct Object cannot precede the verb.

- 62.c. *Sa balita nagsulat si Lito kang Maria.
 OBL news ACT write NOM OBL
 The news, Lito wrote to Maria.

A [^]1 cannot occur in preverbal position, unless it is the preposed form of the genitive pronoun. We cannot re-arrange the nominals in 60 to put the [^]1 before the verb, as in 63.a.

- 63.a. *Sa babaye giluto'an ang bagong kalaha' sa isda'.
 GEN woman cook LOC NOM new LN frying pan OBL fish
 By the woman, the new frying pan was cooked the fish in.

If the preposed genitive form, iya, replaces sa babaye, then it precedes the verb as in 63.b.

- 63.b. Iyang giluto'an ang bagong kalaha' sa isda'.
 her LN cook LOC NOM new LN frying pan OBL fish
 By her, the new frying pan was cooked the fish in.

The fact that the preposed genitive pronoun [^]1 can precede the verb is purely a morphological matter, unrelated to the general restriction barring [^]1 's in preverbal position.

The word order with non-nominative elements in front of the verb is not felt as marked, as the topicalized word order is. It seems to be stylistic, rather like the diverse positions of adverbs in English. I may, however, be mistaken about this. Let us call this word order the adverbial word order. Since the 1 and 2 together are called "nuclear terms," this word order can be represented as below.

ADVERBIAL WORD ORDER: non-nuclear dependent V (former 1's) 1(2)(3) other

The word order conventions are given in terms of the grammatical relations of the dependents of the verb. Naturally, they refer only to dependents of the verb of the sentence, not to dependents of some other clause. For example, the temporal expression in 64.a. is a dependent of the verb ani' (harvest). It cannot appear before the higher verb ingon (tell).

64.a. Gi'ingon ni Maria kanako' nga mo'ani' sila ug humay
OBJ tell GEN I-OBL LN ACT harvest they-NOM OBL rice

sa bulan sa Nobyember.

OBL month GEN

It was told me by Maria that they harvest rice in November.

b. *Sa bulan sa Nobyember gi'ingon ni Maria kanako' nga mo'ani'
OBL month GEN OBJ tell GEN I-OBL LN ACT harvest

sila ug humay.

they-NOM OBL rice

In November, it was told me by Maria that they will harvest rice.

(This sentence is good if the temporal expression goes with tell)

Since a nominal can have a central relation to one verb and an overlay relation to another, like the head of a relative clause, overlay relations may determine the position of a dependent with respect to a verb of which it is not a central dependent.

5.3. The form of the advancement rules

Returning to the main discussion, I have proposed that non-active sentences be derived from active ones by advancement rules. Let us consider the rules in greater detail.

An advancement rule changes the grammatical relation of a dependent of a verb, making its rank higher on the hierarchy. An advancement rule can be thought of as consisting of two parts: a core, which states the change in relation, and the side effects, which state the morphological changes, if any, which a particular language uses to show that the rule has applied. For example, the core of the rule of passive is $2 \rightarrow 1$. The side effects vary from language to language. In English, the chomeur is marked with by and the past participle of the verb and a form of be are used. In Japanese, the chomeur is marked by ni (yotte), and the verb is marked by -rare-. We have already seen one side effect of the advancement rules in Cebuano, which I state here once and for all: The $\hat{1}$ created by an advancement rule is in the genitive case.

In Cebuano, the initial 2, the initial 3, a Locative, an Instrumental, a Temporal, or a Beneficiary can become a final 1. The 2 clearly advances directly to 1 by the passive rule $2 \rightarrow 1$. The manner in which the other dependents advance has not yet been settled. Do the other dependents advance directly or through some intermediate stage(s)?

To see what is meant by advancing by stages, consider the following example from English. In English, an initial Indirect Object can become a final 1, as in 65.a.

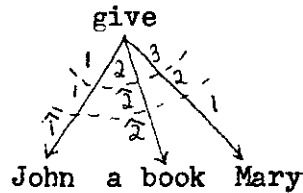
65.a. Mary was given a book by John.

There is no reason to suppose that 65.a. results from a rule of $3 \rightarrow 1$ advancement. We know from 65.b. and 65.c. that English has a rule of $3 \rightarrow 2$ advancement.

- 65.b. John gave a book to Mary.
c. John gave Mary a book.

Sentence 65.a. can be viewed as the result of $3 \rightarrow 2$ advancement followed by passive, as shown in diagram 65.d.

65.d.



Besides removing the need for an extra rule of $3 \rightarrow 1$ advancement, such a derivation of 65.a. explains why the usual side effects of passive are found.

Clearly, in at least some instances, a dependent which starts out lower than a 2 on the hierarchy advances to 1 by stages. Do such dependents advance only by stages? In Cebuano, an initial Instrument may be a final Subject, as in 66.

66. Ipatay mo ang akong sundang sa bitin.
INS kill you-GEN NOM my IN bolo OBL snake
Kill the snake with my bolo.

Should Cebuano have a rule $\text{Instrument} \rightarrow 1$, or should the Instrument first become a 3 and advance directly or indirectly to 1? Should all advancement rules work the same way? If there should be a rule $\text{Ins} \rightarrow 1$, does that mean there should be a rule $\text{Loc} \rightarrow 1$? Might some dependents go through some intermediate stage while others advance directly to Subject? Are these questions to be answered universally or separately for each language?

If the answers are to be universal statements about the form or application of advancement rules, then the questions are empirical. Whenever a dependent advances to a grammatical relation which is already filled, the old term is put en chomage. There may be a language which

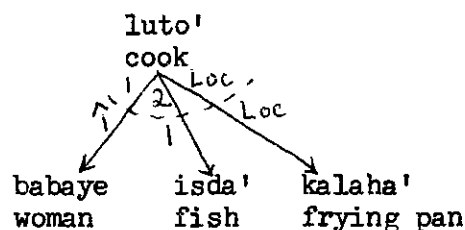
has some rule which is stated on final terms and which also has Locatives or Instruments which become Subjects. Such a language would supply a test of the manner in which the Locative or Instrumental became the Subject. If the rule applied to initial 2's and 3's in sentences in which the Locative or Instrument had become the Subject, the initial 2's and 3's would not be chomeurs, and we could conclude that advancement did not occur by stages in all languages. Cebuano does not provide any direct evidence as to whether the initial 2's and 3's have gone en chomage. Since the question is also undecided on universal grounds so far, I will discuss alternative ways in which advancement rule may apply.

5.3.1. Advancement step by step

If nominal dependents of a verb are advanced step by step up the hierarchy, the rules will be: $\text{nonterm} \rightarrow 3$, $3 \rightarrow 2$, $2 \rightarrow 1$. The statements describing the voice markings will refer to the initial grammatical relations of the advancees, rather than to the last advancement rule which applies. Under this analysis, the last rule to apply in both 67.a. and 67.c. is $2 \rightarrow 1$ advancement, as is shown in 67.b. and 67.c.

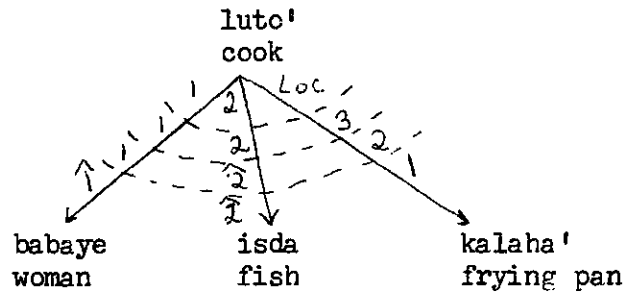
- 67.a. Giluto' sa babaye ang isda' sa kalaha'.
 OBJ cook GEN woman NOM fish OBL frying pan
 The fish was cooked in the frying pan by the woman.

b.



- c. Giluto'an sa babaye ang kalaha' sa isda'.
 cook LOC GEN woman NOM frying pan OBL fish
 The woman cooked the fish in the frying pan.

67.d.



Although the last advancement rule to apply was the same in both sentences, OBJ voice is found in 67.a. and LOC voice in 67.c., in accordance with the initial grammatical relations of the final 1.

If advancement occurs by stages, one constraint will be needed.

Suppose a particular verb requires that the Instrumental be marked with gigamit (being used). If the Instrumental becomes the 3 by the nonterm $\rightarrow 3$ advancement rule, it must go on to become the Subject. For example, applying nonterm $\rightarrow 3$ without applying $3 \rightarrow 2$ and $2 \rightarrow 1$ to 68.a. will result in 68.b., which is ungrammatical.

68.a. Mosulat si Lino ug surat gigamit ang lapis ni Tatay.
 ACT write NOM OBL letter being used NOM pencil GEN Daddy
 Lino will write a letter with Daddy's pencil.

b. *Mosulat si Lino ug surat sa lapis ni Tatay.
 ACT write NOM OBL letter OBL pencil GEN Daddy
 Lino will write a letter with Daddy's pencil.

With the possible exception of the Beneficiary, which will be discussed later, an output in which nonterm $\rightarrow 3$ has applied but $3 \rightarrow 2$ and $2 \rightarrow 1$ have not applied must be barred.

5.3.2. Single step advancement

Going to the other extreme, each of the nominal dependents could advance directly to Subject. If the advancement is direct, a separate rule will be needed for each type of dependent which can be advanced. For greater ease, the rules can temporarily be grouped together according to the voice marker on the verb when the rule applies.¹²

RULE:	VOICE:
2 → 1	OBJ
$\left. \begin{array}{l} 3 \\ \text{Loc} \\ \text{Ben} \end{array} \right\} \rightarrow 1$	LOC
$\left. \begin{array}{l} \text{Ins} \\ \text{Time} \\ \text{Ben} \end{array} \right\} \rightarrow 1$	INS

(Ben → 1 appears twice because the verb may be in either LOC or INS voice when the initial Beneficiary is the final Subject.)

The single-step analysis leaves the clustering of different dependents around a single voice unexplained. It does not require barring any outputs.

5.3.3. An intermediate step

An intermediate position allows an account of the clustering to be given. Suppose Loc → 3 and Ben → 3. Then the other advancements can be written simply as follows:

RULE:	VOICE
2 → 1	OBJ
3 → 1	LOC
nonterm → 1	INS

The status of Loc → 3 and that of Ben → 3 differ. Having a rule Loc → 3 is suspicious. An Indirect Object is generally animate, and animacy may turn out to be a necessary condition for a dependent to be an Indirect Object, initial or not. If so, then Loc → 3 will be an impossible rule, since Locatives are not always animate. However, if animacy is required only of initial Indirect Objects, it will be possible to have a rule advancing Locatives to 3. Let us assume for the moment that the rule is possible.

A rule $\text{Ben} \rightarrow 3$ is much more likely. Since Beneficiaries are animate, no problem will arise from any requirement that Indirect Objects be animate. Not only is such a rule possible, there are two facts that suggest that some speakers have a rule of $\text{Ben} \rightarrow 3$ as more than an intermediate step to allow Beneficiaries to go on to become Subjects.

The Beneficiary is usually marked by para or alang (for).

69.a. Nagluto' si Nina ug isda' para kang Dolfin.
ACT cook NOM OBL fish for OBL
Nina was cooking some fish for Dolfin.

Some speakers (Mr. Larraga and Mrs. Lynch, but not Mrs. de la Pena) also accept sentences in which the Beneficiary is not marked by a preposition.

69.b. Nagluto' si Nina ug isda' kang Dolfin.
ACT cook NOM OBL fish OBL
~~Nina~~ was cooking Dolfin some fish.

Two alternatives are possible. Either the Beneficiary has become a 3, or the preposition has been deleted. There are several reasons for preferring the first alternative.

First, having the rule $\text{Ben} \rightarrow 3$ accounts for the fact that either LOC or INS voice may be found on the verb when the Beneficiary has become the Subject. If $\text{Ben} \rightarrow 3$ applies, the initial Beneficiary, having become an Indirect Object, can advance to 1 by the usual $3 \rightarrow 1$ rule with the usual LOC voice as the side effect. If $\text{Ben} \rightarrow 3$ does not apply, the Beneficiary can advance to 1 by the usual $\text{nonterm} \rightarrow 1$ rule, with the usual side effect, the INS voice. A grammar with preposition drop instead of $\text{Ben} \rightarrow 3$ offers no explanation for the possibility of two voice markings.

Second, a condition will have to be repeated if the preposition is deleted instead of the relation's being changed. An initial Beneficiary can become a final Subject by a rule which puts LOC voice on the verb

only if the verb cannot have an Indirect Object. For example, 70.c. corresponds only to 70.b., not to 70.a.

- 70.a. Nagsulat si Go. Abaya ug rekomendasyon para kang Go. Santos.
ACT write NOM Mr. OBL recommendation for OBL Mr.
Mr. Abaya wrote a recommendation for Mr. Santos.
- b. Nagsulat si Go. Abaya ug rekomendasyon kang Go. Santos.
ACT write NOM Mr. OBL recommendation OBL Mr.
Mr. Abaya wrote a recommendation to Mr. Santos.
- c. Gisulatan ni Go. Abaya si Go. Santos ug rekomendasyon.
write LOC GEN Mr. NOM Mr. OBL recommendation
Mr. Santos was written a recommendation by Mr. Abaya.

This restriction will be needed in a grammar with $\text{Ben} \rightarrow 3$ or in one with $\text{Ben} \rightarrow 1$. Now, 70.b. is unambiguous. If the lack of a preposition in sentence 69.b. were the result of preposition drop, the rule of preposition drop would also have to be prevented from applying with verbs which can take Indirect Objects. The same condition, then, must be stated on two rules if the absence of para or alang (for) results from preposition drop rather than from a rule of $\text{Ben} \rightarrow 3$. If the absence of the preposition is a result of $\text{Ben} \rightarrow 3$, the condition need only be stated on the application of that rule. Since the Beneficiary becomes the Subject by way of Indirect Object in this hypothesis, verbs which do not permit the Beneficiary to advance to 3 will not permit the Beneficiary to advance to Subject with LOC voice.

The plight of a grammar which does not have $\text{Ben} \rightarrow 3$ is even worse. If there is no rule of $\text{Ben} \rightarrow 3$, it will be impossible to collapse the advancement rules even to the extent of saying $\left. \begin{smallmatrix} 3 \\ \text{Ben} \\ \text{Loc} \end{smallmatrix} \right\} \rightarrow 1$ LOC is a rule. We have seen that the initial Beneficiary cannot become a final 1 with a verb which can have a 3, when LOC voice is found on the verb. An initial Locative can become the final 1 with such a verb, as shown in 71.

71. Gisulatan ni Maria ang pulang papil ug balak.
 write LOC GEN NOM red LN paper OBL love poem
 Maria wrote a love poem on the red paper.

Because of this difference, we cannot write Ben and Loc advancement together. Moreover, because an initial Beneficiary can become a final Subject with INS voice even with a verb which permits Indirect Objects, as shown in 72,

72. Isulat mo ako ug rekomendasyon kaniya.
 INS write you-GEN I-NOM OBL recommendation he-OBL
 Please write me a letter of recommendation to him.

the two rules advancing Beneficiaries to 1 cannot be collapsed as
 Ben \rightarrow 1 } $\begin{matrix} \text{LOC} \\ \text{INS} \end{matrix}$. The advancement rules are much more complicated if
 there is no rule of Ben \rightarrow 3.

For speakers who accept 69.b., a rule of Ben \rightarrow 3 advancement permits us to avoid stating the same condition on two different rules and simplifies the statement of the advancement rules. Clearly, a grammar producing 69.b. by means of Ben \rightarrow 3 is to be preferred to one producing it by means of preposition drop.

The case for choosing a grammar with Ben \rightarrow 3 over one without it is not quite so strong for speakers who find 69.b. ungrammatical, requiring that the Beneficiary be marked by para or alang. Such speakers would either have a condition barring a sentence in which Ben \rightarrow 3 has applied but Ben \rightarrow 1 has not or else use para or alang to mark 3's which are derived from Beneficiaries as well as Beneficiaries. However, even if we assume the worst, that such speakers have a condition barring sentence in which Ben \rightarrow 3 has applied and 3 \rightarrow 1 has not, positing a rule of Ben \rightarrow 3 advancement permits the simplification of the advancement rules argued for above. I shall consider Ben \rightarrow 3 a rule of the grammar.

Although the status of $\text{Loc} \rightarrow 3$ is less certain than that of $\text{Ben} \rightarrow 3$, I propose that it be accepted, at least tentatively, and that the advancement rules which were proposed at the beginning of this section be adopted.

Advancements to 3

$\text{Ben} \rightarrow 3$

$\text{Loc} \rightarrow 3$

Advancements to 1

$2 \longrightarrow 1$ OBJ

$3 \longrightarrow 1$ LOC

$\text{nonterm} \rightarrow 1$ INS

In consider this proposal merely tentative because, as mentioned earlier, there may be universal restrictions on the form and application of advancement rules which will be consonant with one of the earlier alternatives rather than with the one discussed here.

5.3.4. An irregularity

Before we leave the form of advancement rules, irregularity in voice marking must be discussed.

As noted in Part I, it is not always the case that OBJ voice is found on the verb when what we would expect to be the initial Direct Object has advanced to Subject. With one set of verbs (kapot, 'grab'; hinumdum, 'remember'; alinggat, 'notice'...), LOC voice is found.

73.a. Na'alinggatan sa mananagat ang iho.
notice LOC GEN fisherman NOM shark
The shark was noticed by the fisherman.

b. Gikaptan niya ang akong bag.
grab LOC he-GEN NOM my LN bag
My bag was grabbed by him.

With another set, verbs of transferring or conveying, the INS voice is used.

74.a. Isulod mo kining kahon sa traak.
INS inside you-GEN this-NOM-LN box OBL bus
Put this chest into the bus.

74.b. Ihatag mo kanako' ang libro.
INS give you-GEN I-OBL NOM book
Give me the book.

c. Ita'as mo ang imong kamot.
INS high you-GEN NOM your IN hand
Raise your hand.

In Part I, I noted that these seeming anomalies could be dealt with in a number of ways. One could say that the hypothesis that verbs with the same meaning have dependents in the same initial grammatical relations is incorrect. Or verbs with unusual voice markings may have meanings which differ subtly from those of the verbs used to translate them. An argument was presented that in Russian direct objects which are not in the accusative/genitive case are indeed direct objects at some stage. By analogy, I supposed that the same was true in Cebuano and rejected these two alternatives.

Two alternatives were left. Either some verbs irregularly use affixes from the LOC and INS affix sets to mark OBJ voice, or some rule perturbs the initial grammatical relations.

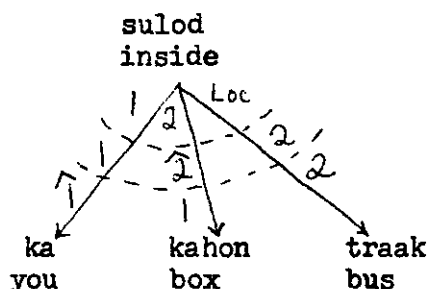
The first of these last two alternatives explains nothing. It is just a way of describing the irregularity. (I am nonetheless attached to it.)

Perlmutter (personal communication) has suggested two ways in which the initial grammatical relations might be perturbed. For both, he begins by considering the verbs of conveying. According to the advancement rules in § 5.4.3, INS voice appears when a nonterm advances to 1. If the initial 2's with verbs of conveying were nonterms at some stage, they could advance by the nonterm \rightarrow 1 rule, and the appearance of INS voice would be normal. A term can become a nonterm only if its grammatical relation is assumed by another dependent, throwing it en chomage, by the Motivated Chomage Law.

There would be two ways to throw the initial 2 en chomage. Either some other dependent could advance to 2 or a dummy could be inserted.

If some other dependent advanced, then the diagram for 74.a. would be as shown in 75.

75.



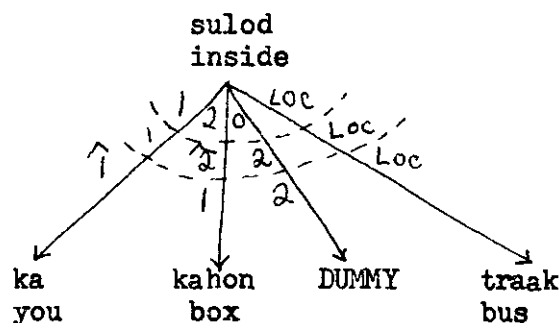
The same process would be involved as in sentences 76.a. and 76.b.

- 76.a. They loaded the hay onto the truck.
- b. They loaded the truck with hay.

There is one serious objection to this solution. It cannot account for sentences like 74.c. in which there is no other dependent which could have advanced. We would have to assume that 74.a. and 74.c. were essentially different. This seems undesirable to me.

The other way to put the 2 en chomage is to insert a dummy. The dummy will be inserted as a 2. The initial 2 goes en chomage, and being a nonterm, can advance to 1 by the regular nonterm \rightarrow 1 rule. Under this analysis, the diagram of 74.a. will be 77.

77.



Insertion of a dummy which is phonologically null may seem to make the Motivated Chomage Law meaningless and appear to be purely ad hoc. It

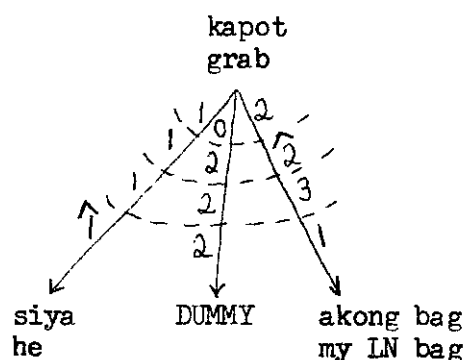
may be worthwhile to discuss insertion rules briefly to show that this is not the case. First of all, Postal and Perlmutter permit dummies to be inserted only as nuclear terms, i.e., Subjects and Direct Objects. Dummies, that is to say, cannot be inserted freely. Secondly, once inserted, a dummy cannot be put en chomage. Inserting a dummy limits the application of subsequent rules. Finally, a dummy must create a chomeur at some point. The dummy need not create a chomeur when it is inserted, it may ascend or advance to create the chomeur; but it must put some term en chomage at some point. These restrictions on dummies keep insertion of dummies from robbing the Motivated Chomage Law of all content. Additional content is given the law by another of Postal and Perlmutter's proposals. They propose that only one advancement rule can be stated to apply to chomeurs: chomeur \longrightarrow 3. (It is necessary to distinguish rules which apply to chomeurs qua chomeurs from those which apply to chomeurs qua nonterms.)

Taken together, the proposed laws and the use of a dummy 2 to account for anomalous case or voice markings make certain predictions. If a dummy 2 is inserted, the initial 2 may be treated like a nonterm or like a 3 and in no other way. In Cebuano, this prediction cannot be tested, for Cebuano has too few voices. The INS voice is used with nonterms. The LOC voice is used with 3's. In a nonactive sentence, if a dependent does not act like a 2 when it advances, it has no alternative but to use either INS or LOC voice. The prediction does have content for languages with more voices. Ilokano has a benefactive voice. It is predicted that no verbs will be found in Ilokano which are marked with the benefactive voice when an initial 2 (which has been put en chomage) advances to 1. The predictions made by using dummy insertion to account for the irregularities in voice with verbs of transferring and conveying cannot be

tested in Cebuano, but they do have content. In contrast, considering irregular cases and voices idiosyncratic manifestations of the usual case and voice used with 2's makes no predictions at all.

The use of dummies can be extended to account for verbs in which the LOC voice appears when the initial 2 advances to 1 by supposing that Cebuano has a rule $\hat{2} \rightarrow 3$. In the derivation of 73.b., for instance, a dummy 2 will be inserted, making akong bag a chomeur. The $\hat{2}$ then advances to 3. Finally, the regular $3 \rightarrow 1$ advancement rule will apply with the usual side effect, LOC voice. The diagram of 73.b. will accordingly be as shown in 78.

78.



Two conditions will have to be placed on the rules used in this analysis. It will be necessary to prevent $2 \rightarrow 1$ from applying without a dummy's being inserted. This can be done by requiring the insertion of the dummy. It will then be impossible to have a situation in which the 2 has advanced to 1 before the dummy is inserted. For suppose that the 2 has advanced to 1. The new 1 cannot be put en chomage by an advancement rule, according to the Advancee Tenure Law. Let the dummy now be inserted. The dummy must put some term en chomage at some point. The only way it can do so is to advance to 1. But it cannot advance to 1, because the current 1 is an advancee. If the 2 advances to 1 before dummy insertion, no good sentence can be produced. Next, $\hat{2} \rightarrow 3$ advancement will also have to be obligatory

with those verbs which permit the rule to apply at all. If it were not obligatory, it would be possible to have the $\hat{2}$ advance to 1 with INS marking rather than LOC marking. The need for the conditions makes the solution less attractive.

The analysis does have another source of attraction, however. It suggests a possible explanation within relational grammar for some facts about Philippine languages observed by Foley (1976). In Philippine languages, there are some verbs that can take either of two voices when the initial 2 is the final 1. For example, in Inibaloi, the verb balatbat¹³ may be in either the OBJ or the INS voice when the initial 2 is the final 1, as shown in 79 (=Foley's 41).

- 79.a. Bedatbat-en to 'y pingkan.
 line up OBJ he NOM plates
 He will line up the plates.
- b. Ibalatbat to 'y pingkan.
 INS line up he NOM plates
 He will line up the plates.

According to Foley, although the sentences are translated the same way, "each sentence codes the event from a different perspective." The first sentence with the OBJ voice "codes the event from the perspective of the result gained by the performance of the action, that is, the plates will be put away...Sentence [79.b.] with i- codes the event from the perspective of the physical positioning of the plates, either with respect to the shelf or to each other." (p.132)

In terms of dummy insertion, we could think of the matter as follows. Not all the information that a speaker desires to express is contained in the dependency relations. Information not included in these relations determines whether or not optional rules apply. The fact that a rule has applied may convey additional information to the hearer. In the example

above, the insertion of a dummy 2 attracts attention away from the "result gained by the performance of the action." The physical positioning of the plates is consequently put into perspective.¹⁴ Note here, by the way, that with these verbs dummy insertion seems to be optional.

I have supposed that not all the information a speaker desires to express is contained in the initial relational structure of a sentence. If this supposition is correct, the question arises: What sort of information is not expressed in the initial relational structure? I would suppose that information about new/old information organization is not included, at least not in the central relations. What else is not expressed should also be considered further, though I do not propose to do so here.

5.3.5. Objections to deriving non-active sentences by advancement rules

Schachter (1975, 1976) and Dryer (1976) object to the analysis proposed. Before I discuss their objections, I would like to repeat something I said before. I am concerned with the correct analysis of Cebuano within a theory, in this chapter within the derivational version of Postal and Perlmutter's theory of relational grammar, in the next chapter within the Extended Standard Theory. Schachter is interested in the correct analysis of Cebuano **either in vacuo** or in a loose framework based on analyses of various languages. Dryer wants to judge the theory by some set of implicit external criteria and amend it when it does not conform to them. Since our aims are different, our arguments and conclusions may also differ.

Schachter presents five major objections to considering the nominative nominal the Subject, in addition to the argument about definiteness, which I discussed in Part I.

1. If the nominative nominal is the Subject, then the rules of reflexivization and Equi will apply before the relation-changing rules. This is contrary to a law of relational grammar that all relation-changing rules apply before any such rules.

This objection is based on a very early version of the theory. As I explained in Section 0 of Part II, the "laws" of relational grammar, although treated as postulates within the theory, are empirical hypotheses when viewed metatheoretically. Even those working within the theory keep in mind the possibility that the "laws" may be falsified. Data from Cebuano and elsewhere led to dropping the law in question. In the later versions of the theory, the first objection no longer holds.

2. Schachter, reacting to my proposal to state Equi and reflexivization on initial grammatical relations, raises a further objection. He notes that in English, Japanese, and many other languages, Equi and reflexivization are stated on final grammatical relations. Why should Philippine languages be different and state the rules on initial terms?

Interestingly enough, Dryer **suggests** a possible answer in the course of one of his objections. He points out that Philippine languages have a strong requirement that the topic and Subject coincide. Because of this requirement, the non-active sentences in Cebuano are not marked, unlike the passive in English and many other languages. The initial Subject is not so greatly de-emphasized. On this account, it is of greater syntactic prominence, and more rules are stated on initial terms.

Although Dryer may have provided an answer, it is not clear that Schachter's objection would have had any relevance to the theory. One of the parameters along which languages may differ is whether they state rules on initial, final, or cyclic terms. Should it be demanded that the theory explain why a language chooses one option or another?

3. Both Schachter and Dryer object to having a basic word order convention in which the $\hat{1}$ follows the verb. Schachter thinks post-verbal position an unnatural place for ex-Subjects. He notes that in English and many other languages, $\hat{1}$'s are moved away from the verb.

This objection assumes that possible word order conventions are well-known and that it is impossible for a $\hat{1}$ to be relegated to post-verbal position. This is not the case. Too little study of possible positions of $\hat{1}$ has been done to justify making such claims. Post-verbal position may turn out to be a natural place for $\hat{1}$'s. In a relational grammar of Malagasy, for example, the $\hat{1}$ will be in post-verbal position. In active sentences, the basic word order is V-2-1, as in 80.a. (Keenan, 1972)

- 80.a. Nividy ny vary ny vehivavy.
bought the rice the woman
The woman bought the rice.

In passive and circumstantial voice sentences, the $\hat{1}$ follows the verb.

- 80.b. Novidin' ny vehivavy ho an'ny ankizy ny vary.
PASS buy the woman for the children the rice
The rice was bought for the children by the woman.

- c. Nividianan' ny vehivavy ny vary ny ankizy.
buy CIRCUMST. the woman the rice the children
The children were bought rice by the woman.

Dryer points out that Malagasy is an oddity among the world's languages, since V-O-S is an uncommon word order, and advises against arguing for the reasonableness of post-verbal position for $\hat{1}$'s on the basis of data from Malagasy. While he is correct in stating that Malagasy word order is unusual, the question is one of possibility, not one of frequency. If post-verbal position is a possible position for $\hat{1}$'s, one cannot claim that the fact that putative $\hat{1}$'s in Cebuano occur in post-verbal position shows that they are not $\hat{1}$'s at all.

4. Schachter shows that the active form of certain verbs is more restricted in occurrence than the nonactive forms. For example, the active form of takot (frighten) can occur only in relative clauses.

- 81.a. *Tumakot ang lalaki ng bata.
 ACT frighten NOM man OBL child
 The man frightened a child.
- b. Nasa'an ang lalaking tumakot ng bata?
 where NOM man LN ACT frighten OBL child
 Where is the man who frightened a child?

To account for the ungrammaticality of 81.a., Schachter presumes, "the verbs in question would have to be marked with a lexical feature that would have the effect of making the goal-subject rule $[2 \rightarrow 1]$ apply obligatorily in just the right cases...On the other hand, if goal-topic constructions are not transformationally derived, all that is needed to account for the distribution...is a contextual feature on certain actor-topic verbs, constraining their insertion to the appropriate contexts." (Schachter, 1976, p.511-512)

If $2 \rightarrow 1$ were a transformational rule, Schachter's argument would be correct in some theories of transformational grammar. The theory of relational grammar does not suppose that information about a previous stage is lost when a rule applies. It allows rules with global power, at least in the derivational version of the theory. In it, it is possible to bar any derivation in which the initial 1 and final 1 are the same for these verbs except in relative clauses.

Note, by the way, that Schachter's alternative supposes that subcategorization restrictions must be stated for each voice of each stem, not once for the verb. Moreover, he is proposing that a verb be categorized for an entire structure extending beyond the bounds of the clause in which it is inserted. Such a subcategorization statement would be forbidden in transformational grammar (see Chomsky, 1965).

5. Schachter points out that Tagalog has several classes of sentences which have no Actors. Assuming that every logically complete declarative sentence must contain a subject and a predicate, he concludes that the Actor cannot in general be the subject.

The classes of sentences without Actors are quite different. Three of the classes are the equational, existential, and attributive sentences.

Equational

82. Abogado ang lalaki.
lawyer NOM man
The man is a lawyer.

Existential

83. May aksidente kagabi.
E(xist) accident last night
There was an accident last night.

Attributive

84. Matalino ang lalaki.
intelligent NOM man
The man is intelligent.

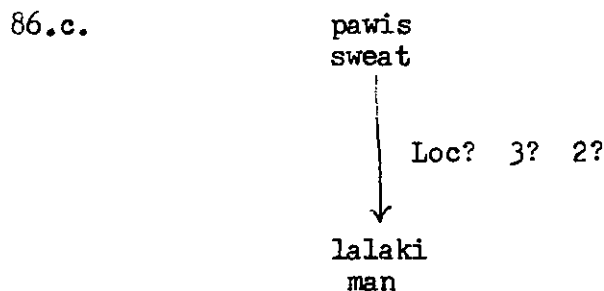
These sentences contain no Actor because they contain no verb. The proposal that the Actor be the initial Subject naturally applies only where there is a verb, since the notion of Actor is defined with reference to a verb. In relational terms, the nominative nominal would be the Subject in 84 and 85, the adjective or predicate nominal being the predicate. Whether aksidente would be the Subject of 83 or whether it would be analyzed as having a dummy Subject cannot be decided without further study. In any case, it should be clear that equational, existential, and attributive sentences are not relevant in determining whether or not the Actor is the Subject.

The other class of sentences is more interesting. There is a large class of denominal verbs in Tagalog, and in Cebuano, which can occur in the LOC voice, but not in the ACT voice, and which do not have Actors.

- 86.a. Papawisan ang lalaki.
 will sweat LOC NOM man
 The man will sweat.
- b. *Papawis ng/sa lalaki
 will sweat ACT OBL/LOC man
 The man will sweat.

Schachter claims that sentences like 86.a. cannot arise from active sources.

The most straightforward response is to claim that these verbs have no initial Subject. The source of 86.a. would be something like 86.c.



In light of Postal and Perlmutter's claim that the initial grammatical relations of verbs with the same meaning are the same in all languages, this response would entail considering many sentences underlyingly subjectless.

Here, by the way, an example of the effect of the conditions on the use of dummies can be seen. We could not derive 86.a. from a source with an underlying Subject by inserting a dummy 1, then advancing the $\hat{1}$ to 3 and thence to 1. Such a derivation would make the dummy into a chomeur, contrary to one of the proposals about dummies.

In this response, one could say that a logically complete expression must have a Subject at some stage, pointing out that 86.a. has a surface Subject. This statement is incorrect, however; even in Philippine languages,

there are sentences that cannot have any Subject whatsoever, as shown in 87, which has no nominal at all.

87. Nagulan.
ACT rain
It's raining.

Schachter's assumption that every sentence must have a Subject being incorrect, his argument does not follow.

The status of Schachter's last four arguments is interesting. They can be understood as arguments against relational grammar, but not as arguments against relating nonactive sentences to active sentences by advancement rules within the theory of relational grammar. As shown in Sections 1 to 4, the Reflexive Rank Law, Coreferential Deletion Law and Equi, the Host Limitation Law and Relational Succession Law, together with line-drawing, require the nonactive sentences to be related to active sentences by such rules. Even if Cebuano were the only language in the world in which [^]l 's appeared after the verb, unless their appearance there contradicted some other law of relational grammar, there would still be no alternative to analyzing the Actors in nonactive sentences as [^]l 's, as long as the laws mentioned above were accepted. Similarly, as long as the condition needed to bar the active forms of takot (frighten) except in relative clauses could be stated in the theory, no matter how complicated the statement was, it would not affect the analysis, which is imposed by laws of the theory, not by considerations of simplicity. If Schachter's arguments went through, they might lead us to conclude that relational grammar did not provide a sufficiently explanatory account of the data. In no case would they serve as arguments against the analysis I have given within the theory. I hope, however, that I have shown that they are not compelling.

Dryer's arguments differ from Schachter's. He looks upon himself as supporting an analysis within relational grammar which differs somewhat from the one I have given. As noted above, in my analysis, reflexivization and Equi have to be restricted with respect to initial grammatical relations. The very earliest version of relational grammar did not consider the possibility of stating restrictions with respect to initial relations. Dryer took this omission as implying a prohibition. He believes that the theory has been amended to permit reference to initial relations, and he objects to the amendment. Dryer believes that, instead, the Actor in nonactive sentences should not be considered a chomeur, but should retain a certain "terminess," ranking between the final Subject and the Direct Object in the hierarchy.

His undertaking, I would stress, is unlike mine. I am showing how a particular version of relational grammar, the derivational version of Postal and Perlmutter's theory, is applied to verb-containing sentences in Cebuano. I propose modifications of the theory only if the theory proves inadequate to allow a description of the data. However, I will discuss Dryer's proposal and arguments, in part because I believe that Dryer's modifications are more far-reaching than he realizes.

First, however, let me mention one point upon which I completely agree with Dryer. In two earlier papers (Bell, 1974a, 1974b), I said that the fact that Actors in non-active sentences are uniformly marked by the genitive case and appear in a fixed position after the verb was evidence that chomeurs act as a class. I made this claim before I had found other relation-changing rules in addition to the advancements. The other rules showed that my claim was incorrect. As Dryer correctly argues,

in my analysis the Actors have genitive marking and post-verbal position by virtue of being 1-chomeurs from advancement rules, not just by being chomeurs.

Dryer presents four arguments against my analysis.

1. Dryer notes that non-active sentences in Cebuano do not have the "marked" feeling associated with the passive in English and are more frequent than active sentences, unlike English passives. From these facts, he concludes that active sentences are no more basic than non-active ones.

Dryer is quite right about the unmarked nature of non-active sentences. His conclusion follows only if we assume that application of an advancement rule necessarily increases the markedness of a sentence. I see no reason to make such an assumption. Dryer himself explains the differences between English passives and Cebuano non-actives. In English, there is a tendency to make the topic the Subject if grammatical means are available to do so. In Cebuano, the topic must become the Subject if there are means to make it one. This requirement means that an active sentence whose topic has not advanced to become the Subject is far more marked in discourse than a non-active sentence whose Subject and topic coincide.

2. Dryer next objects to calling the Actor in non-active sentences ("the passive agent" to use his terminology) a chomeur, because the passive agent is not "idle." It is "active" in Equi and reflexivization and in certain constraints on underlying structure (for example, the requirement that the initial Subject in an imperative sentence be the second person).

In objecting thus, Dryer assumes the principle he wishes to establish, namely, that rules should not be stated on initial grammatical relations. His argument shows that reference to initial grammatical relations is necessary in order to retain the Relational Annihilation Law,

not that the law should be rejected or that reference to initial terms should be forbidden.

Commenting on the alternative, permitting these rule to be restricted with respect to initial terms, Dryer expresses dissatisfaction. He points out that most languages restrict these rules with respect to final terms and claims that the theory of relational grammar is inadequate because it does not provide a pragmatic account of the difference. He then proceeds to give an account of the difference, tracing it to the requirement in Cebuano that the final Subject and the topic coincide. This argument is summarized under Schachter's second objection. In the course of Dryer's argument, he appeals to the distinction between initial and final terms, saying that this is precisely the distinction needed in his account. If I judge correctly, he thereby provides an answer to his own objection, by showing that the notions used in relational grammar are the ones required for the pragmatic account he demands.

3. Dryer's third argument is less impressive. He notes that the passive agent is marked by the genitive case in Cebuano, while in English, French, German, and several other languages, the l-chomeur is marked by a preposition. He concludes that if the passive agent were a chomeur, it would be marked by a preposition in Cebuano, too.

Two responses can be made. Even if it were true that in no other language was a simple case marking sufficient to mark a chomeur, unless it were a part of the theory that such marking was forbidden, we could draw no conclusions about whether the Actor is a chomeur from its being marked by a simple case. However, in point of fact, there are other languages in which a chomeur is marked by a simple case, not a preposition. For example, $\hat{1}$'s of passives are marked by the instrumental case in

passive sentences in Russian, as is shown in 88.

88.a. Vse te ljudi byli izgnany demonami.
all those people-NOM-pl were driven out -pl demons-INS
All those people were driven out by demons.

b. Kniga pisetsja Ivanom.
book-NOM-sa write-3-sg-sja Ivan-INS
The book is being written by Ivan.

4. Dryer claims that properties which hold of

1. Surface 1's, 2's, and passive agents
2. 1's and passive agents
3. Surface 2's and passive agents

will not be adequately explained in the version of relational grammar in which I am working. This is not correct.

Perlmutter and Postal permit reference to initial grammatical relations. Moreover, in their theory, the Subject and Direct Object are accorded special status, being called "nuclear terms." Properties shared by surface 2's and passive agents can be associated with initial nuclear terms, quite a natural group. Limitations stated with respect to initial grammatical relations also account for properties shared by Actors in active and non-active sentences. Since Postal and Perlmutter also permit reference to "anytime" Subjects, their theory could account for properties shared by 1's and passive agents, but Dryer found none, nor do I know of any.

Dryer found one property associated with surface 1's, 2's, and passive agents: the fact that they never occur with a preposition. This "property" involves the rather questionable identification of ngadto and other ~~deictic~~ adverbs as prepositions, as in 89.

89. ngadto sa balay
yonder OBL house
yonder to the house

However, let us pass over this objection. It is not surprising that the nuclear terms, 1 and 2, are not marked by prepositions. That the "passive

agent" is not marked by a preposition is a coincidence; the 1-chomeur marking happens to be the genitive case.

As noted earlier (Part II, § 5.2), 3's and non-terms can precede the verb, as can final Subjects. Actors in non-active sentences and 2's cannot. Dryer sees this as a property shared by 2's and "passive agents." To me, it appears to result from two different word order conventions. One permits non-nuclear terms to precede the verb and is like putting adverbs at the front of the sentence in English. The other is a topicalized word order, permitting Subjects (or perhaps topics, since only Subjects can be topics) to precede the verb. The Direct Object does not appear before the verb in the first order because it is a nuclear term. It does not appear before the verb in the second order because it is not the Subject. That the chomeur does not appear before the verb is a symptom of its having a fixed position. That neither the chomeur nor the 2 can appear before the verb is contingent on their separate patterns of occurrence, not the result of a shared property.

I think that this discussion covers Dryer's arguments against analyzing the Actor in a non-active sentence as a chomeur. Now, let us consider his alternative. Dryer starts out with a structure in which the Actor is a non-topic Subject. Next a topic is selected. The topic is also the final Subject. (Dryer does not indicate how this identification comes about.) The initial Subject in non-active sentences does not become a chomeur, but remains a term, ranking between 1 and 2. The topic is marked with the nominative case; the underlying Subject (if it is not the topic) is put in the genitive; and other nominal dependents are in the oblique case.

Dryer's main desire is to consider passive agents terms. His proposal has two theoretical consequences which he does not mention.

First, he wants the Actor to be the initial Subject and the topic to be the final Subject, but he does not want the Actor to become a chomeur. In other words, he throws out the Relational Annihilation Law. Any generalizations this law permits will be lost.

Second, he has a rule create topics, then in some unspecified way has the topics be (become?) final Subjects. In Postal and Perlmutter's system, rules which change grammatical relations refer to central grammatical relations, the terms and impure grammatical relations such as Ben, Loc, Ins, and the like, relations which are claimed to be predictable from the meaning of the verb. Topic is considered an overlay relation. Accordingly, the use of a rule such as $\text{topic} \rightarrow 1$ is forbidden by Postal and Perlmutter.¹⁵

Dryer's proposal is incompatible with Postal and Perlmutter's theory, and the revisions of the theory required to accommodate it seem to me more drastic than allowing reference to initial grammatical relations.

One point of Dryer's proposal, however, deserves closer attention. Within Cebuano, his case marking rules capture a generalization which mine miss. Recall that in my analysis, Actors can end up in the genitive case in two different ways, either by being $\hat{1}$'s or by being in a non-finite clause. That the case is the same in both is merely a coincidence.

In Dryer's case marking rule, $\hat{1}$'s and Subjects of non-finite clauses are marked genitive by the same rule, in virtue of being non-topic initial Subjects.

It is not certain that the generalization is genuine. To anticipate, like me, Dryer derives Cebuano causatives from a bisentential source.¹⁶ If his case assignment rule is correct, if it is the underlying Subject that is marked genitive, then the Actor of the lower clause in a causative

sentence should be genitive. In fact, as shown in 90.a. and 90.b., it is in the oblique case. (The Actor of the lower clause is underlined.)

90.a. Nagpadagan si Go. Abaya kang Alfredo.
ACT C run NOM Mr. OBL
Mr. Abaya is letting Alfredo run.

b. *Nagpadagan si Go. Abaya ni Alfredo.
ACT C run NOM Mr. GEN
Mr. Abaya let Alfredo run.

Moreover, rules marking Subjects of some or all subordinate clauses genitive are found in other languages besides Cebuano. The genitive Subjects of gerunds in diverse Indo-European languages are well-known. In Luiseño (Hyde, 1970), a Uto-Aztecan language, other Subjects of subordinate clauses are also in the genitive case, as they are also in Turkish. A rule marking Subjects of non-finite clauses genitive, then, is quite in line with rules in other languages.

To summarize, Schachter and Dryer present arguments against my analysis. Schachter's arguments are outside the theory of relational grammar and do not affect my arguments, which are within the theory. They might cast doubt on the theory itself, if the theory provided no means of accounting for the data Schachter adduces. I hope that I have shown that the data can, in fact, be accommodated in the theory.

Dryer is disturbed by the seeming activity of $\hat{1}$'s from advancement rules and proposes sweeping revisions of the theory to prevent Actors in non-active sentences from ceasing to be terms. Postal and Perlmutter's proposal to permit rules to refer to initial grammatical relations accounts for the same data. Since Dryer himself had recourse to the distinction between initial and final grammatical relations in giving a pragmatic account of why Actors trigger Equi and reflexivization, he has not shown that his proposal obviates the need for referring to initial

grammatical relations. If one must refer to initial grammatical relations anyhow, there is no reason to introduce the new notion of "terminess" proposed by Dryer.

Let us keep the analysis in which the Actor is the initial Subject, the nominative nominal is the final Subject, and the change in relations is effected by advancement rules, and go on to see how this analysis interacts with new data.

6. Causatives in Cebuano

6.1. Causatives in general

Certain languages have productive constructions for expressing a situation in which someone permits or causes an action to be performed. In some languages, an affix is added to the verb stem. For example, in Turkish, -tir- is inserted to form causative verbs. (This and succeeding examples are from Aissen, 1974.)

91.a. Kasap et-i kesti.
 butcher-NOM meat-ACC cut
 The butcher cut the meat.

 b. Hasan kasab-a et-i kes-tir-di.
 Hasan-NOM butcher-DAT meat-ACC cut C PAST
 Hasan had the butcher cut the meat.

In other languages, the non-causative verb is accompanied by a causative verb in the causative construction. In French, faire (make) and laisser (let) are used in the causative construction.

92.a. Jean est parti.
 is left
 Jean has left.

 b. J'ai fait partir Jean.
 I have made to leave
 I made Jean leave.

Causative constructions have been the subject of many studies. In several of the more recent studies (Comrie, Aissen), it has been argued

that causatives in certain languages are single clauses on the surface but are two clauses initially. For example, Aissen (1974) argues from reflexivization and clitic placement that causatives in French are single clauses on the surface. She then argues that these single-clause causatives should be derived from a source with two clauses, basing her argument on the semantics of the nominal dependents of the verb (whether it takes an agent or an experiencer as Subject, for example), strict subcategorization, and selectional restrictions.

Certain regularities have been found in the way in which the two clauses are united into a single clause in the causative construction in diverse languages. Aissen notes, for example, that in both French and Turkish, if the lower verb is intransitive, the lower Subject becomes a Direct Object of the causative. In French, for example, if Jean in 92.b. is replaced by a pronoun, as in 93, the accusative pronoun le is used.

93. Je l'ai fait partir.
 I he-ACC have made to leave
 I made him leave.

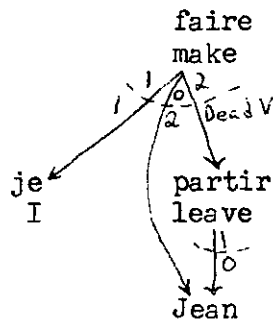
If the lower verb is transitive, the Direct Object becomes the Direct Object of the causative and the lower Subject becomes the Indirect Object of the causative, as shown in 94.

- 94.a. Il l'a chantée.
 he-NOM it-ACC-F has sung-F
 He sang it.
- b. Je la lui ai laissée chanter.
 I it-ACC-F he-DAT have let-F sing
 I let him sing it.

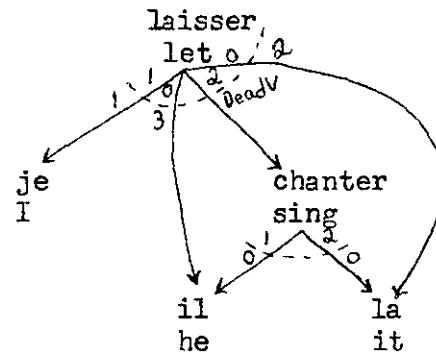
Postal and Perlmutter propose that causatives which are single clauses on the surface be derived from bisentential sources by a universal¹⁷ rule of Causative Clause Union which makes the lower Subject into the Direct Object of the causative when the lower clause is intransitive, and

makes the lower Subject into the Indirect Object of the causative and the lower Direct Object into the Direct Object of the causative when the lower clause is transitive. The lower verb becomes a "dead" verb and the remaining dependents of the lower verb become "dead" dependents of the upper verb, although what is meant by a "dead" dependent may differ in different languages. Accordingly, their diagram for 93 is 95.a., and the diagram for 94.b. is 95.b.

95.a.



b.



Cebuano seems at first glance to present a problem for this proposal. It can be argued that causatives in Cebuano are single clauses on the surface. By Postal and Perlmutter's proposal, these causatives should be derived by Clause Union from a bisentential source. However, the grammatical relations, as revealed by voice markings, are not those predicted by the rule of Clause Union. This difference can be resolved if some other rule applies after Clause Union. Data on causatives in certain other Philippine languages, which have richer case marking systems, show that this solution is correct.

6.2. Causatives in Cebuano

The causative morpheme in Cebuano is pa-.¹⁸

- 96.a. Nagdagan ang bata'.
 ACT run NOM child
 The child was running.

- 96.b. Nagpadagan ang lalaki sa bata'.
 ACT C run NOM man OBL child
 The man was letting the child run.

There are three arguments that causatives are single clauses on the surface.

1. Argument from reflexivization

We saw earlier that reflexivization is clause-bounded. In a causative sentence, a reflexive may refer to the person who causes the action to be performed as well as to the person caused to perform it. For example, in 97, the reflexive may refer to either Tomas or Fred.

97. Nagpapanday si Tomas kang Fred ug balay para sa iyang ka'ugalingon.
 ACT C build NOM OBL OBL house for OBL his LN self
 Tomas_i had Fred_j build a house for himself_{i,j}.

Since the reflexive can refer to either Tomas to Fred, Tomas and Fred must be clausemates, dependents of a single predicate. Therefore, sentence 97 must be a single clause.

2. Argument from quantifier float

Quantifier float is also clause -bounded. In 98, for example, tanán (all) can be construed with istudiante, which is a dependent of the verb which tanán follows, but not with magtutudlo, which is in a different clause.

98. Nakakita' tanán ang mga istudiante nga nagbasa ang mga magtutudlo
 ACT see all NOM pl student LN ACT read NOM pl teacher
 sa mga libro ni Rizal.
 OBL pl book GEN
 The students had all seen that the teachers were reading Rizal's books.

As in non-causative sentences, so after a causative verb, a detached tanán is unambiguously construed with the Subject, whether this Subject is the person who causes or permits the action as in 99.a.,

- 99.a. Magpabasa tanán ang mga magtutudlo sa mga istudiante sa libro.
 ACT C read all NOM pl teacher OBL pl student OBL book
 The teachers will all let the students read the books.

the person caused to act, as in 99.b.,

99.b. Pabasahon tanang sa mga magtutudlo ang mga istudiante sa libro.
C read OBJ all GEN pl teacher NOM pl student OBL book
The students will all be let read the books by the teacher.

or the Direct Object of the action, as in 99.c.

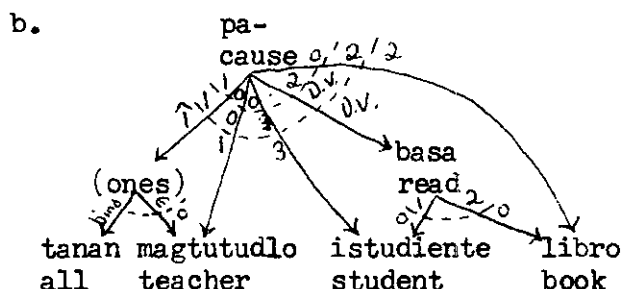
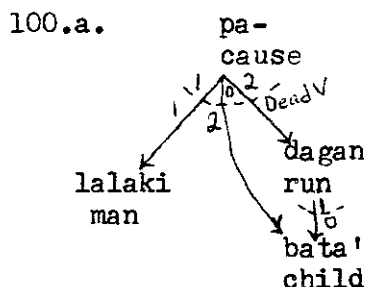
99.c. Ipabasa tanang sa mga magtutudlo sa istudiante ang mga libro.
INS C read all GEN pl teacher OBL student NOM pl book
The teachers will let the students read all the books.

Since quantifier float is clause-bounded, the person causing or permitting the action, the person performing the action, and the object of the action are all in the same clause. That is to say, causatives are a single clause on the surface.

3. Argument from advancement rules

The sentences in 99 illustrate another argument that causatives are single clauses on the surface. Advancement rules apply to dependents of a verb. In 99.b. and 99.c., mga istudiante and mga libro respectively have advanced to become Subjects of the causative. They must therefore be dependents of the causative verb, and the causative must be a single clause.

Reflexivization, quantifier float, and advancement rules show that causatives are single clauses in surface structure. According to Postal and Perlmutter's proposal, they should result from the application of Clause Union to a bisentential source. Under this proposal, the diagram for 96.b. will be 100.a. and the diagram for 99.a. will be 100.b.



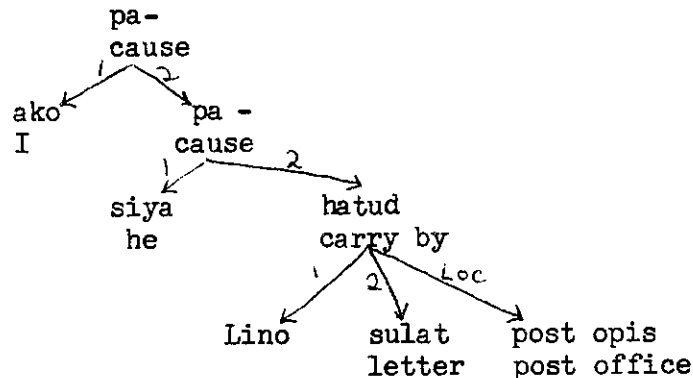
Positing a bisentential source has a rather interesting consequence. Before, we saw that the basic word-order convention is

Verb (former 1) 1 (2)(3)(nonterms),

when only chomeurs resulting from quantifier float and the advancements are considered as former 1's. The same word order convention holds in causatives if we include the former Subject of the lower verb among the former 1's, as can be seen in 99.c., in which the former lower Subject istudiante precedes the final 1 mga libro. If we had a single clause source for causatives we would need two separate word-order conventions, the one given above for non-causatives and a special convention for causatives: Verb (former 1) (3) 1 (2) (nonterms).

In Cebuano, only one causative pa- can occur. No good sentence can be derived from a source like 101.

101.a.



- b. *Nagpapahatud ako kaniya kang Lino sa surat sa post opis.
 ACT C C carry I-NOM he-OBL OBL OBL letter OBL post office
 I had him make Bill take the letter to the post office.

We will have to state that one pa- cannot be embedded under another, or allow only one causative affix in a sequences of verbal affixes, or otherwise block 101.a.¹⁹

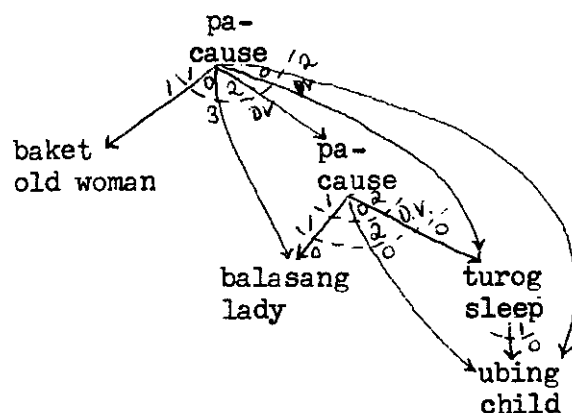
The need for such a condition should not be construed as evidence against having a bisentential source. Even if causatives were formed

morphologically and inserted as single verbs, some such condition would be needed to prevent sequences of causative morphemes.

In this connection, it is interesting to note that Ilokano, another Philippine language, does permit two causative morphemes in a single causative (Constantino, 1971). Ilokano has two causative morphemes, pa- and pag-. Sequences of pa+pa-, pag+pag-, and pa+pag- are possible. Sentence 102.a. will accordingly have a trisentential source, as shown in diagram 102.b.

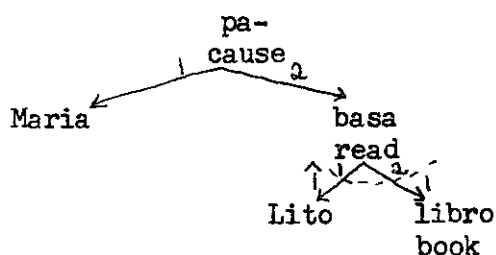
- 102.a. Agpapaturog diay baket iti ubing idiay balasang.
 ACT C C sleep NOM old woman OBL child OBL lady
 The old woman will have the lady put a child to sleep.

b.



One further restriction will be needed. Advancement rules will have to be prevented from applying in the lower clause. Advancement rules have two side effects. The chomeur is marked genitive, and the voice is changed. There is no evidence that either of these changes can take place in the lower clause of a causative construction. For example, if passive applied in the lower clause in 103.a., we would expect to find Lito in the genitive case and the verb in the OBJ voice (basahon), but we find neither.

103.a.



Suppose that passive has applied as indicated in 103.a. Let Clause Union apply. Since libro has become the Subject of the lower clause, we would expect it to be treated like the lower Subject in Clause Union. Now when the former lower Subject becomes the Subject of the causative, the verb is in the objective voice. We would therefore expect the verb to be in the objective voice when libro becomes the Subject of the causative. We would also expect the chomeur of the lower clause Lito to be in the genitive case. But sentence 103.b., with the verb in the objective voice and Lito in the genitive, is ungrammatical.

103.b. *Pabasahon ni Maria ni Lito ang libro.
 C read OBJ GEN GEN NOM book
 Maria will make Lito read the book.

The correct form is 103.c., in which there is no evidence whatsoever that any advancement has occurred in the lower clause.

103.c. Ipabasa ni Maria kang Lito ang libro.
 INS C read GEN GEN NOM book
 Maria will have Lito read the book.

We can ensure that no advancements apply in the lower clause by stating clause union on initial grammatical relations in Cebuano. Whether a language permits relation-changing rules to apply to the lower clause in causative constructions will be one of the parameters along which languages differ.

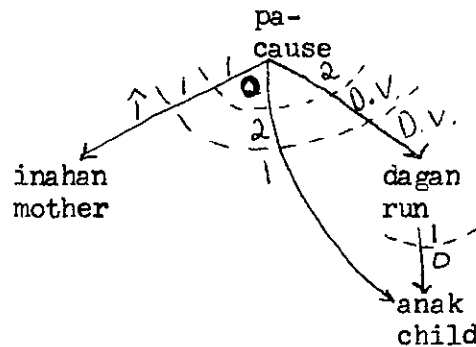
We have seen that the bisentential source proposed by Postal and Perlmutter allows an account to be given of the position of the former lower Subject in causatives. It requires that two conditions be placed on clause union. First, a verb cannot have two causative prefixes. Second, no advancements can apply in the lower clause. Now let us examine in detail the rule of clause union which is to unite the two clauses.

The rule of clause union for causatives states that the lower 1 becomes an upper 2 if the lower clause is intransitive and that the lower 2 becomes the upper 2 and the lower 1 becomes the upper 3 if the lower clause is transitive. The other dependents become "dead" dependents of the upper verb.²⁰

In Cebuano, intransitive verbs act as predicted. If we embed an intransitive verb under pa-, the lower Subject becomes the upper Direct Object, judging from the fact that OBJ voice is used when the former lower Subject is advanced to 1, as shown in 104.

- 104.a. Padaganon sa inahan ang anak.
C run OBJ GEN mother NOM child
The mother will make the child run.

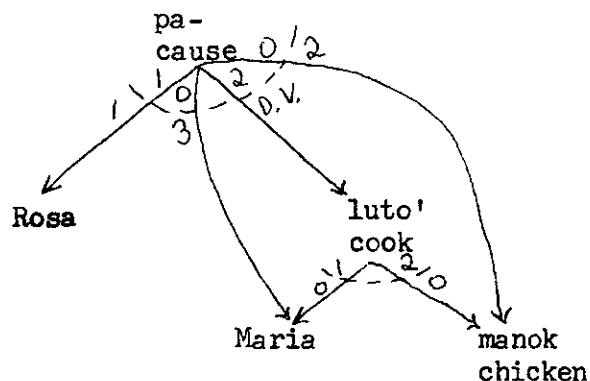
b.



When the lower verb is transitive, the rule of clause union makes the lower Subject into an upper Indirect Object, as shown in 105.a. and 105.b.

- 105.a. Nagpaluto' si Rosa kang Maria sa manok.
ACT C cook NOM OBL OBL chicken
Rosa let Maria cook the chicken.

b.



When 3's advance to 1, the verb is in the locative voice. When Maria in 105.a. advances to 1, we would accordingly expect the verb to be in the locative voice, as in 105.c.

105.c. *Gipaluto'an ni Rosa si Maria sa manok.
C cook LOC GEN NOM OBL chicken
Rosa had Maria cook the chicken.

However, 105.c. is ungrammatical in the desired reading.²¹ Instead of being in the LOC voice, the verb is in the OBJ voice when Maria becomes the Subject, as in 105.d.

105.d. Paluto'on ni Rosa si Maria sa manok.
C cook OBJ GEN NOM OBL chicken
Rosa will have Maria cook the chicken.

Since the OBJ voice is a side effect of the rule $2 \rightarrow 1$, Maria must be the Direct Object, not the Indirect Object, of the causative when it advances to Subject.

The rule of clause union also makes the Direct Object of the lower verb into the Direct Object of the upper verb. If this is correct, then the verb should be in the OBJ voice when the former lower Direct Object becomes the Subject of the causative. As shown in 105.e., this is not the case.

105.e. *Paluto'on ni Rosa kang Maria ang manok.
C cook OBJ GEN OBL NOM chicken
Rosa will have Maria cook the chicken.

Instead, the verb is in the INS voice.

105.f. Ipaluto' ni Rosa kang Maria ang manok.
INS C cook GEN OBL NOM chicken
Rosa will have Maria cook the chicken.

If the voice affixes reflect the grammatical relations established by clause union, then the grammatical relations produced by clause union in Cebuano are not like those produced in other languages. We have two alternatives. We can deny Postal and Perlmutter's claim that their rule

of clause union is universal and formulate a language-particular rule of clause union in Cebuano, or we can say that the grammatical relations shown by the voice are not the grammatical relations at the end of clause union, the relations having been changed by some other rule(s) before advancement to Subject. Let us examine these alternatives.

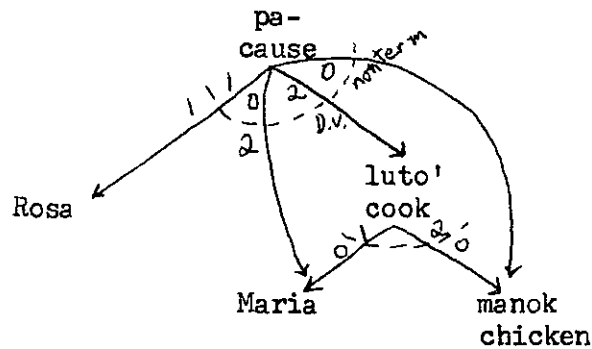
First, let us consider the kind of language-particular rule which we would need to account for the Cebuano data summarized above.

The fate of the lower Subject is clear enough in a language-particular formulation of clause union. The lower 1 becomes the upper 2, regardless of whether the lower clause is transitive or intransitive.

The fate of the lower 2 is unclear. The verb is in the INS voice when the former lower 2 becomes the upper 1, as in 105.f. INS voice is a side effect of the nonterm \rightarrow 1 advancement rule. Should the rule of clause union make the lower 2 into some sort of nonterm? As discussed earlier, when the Direct Object of a verb of transferring or conveying advances to become the Subject, the verb is in the INS voice. Should the lower 2 become the upper 2 and be treated parallel to the 2 of a verb of transferring or conveying? I will return to this question later. For the moment, let us suppose that the lower 2 is made into a nonterm of the upper clause, for if the lower 2 becomes the upper 2, there will be two Direct Objects in a single clause, a situation which would represent a far greater deviation from Postal and Perlmutter's theory than the proposal that clause union is not universal.

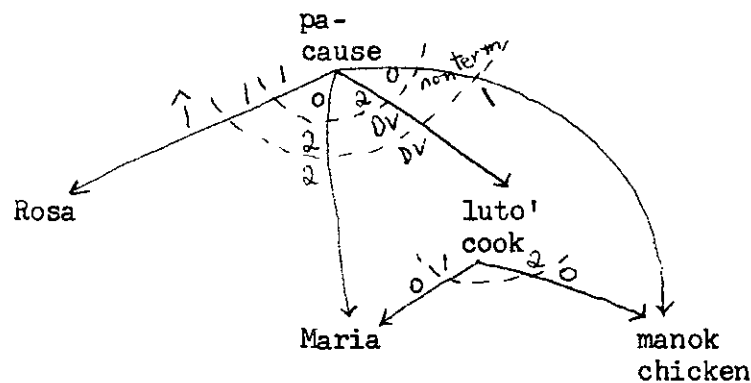
The rule of clause union for Cebuano would, then, state that the lower 1 becomes the upper 2 and the lower 2 becomes some sort of nonterm in the causative. With this sort of rule, the diagram of 105.a. will be 106.a., and the diagram of 105.f. will be 106.b.

106.a.



Nagpaluto' si Rosa kang Maria sa manok.

106.b.



Ipaluto' ni Rosa kang Maria ang manok.

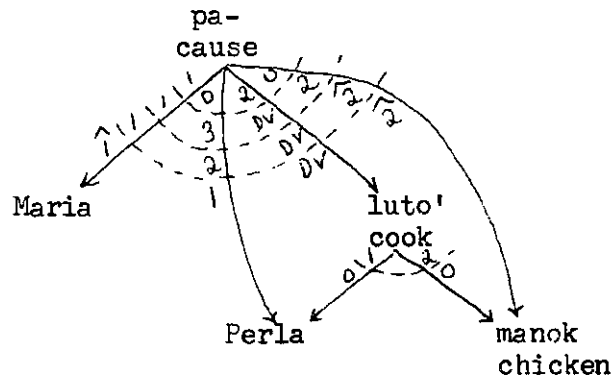
The other possibility is to say that the grammatical relations established by clause union are altered before the dependents advance to Subject. The proposed universal rule of clause union makes the lower 1 into the upper 3. At the time it advances to 1, it is a 2. The rule of $3 \rightarrow 2$ advancement can be invoked to account for the difference.

We already know that $3 \rightarrow 2$ advancement is a rule found in English. Postal and Perlmutter (in preparation) give examples of the rule in many other languages as well. Further, they show that it applies to the output of clause union in many languages. The behavior of the former lower Subject in Cebuano can be accounted for by assuming that the rule of $3 \rightarrow 2$ advancement applies to the output of clause union here, too. The former lower Subject of a transitive will become the 3 of the causative as a result of clause union. It may then advance to 2 and thence to 1.

Since its last advancement is by the $2 \rightarrow 1$ rule, the verb is marked by the OBJ voice. The diagram of 107.a. is accordingly 107.b.

107.a. Paluto'on ni Maria si Perla sa manok.
 C cook OBJ GEN NOM OBL chicken
 Maria will have Perla cook the chicken.

b.



If we were to assume that $3 \rightarrow 2$ advancement was obligatory in causatives, we would have an explanation of the fact that the verb is in the INS voice when the former lower 2 becomes the 1 of the causative. By clause union, the lower 2 would become the 2 of the causative. When $3 \rightarrow 2$ applied, the 2 would become a chomeur by the Relational Annihilation Law. Being a nonterm, it would advance by the usual nonterm $\rightarrow 1$ rule with the usual side effect, INS voice. As long as we could be sure that $3 \rightarrow 2$ would apply before $2 \rightarrow 1$ applied, this explanation would work in Cebuano. We will see **shortly**, however, that this proposal would not account for parallel facts in other Philippine languages. I shall leave the problem of the INS voice when the former lower 2 becomes the upper 1 to be discussed later, after the discussion of the OBJ voice found when the former lower 1 of a transitive becomes the 1 of the upper verb.

Two possible analyses have been presented. Cebuano may have a language-particular form of clause union, or a rule of $3 \rightarrow 2$ advancement may apply to the output of the proposed universal rule of clause union. There is no evidence within Cebuano to enable us to choose between these

alternatives because of the paucity of case markings. Cebuano has only three cases: nominative, genitive, and oblique. If a nominal is in the oblique case, the case marking tells us that the nominal is not the Actor or the final Subject. It tells us nothing more about the grammatical relation of the nominal. Further information about the grammatical relation of the nominal can be obtained only by having it advance to 1 and seeing which voice appears on the verb. The voice indicates the grammatical relation of the nominal when the rule advancing it to Subject applies. The application of a rule of $3 \rightarrow 2$ advancement would not cause any change in case marking. Cebuano can therefore offer no evidence for or against the hypothesis that a rule of $3 \rightarrow 2$ advancement applies to the output of clause union.

Data from related languages provide evidence allowing us to choose between the alternatives. Certain other Philippine languages have richer case marking systems than Cebuano. Some have accusative markers as well as nominative, genitive, and oblique. Some have a full set of cases: nominative, genitive, referential (used for 3's and Locatives), accusative, and instrumental. In these languages, there are two sources of information about the grammatical relation of a given nominal: its case when it is not a Subject, and the voice on the verb when it is the Subject. In causative sentences, the case marking reflects the grammatical relations predicted by the universal version of clause union, while the voice marking is like the Cebuano voice. The contradictory information can be harmonized by supposing that the rule of $3 \rightarrow 2$ advancement applies to the relations established by clause union, as I shall now show, using data from Ivatan, Maranao, Bikol, and Hiligaynon.

1. Ivatan (Reid, 1966)

Ivatan marks nominative (o), genitive (no), referential (do), accusative (so), and instrumental (no) cases. It has active, objective, locative, and instrumental voices. As in Cebuano, the causative morpheme is pa-.

With intransitive lower verbs, causatives are constructed exactly as predicted by clause union. Corresponding to 108.a., we have the causative 108.b.²²

108.a. *Domisna o kayvana do bangko.
ACT sit NOM friend-his REF seat
His friend is sitting on the seat.

b. Mapadisna o tao so kayvana do bangko.
ACT C sit NOM man ACC friend-his REF seat
The man is letting his friend sit on the seat.

In 108.b., the former lower Subject kayvana is marked by the accusative marker so, as predicted by the rule of clause union. When kayvana becomes the Subject, the objective affix -en appears on the verb, as is usual when 2 → 1 applies.

108.c. Padisnahren no tao o kayvana do bangko.
C sit OBJ GEN man NOM friend-his REF seat
The man is letting his friend sit on the seat.

When we look at the case markings, the causatives of transitive verbs also behave as predicted by the rule of clause union. For example, corresponding to 109.a., we have 109.b.

109.a. *Manrarayaw o kayvana so libro.
ACT destroy NOM friend-his ACC book
His friend is destroying the book.

b. Mapararayaw o tao do kayvana so libro.
ACT C destroy NOM man REF friend-his ACC book
The man is letting his friend destroy the book.

In 109.b., the former lower 2 libro is marked by the ACC so, while the former lower 1 kayvana is marked by the REF do, the case used for 3's.

If advancement to 1 applied directly to the grammatical relations established by clause union and shown by the case markings, we would expect to find the LOC voice on the verb when the former lower 1 advanced to be the 1 of the causative. Instead, the OBJ voice (-en) is found on the verb. In addition, the causative affix is not pa- but pang-.²³

- 109.c. Panrarayawen no tao o kayvana so libro.
C ? destroy OBJ GEN man NOM friend-his ACC book
The man is letting his friend destroy the book.

The verbal affixes can be accounted for if $3 \rightarrow 2$ advancement applies to the output of clause union. The ng which appears in the prefix can be taken as marking the application of the $3 \rightarrow 2$ rule, such markers being common among the languages of the world. Kayvana is then a Direct Object. When it advances to Subject, the verb is in the objective voice.

If no $3 \rightarrow 2$ rule applies, if a language-particular version of clause union is proposed to account for the objective voice when the former lower 1 becomes the 1 of the causative in Ivatan as in Cebuano, the case assignment rules will have to be complicated. Moreover, there will be no way to account for the appearance of the -ng- infix. The data from Ivatan, then, strongly support choosing the analysis with the universal version of clause union and a rule of $3 \rightarrow 2$ advancement over the analysis with a language-particular, or language-family-particular, version of clause union.

Ivatan also shows that one cannot account for the use of the INS voice when the former lower 2 becomes the upper 1 by requiring $3 \rightarrow 2$ advancement to be obligatory. In Ivatan, as in Cebuano, the INS voice affix (i-) is used when the former lower 2 becomes the Subject of the causative, as in 109.d.

- 109.d. Ipararayaw no tao do kayvana o libro.
INS C destroy GEN man REF friend-his NOM book
The man is letting his friend destroy the book.

The fact that kayvana is in the REF case makes it improbable that $3 \rightarrow 2$ advancement has applied in 109.d. If $3 \rightarrow 2$ has not applied, then it has not put the 2 libro en chomage, and the INS voice is still a mystery. I shall return to this matter later.

The analysis presented above might be challenged at two points. First, in 109.c., libro is a 2-chomeur, but it is in the ACC case. Someone might insist that the change in termhood must be shown by a change in case.

Such insistence would be misguided. The case of a chomeur does not always change. For example, in nonactive sentences in Ilokano, the $\hat{1}$ is also in the nominative case, as shown in 110.

110.a. Agpaturog diay balasang iti ubing.
 ACT C sleep NOM lady OBL child
 The lady will put a child to sleep.

b. Paturogen diay balasang diay ubing.
 C sleep OBJ NOM lady NOM child
 The child will be put to sleep by the woman.

In 110.a., the Subject is in the nominative case. In 110.a., ubing has advanced to 1. Balasang is now a $\hat{1}$, but it is in the nominative case. A term becomes a chomeur when another nominal assumes its grammatical relation as the result of a rule. A rule may specify the marking to be used for the chomeurs it creates. By the Chomeur Marking Law, if the rule does not specify the chomeur marking, a \hat{n} will undergo the same marking rules as an n. In Ilokano, the case of chomeurs created by the advancements to 1 is not specified. Accordingly, the $\hat{1}$'s are marked nominative, just as 1's are.²⁴

Secondly, $3 \rightarrow 2$ advancement applies to the grammatical relations established by clause union. Why, then, is 111, which results when $3 \rightarrow 2$ applies to 109.b., ungrammatical?²⁵

111. *Mapanrarayaw o tao so kayvana so libro.
ACT C D destroy NOM man ACC friend-his ACC book
The man is letting his friend destroy the book.

To permit 109.c. but not 111, we will have to bar a derivation in which $3 \rightarrow 2$ advancement has applied and $2 \rightarrow 1$ has not. Such a condition is possible, since we suppose that information about earlier stages is available. Inelegant though such conditions are, Postal and Perlmutter (in preparation) give examples which show the need for them.

2. Maranao (McKaughan 1958)

Maranao has nominative (so), genitive (o), accusative (sa), and oblique (ko/sa) case markers, and active, objective, locative, and instrumental voices. The causative prefix in Maranao is paki-. (The pa- drops with certain prefixes.)

McKaughan gives no data on causatives of intransitive verbs. With transitive verbs, the case markings reflect the grammatical relations predicted by the universal rule of clause union.

112. Miakisombali' den sa mga manok so Ba'i sa Agmaniog.
ACT C kill then ACC pl chicken NOM Lady OBL
Then the Lady of Agamaniog had (someone) kill the chickens.

Sentence 112 shows that the lower 2 becomes the 2 of the causative.

Sentence 113.a., in which the former lower 2 has become the upper 1, shows that the former lower 1 is marked by ko, the oblique marker, which is also used for Indirect Objects.

- 113.a. Pakitabasen o mama' ko oata' so karatas.
C cut OBJ GEN man OBL child NOM paper
The man will let the child cut the paper.

(Note that Maranao, unlike Ivatan and Cebuano, uses the OBJ voice when the former lower 2 advances to 1. This difference will be discussed later.)

When the former lower Subject becomes the Subject of the causative, the

causative prefix is changed from paki- to paka-, and the verb appears in the objective voice.

- 113.b. Pakatabasen o mama' so oata' sa karatas.
 C cut OBJ GEN man NOM child ACC paper
 The man will let the child cut the paper.

As in Ivatan, so too in Maranao, the $3 \rightarrow 2$ advancement rule permits us to account for case marking, voice, and the change in the causative prefix. The case markings show the grammatical relations established by clause union. The change in the causative prefix marks the application of the $3 \rightarrow 2$ rule, and OBJ voice is found because $2 \rightarrow 1$ has applied to the output of the $3 \rightarrow 2$ advancement.

Bikol (Mintz, 1971)

Bikol has nominative (si/an/su), genitive (ni/nin/kan), accusative (ki/nin/kan) and oblique (ki/sa) cases and active, objective, locative, and instrumental voices. The causative prefix is pa-.

With intransitive lower verbs, the former lower Subject is in the accusative case, as in 114.a.,

- 114.a. Nagpapuli' ako kan maestro mo.
 ACT C go home I-NOM ACC teacher your
 I sent your teacher home.

and the verb is in the objective voice when it becomes the Subject.

- 114.b. Papuli'on mo an maestro mo.
 C go home OBJ you-GEN NOM teacher your
 Send your teacher home.

Clearly, the lower 1 has become the 2 of the causative, as predicted by the rule of clause union.

When the lower verb is transitive, the case marking reflects the grammatical relations predicted by clause union. The former lower 1 is marked by the oblique case, which is the case used for Indirect Object, and the former lower 2 is in the accusative case, as shown in 115.a.

- 115.a. Nagpabasa ako sa'iya kan 1984.
ACT C read I-NOM he-OBL ACC
I let him read 1984.

When the former lower 1 becomes the 1 of the causative, the verb is in the objective voice, as in 115.b.

- 115.b. Pabasahon mo si Boy.
C read OBJ you-GEN NOM
Have Boy read.

As in the case of Ivatan and Maranao, the case marking and voice marking can be harmonized by having $3 \rightarrow 2$ apply to the grammatical relations established by clause union. The only difference is that application of the rule does not cause any change in the causative prefix.

When the former lower 2 becomes the Subject of the causative, the verb is in the instrumental voice.

- 115.c. Ipakanto mo sa maestro mo an 'Sarong Banggi.'
INS C sing you-GEN OBL teacher your NOM
Have your teacher sing 'Sarong Banggi.'

Hiligaynon (Wolfenden, 1971)

Hiligaynon has nominative (si/ang), accusative/genitive (AG) (ni/sing/sang), and oblique (kay/sa) cases and active, objective, locative, and instrumental voices. The causative morpheme is pa-.

Hiligaynon is like Bikol in not marking the application of the $3 \rightarrow 2$ advancement rule, but the rule is needed to account for the case markings and voice markings. As in the other languages, the case markings in Hiligaynon reflect the grammatical relations established by clause union. I do not have an example of an active sentence in which the former lower 1 is expressed. Sentence 116.a. shows that the former lower 2 is in the accusative case in the active form of a causative.

116.a. Magpaluto' ka sang adobo.
 ACT C cook you-NOM AG adobo (meat cooked in vinegar)
 Have (someone) cook some adobo.

In 116.b., the former lower 2 has advanced to become the Subject of the causative. The former lower Subject is in the oblique case, the case used for Indirect Objects.

116.b. Mapaluto' ko ang lumpya kay Mrs. Reyes.
 OBJ C cook I-AG NOM lumpia (like egg roll) OBL
 I will have Mrs. Reyes cook the lumpia.

Sentences 116.a. and 116.b. together show that the lower 2 has become the upper 2 and the lower 1 has become the upper 3. But when the former lower Subject becomes the Subject of the causative, the verb is again in the objective voice, as in 116.c.

116.c. Indi' mo sia pagpakuha'on sang bulong.
 not you-AG he-NOM C take OBJ AG medicine (as a science)
 Don't let him take up the study of medicine.

As before, the conflict between case marking and voice can be resolved by letting 3→2 advancement apply, then applying passive.

In Ivatan, Maranao, Bikol, and Hiligaynon, the case marking indicates that the lower 2 becomes the upper 2 and the lower 1 becomes the upper 3 in the causatives of transitive verbs, as predicted by Postal and Perlmutter's rule of clause union. The voice marking, however, shows that the former lower 1 is a 2 when it advances to become the upper 1. The rule of 3→2 advancement must have applied. The application of the rule is marked in Ivatan and Maranao by a change in the causative prefix. The analysis proposed to allow retention of the universal rule of clause union in Cebuano is necessary to account for the discrepancy in case marking and voice marking in other languages. The application of the 3→2 advancement rule in the other languages should remove any suspicion that proposing it

as a rule in Cebuano is ad hoc. Let us, then, adopt it in Cebuano as well as in the other languages.

We are left with one problem, explaining the behavior of the lower 2. In Maranao and Hiligaynon, it acts just as predicted. It becomes the upper 2 of the causative by clause union, then it may advance to 1 by the usual $2 \rightarrow 1$ advancement rule, with the usual side effect, OBJ voice. In Ivatan and Bikol, however, although the case marking indicates that the lower 2 becomes the 2 of the causative, the verb is in the instrumental voice when the former lower 2 becomes the 1 of the causative, as it is in Cebuano, Manobo, and Tagalog. Why?

In the discussion of Ivatan, we saw that the former lower 2 cannot have been made into a chomeur by obligatory application of the rule of $3 \rightarrow 2$ advancement, since in 109.d., 113.a., 115.c., and 116.b., the former lower 2 has become the 1 of the causative, but the former lower 1, which has become the 3 of the causative, remains in the OBL (or REF) case, showing that it has not become the 2 of the causative. Has the former lower 2 been made a chomeur as the result of some other rule, or are we dealing with some irregular spelling out of OBJ voice?

Kerr (1965) suggests that this problem is connected with the apparently irregular voice markings discussed earlier (Section 1.4 of Part I, Section 5.3.4. of Part II). In the last version of the advancement rule, INS voice marked the advancement of a nonterm to Subject. However, INS voice also appeared when the Direct Object of a verb of transferring or conveying advanced to 1. Discussing Cotabato Manobo, Kerr refers to this second use of the instrumental voice as a "shifted instrument battery" in which "the definition of instrument case...has shifted

to goal function." (p. 23) In his discussion of causatives, he goes on to propose that "some kind of correlation may also be established between the shifted instrument battery, and the causative instrument battery... based on the common case-marking function of the ...voice of each battery." (p.34)

Ilokano provides some evidence that Kerr is correct in grouping the former lower 2 in causatives with the 2's of verbs of transferring and conveying. Ilokano (Bernabe, et al, 1971; Constantino, 1971) has six voices: Active (-ag-/-um-), Objective₁ (-en), Objective₂ (i-), Instrumental (pag-), Benefactive (i-...-an), and Locative (-an). The OBJ₂ voice is used with verbs of transferring or conveying. If grouping former lower 2's together with 2's of verbs of transferring and conveying is correct, then in Ilokano, when a former lower 2 advances to become the 1 of the causative, the OBJ₂ voice should be found on the verb. This prediction is fulfilled. Corresponding to the active sentence in 117.a., we find 117.b., in which the OBJ₂ affix (i-) appears on the verb when the former lower 2 has become the 1 of the causative.

117.a. Nagpaluto' diay baket iti innapoy idiay balasang.
 ACT C cook NOM old woman OBL(-DEF) rice OBL(+DEF) lady
 The old woman made the lady cook rice.

b. Ipaluto' diay baket diay innapoy idiay balasang.
 OBJ₂ C cook NOM old woman NOM rice OBL(+DEF) lady
 The old woman made the lady cook the rice.

Giving an account of the behavior of the former lower 2 in causatives requires returning once more to the irregular voice marking when the 2 of a verb of transferring or conveying advances to 1.

Earlier, we saw that there are at least four possible explanations for the use of INS voice when the putative Direct Object of a verb of transferring or conveying advances to 1.

1. The meaning of the verb differs subtly from the meaning of its English translation, and the nominal is not a Direct Object, but stands in some nonterm relation to the verb. This proposal is impossible for causatives, if Postal and Perlmutter's formulation of clause union is accepted. Clause union makes the 2 of the lower verb into the 2 of the causative. If clause union is accepted, there can be no question of the former lower 2's being anything but the 2 of the causative. If we are correct in grouping the 2's of causatives with the 2's of verbs of transferring and conveying, this explanation becomes impossible for the latter, as it is for the former, and it can be dropped from consideration.

2. The verb is in the OBJ voice, but OBJ is irregularly spelled out using affixes from the INS set. In view of the data from Ilokano, this explanation could be elaborated further. It could be said that there are two sets of OBJ affixes. Verbs of transferring and conveying and causatives use members of one set. As the result of a historical accident, affixes of this set coincide with affixes of the instrumental voice. Other verbs use affixes from the other set of OBJ affixes. This proposal leaves unexplained the existence of two sets of affixes to start with and uses a single set of affixes for two purposes. Certainly, neither of these shortcomings is fatal, but an explanation which is not subject to them would be preferable.

3. A dummy 2 is inserted with verbs of transferring and conveying. The same rule applies with causatives in Cebuano, Ivatan, Tagalog, Manobo, and Ilokano, but not in Maranao and Hiligaynon. When the dummy 2 is inserted, the former 2 becomes a $\hat{2}$ by the Relational Annihilation Law. In Cebuano, Ivatan, Tagalog, and Manobo, it advances with the rest of the nonterms and, like them, triggers INS voice on the verb. Ilokano has a

special voice which is used when a nonterm which was a 2 advances to 1. This proposal accounts for the use of two affix sets in Ilokano and relates the behavior of the former lower Direct Object of causatives in different languages. It has the drawback of requiring insertion of a dummy which has no phonological realization.

4. The 2 is put en chomage by an advancement rule. If the rule putting the 2 en chomage is $3 \rightarrow 2$ advancement, we will have 2's which are marked with the case usually used for 3's. Since the stage at which the new 2's were 3's is neither the initial stage, nor the cycle final stage, nor the final stage, for the stage after clause union has applied is none of these, we would have to allow the case marking rules to refer to arbitrary stages in the derivation. This strikes me as undesirable.

The first alternative is impossible if the universal formulation of clause union is accepted. The fourth seems, to me at least, unwise. I leave the reader to choose between the other two alternatives. I myself have no strong inclination toward either. Henceforth, when dealing with a verb which has irregular voice marking, I shall ignore the irregularity and speak of the Direct Object, whatever the voice marking may be.

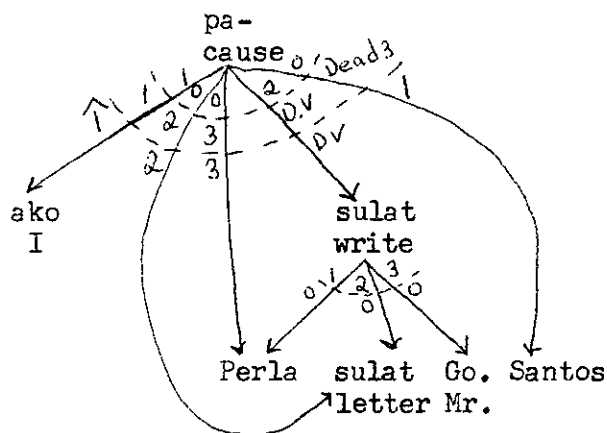
Whichever explanation is chosen, it is clear that the behavior of the former lower Direct Object, like the behavior of the former lower Subject, presents no serious difficulty for Postal and Perlmutter's proposed formulation of clause union. Even more, their rule of clause union, together with a rule of $3 \rightarrow 2$ advancement, explains the conflicting information about the grammatical relations of the former lower Subject gained from case marking and voice marking in Ivatan, Bikol, Hiligaynon, and Maranao. It also explains the change in the causative prefix when the former lower Subject becomes the Subject of the causative in Ivatan and Maranao. Outside the theory, an explanation is difficult to find.

So far I have treated only the lower 1 and lower 2 in clause union. In clause union, all the nominal dependents of the lower verb become dependents of the causative. The fate of nuclear terms, the Subject and Direct Object, is central to the proposed rule. The fate of non-nuclear dependents is less certain. Perlmutter has tentatively suggested that they become "dead" dependents of the causative. They do not on that account cease to participate in rules. Apparently, a "dead" n acts like an n in advancement rules, at least in Philippine causatives. For example, in 118.a., kang Go. Santos is a dead 3. As shown in 118.b., it can advance to 1 by the usual $3 \rightarrow 1$ advancement rule, with the usual side effect, LOC voice.

118.a. Nagpasulat ko kang Perla ug sulat kang Go. Santos.
 ACT C write I-NOM OBL OBL letter OBL Mr.
 I was letting Perla write a letter to Mr. Santos.

b. Gipasulatan ko' kang Perla si Go. Santos ug sulat.
 C write LOC I-GEN OBL NOM Mr. OBL letter
 I had Perla write a letter to Mr. Santos.

c.



The other "dead" dependents act in the same manner. The choice of name is unfortunate.

We have discussed advancement rules and clause union in Cebuano.

Now let us turn to ascension rules.

7. Ascension rules in Cebuano

7.0. Introduction

In an ascension, a nominal which is a subpart of a dependent of a verb becomes itself a dependent of the verb. The dependent from which it ascends (the host) must be a term (Host Limitation Law). The ascendeo assumes the grammatical relation of the host from which it ascends (Relational Succession Law). By the Relational Annihilation Law, the rest of the host becomes a chomeur. I have found three ascension rules in Cebuano, in addition to the rule of quantifier float discussed earlier.

7.1. Subject ascension

It was mentioned in § 2.2.2 that the Direct Object of certain verbs may be a finite clause linked to the matrix sentence by nga.

119.a. Naka'alinggat ang mananagat nga mibalik ang iho.
ACT notice NOM fisherman LN ACT return NOM shark
The fisherman noticed that the shark had returned.

A sentential complement can advance to Subject.

119.b. Na'alinggatan sa mananagat nga mibalik ang iho.
notice LOC GEN fisherman LN ACT return NOM shark
That the shark had returned was noticed by the fisherman.

In addition to 119.b., we also find 119.c.

119.c. Ang iho na'alinggatan sa mananagat nga mibalik.
NOM shark notice LOC GEN fisherman LN ACT return
That the shark had returned was noticed by the fisherman.

Sentence 119.d., formed analogously from 119.a., is ungrammatical.

119.d. *Ang iho naka'alinggat ang mananagat nga mibalik.
NOM shark ACT notice NOM fisherman LN ACT return
The fisherman noticed that the shark had returned.

The Subject of the complement clause can appear before the main verb when the complement clause has become the Subject of the main verb.

Only the Subject of the complement clause can thus escape from its clause.

- 120.a. Gituohan ko' nga magbuhat si Tomas ug ma'ayong silya.
believe LOC I-GEN LN ACT make NOM OBL good LN chairs
That Tomas makes good chairs is believed by me.

Tomas is the Subject of the complement clause, and it can appear before the main verb.

- 120.b. Si Tomas gituohan ko' nga magbuhat ug ma'ayong silya.
NOM believe LOC I-GEN LN ACT make OBL good LN chair
That Tomas makes good chairs is believed by me.

Ma'ayong silya, the Direct Object of magbuhat, cannot appear before the main verb.

- 120.c. *Ug ma'ayong silya gituohan ko' nga magbuhat si Tomas.
OBL good LN chair believe LOC I-GEN LN ACT make NOM
That Tomas makes good chairs is believed by me.

In order for ma'ayong silya to precede the main verb, it must become the Subject of the complement clause. In 120.d., ma'ayong silya is the Subject of the complement clause, and it can appear before the main verb, as in 120.e.

- 120.d. Gituohan ko' nga gibuhat ni Tomas ang ma'ayong silya.
believe LOC I-GEN LN OBJ make GEN NOM good LN chair
That the good chair was made by Tomas was believed by me.

- e. Ang ma'**ayong** silya gituohan ko' nga gibuhat ni Tomas.
NOM good LN chair believe LOC I-GEN LN OBJ make GEN
That the good chair was made by Tomas was believed by me.

In 120.d., Tomas is no longer the Subject of the complement clause, and it can no longer appear before the main verb.

- 120.f. *Ni Tomas gituohan ko' nga gibuhat ang ma'**ayong** silya.
GEN believe LOC I-GEN LN OBJ make NOM good LN chair
That the good chair was made by Tomas was believed by me.

This construction can appear in embedded clauses, as in 121, in which iho comes from the complement clause but appears before alinggat.

121. Gi'ingon ni Fred kang Perla nga ang iho na'alinggatan
OBJ tell GEN OBL LN NOM shark notice LOC

sa mananagat nga mibalik.
GEN fisherman LN ACT return
It was told by Fred to Perla that it had been noticed by the
fisherman that the shark had returned.

The nominal may move up more than one clause. In 122, iho has come from the lowest clause.

122. Ang iho gi'ingon ni Fred kang Perla nga misinggit si Lito
NOM shark OBJ tell GEN OBL LN ACT shout NOM

nga na'alinggatan sa mananagat nga mibalik.
LN notice LOC GEN fisherman LN ACT return
It was told by Fred to Perla that Lito had shouted that it
had been noticed by the fisherman that the shark had returned.

In this construction, a nominal dependent which was initially in one clause appears in front of the verb in another clause. It must bear some relation to the latter verb. It appears in the position of the preverbal dependent in the topicalized word order. Its relation to the upper verb depends on how the topicalized word order should be stated. Is it the Subject or the topic which appears before the verb? Does the nominal stand before the upper verb because a rule has applied, letting it ascend to be the Subject of the upper verb, or because it bore the topic relation to the upper verb all along?

There is one slight piece of evidence that the preverbal nominal has ascended. In all the examples given, the topicalized word order convention has been used. In general, the topicalized word order must be used. Sentence 123, in which the basic word order convention is used, is unacceptable.

123. *Gituohan ko' ang ma'ayong silya nga gihimo ni Tomas.
believe LOC I-GEN NOM good LN chair LN OBJ make GEN
It was believed by me that the good chair was made by Tomas.

However, in some sentences the normal word order is possible.

124. Na'alinggatan sa mananagat ang iho nga mibalik.²⁶
 notice LOC GEN fisherman NOM shark LN ACT return
 It was noticed by the fisherman that the shark had returned.

Since the nominal ang iho can appear in the basic position for 1's in some sentences, it does seem to have ascended. However, I have no explanation for the fact that it appears only in preverbal position in the other sentences.

The other processes which are restricted with respect to Subjects give no clear evidence on this point.

If quantifier float applied in 125.a., the result should be 125.b.

- 125.a. Ang tanang mga silya gituohan ko' nga gibuhay ni Tomas.
 NOM all LN pl chair believe LOC I-GEN LN OBJ make GEN
 That the chairs were made by Tomas was believed by me.
- b. *Ang mga silya gituohan ko' tanan nga gibuhay ni Tomas.
 NOM pl chair believe LOC I-GEN all LN OBJ make GEN
 That the chairs were all made by Tomas was believed by me.

The unacceptability of 125.b. shows that the putative ascendeo cannot host quantifier float. However, the unacceptability of 125.b. does not show that ang tanang mga silya is not the Subject of tuo. The topicalized word order convention cannot be used when quantifier float has applied, even in a single clause, as shown by the badness of sentence 126.

126. *Ang mga kahoy gipilay tanan sa mangangahoy.
 NOM pl tree OBJ cut down all GEN woodcutter
The trees were all cut down by the woodcutter.

With relativization, the inconclusiveness has another source. If the putative ascendeo is relativizable, it is the Subject, assuming for the moment that Keenan and Comrie's Hierarchy is correct. If we embed 119.c. as a relative clause, the result will be 127, and 127 is indeed grammatical.

127. Dako' ang iho nga na'alinggatan sa mananagat nga mibalik.
 big NOM shark LN notice LOC GEN fisherman LN ACT return
 The shark that it was noticed by the fisherman had returned
 was big.

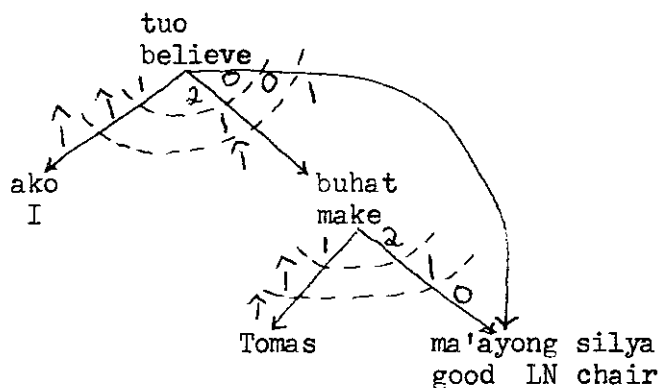
However, since relativization applies across clause boundaries, 127 could come as easily from embedding 119.b. as from embedding 119.c. Relativization also fails to provide decisive evidence.

The data from relativization and quantifier float are compatible with considering the preverbal nominal an ascende, but they provide no evidence that it is one. The only evidence is that offered by the few sentences in which the putative ascende can occupy the position of the Subject of the higher verb in the basic word order convention. Tentatively, I propose that we consider the nominal to have ascended by the following rule:

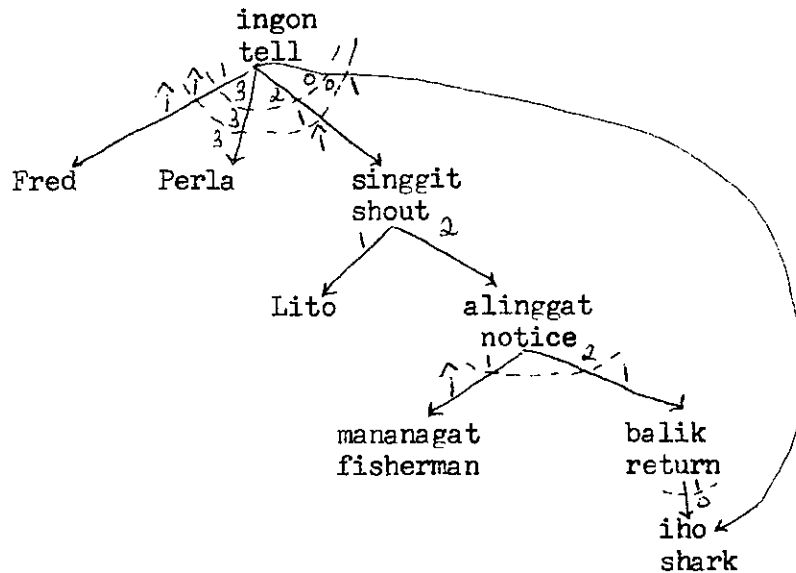
SUBJECT ASCENSION: The Subject of a finite clause which is (or is embedded in) the Subject of a higher verb may ascend to be a dependent of that higher verb.

If this rule indeed describes what is happening, then by the Relational Succession Law, the ascende becomes the Subject of the higher verb, and by the Relational Annihilation Law, the remnant of the complement clause becomes a chomeur, as shown in 128.a., the diagram for 120.e., and in 128.b., the diagram for 121.

128.a.



128.b.



7.2. Possessor ascension

Cebuano has a class of verb-containing sentences in which two NOM nominals are found. (Wolff, 1967, p.348, Paragraph 31)

129.a. ...ang sakup ni Iyo' Bruno nagkadugo' ang mga ba'ba'.
 NOM group GEN ACT be bloody NOM pl mouth
 Iyo Bruno's group, (their) mouths were bloody.

Except for topic, 129.a. is synonymous to 129.b.

129.b. ...nagkadugo' ang mga ba'ba' sa sakup ni Iyo' Bruno.
 ACT be bloody NOM pl mouth GEN group GEN
 The mouths of Iyo Bruno's group were bloody.

In 129.a., the possessor (sakup ni Iyo' Bruno) appears in the front of the verb and is marked with the nominative case. Optionally, a possessive pronoun copy may be left behind.

129.c. Ang sakup ni Iyo' Bruno nagkadugo' ang ilang mga ba'ba'.
 NOM group GEN ACT be bloody NOM their LN pl mouth
 Iyo Bruno's group, their mouths were bloody.

A preverbal possessor must come from the Subject. In 130.a., the possessor (sa baka) is not in the Subject.

130.a. Miputol na siya sa sungay sa baka.
 ACT cut off already he-NOM OBL horns OBL cow
 He has already cut off the cow's horns.

If the possessor appears in preverbal position, the sentence is ungrammatical.

- 130.b. *Sa/*Ang baka miputol na siya sa mga sungay.
GEN NOM cow ACT cut off already he-NOM OBL pl horns
The cow, he cut off (its) horns.

In 130.c., the possessor is in the Subject,

- 130.c. Giputlan na niya ang sungay sa baka.
cut off LOC already he-GEN NOM horns GEN cow
The cow's horns were cut off by him.

and in 130.d., the possessor appears before the verb in the nominative.

- 130.d. Ang baka giputlan na niya ang sungay.
NOM cow cut off LOC already he-GEN NOM horn
The cow, (its) horns were cut off by him.

Moreover, when my informant was asked to correct 131.a.,

- 131.a. *Ang pangulo nagbisita ang mga sulugu'on sa balay.
NOM chief ACT visit NOM pl servant OBL house
The chief, (his) servants visited the house.

he gave 131.b.

- 131.b. Nagbisita ang mga sulugu'on sa pangulo sa balay.
ACT visit NOM pl servant GEN chief OBL house
The chief's servants visited the house.

Asked to correct 131.c.,

- 131.c. *Ang pangulo gibisitahan sa mga sulugu'on ang balay.
NOM chief visit LOC GEN pl servant NOM house
The chief, (his) house was visited by the servants.

he responded with 131.d.

- 131.d. Gibisitahan sa mga sulugu'on ang balay sa pangulo.
visit LOC GEN pl servant NOM house GEN chief
The chief's house was visited by the servants.

In both sentences, the improperly preverbal possessor was associated with the Subject. The pattern of grammatical and ungrammatical sentences in 130 and the corrections in 131 show clearly that the preverbal possessor comes only from the Subject.

In this construction, the possessor acts like a dependent of the verb. It appears before the verb, a position permitted to the Subject in

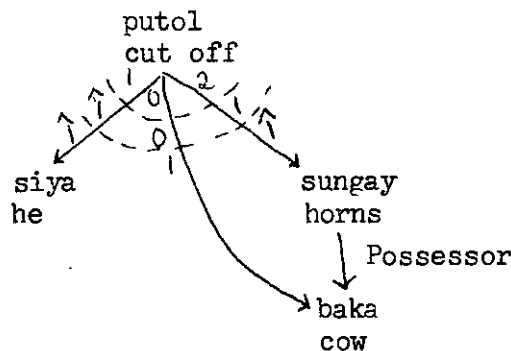
the topicalized word order convention and to non-nuclear dependents in the adverbial word order convention, a position, that is to say, permitted only to dependents of the verb.

The possessor starts out as part of a dependent of a verb and ends up as a dependent itself. Such a change in dependency is effected by an ascension rule.²⁷ The possessor has ascended. We have seen that it ascends only from Subjects. Preverbal possessors arise, then, from a rule of possessor ascension.

POSSESSOR ASCENSION: A possessor may ascend from a Subject.²⁸

Since the host must be the Subject, the rule of possessor ascension clearly obeys the Host Limitation Law. By the Relational Succession Law, the possessor is now the Subject. By the Relational Annihilation Law, the former Subject is now a $\hat{1}$. Accordingly, the diagram of 130.d. will be 132.

132.



A condition on the rule is required. If possessor ascension applies, then the topicalized word order must be used, as is shown by the ungrammaticality of 133, in which the basic word order convention is used.

133. *Giputlan niya ang baka ang sungay.
cut off LOC he-GEN NOM cow NOM horn
The cow, (its) horns were cut off by him.

The consequences of possessor ascension are borne out. The ascende is indeed the Subject. First, the case used for the ascende is nominative, the case used to mark final Subjects.

Secondly, the ascended possessor can be relativized in some sentences.

134. Nahadlok siya sa sakop ni Iyo' Bruno nga nagkadugo' ang ba'ba'.
 ACT fear he-NOM OBL group GEN LN ACT be bloody NOM mouth
 He was afraid of Iyo Bruno's group, whose mouths were bloody.

Since only Subjects can be relativized, the ascended possessor must be a Subject, as predicted by the Relational Succession Law.

There are also sentences in which the ascendeo cannot be relativized. For example, in 135, sentence 130.d. has been embedded as a relative clause and the possessor has been relativized, but 135 is ungrammatical.

135. *Kusgan ang baka nga giputlan niya ang sungay.
 strong NOM cow LN cut off LOC he-GEN NOM horn
 The cow, whose horns were cut off by him, was strong.

The ungrammaticality of 135 shows that being a Subject is not a sufficient condition for a nominal to be relativizable. It does not show that the ascendeo is not the Subject.

Thirdly, the ascendeo in possessor ascension can ascend farther by Subject ascension. Possessor Ascension may apply to 136.a. to form 136.b.

- 136.a. Gi'ingon sa babaye kang Fred nga giputlan nako' ang sungay sa baka.
 OBJ tell GEN woman OBL LN cut off LOC I-GEN NOM horn GEN cow
 That the cow's horns were cut off by me was told by the woman to Fred.
- b. Gi'ingon sa babaye kang Fred nga ang baka giputlan nako' ang sungay.
 OBJ tell GEN woman OBL LN NOM cow cut off LOC I-GEN NOM horn
 That the cow, (its) horns were cut off by me was told to Fred by the woman.

Ang baka can now ascend by Subject ascension to give 136.c.

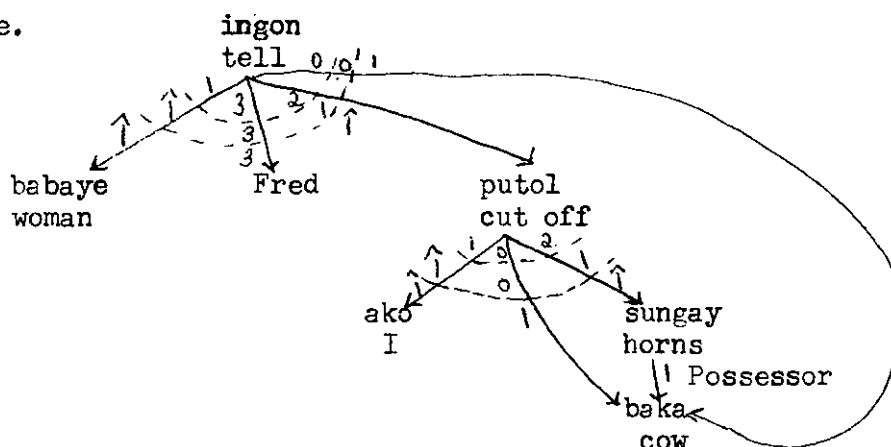
- 136.c. Ang baka gi'ingon sa babaye kang Fred nga giputlan ang sungay.
 NOM cow OBJ tell GEN woman OBL LN cut off LOC NOM horn
 The cow, it was told by the woman to Fred that its horns were cut off.

If possessor ascension does not apply, the possessor cannot ascend by Subject ascension. Thus, sentence 136.d. is ungrammatical.

- 136.d. *Sa baka gi'ingon sa babaye kang Fred nga giputlan ang sungay.
 GEN cow OBJ tell GEN woman OBL LN cut off LOC NOM horn
 The cow's, it was told by the woman to Fred that its horns were cut off.

The diagram for 136.c. is 136.e.

136.e.



Since only Subjects ascend in Subject ascension, the ascende from possessor ascension must be the Subject of giputlan.

As predicted by the Relational Annihilation Law, the remnant of the host is a chomeur. The chomage of the host is shown by its inaccessibility to relativization, as in 137.a., and to Subject ascension, as in 137.b.

137.a. *Nakakita' siya sa mga ba'ba' nga ang sakup ni Iyo' Bruno
ACT see he-NOM OBL pl mouth LN NOM group GEN

nagkadugo'.

ACT be bloody

He saw the mouths which Iyo Bruno's group, (theirs) were bloody.

b. *Ang sungay gi'ingon niya kang Fred nga ang baka giputlan.
NOM horn OBJ tell he-GEN OBL LN NOM cow cut off LOC
The horns, it was told to Fred by him that the cow, (its)
had been cut off.

Since the host becomes a chomeur, the nominative marking on the host, which can be seen in sentences 129.a. and 130.d., is an instance of the Chomeur Marking Law. The rule of possessor ascension does not specify a marking for chomeurs created by it. Accordingly, the host undergoes the same marking as the ascende; hence, it too is in the nominative case.

The presence of two nominatives in a sentence, which is a consequence of the Chomeur Marking Law in this analysis, presents difficulties for those who simply identify the topic and the nominative nominal, denying that Cebuano

has Subjects. In 130.d., which is the topic, ang baka or ang sungay or both? Using the analysis proposed here and the principle that if there is a topic, it must be the Subject, we can reply that the Subject baka is the topic.

The presence of two nominals in the nominative case would also create a problem for any analysis which stated that nominative nominals could be relativized and topicalized, not referring to Subjects. If relativization and topicalization are restricted to applying to nominative nominals, then they should apply to both the nominatives, ang sungay as well as ang baka. In such an analysis there is no explanation for the fact that it is the possessor, not the possessed, that can be relativized and raised like other nominative nominals.

I would like to end this discussion of possessor ascension with a caution. The rule of possessor ascension is too strong as stated. Possessor ascension is quite limited. It can apply only with certain verbs. For example, it cannot apply with palit (buy).

138. *Kadtong baka gipalit niya ang sungay.
that-NOM LN cow OBJ buy he-GEN NOM horn
That cow, (its) horns were bought by him.

Moreover, as shown in 139, increased complexity of material between the two nominatives reduces acceptability.

- 139.a. Ang pangulo gibisitahan nila ang balay.
NOM chief visit LOC they-GEN NOM house
The chief, (his) house was visited by them.
- b. *Ang pangulo gibisitahan sa sulugu'on ang balay.
NOM chief visit LOC GEN servant NOM house
The chief, (his) house was visited by the servants.

Yet there is no prohibition on having full nominals between them.

140. Ang baka giputlan sa magdadaro ang sungay.
NOM cow cut off LOC GEN farmer NOM horns
The cow, (its) horns were cut off by the farmer.

I am uncertain about the exact restrictions on the extent of application of the rule.²⁹

7.3. Pag-Ascension

In the discussion of pag-nominals (§2.2.1), it was noted that a pag-nominal cannot have any nominative dependents.

141. ... sa pagkapot sa/*ang kawatan sa/*ang manok...
OBL grabbing GEN NOM thief OBL NOM chicken
upon the thief's grabbing the chicken...

Pag-complements of certain verbs (sugud, 'begin'; huna'huna', 'think'; hadlok, 'fear'; hinumdum, 'remember'; sulay, 'try';...) appear to contradict this generalization.

142. Gihuna'huna' ni Lito sa pagsulat ni Maria ang balita kang Jose.
OBJ think about GEN GEN? writing GEN NOM news OBL
Maria's writing the news to Jose was being thought about by Lito.

If ang balita is a dependent of the pag-nominal, then the complement must be exceptional.

On the face of it, sentence 142 is exceptional in another way as well. In an independent clause, huna'huna' must have a nominative dependent.

- 143.a. Gihuna'huna' ni Lito ang iyang anak.
OBJ think about GEN NOM his LN child
Lito was thinking about his child.

b. *Gihuna'huna' ni Lito sa iyang anak.
OBJ think about GEN OBL his LN child
Lito was thinking about his child.

In 142, huna'huna' is the verb in an independent clause, but it appears to have no nominative dependent.

The two apparent anomalies in sentences like sentence 142 vanish if the nominative nominal ang balita is a dependent of huna'huna' rather than of pagsulat. Indeed, the nominative nominal does act like a dependent of the matrix verb.

First of all, such a nominative can appear before the verb in some instances.³⁰ Kanang taytayana appears to be in the pag-complement pag'agi kanang taytayana in sentence 144.a.

144.a. Gikahadlokan ko' sa pag'agi kanang taytayana.
fear LOC I-GEN GEN? passing that-NOM LN bridge-SPEC
I'm afraid to go over that bridge.

But the nominative kanang taytayana can also appear before the matrix verb, as in 144.b.

144.b. Kanang taytayana gikahadlokan ko' sa pag'agi.
that-NOM LN bridge SPEC fear LOC I-GEN GEN? passing
That bridge I'm afraid of going over.

The nominative nominal appears before the verb, a position permitted to the Subject in the topicalized word order or to a non-nuclear dependent in the adverbial word order, but to a dependent in both. In appearing before the matrix verb, the nominative nominal from the pag-complement is acting like a dependent of the verb gikahadlokan.

The nominative nominal in this construction not only acts like a dependent. More specifically, it acts like a Subject of the matrix verb. in relativization, possessor ascension, and perhaps in quantifier float.

As an example of relativization, 145.a. can be embedded as a relative clause, yielding 145.b.

145.a. Gisugdan ni Juan sa pagpilay ang kahoy.
begin LOC GEN GEN? cutting down NOM tree
Juan began to cut down the tree.

b. Ta'as ka'ayo ang kahoy nga gisugdan ni Juan sa pagpilay.
tall very NOM tree LN begin LOC GEN GEN? cutting down
The tree that Juan began to cut down was very tall.

It is clear that 145.b. could not be derived from 146.a., since the case marker with pagpilay is sa, not ang, in 145.b.

146.a. Gisugdan ni Juan ang pagpilay sa kahoy.
begin LOC GEN NOM cutting down OBL tree
Cutting down the tree was begun by Juan.

Kahoy cannot be relativized in 146.a. Sentence 146.b. is ungrammatical.

146.b. *Ta'as ka'ayo ang kahoy nga gisugdan ni Juan ang pagpilay.
tall very NOM tree LN begin LOC GEN NOM cutting down
The tree that Juan began to cut down was very tall.

Since only a Subject can be relativized, it follows that kahoy is the Subject of some verb in 145.a. Since we have argued that kahoy is a dependent of the matrix verb, it follows that it is the matrix verb of which kahoy is the Subject.

Possessors can ascend from these nominative nominals. In 147.a., the nominative nominal ang sungay sa baka appears inside the pag-clause.

147.a. Gisugdan niya sa pagputol ang sungay sa baka.
begin LOC he-GEN GEN? cutting off NOM horn GEN cow
He began cutting off the horns of the cow.

In 147.b., baka has ascended to become the Subject, by possessor ascension.

147.b. Ang baka gisugdan niya sa pagputol ang sungay.
NOM cow begin LOC he-GEN GEN? cutting off NOM horns
The cow, he began cutting off (its) horns.

Again, since possessors ascend only from Subjects, the nominal ang sungay sa baka must be the Subject of something. Since it is a dependent of the matrix verb, it must be the Subject of the matrix verb.

The nominative nominal in this construction may be able to host quantifier float. My informant, Mr. Larraga, sometimes accepts and sometimes rejects 148.a. and 148.b. and like sentences.

148.a. ?Gisugdan tanan sa mangangahoy sa pagpilay ang kahoy.
begin LOC all GEN woodcutter GEN? cutting down NOM tree
The trees were all begun to be cut down by the woodcutters.

b. ?Gisugdan sa mangangahoy sa pagpilay tanan ang mga kahoy.
begin LOC GEN woodcutter GEN? cutting all NOM pl tree
The trees were begun to be all cut down by the woodcutter.

Whether he accepts or rejects 148, however, Mr. Larraga consistently construes the quantifier with the nominative kahoy in these sentences. That is, whether accepting or rejecting the sentences, he treats kahoy like the Subject of gisugdan.

The nominative nominal in these sentences starts out as a dependent of the pag-nominal and ends up as the Subject of the matrix verb. Clearly, it has ascended. **There** is, then, a rule of pag-ascension. To formulate the rule clearly, we must consider first the possible ascendees and next the possible hosts.

Heretofore, the ascendee has been the Direct Object of the pag-nominal. The Indirect Object of the pag-nominal can also ascend, as in 149.a.

149.a. Gihuna'huna' ni Lito sa pagsulat ni Maria sa balita si Jose.
 OBJ think about GEN GEN? writing GEN OBL news NOM
 Maria's writing the news to Jose was thought about by Lito.

The Subject of the pag-nominal cannot ascend.

149.b. *Gihuna'huna' ni Lito sa pagsulat si Maria sa balita kang Jose.
 OBJ think about GEN GEN? writing NOM OBL news OBL
Maria's writing the news to Jose was thought about by Lito.

The ascendee, then, can be the initial 2 or 3 of the pag-nominal.

Now let us turn to the host. We can have pairs of sentences like 146.a. and 145.b., repeated here as 150.a. and 150.b. respectively.

150.a. Gisugdan ni Juan ang pagpilay sa kahoy.
 begin LOC GEN NOM cutting down OBL tree
 Cutting down the tree was begun by Juan.

b. Gisugdan ni Juan sa pagpilay ang kahoy.
 begin LOC GEN GEN? cutting down NOM tree
 Cutting down the tree was begun by Juan.

Sentence 151.a., on the other hand, has no corresponding sentence with a nominative nominal in the pag-clause. Sentence 151.b. is ungrammatical.

151.a. Misugud si Juan sa pagpilay sa kahoy.
 ACT begin NOM OBL cutting down OBL tree
 Juan began cutting down the tree.

b. *Misugud si/ni Juan sa pagpilay ang kahoy.
 ACT begin NOM/GEN OBL cutting down NOM tree
 Juan began cutting down the tree.

There are two ways to account for the pattern of grammaticality of in 150 and 151. 1. In deriving a sentence like 150.b., kahoy could

ascend from the pag-nominal while the pag-nominal was the Direct Object of the matrix verb and then advance to 1 of the matrix verb after ascending.

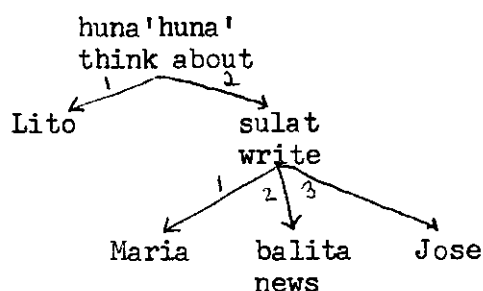
2. The pag-nominal could advance to become the Subject of the matrix verb and then kahoy could ascend to become the Subject of the matrix verb.

Let us consider these two possibilities in more detail, by seeing how

142 would come about in each analysis.

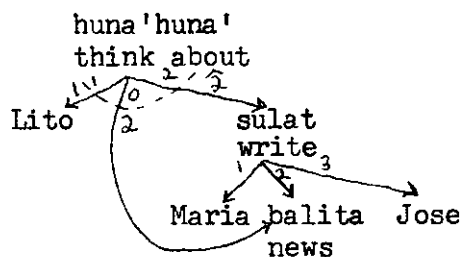
The initial structure will be the same, whichever analysis is used.

152.a.



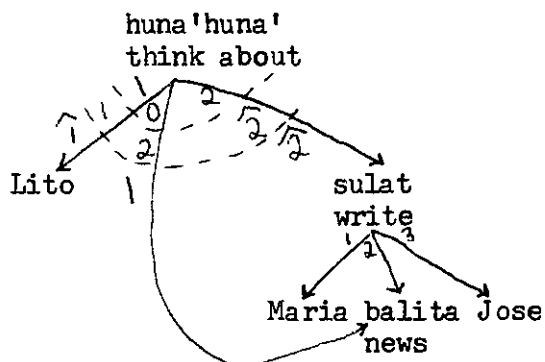
Under the first alternative, the ascension occurs at once. Balita becomes a dependent of the matrix verb. Since it ascends from a 2, it becomes a 2. We have the situation in 152.b.

152.b.



Since balita is a 2 in both structures, albeit a 2 of different verbs, no change in case marking would occur as a result of this rule. We cannot look at a sentence which would correspond to 152.b. and tell whether the ascension has occurred. We have no evidence for or against an intermediate stage like 152.b. The next step in the derivation of 142 will be to have balita, which is currently the 2 of the matrix verb, advance to become the Subject of the matrix verb, as in 152.c.

152.c.



The other possibility is to have ascension only from Subjects. In going from 152.a. to the diagram of 142, the pag-clause first advances to become the Subject of the matrix verb, as in 152.d.

152.d.

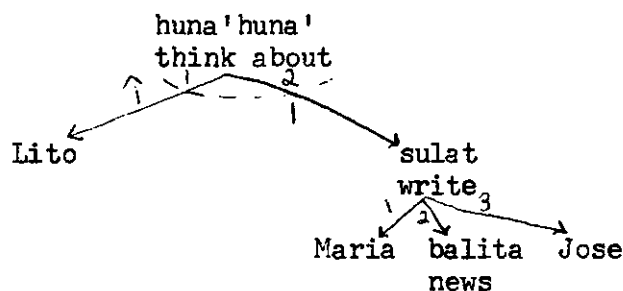
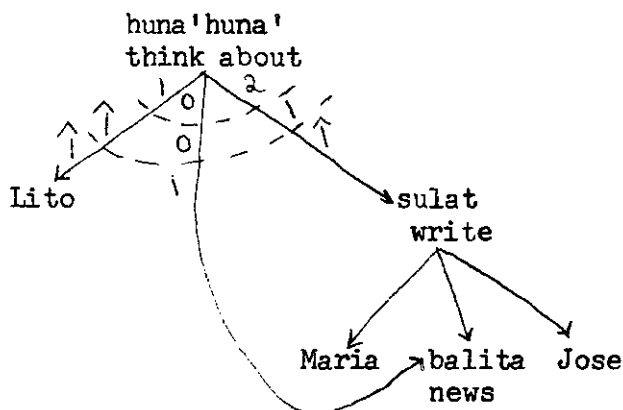


Diagram 152.d. corresponds to sentence 152.e., which is grammatical.

152.e. Gihuna'huna' ni Lito ang pagsulat ni Maria sa balita kang Jose.
 OBJ think about GEN NOM writing GEN OBL news OBL
 Maria's writing the news to Jose was thought about by Lito.

Next, balita will ascend. Since it ascends from the Subject of the matrix, it becomes the Subject of the matrix verb, by the Relational Succession Law. Diagram 152.f. will then correspond to 142 under this analysis.

152.f.



Both the possibilities have an intermediate stage. The intermediate stage in the first alternative could not be distinguished from the first stage on the surface and would not be required by anything but this first analysis of pag-ascension. The intermediate stage in the second alternative is the grammatical sentence 152.e., which must be derived anyhow. It seems to me that the second alternative is preferable in that the intermediate stage it posits can actually be observed.³¹

I propose then that the host in pag-ascension be the Subject of the matrix verb.

One more matter of form remains to be considered. By the Relational Annihilation Law, the rest of the pag-clause becomes a chomeur. By the Chomeur Marking Law, this chomeur will be marked nominative unless the rule specifies a specific marking for the chomeur. The nominal marker on the chomeur is sa, not the nominative marker. Sa is ambiguous. It can be either genitive or oblique. Normally, the case is disambiguated by substituting a personal name for a nominal marked by sa. If the case is genitive, the personal marker will be ni; if oblique, kang. Since pag-clauses are not personal names and pag-ascension cannot occur out of personal names, there is no way to determine whether the sa which marks the chomeur is genitive or oblique. We have to make an arbitrary choice. We saw earlier that $\hat{1}$'s from advancement rules are GEN. If we take sa to be the genitive marker here, we can say that if a rule specifies a case for $\hat{1}$'s, that case is genitive.³² This generalization strikes me as questionable, but since a decision is necessary, I will say that the chomeur created by pag-ascension is in the genitive case.

Taking all these comments into consideration, the rule of pag-ascension will be:

PAG-ASCENSION: The 2 or 3 of a pag-nominal may ascend when the pag-nominal is the Subject of a certain class of verbs (hadlok, 'frighten'; huna'huna, 'think about'; hinumdum, 'remember';...) Chomeur Marking: genitive

The ascendeer is the Subject of the matrix verb, but it does not always occur in the usual Subject position, that is, following the Actor of the matrix verb. In 153, it can appear in the basic Subject position; in 154, it cannot.

153. Gisugdan ni Juan ang kahoy sa pagpilay.
begin LOC GEN NOM tree GEN cutting down
The tree was begun to be cut down by Juan.

154. *Gihuna'huna' ni Lito ang balita sa pagsulat ni Maria kang Jose.
OBJ think about GEN NOM news GEN writing GEN OBL
Lito was thinking of Maria's writing the news to Jose.
(Good if the pag-clause is understood as a temporal clause:
"Lito was thinking about the news while Maria was writing
to Jose.")

A new word order convention must be made to allow the new Subject to end up with the remnant of the pag-clause, even though it is now a dependent of the matrix verb. This word order convention will have to mention the verb of which a nominal is a dependent and the initial grammatical relation of the dependent. I shall write the verb as a subscript, 'm' for the matrix verb and 'p' for the pag-nominal, and put an 'i' before a grammatical relation if it is an initial grammatical relation. Thus 'i3_p' will mean the initial 3 of the pag-nominal, for example. The word order will then be:

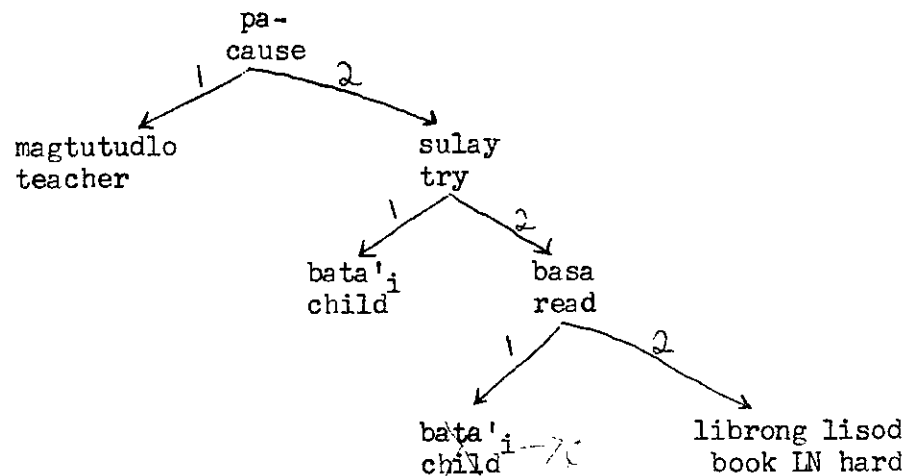
PAG-ASCENSION W.O.: V_m(former 1_m) pag-nominal (1_p) (i2_p)(i3_p) (nonterm_p)

The complicated word order suggests that the analysis might be slightly wrong. Perhaps the nominal does not cease to be a dependent of the pag-nominal when it becomes a dependent of the matrix verb. I leave this question for further study.

We saw earlier that advancements cannot occur in the lower clause of causatives. I proposed that clause union should be stated on initial grammatical relations. The interaction of clause union and pag-ascension supports this proposal, for pag-ascension cannot occur downstairs in a causative. To see this, let us consider first what will happen if pag-ascension were allowed to apply downstairs in causatives, then what happens if pag-ascension applies only upstairs.

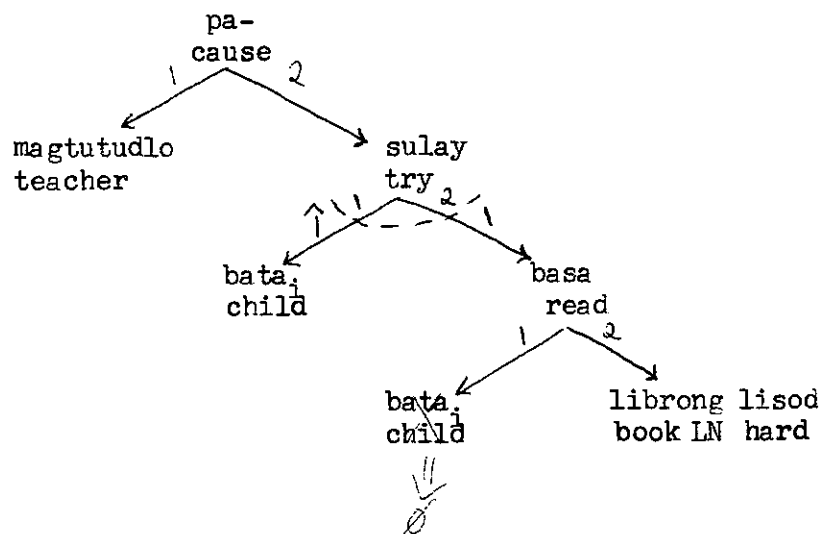
Suppose we start with the situation diagrammed in 155.a.

155.a.



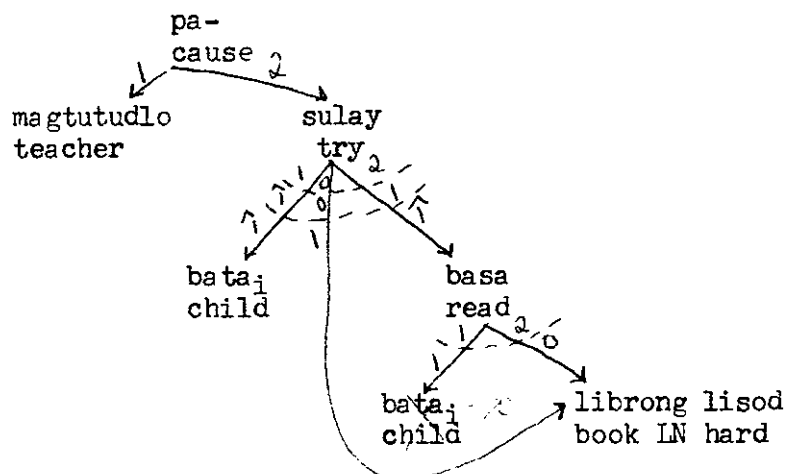
Now suppose pag-ascension is to apply downstairs before clause union applies. Since pag-ascension occurs only from Subjects of the matrix, the pag-nominal must first advance to be the subject of sulay, as in 155.b.

155.b.



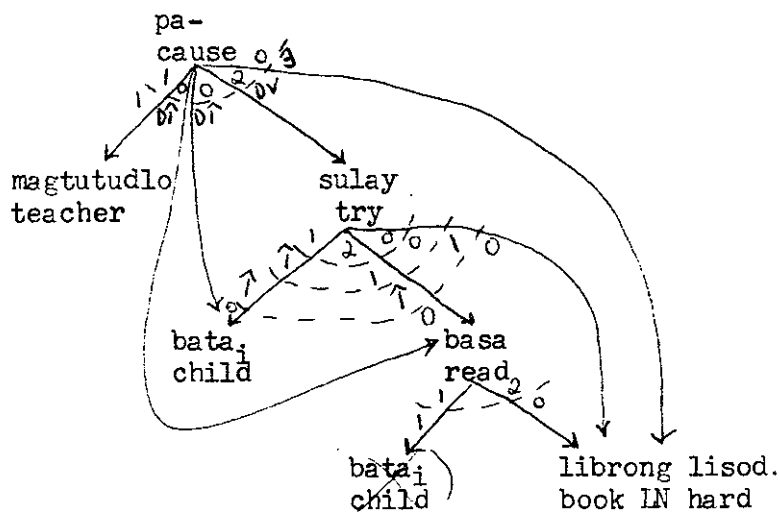
If pag-ascension now occurs, we will have 155.c.

155.c.



When clause union applies to 155.c., we will have 155.d. Since librong
lisod is the 1 of sulay, it will be the 3 of the causative.³³

155.d.



Now, suppose that librong lisod advances to be the Subject of the causative. We have seen that the objective voice is found when the former lower 1 becomes the Subject of the causative. The result of all these changes, then, would be 155.e.

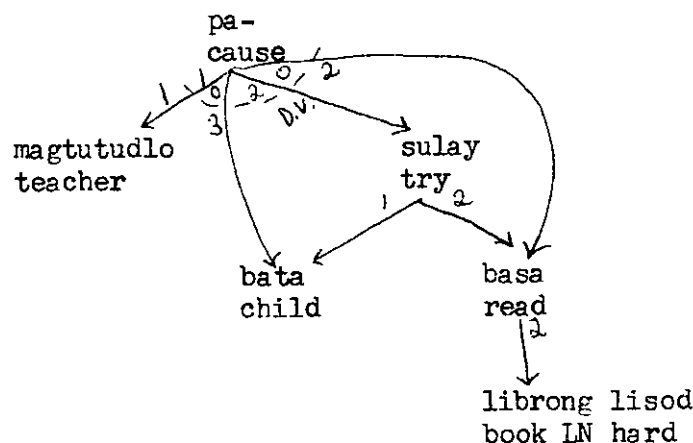
155.e. *Pasulayon sa magtutudlo sa bata' sa pagbasa ang librong lisod.
C try OBJ GEN teacher OBL child OBL reading NOM book LN hard
 GEN GEN

The teacher will have the child try to read the hard book.

But 155.e. is ungrammatical. Therefore, we cannot let pag-ascension apply downstairs in a causative.

Next, suppose that clause union is stated on initial grammatical relations and that pag-ascension applies to the output of clause union. As before, let us start with 155.a. When clause union applies, we will get 156.a. (I am assuming that Equi has applied and ignoring the 1 of basa.)

156.a.



Since pag-ascension requires the host to be the 1 of the matrix verb, basa must become the 1 of the causative before the rule can apply. Basa is the former lower 2. We have seen that the verb is in the instrumental voice when the former lower 2 becomes the 1 of the causative. At this point, we will have sentence 156.b., which is grammatical.

156.b. Ipasulay sa magtutudlo sa bata' ang pagbasa sa librong lisod.
 INS C try GEN teacher OBL child NOM reading OBL book LN hard
 The teacher will have the child try to read the hard book.

If pag-ascension now occurs, it will cause no change in voice marking.

The output should be 156.c., and 156.c. is indeed grammatical.

156.c. Ipasulay sa magtutudlo sa bata' sa pagbasa ang librong lisod.
 INS C try GEN teacher OBL child GEN reading NOM book LN hard
 The teacher will have the child try to read the hard book.

Permitting pag-ascension to apply downstairs in the causative predicted the wrong voice marking on the verb when the ascendeo eventually became the Subject of the causative. Having pag-ascension apply only after clause union predicted the correct voice. Clearly, pag-ascension supports stating clause union on initial grammatical relations.

7.4. Summary

We have examined three ascensions in Cebuano: subject ascension, possessor ascension, and pag-ascension.³⁴ Another ascension, quantifier float, was discussed earlier. In all of these, the Subject was the host. I have not found any ascensions from any term except the Subject. If there are none, it would seem that in restricting the grammatical relation of possible hosts in ascensions, as in relativization, Cebuano draws the line at 1.

All these ascensions were well-behaved, conforming to the Host Limitation Law and the Relational Succession Law. In possessor ascension, the Chomeur Marking Law helped to account for the presence of two nominatives in a single verb-containing clause, a matter difficult to explain for those claiming that the nominative is the topic alone, not the Subject as well.

Two awkward points remain. First, in sentences in which possessor ascension has applied, being a Subject is not a sufficient condition for being relativizable, as it seems to be in other constructions. Second, the rule of pag-ascension required a special word order, which was very clumsy to state. I cannot think of any way to make the analysis smoother on these points. I hope someone else can.

8. Summary and Conclusions

Postal and Perlmutter hypothesize that initial grammatical relations are predictable from the meaning of the verb. Under this hypothesis, the Actor should be the initial Subject in Cebuano. According to the Coreferential Deletion Law and the Reflexive Rank Law, the Actor does indeed act like a Subject. The restrictions on quantifier float and

relativization show that the nominative nominal is the Subject at some stage. These results impose an analysis in which the Actor is the initial Subject and the nominative nominal is the final Subject. Reflexivization and Equi are then restricted with respect to initial grammatical relations, while quantifier float and relativization depend on final grammatical relations. The grammatical relations are changed by advancement rules. The manner in which advancement rules apply was discussed. The simplest system is one in which both Ben and Loc advance to 3, then advance from 3 to 1 by the regular $3 \rightarrow 1$ rule. I therefore tentatively proposed a rule of Ben $\rightarrow 3$ advancement and a rule of Loc $\rightarrow 3$ advancement, though the latter is less well-supported both within Cebuano and in universal grammar. In any case, the exact manner in which advancement rules apply is, in principle, an empirical question to be determined by examining languages which mark cases more clearly than Cebuano and which have rules which provide tests of whether dependents are 2's and 3's.

Schachter (1975, 1976) and Dryer (1976) raised certain objections to this analysis. None of their objections vitiated any arguments used to establish the analysis within the theory of relational grammar, but they might have cast doubt on the theory itself. I therefore replied to their objections.

Next, causatives were examined. Reflexivization, quantifier float and advancements showed that Cebuano causatives are single clauses on the surface. In Postal and Perlmutter's proposal, single clause causatives are derived from a bisentential source by a universal rule of clause union which makes the lower Subject into an upper Direct Object, if the lower clause is intransitive, and makes the Subject of the lower clause into the Indirect Object of the causative and the lower Direct Object into the

Direct Object of the causative, if the lower clause is transitive. Since objective voice is found on the verb in Cebuano when the lower Subject becomes the Subject of the causative of a transitive verb, a rule of $3 \rightarrow 2$ advancement was required to preserve the proposal in Cebuano. Examination of causatives in four other Philippine languages showed that this rule is needed to explain case and voice markings in these languages, for case markings reflect the grammatical relations predicted by clause union, while voice shows the relations after the $3 \rightarrow 2$ rule has applied.

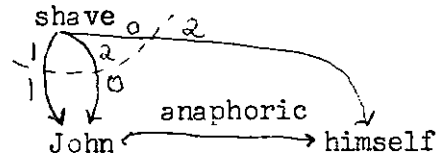
Finally, three ascension rules were discussed. In all of them, as in quantifier float, the Subject was the host. Possessor ascension and subject ascension required that the topicalized word order be used in many instances, and pag-ascension required a special, awkward word order convention.

On the whole, one set of laws of relational grammar proposed by Postal and Perlmutter imposed a certain analysis on simple, verb-containing sentences in Cebuano. When this analysis was extended to additional data, it was found to be in accordance with other laws and rules of relational grammar. That is to say, although there is no logical connection between the laws, they impose a straightforward and consistent analysis on the Cebuano data.

Footnotes to Part II

1. Postal and Perlmutter have recently made a new proposal to replace the treatment of coreference in which nominals are indexed for coreference, which they had been using. Instead of repeating nominals, they let a nominal be multiply attached to a verb or verbs. A convention requires that nominals be singly attached eventually. A pronoun is set up to bear the extra relations. The pronoun bears an anaphoric relation to the dependent whose extra relation it assumes. The context determines whether a regular pronoun, a reflexive, or a null pronoun will be set up. Under this proposal, (i) will have the diagram in (ii).

(i) John shaved himself. (ii)



The details of this proposal have not yet been worked out, and even what I have sketched is liable to change. It will require restatement of the Coreferential Deletion Law and the Reflexive Rank Law, but I take it that analogous laws will be required in the new treatment. Please remember that the model I am using is now superseded whenever I talk of reflexives or Equi or indexed nominals in relativization.

2. Kim's (1976) work on Korean pronouns holds great interest for anyone interested in unambiguous coreference. Kim argues that the pronoun agi, which has previously been analyzed as a reflexive, is not one, since it does not mark obligatory coreference with an antecedent. It permits co-reference with an antecedent inside or outside its clause. Rather, the "non-reflexive" pronoun ki marks obligatory non-coreference, not permitting an antecedent in the same clause.

3. When used as a possessor, the reflexive does not require an antecedent in the same clause. It merely acts as an intensive.

(i) Nakita' nako' ang balay sa iyang ka'ugalingon.
OBJ see I-GEN NOM house GEN his LN self
His own house was seen by me.

4. Pag-complements will be introduced shortly in § 2.2.2.

5. For details about placement of pronouns, see Wolff (1966, 6D).

6. I take it that the nga-clause in 22.c. is in the nominative case. If it is not in the nominative case, then sentence 22.c. will be an independent clause with the verb alinggat without a nominative. But the verb must have a nominative dependent. (i), in which there is no dependent in the nominative case, is ungrammatical.

(i) *Na'alinggatan niya sa iho.
notice LOC he-GEN OBL shark
He noticed the shark.

Secondly, the nga-clause denotes the situation noticed. But when the verb is in the LOC voice, the thing noticed is in the nominative case, as in (ii).

(ii) Na'alinggatan niya ang iho.
notice LOC he-GEN NOM shark
The shark was noticed by him.

In order that alinggat have a nominative dependent in an independent clause and that the thing noticed be in the nominative case when the verb is in the LOC voice, the nga-clause must be in the nominative case.

7. If it is not Equi which deletes the Actor (or which requires that the extra relation be borne by a null pronoun in the new treatment), then we will need a new rule which will have the same effect as Equi. It is more economical to suppose that we are dealing with Equi here.

8. I have gone into such detail about the difference between quantifiers which are detached and quantifiers which are still in their nominals, even though they come after the noun, because it seems to me that some of Piango and Lasnik's (1976) objections to Postal (1976) arose because they were talking about both types of quantifiers while Postal was talking about only detached quantifiers.

9.a. Some speakers of Japanese will allow quantifier float from 3's as well, but these sentences are less natural than those with quantifier float from 1's and 2's. b. In French, quantifier float from 2's and 3's is subject to additional conditions that do not apply to quantifier float from 1's. (Perlmutter, personal communication)

10. If construing tanan with the nominative nominal is semantically anomalous, for example if the nominative nominal is a singular personal name, Mr. Larraga's response is to construe the quantifier with the nearest nominal which is eligible to be considered plural, saying, "Well, I guess it goes with..." or "It must go with ...". It sounds to me as if the sentences are not grammatical and he is using a subsidiary strategy to make some sense out of what he is being given. However, he does not say they are ungrammatical.

11. Kini is itself nominative; so no nominative marker appears.

12. Because there are different conditions on the application of Ben → 1 and Loc → 1, the collapsed version of the rules is not really possible. These conditions will be discussed in the next sub-section.

13. I am not sure that balatbat is the correct stem, as I know nothing of Inibaloi morphology.

14. Chandler (1974), in discussing Northern Kankanay, argues that the possibility of using either of two voice affixes when a particular nominal becomes the nominative nominal arises when a nominal bears two different semantic relations to the verb, for example, Agent-Source or Object-Range. She also correlates the use of voices other than objective when the Direct Object becomes the topic (Subject, in my analysis) with differences in case relationships. These relationships will be among the factors which determine whether an optional rule applies, in my understanding of derivational relational grammar.

15. I look at the matter thus: Somewhere, either as an overlay relation, or in a separate structure of some sort, we have information about the topic. We do not use a rule topic → 1, but we do throw out any derivation in which topic has not become 1 by whatever rule would make it the Subject.

16. Dryer's description of the grammatical relations which result from clause union in Cebuano is incorrect. He used only realis, in which OBJ and INS voices have homophonous affixes, instead of irrealis, in which the voices have distinct affixes.

17. Please note that the rule of clause union is universal in the sense of being one of the possible rules for human languages. It is not universal in the sense of being found in every language. English, for example, does not have a causative construction formed by clause union.

18. I am not discussing all verbs in whose meaning some element of causality can be detected, but only ones formed with pa-. For example, mag'itom (blacken) involves the notion of causing something to become black, but I do not discuss it.

19. One does find two pa's in a row as in (i).

(i) Ipapahatud nako' kaniya ang sulat sa post opis.
INS C ? carry I-GEN he-OBL NOM letter OBL post office

I will ask him to take the letter to the post office.

The extra pa- makes the situation described politer. A request, rather than compulsion, will be used. Since no additional nominal is permitted, whatever the extra pa- may be, it is not a causative morpheme.

20. It is an open question at present whether or not the conditions under which dependents of the complement verb become "dead" dependents of the matrix verb are universal. What exactly is involved when a dependent is "dead" is also unclear, as yet.

21. Sentence 105.c. has a good reading. In it, the lower Subject has been dropped, and the LOC voice is a sign that the Ben has become the Subject; so, the meaning is "Rosa had someone cook fish for Maria."

22. Reid cites different verbs in his causative and non-causative paradigms for particular classes of verbs. I have formed similar sentences, trusting that his verb-class paradigms are correct. I have put a • before any sentence so formed. If any is incorrect, for some reason or other, just use the case markings and voices. They are correct, and the discussion depends only on them. For brevity, I have also sometimes omitted nominals that Reid marked as optional.

23. ng assimilates to the following consonant in place of articulation.

24. The Chomeur Marking Law is not a true law. It does not rule out any imaginable case marking for chomeurs. It can be considered as the statement of a general tendency or as a convention on writing rules, telling whether or not one has to specify case marking for the chomeur.

25. I assume that sentence 111 is ungrammatical, since Reid does not mention sentences of this sort. I would rejoice to be shown wrong on this point. If 111 were grammatical, then no output condition would be needed.

26. In the surface structure of both 123 and 124 there is a noun followed by a nga-clause which is missing its nominative nominal. This is the same

structure found in a relative clause. Both sentences have readings with relative clauses. The reading of 123 is semantically anomalous, "The good chair that was made by Tomas was believed by me." The reading of 124 is good, "The shark that had returned was noticed by the fisherman." However, although Mr. Larraga will assent to interpreting 124 as a relative clause containing sentence, he consistently translates it the other way, "The fisherman noticed the shark, that the shark had returned."

27. There is another rule which makes a possessor a dependent of the verb. It is the rule of possessor union. It works rather like clause union. I do not wish to discuss it here. Suffice it to say that it makes the possessor a 3, and there is no sign of the possessor's being a 3 in this construction.

28. Using Postal and Perlmutter's new proposal for coreference, the optional pronoun might be accounted for by optionally having the possessor cease to bear a relation to the possessed when it ascends. If it still has a relation, a pronoun would be inserted to assume the extra relation.

29. Possessor ascension can apply to the output of clause union as in (i).

- (i) Kadtong baka gipaputlan niya sa magdadaro ang sungay.
that-NOM LN cow C cut LOC he-GEN OBL farmer NOM horns
That cow, he made the farmer cut off (its) horns.

30. There are sentences in which the nominative nominal cannot precede the verb. For example, if the nominative nominal precedes the verb in sentence 142, as in (i) below, the remnant of the pag-clause is treated as a complete temporal clause, not as the chomeur of pag-ascension.

- (i) Ang balita gihuna'huna' ni Lito sa pagsulat ni Maria kang Jose.
NOM news OBJ think about GEN OBL writing GEN OBL

The news was thought about by Lito while Maria was writing to Jose.

I suspect that the temporal reading takes precedence over the other and that the other comes through only when there is something missing from the pag-clause which prevents it from being interpreted as a temporal.

31. In the second analysis, the pag-clause is first advanced to Subject, then put en chomage. Its rank first increases, then decreases. In the first analysis, the ranks never decrease. The second analysis contradicts a hypothesis once entertained by Postal and Perlmutter: A dependent which has been promoted cannot be demoted. Postal and Perlmutter have since rejected the hypothesis above, partly on the basis of the comparison of these analyses.

32. Since the nominal markers do not appear before a clause linked with nga, the case of the chomeur from Subject ascension is indeterminate. We can consider it NOM or GEN if we want to preserve the generalization.

33. If the lower verb has become intransitive as a result of the application of passive, then librong lisod becomes the 2 of the causative in clause union. The voice is the same either way.

34. As far as I know, these constructions have not been discussed elsewhere. I came across examples of all of them in the readings in Wolff (1967).

PART III

Consequences of the Transformational Subject Constraints in Cebuano

0. Introduction

In Part II, we saw that, in a relational analysis, the Actor is the initial Subject and the nominative NP is the surface Subject. In the transformational framework, the matter is more complicated. The notion "subject" appears in four places in the theory of transformational grammar, first in a configurational definition and then, covertly or overtly, in three conditions: the Condition on Strict Subcategorization, the Sentential Subject Constraint, and the Specified Subject Condition. An analysis which retains all the proposals about subjects is possible, but it is not very revealing. In it, Cebuano has no subjects, the conditions stated with respect to subjects apply only vacuously, and language-particular restrictions are required on the rules of topicalization and relativization. If one of the proposals, the configurational definition of the subject, is given up, then one of the restrictions on topicalization and relativization will follow from the Specified Subject Condition as modified by Fiengo and Lasnik (1976), if the nominative NP is analyzed as the subject. Let me sketch the path by which this conditional conclusion is reached.

I begin by attempting to apply the configurational definition of "subject-of" in Cebuano. I argue that an analysis in which Cebuano has neither deep nor derived c-subjects is preferable to one with c-subjects, when c-subject is defined as in Chomsky (1965). It follows that either

Cebuano has no c-subject or that "subject" should be differently defined in Cebuano. To determine which of these alternatives is preferable, I turn to the conditions which involve the notion of subject or c-subject.

I start with the Condition on Strict Subcategorization. After showing that it does use the notion of c-subject in the strict subcategorization of verbs, I show that it provides some slight evidence that Cebuano has no c-subjects. However, data from Russian undermine the condition or the definition of c-subject, rendering suspect any argument based on their interaction.

Turning to the Sentential Subject Constraint, I show that considering either the Actor or the nominative NP the c-subject leads to violations of the ~~constraint~~ by the rules of topicalization and relativization. If the constraint is correct, Cebuano does not have a c-subject. However, the correctness of the constraint has been called into question by Kuno. I present his argument and reformulation and propose an amendment to correct a flaw. Kuno's constraint accounts for certain data from topicalization for which the Sentential Subject Constraint does not account. If it is adopted in place of the Sentential Subject Constraint, then we cannot draw any conclusions about subjects in Cebuano from the Sentential Subject Constraint. Because the constraint has not been completely disproved, I consider it again in the general conclusions.

Only the Specified Subject Condition remains. The condition will not apply to verb-initial languages in the form in which it is given by Chomsky (1973). The revision proposed by Fiengo and Lasnik (1976) will apply in such languages. I therefore consider its consequences as it interacts with reflexive anaphora, preverbal possessors, and topicalization and relativization.

Initially, it seems that the Modified Specified Subject Condition functions to prevent a reflexive in a pag-clause from being assigned an antecedent in the matrix clause. In order to use the condition in this way, it is necessary to assume that the condition blocks rules from involving the subject of a clause and a position outside that clause. Later evidence suggests that this assumption is incorrect. It follows that the condition is not what blocks reflexive anaphora. I finally suggest that pag-constructions, not finite clauses, act like tensed sentences in the Tensed-S Condition and that it is the latter condition that blocks reflexive anaphora. From the data on reflexives, then, we learn nothing about subjects.

Sentences with preverbal possessors seem at first glance to show that if the Modified Specified Subject Condition is correct, then the Actor is not the subject of a pag-construction which contains a nominative NP. However, in Chomsky's latest theory, the preverbal possessors are not related to postverbal nominative NP's by a specific rule, the violations vanish, and the construction gives us no information about subjects.

Topicalization provides examples of violations of the condition when the Actor is analyzed as the subject in finite clauses and pag-constructions which do not have a nominative NP. It is compatible with the condition when the nominative NP is analyzed as the subject, if a condition is placed on its interpretation. If the nominative NP is analyzed as the subject, the fact that topicalization applies only to nominative NP's will follow from the condition. The same restriction on relativization can be accounted for in the same way. If the condition is used to explain this restriction, then the configurational definition of subject must be abandoned, at least in Cebuano.

1. Consequences of the configurational definition of "subject-of" in Cebuano

1.1. The definition of "subject-of"

Chomsky (1965, p.71) defines the relation "subject-of" a sentence as $\langle \overline{NP}, \overline{S} \rangle$; that is, the/a NP introduced by a Phrase Structure Rule (PSR) with S on the left and the NP on the right, a rule of the form:

PSR 1: $S \rightarrow X \quad NP \quad Y$

In order for the definition of c-subject to specify a unique NP, only one NP can be introduced by the rule expanding S. In PSR 1, neither X nor Y can be $W - NP - Z$. For example, if a sentence is analyzable as $NP_1 - V - NP_2$, it is impossible for NP_1 and NP_2 both to be dominated directly by S, if the sentence is to have a c-subject. One of the NP's must be combined with the V into a VP node (or a Predicate Phrase node). This grouping permits an analogous definition of the relation "object-of" a VP as a/the NP introduced by a PSR with VP on the left and NP on the right.

PSR 2: $VP \rightarrow X \quad NP \quad Y$

If there is some reason for not grouping the verb together with one of the NP's in a sequence like $NP_1 - V - NP_2$, if we must for some reason propose a PSR expanding S which introduces two NP's directly, as in PSR 3,

PSR 3: $S \rightarrow NP \quad V \quad NP$

then I will say that the S has no c-subject, since the c-subject is not uniquely defined.

1.2. Application of the definition to languages with different word-orders

The definitions of c-subject and c-object depend only on dominance relations, not on word order. In PSR 1, the VP may be a part of X or of Y. Similarly, the verb may be found in X or in Y in PSR 2.

Considering only the verb (V), c-subject (S), and c-object (O), it follows that languages may have S-V-O, S-O-V, V-O-S, and O-V-S as their underlying word orders, for in these the verb stands next to the c-object and can be grouped with it into a single constituent (VP). The underlying word order V-S-O is impossible, for the V and O could not be grouped together, as required for the definitions of c-subject and c-object to be met. To see the possibilities more clearly, let us consider some examples.

In English, ignoring the Aux for ease of exposition, the rule expanding S is roughly PSR 4, and VP is expanded roughly as in PSR 5.

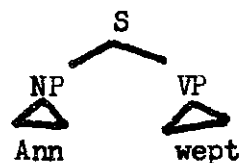
PSR 4: $S \rightarrow NP \quad VP$

PSR 5: $VP \rightarrow V \quad NP$

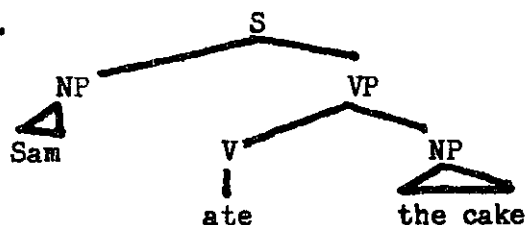
According to the definition, the NP introduced by PSR 4 is the c-subject of the sentence. In 1.a., whose tree is roughly 1.b., the c-subject is Ann. In 2.a., the c-subject is Sam, and the c-object is the cake.

1.a. Ann wept.

b.



2.a. Sam ate the cake. b.



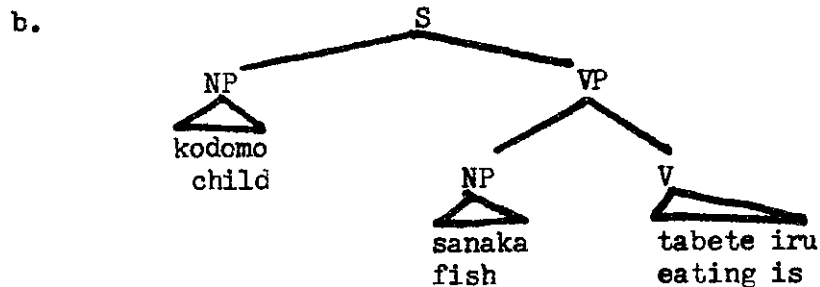
The definitions of c-subject and c-object also accommodate languages with underlying S-O-V word order. In Japanese, for example, the rule expanding S might still be PSR 4, but the rule expanding VP will be PSR 6.

PSR 6: $VP \rightarrow NP \quad V$

PSR 6 differs from PSR 5 in that the NP precedes the V, but the c-subject and c-object are still defined, since the definitions do not depend on

word order, but only on dominance. Thus, in 3.a., the c-subject is kodomo (the child) and the c-object is sanaka (fish).

- 3.a. Kodomo ga sanaka o tabete iru.
 child SUBJ fish OBJ eating is
 The child is eating the fish.

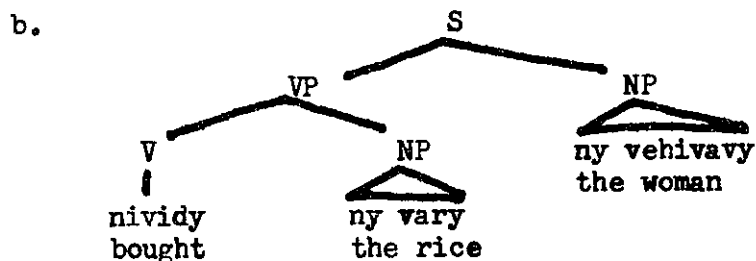


It is also possible to analyze a language as having underlying V-O-S word by expanding VP using PSR 5 and expanding S using PSR 7.

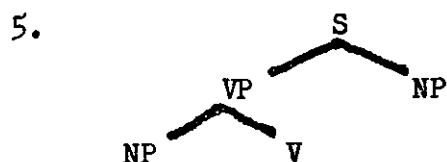
PSR 7: $S \rightarrow VP \ NP$

In Malagasy (Keenan, 1972), sentence 4.a. has the tree 4.b. Ny vehivavy (the woman) is the c-subject and ny vary (the rice) is the c-object.

- 4.a. Nividy ny vary ny vehivavy.
 bought the rice the woman
 The woman bought the rice.



Using PSR 7 together with PSR 6 would produce structures like 5, in which the word order is O-V-S. I do not know of any language with such a word order.



Since an NP must stand next to a V in order to be grouped with it, and hence to be its c-object, underlying V-S-O word order is impossible under Chomsky's definition of subject and object.

1.3. Argument that Cebuano has no deep c-subject

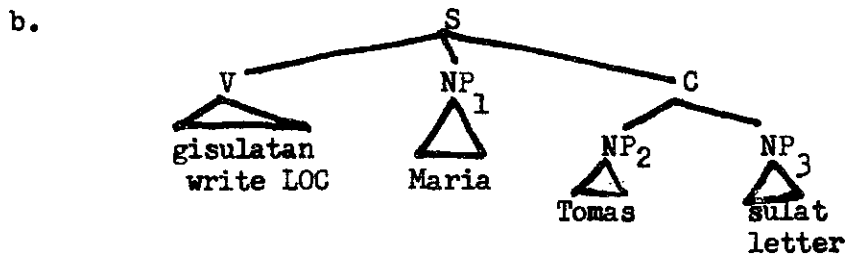
In this section, I show that if the underlying word order and the surface word order are the same, making either the Actor or the nominative NP the c-subject requires arbitrary ad hoc nodes, and that if the underlying and surface word orders differ, making either the Actor or the nominative the c-subject requires an ad hoc movement rule.

In Part II, we saw that the unmarked word order in a verb-containing sentence in Cebuano was as shown in 6:

6: Verb (genitive Actor) nominative NP (other NP's and PP's).

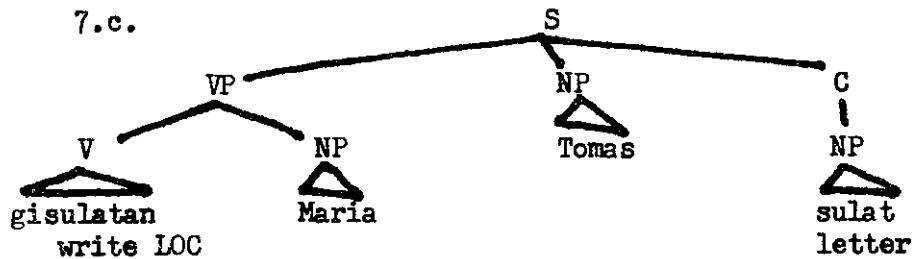
If the underlying word order is the same as the surface word order, the Actor can be made into a c-subject only by grouping the nominative NP and other NP's following it together. Sentence 7.a. will have the structure shown in 7.b.

7.a. Gisulatan ni Maria si Tomas ug sulat.
 write LOC GEN NOM OBL letter
 Tomas was written a letter by Maria.



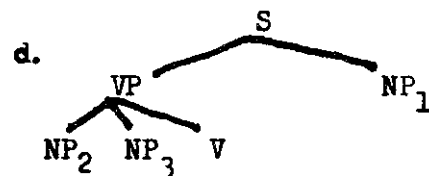
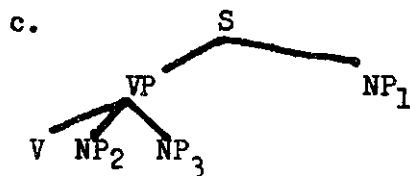
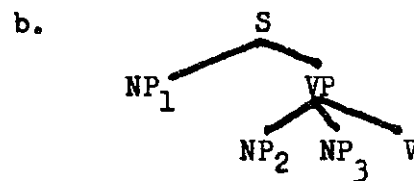
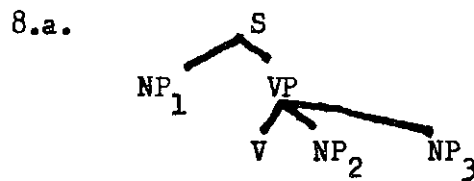
But there is no evidence for the existence of a node like C. Making the Actor the c-subject requires an arbitrary node if the surface word order and the underlying word order are the same.

Making the nominative NP the c-subject requires grouping the Actor with the verb and positing some ad hoc node to prevent sulat from being dominated directly by S, as shown in 7.c.

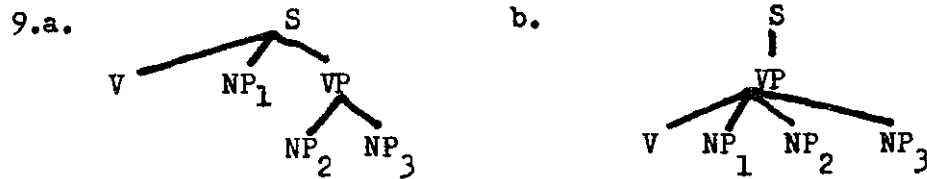


If the surface word order and the underlying word order are the same, analyzing either the Actor or the nominative NP as a deep c-subject requires postulating an ad hoc node in the deep structure.

If the underlying word order and surface word order are different, Cebuano can be analyzed as having a VP node. At some point in the derivation, either the VP node will be broken up or the c-subject will be moved in under the VP node. Considering several of the possibilities, a sentence like 7.a. will start out with one of the structures shown in 8, where NP₁ is either the Actor or the nominative, whichever is being considered as a candidate for deep c-subject.



The final structure will be one of those shown in 9.



It is within the power of transformational grammar to generate any of the structures in 8 by means of PSR's and to deform them into either of the structures in 9 by means of transformations. To do so requires the obligatory application of a re-ordering rule which has no independent support.

Analyzing Cebuano as having deep c-subjects requires an arbitrary node if surface word order and underlying word order are the same and an otherwise unjustified re-ordering rule if the surface word order and underlying word order differ. Unless evidence can be given showing that Cebuano must have deep c-subjects, it would be better to choose an analysis in which there is no VP node and Cebuano has no underlying c-subjects.

1.4. Argument that Cebuano has no derived subjects

Chomsky's definition of "subject-of" is stated on structures introduced by PSR's, that is, on base structures. In itself, it says nothing about whether there are derived subjects or what such subjects would be. Hall (1965) proposed an extension of the notion of subject to derived structures. I discuss her extension and point out some of the complications which arise if Cebuano is required to have derived subjects. I conclude that unless it can be shown that Cebuano must have derived c-subjects, Cebuano should be analyzed as having no derived c-subjects.

Examining a series of English constructions produced by transformations which either replaced or deleted a NP which was the c-subject in the deep

structure (Passive, Extraposition, There existentials, Imperatives, constructions with too many), Hall argued that the definition of surface subject which is closest to the traditional usage is as follows:

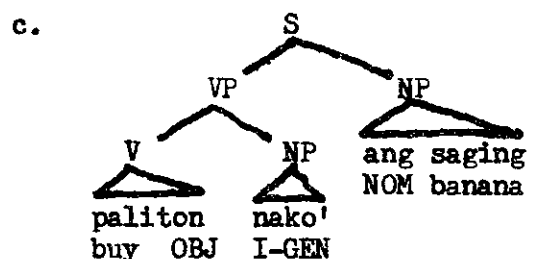
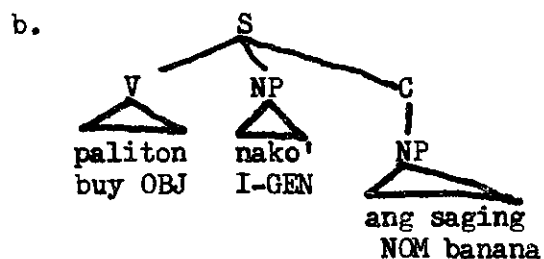
The constituent in a surface tree which counts as its surface subject is whatever remains of the underlying subject if it has not been substituted for or else any constituent that has been substituted for the subject. (p. 20)

She notes in favor of her conclusion that defining surface grammatical relations in terms of base grammatical relations limits the possible surface grammatical relations.

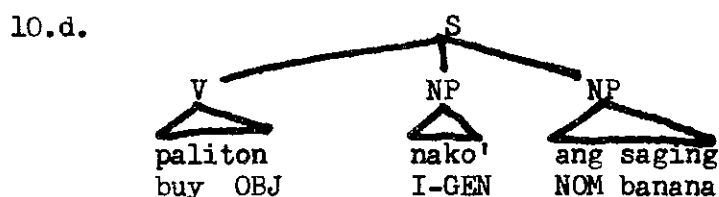
If Hall's conclusion is accepted and if the argument that Cebuano has no deep c-subjects is believed, then it follows that Cebuano has no surface c-subjects either. As Hall claims, her definition makes predictions.

However, Hall's data would also support a weaker conclusion, that the surface subject is the NP directly dominated by S in surface structure, for it is this NP which contains the remains of the deep c-subject or its replacement in the constructions she considers. Even accepting this weaker version as a definition of surface subject does not make it easy to posit a surface c-subject in Cebuano. If the weaker definition is accepted, then the surface tree associated with 10.a. will be 10.b. if the Actor is the surface c-subject and 10.c. if the nominative NP is the surface c-subject.

- 10.a. Paliton nako' ang saging.
 buy OBJ I-GEN NOM banana
 The bananas will be bought by me.



But if Cebuano has no underlying c-subject, then the underlying structure for 10.a. will presumably be 10.d.



Again, an otherwise unjustified rule will be required to convert 10.d. to either 10.b. or 10.c. Moreover, such a rule will have to affect only the structure of the tree, not the order of the words. Such a rule would not be permitted in the version of transformational grammar which does not allow Boolean conditions on structural descriptions, of which more hereafter. At best, the rule would be ad hoc; at worst, impossible. Even if the weaker definition of surface c-subject is accepted, if Cebuano has no deep c-subject, then it should have no surface c-subject.

1.5. Conclusions and directions

We have seen that positing deep c-subjects in Cebuano requires either an otherwise unmotivated node in the phrase structure tree or an obligatory ad hoc movement rule. Cebuano should accordingly be analyzed as having no deep c-subjects, when we take into account only the definition of c-subject. But if Cebuano has no deep c-subject, then, as has been shown, it should have no surface c-subject either. Cebuano should be analyzed as having no subjects in either deep or surface structure, when we consider only the definition of c-subject.

But, of course, we cannot take into account only the definition of c-subject. We must also consider the conditions which involve either subjects or specifically the NP immediately dominated by S. We must see whether these conditions are compatible with an analysis in which Cebuano

has no c-subject. We may also ask whether they are compatible with an analysis in which either the Actor or the nominative NP is taken as the subject. If we find that the conditions are not compatible with an analysis in which Cebuano has no subject, we will have to conclude that either the definition of c-subject is not the definition of subject in Cebuano or that Cebuano has to be analyzed as having deep c-subjects despite the complexity of such an analysis, or that the constraints are incorrectly stated.

There are three conditions that explicitly or implicitly involve subjects: the Condition on Strict Subcategorization, the Sentential Subject Constraint, and the Specified Subject Condition. I shall consider each of the conditions in turn.

The Condition on Strict Subcategorization seems to provide some support for an analysis in which Cebuano has no deep c-subject, but data from Russian cast doubt on either the condition or the definition of c-subject, rendering the evidence it provides inconclusive.

The Sentential Subject Constraint is compatible with an analysis in which Cebuano has no c-subjects. It is not compatible with analyzing either the Actor or the nominative NP as the c-subject.

The Specified Subject Condition as stated in Chomsky (1973) will not apply in a language in which the verb precedes the subject. Accordingly, the modified version proposed by Fiengo and Lasnik (1976) will be used. Data concerning assignment of antecedents to reflexives will show that either the Actor is the subject of pag-constructions or the Modified Specified Subject Condition is incorrect. Actors in pag-constructions do not act like specified subjects if sentences with pre-verbal possessors are derived by rule from structures with possessor in the usual position.

This seeming contradiction can be resolved either by not deriving one set of sentences from another or by proposing that the Actor is the subject of a pag-construction only if the construction does not contain a nominative NP, or both. Topicalization seems at first glance to violate the condition if either the nominative NP or the Actor is analyzed as the subject. A convention on interpreting the condition will remove the difficulty when the nominative NP is analyzed as subject. If it is proposed that Cebuano has a rule of wh-movement and that topicalization proceeds via wh-movement, there will be no difficulty in analyzing the Actor as the subject either. The Modified Specified Subject Condition, that is to say, requires the Actor to be analyzed as the subject in pag-constructions which do not contain nominative NP's but provides no firm evidence regarding the correct analysis of subjects in clauses which do contain a nominative NP.

Let us turn now to detailed consideration of each of the conditions.

2. Consequences of the conditions involving the notion "subject" in Cebuano

2.0. Introduction

There are three conditions which involve reference to VP nodes, NP immediately dominated by S, or subjects. If the decision to analyze Cebuano as having no c-subjects is correct, if the definition of subject as $\langle \bar{NP}, S \rangle$ correctly characterizes subjects in Cebuano, and if the constraints are correct, then neither the Actor nor the nominative NP should consistently act like a subject in restricting rules in accordance with the constraints.

2.1. The Condition on Strict Subcategorization

2.1.1. Statement of the condition

Chomsky (1965, p.99) proposes the following condition:

Each strict subcategorization rule must be of the form $A \rightarrow CS / \alpha \underline{\quad} \beta$, where $\alpha A \beta$ is a σ , where furthermore σ is the category symbol that appears on the left in the rule $\sigma \rightarrow \dots A \dots$ that introduces A, and where CS is a complex symbol.

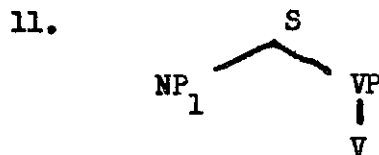
In particular, this means that a V can be subcategorized only with respect to the constituents introduced by the rule introducing it.

If a language has a VP node, then the V can be strictly subcategorized only with respect to constituents directly dominated by the VP node.

Since the c-subject is a sister of the VP node, a verb cannot be strictly subcategorized for the obligatory occurrence or non-occurrence of a c-subject. The condition thus implicitly involves the notion of c-subject.

2.1.2. Weak support from the condition for having no deep c-subjects in Cebuano

Suppose we assumed that Cebuano had an underlying c-subject. It would follow from the Condition on Strict Subcategorization that the verb could not be subcategorized for the non-occurrence of the c-subject. In structure 11, that is to say, the verb could not be subcategorized for the occurrence or non-occurrence of NP_1 .



There is a very small class of verbs describing ambient conditions which cannot occur in the active voice with a nominative NP, or Actor. For example, as shown in 12, ulan (rain) cannot occur in the active voice

with a nominative NP. Since the nominative NP in the active voice is the Actor, the verb cannot occur in the active voice with an Actor.

12. Mag'ulan {
 ACT rain { *ang panahen
 { *ang Bathala
 { *kadto
 { NOM
 The season }
 God } is raining
 That one }

Now, if Cebuano has an underlying c-subject, it is the Actor or the nominative NP. But ulan (rain) cannot occur with a nominative Actor when it is in the active voice. In the active voice, ulan will have to be subcategorized for the non-occurrence of the c-subject. But this is contrary to the Condition on Strict Subcategorization. According to the Condition on Strict Subcategorization, then, Cebuano should not have a c-subject, underlyingly.

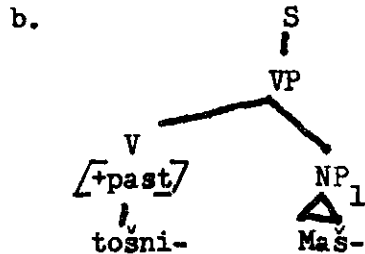
2.1.3. Argument that the correctness of the condition is in doubt

The argument given above is weak in two ways. First, the number of verbs which cannot occur in some voice or another with a nominative NP or with an Actor is quite small. Second, data from Russian cast some doubt on the correctness of the Condition on Strict Subcategorization, rendering the support it provides inconclusive.

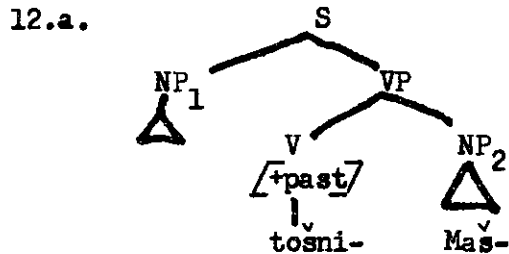
Russian seems to have subjects. It has NP's which are in the nominative case, with which the verb agrees (in number and gender in the past tense and in person and number in the non-past), and which are the antecedents of reflexives. However, Russian also has verbs which cannot occur with lexically realized c-subjects. Chvany (1975) argues, for example, that tošnit' (nauseate) is such a verb. She points out

that "it cannot ever take a Subject such as a 'causer' or 'agent' of... nausea" (p.36), and proposes deriving sentences such as 11.a. from structures such as 11.b.

- 11.a. Mašu tošnilo
 Maša-ACC nauseate-3rd-sg.- Neuter
 Mary was nauseated.



She argues further that 11.a. is not derived from a tree with an empty c-subject like 12.a., for by regular rules, 12.a. would yield the ungrammatical 12.b.



- b. *Maša tošnilas'.
 Masa-NOM nauseate-sg.-Fem-sja
 Mary was nauseated.

Babby (1975) similarly argues that verbs like tošnit' should be analyzed as having no c-subject, showing systematic differences in the existence of active participles and gerunds between verbs with c-subjects and verbs with no c-subjects. If Babby and Chvany are correct, then some verbs in Russian must be strictly subcategorized for the obligatory non-occurrence of c-subjects. But if the verb must be subcategorized for the obligatory non-occurrence of an NP, the Condition on Strict Subcategorization would require that NP to be introduced by the same rule

which introduces V. The NP could not be a sister of the VP node; i.e., could not be a c-subject. It follows that Russian cannot be analyzed as having c-subjects if the Condition on Strict Subcategorization is retained. Since there is evidence that Russian does have subjects, either the condition or the definition of "subject-of" is incorrect.

2.1.4. Conclusion

Because one consequence of the Condition on Strict Subcategorization is that verbs cannot be subcategorized for the occurrence or non-occurrence of c-subjects, the condition seemed to make empirical predictions about languages with c-subjects as compared to languages without c-subjects, and the predictions about languages without c-subjects held in Cebuano. However, data from Russian cast doubt on the correctness either of the condition or the definition of "subject-of". The argument based on the correctness of both of these therefore became inconclusive, and I will not consider it further.

2.2. The Sentential Subject Constraint

2.2.1. Statement of the constraint

In order to account for the difference in pairs of sentences like those in 13,

- 13.a. *I read the book (which) that Tom liked surprised Mary.
- b. I read the book (which) it surprised Mary that Tom liked.

Ross (1967, p. 134) proposed the following universal constraint:

Sentential Subject Constraint: No element dominated by an S may be moved out of that S if that node S is dominated by an NP which is itself immediately dominated by S.

In the following sub-sections, I argue that the rules of topicalization and relativization violate the constraint if either the

Actor or the nominative NP is the subject. It follows that either the constraint is incorrect or neither the Actor nor the nominative NP is the subject. We cannot simply settle on the second alternative, for the correctness of the constraint is itself in doubt and has been called into question by Kuno. I present Kuno's argument briefly. Certain data from English show that the reformulation proposed by Kuno is incorrect as stated. A possible direction for correcting his proposal is presented. Finally some data from Cebuano topicalization which seem to support Kuno's constraint are given. Because the correctness of the Sentential Subject Constraint is somewhat in doubt, the constraint tells us nothing definite about the correct analysis of subjects in Cebuano.

2.2.2. Interaction of the constraint and topicalization

2.2.2.1. Topicalization

In the unmarked word order of Cebuano verbal sentences, the nominative NP is or follows the Actor. Other orders are possible. In the most common, the nominative NP comes first in the sentence. This order is felt as marked, although the nature of the markedness is unclear. Corresponding to 14.a., we find 14.b.

14.a. Giluto' sa babaye ang bugas.
OBJ cook GEN woman NOM rice
The rice was cooked by the woman.

b. Ang bugas giluto' sa babaye.
NOM rice OBJ cook GEN woman
The rice was cooked by the woman.

No pronoun copy can be found in the usual position of the nominative NP in a topicalized sentence. Sentence 15.b. is grammatical, but 15.c. is not.

15.a. Nakita' ni Fred ang banggi'itan nga lalaki.
OBJ see GEN NOM famous LN man
The famous man was seen by Fred.

- 15.b. Ang banggi'itan nga lalaki nakita' ni Fred.
 NOM famous LN man OBJ see GEN
The famous man was seen by Fred.
- c. *Ang banggi'itan nga lalaki nakita' ni Fred siya.
 NOM famous LN man OBJ see GEN he-NOM
 The famous man, he was seen by Fred.

Cebuano also permits peripheral NP's to appear in front of the verb.

(See Part II, § 5.2) For example, corresponding to 16.a., we find 16.b.

- 16.a. Mo'ani' kami ug humay sa bulan sa Nobyembre.
 ACT harvest we-NOM OBL rice OBL month GEN
 We harvest rice in November.
- b. Sa bulan sa Nobyembre mo'ani' kami ug humay.
 OBL month GEN ACT harvest we-NOM OBL rice
 In November, we harvest rice.

Topicalization is distinct from the rule preposing peripheral NP's. The latter rule cannot extract a NP from a clause. In 17, the preposed NP sa bulan sa Nobyembre cannot be taken to belong to the embedded clause.

17. Sa bulan sa Nobyembre gi'ingon ko' kaniya nga mo'ani'
 OBL month GEN OBJ tell I-GEN her-OBL LN ACT harvest
 kami ug humay.
 we-NOM OBL rice
 In November, I told her that we would harvest rice.
 Not: I told her that we harvest rice in November.

Topicalization, on the other hand, can extract a nominative NP from an embedded clause, to assume for the moment that topicalization is a movement rule.

- 18.a. Na'alinggatan sa mananagat nga mibalik ang iho.
 notice LOC GEN fisherman LN ACT return NOM shark
 That the shark had returned was noticed by the fisherman.
- b. Ang iho na'alinggatan sa mananagat nga mibalik.
 NOM shark notice LOC GEN fisherman LN ACT return.
 That the shark had come back was noticed by the fisherman.

In 18.b., the nominative NP has been extracted from the embedded clause.

Topicalization can extract NP's from embedded clauses. The rule preposing peripheral NP's cannot. The rules are therefore distinct.

Topicalization can apply ambiguously to 18.a. In addition to 18.b., in which the nominative NP within the nga-clause has been moved, the nga-clause itself can be topicalized, as in 18.c.

18.c. Nga mibalik ang iho na'alinggatan sa mananagat.
IN ACT return NOM shark notice LOC GEN fisherman
That the shark had returned was noticed by the fisherman.

Since the nga-clause is accessible to topicalization and since it is parallel to the nominative NP in sentences in which the thing noticed is not described by a clause, as in 18.d., the nga-clause must be in the nominative case.

18.d. Na'alinggatan sa mananagat ang iho.
notice LOC GEN fisherman NOM shark
The shark was noticed by the fisherman.

If it is correct to take case as a feature of NP's (Chomsky, 1965) or as a constituent of NP's (Siegel, 1975), then the nga-clause is dominated by NP.

Sentence 18.c. has another interest. If topicalization is a movement rule, it apparently violates the A/A Principle. The rule applies to the nominative NP. In 18.a., both the nga-clause and the nominative NP within the nga-clause are eligible for movement. By the A/A Principle, the rule should apply only to the nga-clause. In fact, it applies to both. Indeed, topicalization can apply to the nominative NP in a nga-clause only if the nga-clause is nominative. In 19.a., the nga-clause is not nominative, but oblique.

19.a. Naka'alinggat ang mananagat nga mibalik ang iho.
ACT notice NOM fisherman IN ACT return NOM shark
The fisherman noticed that the shark had returned.

As shown in 19.b., the nominative NP in the nga-clause cannot be extracted by topicalization.

- 19.b. *Ang iho naka'alinggat ang mananagat nga mibalik.
 NOM shark ACT notice NOM fisherman LN ACT return
 The shark, the fisherman noticed that (it) had returned.

The nominative NP inside the nga-clause can be topicalized only if the nga-clause itself meets the condition for topicalization. I do not know how to state this requirement as a condition on the rule of topicalization. The exact form of the rule will be discussed later in section 2.3.4.

2.2.2.2. Violations of the Sentential Subject Constraint when either the Actor or the nominative NP is taken as the subject

The Actor was defined morphologically in Part I, § 1.2. as the NP which was nominative when the verb was in the active voice. Despite the unfortunate semantic overtones, it is possible to have a sentential Actor. For example, the verb santop (enter one's mind) can have a pag-construction as the Actor, as shown in sentence 3 of Part I, repeated here as 20.

20. Misantop sa iyang bu'ot ang usa ka sayon nga pa'agi.
 ACT enter OBL his LN mind NOM one LN easy LN way
 An easy way (of doing it) entered his mind.

The verb santop can also occur in the active voice with a nga-clause; that is, with the nga-clause as the Actor, as in 21.a.

- 21.a. Misantop sa huna'huna' ni Juan nga gihigugma niya si Perla.
 ACT enter OBL thoughts GEN LN OBJ love he-GEN NOM
 That Perla was loved by him entered Juan's mind.

In 21.a., the nga-clause is parallel to the pag-construction in 20; it is in the nominative case. The rule of topicalization can remove the nominative NP si Perla from the sentential Actor gihigugma niya si Perla to form sentence 21.b.

- 21.b. Si Perla misantop sa huna'huna' ni Juan nga gihigugma niya.
 NOM ACT enter OBL thoughts GEN LN OBJ love he-GEN
 It entered Juan's mind that Perla was loved by him.

The nga-clause in 21.a. is at once the Actor and the nominative NP. In 21.b., an element in it has been removed from the clause. If either the Actor or the nominative NP is the c-subject, 21.b. violates the Sentential Subject Condition. Similarly, in 18.a., the nga-clause is nominative. In 18.b., the rule of topicalization has extracted ang iho from the nominative NP, providing an additional violation of the Sentential Subject Constraint when the nominative NP is analyzed as the c-subject.

We can conclude that either the Sentential Subject Constraint does not apply to topicalization in Cebuano or that neither the Actor nor the nominative NP is the c-subject.

2.2.3. Interaction of the Sentential Subject Constraint and relativization

2.2.3.1. Review of relative clauses

In Part II, § 4.2, we saw that relative clauses are linked to their heads by nga. The relative clause has no nominative NP, and the head is interpreted as the nominative NP in the relative clause. However relativization proceeds (a matter which will be discussed in § 2.3.4.4), only the nominative NP can be relativized. For example, a relative clause can be formed on karabao in 22, as shown in 23.a., but no relative clause can be formed on magdadaro, as shown in 23.b.

22. Gipalit sa magdadaro ang karabao.
OBJ buy GEN farmer NOM buffalo
The buffalo was bought by the farmer.

- 23.a. Nakakita' ko sa karabao nga gipalit sa magdadaro.
ACT see I-NOM OBL buffalo IN OBJ buy GEN farmer
I saw the buffalo which was bought by the farmer.

- b. *Nakakita' ko sa magdadaro nga gipalit ang karabao.
ACT see I-NOM OBL farmer IN OBJ buy NOM buffalo
I saw the farmer by whom the buffalo was bought.

2.2.3.2. Violation of the Sentential Subject Constraint if the Actor is the c-subject

If relativization involves extraction, then it violates the Sentential Subject Constraint, if the Actor is taken as the c-subject. Sentence 24.a. is like 21.a., except that si Perla has been replaced by ang babaye (the woman).

24.a. Misantop sa huna'huna' ni Fred nga gihigugma niya ang babaye.
 ACT enter OBL thoughts GEN LN OBJ love he-GEN NOM woman
 That the woman was loved by him entered Fred's mind.

In 24.b., babaye has been relativized.

24.b. Gwapa ang babaye nga misantop sa huna'huna' ni Fred nga
 pretty NOM woman LN ACT enter OBL thoughts GEN LN
 gihigugma niya.
 OBJ love he-GEN
 The woman whom it entered Fred's mind that he loved is pretty.

A NP inside a sentential Actor has been relativized. If relativization proceeds by movement and if the Actor is taken to be the c-subject, then relativization violates the Sentential Subject Constraint. Either relativization does not proceed by movement, or the Sentential Subject Constraint does not apply to relativization in Cebuano, or the Actor is not the c-subject.

2.2.3.3. Violation of the constraint if the nominative NP is the c-subject

In 24.a., the nga-clause is the nominative NP. In 24.b., an NP inside the nominative NP has been relativized. Similarly, in 25.a., the nga-clause (nga ikabagat ang isda') is the nominative NP.

25.a. Iyang gipangaliyan nga ikabagat ang isda'.
 his LN pray LOC LN INS meet NOM fish
 That the fish would be met with was prayed for by him.

(Iya' is the preposed genitive pronoun. It corresponds to a niya after the verb. A preposed genitive Actor pronoun is linked to the verb by nga.)

In 25.b., isda' has been relativized from inside the nominative nga-clause.

- 25.b. Kini ang isda' nga iyang gipangaliyang ikabagat.
this-NOM NOM fish LN his LN pray LOC LN INS meet
This was the fish that he had prayed to meet.

An NP which is inside a sentential nominative NP can be relativized.

If the nominative NP is the c-subject, then if relativization proceeds by movement, the Sentential Subject Constraint does not apply to relativization in Cebuano.

2.2.4. Preliminary conclusions

If Cebuano is analyzed as having no c-subjects, the data from topicalization and relativization present no difficulties for the Sentential Subject Constraint. If either topicalization or relativization involves movement, then either the constraint is not universal or neither the Actor nor the nominative NP is the c-subject.

2.2.5. Kuno's argument against the Sentential Subject Constraint

2.2.5.1. Summary of the argument

Kuno (1973) argues that the Sentential Subject Constraint is incorrect. He claims that it fails to account for the alleged fact that 26.b. is much worse than 26.c.

- 26.a. Learning the spelling of some words is difficult.
b. *Which words is learning the spelling of difficult?
c. ?Of which words is learning the spelling difficult?

He points out that it also fails to explain the lower acceptability of 27.b. as compared with 27.a.

- 27.a. John handed a picture of Mary to Bill.
b. ??Who did John hand a picture of to Bill.

He reformulates the constraint as follows:

The Clause Non-Final Incomplete Constituent Constraint:
It is not possible to move any element of a phrase/clause A
in the clause nonfinal position out of A if what is left over
in A constitutes an incomplete phrase/clause /where a
phrase/clause is incomplete if some additional element is
required in order to fill all its obligatory nodes/.

As it stands, Kuno's constraint is clearly incorrect. It predicts
that 28.a. should be much better than 28.b., but both are fully grammatical.¹

- 28.a. Who did John see a picture of?
b. Who did John see a picture of yesterday at the post office?

Comparing 28.b. with 27.b., one difference is immediately apparent.

The PP to Bill which follows a picture of in 27.b. is an obligatory
constituent, while yesterday at the post office in 28.b. is not
obligatory. Instead of referring to a clause/phrase in non-final
position, the constraint should refer to a clause/phrase followed by
an obligatory constituent, taking this difference into consideration.
If it is correct to amend Kuno's constraint as suggested rather than
rejecting it, then 29 should be better than 27.b., since 30.a. is better
than 30.b.

29. Who did John give a picture of to Bill?
30.a. ??Who did John give a picture of?
b. *Who did John hand a picture of?

And indeed, 29 does seem to be a little better than 27.b.²

Both the original argument and the proposed revision are based on
such questionable sentences and fine shades of difference that they
cannot be taken as establishing that the Sentential Subject Constraint
should definitely be replaced by the Clause Non-Final Incomplete
Constituent Constraint. Yet Kuno's constraint does account for one
otherwise peculiar fact about Cebuano topicalization, to which the
Sentential Subject Constraint does not apply, as we have seen.

2.2.5.2. Interaction of Kuno's constraint with topicalization

We have seen that the Sentential Subject Constraint either does not apply in Cebuano or applies vacuously (if Cebuano has no subjects). Topicalization is, however, blocked from extracting an NP from a clause which is not the lowest and final clause of the sentence; that is, from a clause which has in Cebuano the linear position of the subject in English. To see this, let us start with 31.a., which is bracketed into clauses for the sake of clarity.

31.a. $\left[\begin{array}{ccccccc} \text{Gi'ingon ni Jose kang Maria} & \text{nga misinggit si Lito kang Pedro} \\ \text{S}_1 \text{ OBJ tell GEN OBL} & \text{S}_2 \text{ LN ACT shout NOM OBL} \end{array} \right] \left[\begin{array}{ccccccc} \text{nga gisa'ad ni Juan ang kareta nga bulawan sa hari.} & & & & & & \\ \text{S}_3 \text{ LN OBJ promise GEN NOM cart LN gold OBL king} & \text{S}_3 & \text{S}_2 & \text{S}_1 \end{array} \right]$

It was told by Jose to Maria that Lito had shouted to Pedro that the cart of gold had been promised to the king by Juan.

In 31.a., S_2 is a nominative NP. As mentioned earlier, topicalization can extract an NP from inside a nominative nga-clause. Topicalization moves a nominative NP. Inside S_2 there are two nominative NP's, Lito and kareta nga bulawan. If topicalization applies to kareta nga bulawan, a grammatical sentence results, as shown in 31.b.

31.b. $\begin{array}{ccccccc} \text{Ang kareta nga bulawan gi'ingon ni Jose kang Maria nga misinggit} \\ \text{NOM cart LN gold OBJ tell GEN OBL LN ACT shout} \\ \\ \text{si Lito kang Pedro nga gisa'ad ni Juan sa hari.} \\ \text{NOM OBL LN OBJ promise GEN OBL king} \end{array}$

It was told by Jose to Maria that Lito had shouted to Pedro that the cart of gold had been promised by Juan to the king.

If topicalization applies to Lito, however, an ungrammatical sentence results, as shown in 31.c.

31.c. $\begin{array}{ccccccc} \text{*Si Lito gi'ingon ni Jose kang Maria nga misinggit kang Pedro} \\ \text{NOM OBJ tell GEN OBL LN ACT shout OBL} \\ \\ \text{nga gisa'ad ni Juan ang kareta nga bulawan sa hari.} \\ \text{LN OBJ promise GEN NOM cart LN gold OBL king} \end{array}$

It was told by Jose to Maria that Lito had shouted to Pedro that the cart of gold had been promised by Juan to the king.

The Sentential Subject Constraint would not block topicalization from extracting Lito without blocking it from extracting kareta nga bulawan. Kuno's constraint, on the other hand, blocks extraction of Lito, while permitting extraction of kareta nga bulawan. Kuno's constraint, or one like it, will be needed in any case to account for the grammaticality of 31.b. and the ungrammaticality of 31.c. If the revised version of Kuno's constraint can also account for the data upon which Ross's Sentential Subject Constraint is based, Kuno's constraint should be preferred to the Sentential Subject Constraint.

2.2.6. Conclusion

The Sentential Subject Constraint is compatible with an analysis in which Cebuano has no c-subjects. It is not compatible with an analysis in which Cebuano has c-subjects. Because the correctness of the constraint has been called into question on other grounds, no firm conclusions about whether Cebuano has c-subjects or not can be reached on the basis of the interaction of topicalization and relativization with this constraint.

2.3. The Specified Subject Condition

2.3.1. Statement of the condition

2.3.1.1. The condition as stated by Chomsky (1973)

1. The rationale for the condition

In the Aspects model of transformational grammar, Boolean conditions could be stated on factors in a structural description. That is to say, a condition could require that a part of a string be analyzable as A or as B, that it be analyzable as A and as B, or that it be analyzable as not-A. For example, a rule might apply to both NP's and PP's. The

structural description would be met when either an NP or a PP was present. This condition was symbolized using braces as $\left\{ \begin{smallmatrix} \text{NP} \\ \text{PP} \end{smallmatrix} \right\}$. Or a rule might apply only to an NP which was after a V and under a VP node. Conjunctive conditions were abbreviated using brackets. A structural description with the condition stated above would be written as in 32:

$$32. \quad X - \bigwedge_{VP} V - NP - \overline{Y}_{VP} - Z$$

Some linguists, notably Postal in his book On Raising, interpreted the scope of a rule whose structural description was $W - V - NP - Y$ as a clause, making implicit use of a conjunctive condition. A string had to be analyzable both as $W - V - X - NP - Y$ and as S . This interpretation also had a negative condition, that X could not contain a clause boundary. Others never imposed such conditions, permitting transformations to apply freely across clause boundaries.

In an attempt to reduce the number of grammars which could be written in a transformational framework, Chomsky (1973) imposed stringent conditions on structural descriptions. Among other restrictions, he suggested attempting to eliminate Boolean conditions. Banning Boolean conditions focussed attention on the fact that there was no way to prevent transformations from applying across clause boundaries. If the structural description of passive, for example, is roughly as in 33,

$$33. \quad X - NP - V - Y - NP - Z,$$

then it will apply to 34.a. to produce 34.b., despite the fact that expects and the food are in different clauses.

- 34.a. John - expects - the food - to be good to eat.
- b. The food is expected to be good to eat by John.

When rules apply across clause boundaries extreme overgeneration results. The rules apply to too many strings and produce ungrammatical

sentences. For example, passive will apply to 35.a. to produce 35.b., which is ungrammatical.

- 35.a. I - believe - the dog - is hungry.
- b. *The dog is believed is hungry by me.

In order to prevent the generation of ungrammatical strings like 35.b., Chomsky proposes certain conditions on the application of rules. To block passive from applying to 35.a., he proposes the Tensed-S Condition:³

Tensed-S Condition:
No rule can involve X, Y in the structure
... X... $\left[\alpha \right] \dots Y \dots$...
where α is a tensed sentence.

In order to permit the generation of sentences like 36.a. and 36.b., movement into COMP is excepted from this constraint.

- 36.a. What did Mary claim that she had read?
- b. I discovered that the book that Mary claimed that she read hasn't even been released for sale in this area.

The Tensed-S Condition alone cannot prevent all over-generation.

In 37.a., the complement is not tensed, but 37.b. is still ungrammatical.

- 37.a. John - expects - Mary to cook - the fish.
- b. *The fish is expected Mary to cook by John.

Sentence 37.a. is ruled out by a condition preventing the extraction of a NP from a clause with a subject. The subject need not be phonologically realized in order to block extraction. An empty node (represented for convenience by PRO) in subject position also suffices, as shown in 38.

- 38.a. John - expected - PRO to water - the horse
- b. *The horse was expected to water by John.

2. The Specified Subject Condition

Chomsky formalized the condition in the Specified Subject Condition, given on the next page.

Specified Subject Condition:

No rule can involve X, Y in the structure

... X ... $\left[\alpha \dots Z \dots - W Y U \dots \right] \dots$ ₄
 where Z is the subject of WYU and is not controlled by a category containing X and where X is superior to Y (i.e., where every major category node dominating X dominates Y as well but not conversely).

If α in the condition is S' (where $S' \rightarrow \text{COMP } S$), then rules which move something into COMP will not be subject to the condition. On the first cycle the element will be moved into COMP, to the left of the subject. When it moves into the COMP node of the next sentence up, exiting from S', it will not have to move across the subject, for it will already be to the left of the subject. Movement from COMP to COMP will permit what to be extracted from the lowest clause in 39, despite the fact that Sue is the c-subject of that clause.

39. What did Bob tell you that Mary claimed that Sue had given her?

2.3.1.2. Inapplicability of the condition as stated to verb-initial languages

As stated, the specified subject must precede the string of which it is a subject in order for the rule to apply. The subject's linear position in the statement of the condition makes three empirical predictions. 1. In languages in which the subject precedes the verb, rules relating a position inside a clause to a position to the right of the clause will apply the same whether or not the clause has a specified subject. 2. In languages in which the subject normally precedes the verb, the applicability of rules relating a position inside a clause to a position to the left of the clause will differ depending on whether or not the clause has a specified subject. 3. In languages, like Malagasy, in which the verb precedes the subject, rules relating a position inside a clause to one outside should apply equally freely regardless of whether the clause has a specified subject or not.

2.3.1.3. A revision of the condition which will apply to verb-initial languages

Fiango and Lasnik (1976) propose a modification of the Specified Subject Condition, which will apply equally in languages in which the verb precedes the subject and in languages in which the verb follows the subject.

Modified Specified Subject Condition:

... X ... \int_{α} ... Y ... \int ...
no rule can involve X, Y, where α is assigned a subject not equal to a category containing X.

I take it that by the "equal to" Fiango and Lasnik mean "controlled by."

The Modified Specified Subject Condition (hereafter MSSC) differs from the Specified Subject Condition (hereafter SSC) in two ways. First, the SSC predicts an asymmetry in the application of rules depending on whether the subject precedes or follows the verb. The MSSC predicts symmetry. Which is to be preferred is clearly an empirical question. Second, the SSC does not block a rule from applying to relate the subject of a clause and a position outside the clause. Whether Fiango and Lasnik's revised version will block such application depends on the interpretation of the condition. In English at least, rules must be allowed to apply to the subject, as shown in 40.

- 40.a. Tom believes himself to be the handsomest man in town.
- b. Tom is thought to be the handsomest man in town.

My interest is in considering the consequences of analyzing Cebuano as a language without subjects, of analyzing it with the Actor as the subject at some level, and of analyzing it with the nominative NP as the subject at some level. Since Cebuano is a verb-initial language, the verb precedes both candidates for subject. The SSC can give no information about consequences of any of the possible analyses. The MSSC may

yield some information. Although it may turn out that the SSC is correct and the MSSC is incorrect, the SSC is useless for my purposes. I shall therefore consider the consequences of the MSSC, assuming it to be correct.

2.3.2. Interaction of the MSSC and reflexive anaphora

2.3.2.1. Evidence that the MSSC applies to the rule assigning anaphoric relations to reflexives

In early transformational grammars, reflexive pronouns were created by a transformational rule which applied only within a single clause.

- 41.a. Bob admired himself.
- b. *Anna told Bob that she admired himself.
- c. *Bob made Anna admire himself.

Problems with sentences such as 41, in which the reflexives and their antecedents are initially in different clauses,

- 41.a. Bill expects himself to be admired by everyone.
- b. Mary was flattered that a picture of herself was hanging in Bill's apartment.

together with a desire not to permit transformations to introduce any lexical material led to proposing that reflexives be generated in the base and assigned anaphoric relations by interpretive rules.

As discussed in § 1.1.2 of Part II, the reflexive pronoun in Cebuano consists of a genitive pronoun plus ka'ugalingon ('self'). Except when used as a possessor, a reflexive must be assigned an antecedent for a sentence to be well-formed semantically.

- 42.a. Nagsulat siya sa iyang ka'ugalingon.
ACT write he- NOM OBL his LN self
He was writing to himself.
- b.* Nagsulat siya sa imong ka'ugalingon.
ACT write he-NOM OBL your LN self
He was writing to yourself.

The antecedent must precede the reflexive. In 43.a., the reflexive precedes bata', and bata' cannot normally be an antecedent for the reflexive.

- 43.a. Nakadawat ang babaye ug sulat bahin sa iyang ka'ugalingon
 ACT receive NOM woman OBL letter about OBL his/her LN self
 gikan sa bata'.
 from OBL child
 The woman received a letter about herself/*himself from the
 child.

In 43.b., bata' precedes the reflexive and can now serve as an antecedent for the reflexive.

- 43.b. Nakadawat ang babaye ug sulat gikan sa bata' bahin
 ACT receive NOM woman OBL letter from OBL child about
 sa iyang ka'ugalingon.
 OBL his/her LN self
 The woman received a letter from the child about herself/himself.

Linear order alone does not suffice to determine which NP's can serve as antecedents of reflexives. In 44, bata' precedes the reflexive, but cannot be interpreted as its antecedent.

44. Ningdawat si Jose ug kahon gikan sa bata' para sa iyang
 ACT receive NOM OBL box from OBL child for OBL his LN
 ka'ugalingon.
 self
 Jose_i accepted a box from the child_j for himself_i. (Unambiguous)

Jackendoff (1972) proposes a "thematic" hierarchy in which the actor (the semantic actor, not the morphologically defined Actor in Cebuano) is higher than location, source, and goal, which are higher than the "theme" (an object transferred or conveyed, not old information). He proposes a general condition for the assignment of antecedents to reflexives in English:

Thematic Hierarchy Condition on Reflexives
 A reflexive may not be higher on the Thematic Hierarchy than its antecedent.

If beneficiaries are added to the hierarchy somewhere above source, goal, and location, then extending the condition to Cebuano would permit us to account for the unambiguity of 44. Bata', the source, would be lower in

rank than the reflexive, the beneficiary. Because it would be lower on the hierarchy, it could not serve as an antecedent for the reflexive.

This account has one further consequence. In 44, Jose is the goal, but it can still serve as an antecedent for the reflexive. If the Thematic Hierarchy Condition is to be invoked to explain the lack of ambiguity in 44, it will be necessary to interpret Jose as actor, as well as goal.

Although the Thematic Hierarchy Condition on Reflexives does not apply in all languages (Chvany, 1975, Ch. IV), if it is imposed in Cebuano, the rule assigning coreference between a reflexive and other NP's could tentatively be stated in terms of order: An NP which precedes the reflexive can be coreferential to it.

Given the tentative rule above, how are we to block coreference between babaye and the reflexive in the sentences below?

- 45.a. Mi'ingon ang babaye nga bantayan ni Tomas ang iyang ka'ugalingon.
ACT tell NOM woman LN look after LOC GEN NOM his/her LN self
The woman said that himself/*herself would be looked after
by Tomas.
- b. Gihuna'huna' sa babaye ang pagtan'aw ni Tomas sa iyang
OBJ think about GEN woman NOM looking at GEN OBL his/her LN
ka'ugalingon.
self
Tomas's looking at himself/*herself was thought about by the
woman.
- c. Ningsa'ad si Tomas sa babaye sa pagbantay sa iyang
ACT promise NOM OBL woman OBL looking at OBL his/her LN
ka'ugalingon.
self
Tomas promised the woman to look after himself/*herself.

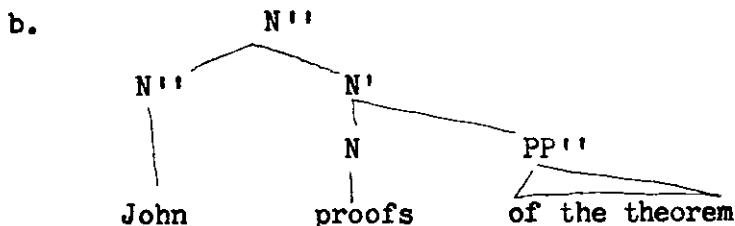
If we appeal to the general conditions, we can say that the Tensed-S Conditions prevents the rule assigning anaphoric connections between NP's and reflexives from applying in 45.a. In 45.b. and 45.c., the complement is not a tensed clause. The rule would have to apply across a specified

Actor. If we analyze the Actor as the subject, then we can invoke the MSSC to guarantee the correct assignment of coreference between reflexives and antecedents in 45.b. and 45.c. If the MSSC is used to account for the assignment of coreference in 45.b. and 45.c., then we will have to analyze the Actor as the subject of the pag-construction.

2.3.2.2. Consequences of analyzing the Actor as the subject in pag-constructions

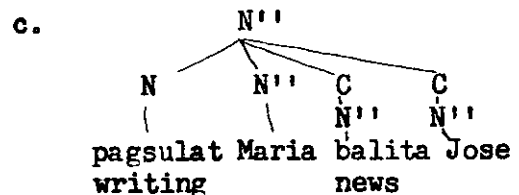
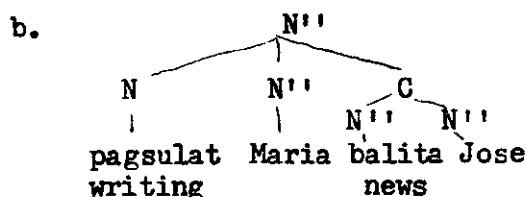
If the Actor is the subject in pag-constructions, then extending the configurational definition of "subject-of" to nominals will involve undue complexity. Jackendoff (1974) proposes an extension of the configurational definition of subject. He first proposes a feature system in which S's and N's share the feature $[+Subj(ect)]$. He then defines the generalized grammatical relation "subject-of" as $[\bar{N}, [+Subj}]$. Accordingly, his structure for 46.a. is 46.b. (I use ' for bars.)

46.a. John's proofs of the theorem



An analogous structure in Cebuano would require an arbitrary node, just as analyzing the Actor as c-subject in finite sentences does. The structure for 47.a., for instance, would be either as in 47.b. or as in 47.c.

47.a. pagsulat ni Maria sa balita kang Jose
 writing GEN OBL news OBL
 Maria's writing of the news to Jose



If the MSSC is to be invoked to explain reflexive anaphora, then the Actor must be the subject of pag-constructions. But using the configurational definition of subject results in using otherwise unjustified nodes in the PSR's. Either the MSSC is not what blocks coreference, or the configurational definition of "subject-of" is incorrect, or the complications it causes must be accepted as necessary evils.

There is some evidence that the MSSC is not what blocks coreference.

2.3.2.3. Evidence that the MSSC does not apply to the rule assigning anaphoric relations to reflexives

The Actor in a pag-construction cannot be a reflexive.

48.a. *Natingala si Lito sa pagdagan sa iyang ka'ugalingon.
ACT be surprised NOM OBL running GEN his LN self
Lito was surprised at himself's running away.

b. *Naghuna'huna si Lito sa pagdagan sa iyang ka'ugalingon.
ACT thing about NOM OBL running GEN his LN self
Lito was thinking about himself's running away.

We saw earlier that in English the MSSC must not block rules which apply to the subject. Yet something is preventing anaphoric relations from being set up between the NP in the main clause and the putative subject of the pag-construction. Either English and Cebuano differ in the way in which the MSSC applies to subjects, or the MSSC is not what blocked anaphora between the reflexive and babaye in 45.b. and 45.c.

But if the MSSC does not block the assignment of coreference in 45.b. and 45.c., what does?

The first alternative to suggest itself is cyclic assignment of coreference. Cyclic assignment can account for the data in 45. The reflexive will be assigned an antecedent on the lower cycle. It will be coreferential to a NP in the next clause only if that NP is coreferential to its antecedent. However, cyclic assignment of coreference would also

predict that the sentences in 48 would be grammatical. There being no possible antecedent for the reflexive on the lowest cycle, the reflexive would be assigned an antecedent on the higher cycle, and the sentence would be well-formed.

Neither cyclic application nor the MSSC can block assignment of coreference between a reflexive in a pag-construction and a NP in the matrix sentence consistently. I will return later to the question of what does block coreference. For now, I leave it unanswered.

2.3.2.4. Conclusions

The MSSC can be invoked to block assignment of coreference between a reflexive in a pag-construction and an NP in the matrix only if the MSSC blocks rules from applying to the subject of a construction. The MSSC as stated by Fiango and Lasnik is open to such an interpretation. However, in English, the MSSC must not prevent rules from applying to the subject. We shall see later that we can use the MSSC in explaining the restriction on topicalization and relativization if we do not permit the MSSC to prevent rules from applying to subjects in Cebuano either.

At this point, however, the MSSC might be interpreted to block rules from applying to subjects and used to block the coreference assignment. If so, the Actor will be the subject in pag-constructions. It does not immediately follow that the Actor will be the subject in finite clauses as well, for the genitive in a nominal in Cebuano might correspond to the nominative NP in a finite clause, as happens in English (compare "he shot the lion" and "his shooting the lion").

If the Actor is the subject of a pag-construction, then the extension of the configurational definition to pag-constructions requires positing

arbitrary nodes in the PSR's. If the MSSC is used to account for the data about reflexives, requiring the Actor to be analyzed as the subject of pag-constructions, then the configurational definition of "subject-of", which requires positing ad hoc nodes, is probably incorrect.

2.3.3. Interaction of MSSC with preverbal possessors

2.3.3.1. Preverbal possessors

In Section 7.2 of Part II, a class of sentences was presented in which a preverbal nominative NP was construed as the possessor of a nominative NP found later in the sentence. In 49.a., for example, the preverbal nominative ang baka is construed as the possessor of ang sungay, making 49.a. synonymous to 49.b., except for topic.

49.a. Ang baka giputlan niya ang sungay.
NOM cow cut off LOC he-GEN NOM horns
The cow, (its) horns were cut off by him.

b. Giputlan niya ang sungay sa baka.
cut off LOC he-GEN NOM horns GEN cow
The cow's horns were cut off by him.

A pronoun coreferential to the preverbal possessor may be present.

49.c. Ang baka giputlan niya ang iyang sungay.
NOM cow cut off LOC he-GEN NOM his LN horns
The cow, its horns were cut off by him.

2.3.3.2. Apparent violation of the MSSC if the Actor is the subject of a pag-construction which contains a nominative NP

In sentence 50.a., the preverbal possessor ang baka is construed with the nominative NP in a pag-construction, making 50.a. synonymous to 50.b., except for topic.

50.a. Ang baka gisugdan niya sa pagputol ang sungay.
NOM cow begin LOC he-GEN OBL cutting off NOM horns
The cow, cutting off (its) horns was begun by him.

50.b. Gisugdan niya sa pagputol ang sungay sa baka.
begin LOC he-GEN OBL cutting off NOM horns GEN cow
Cutting off the horns of the cow was begun by him.

In 50.a. and 50.b., a PRO will follow pagputol and will be controlled by niya. If 50.a. and 50.b. are related by a rule, that rule will involve two NP's separated by a specified Actor. If the Actor is the subject, then the rule violates the MSSC.

2.3.3.3. Base-generation of preverbal possessors

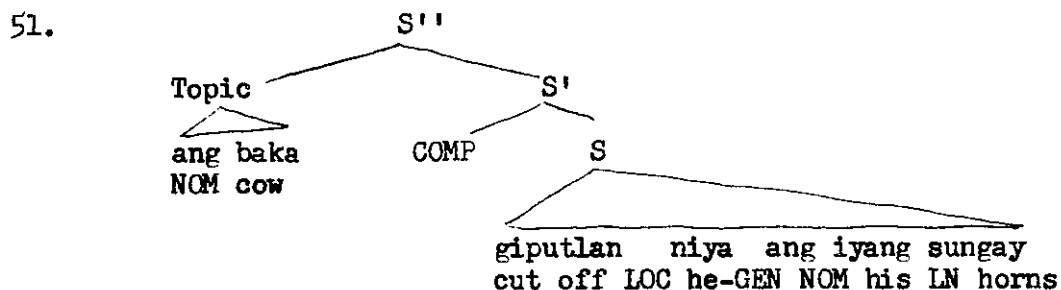
Either the MSSC is incorrect, or the Actor is not the subject of a pag-construction which contains a nominative NP, or the sentences in 50.a. and 50.b. are not related by rules and neither are the preverbal possessor and the later nominative NP. From the point of view of an inquiry into Cebuano subjects, the first two alternatives are of greater interest than the last. However, we cannot conclude that one of the first two alternatives is correct, for the third alternative is feasible.

In Part II, sentences with preverbal possessors were derived from sentences with possessors inside the NP of the thing they possess. This same analysis could be translated into some versions of transformational grammar. It could not be proposed in the lexicalist version, for in that version transformations cannot introduce lexical material, including pronoun copies. In the lexicalist version, sentences with preverbal possessors must be base-generated, to permit the optional pronoun.

Chomsky has recently (class, fall, 1975) proposed permitting PSR's to introduce a Topic node.

PSR 1: S' \longrightarrow Topic S'
PSR 2: S' \longrightarrow COMP S

If these rules are used for preverbal possessors, 49.c. will have roughly the form shown in 51.



Given a structure like 51, if a rule of semantic interpretation is used to assign coreference between the Topic and the nominative NP in the S, violations of the MSSC will still result. It is a part of Chomsky's proposal that no specific rule is used to specify the relation of the Topic to the S in constructions in which a pronoun referring to the Topic may be present. In his view, the material under the S is loosely predicated of the Topic. The relation of the S to the Topic is determined by the sense and may be tangential. He would consider the preverbal possessor analogous to the circus in 52.

52. As far as the circus goes, I like clowns.

Base-generating sentences with preverbal possessors allow the preverbal possessor to be connected with an embedded clause. In this analysis, 53 will be base-generated, not derived via topicalization.

53. Ang baka gi'ingon sa babaye kang Fred nga giputlan ni Juan
 NOM cow OBJ tell GEN woman OBL LN cut off LOC GEN
 ang sungay.
 NOM horns
 The cow, it was told to Fred by the woman that (its) horns
 were cut off by Juan.

There is one major objection to this proposal, but it can be met. If all that is required is that the clause be interpreted as somehow pertinent to the preverbal possessor, one would expect the voice of the clause to make no difference, but the voice does matter. Sentence 49.a. is grammatical, but 54 is not.

54. *Ang baka miputol siya sa sungay.
NOM cow ACT cut off he-NOM OBL horns
The cow, he cut off (its) horns.

A reply to this objection is possible. Recalling that from the viewpoint of new/old information organization the nominative NP is the topic of its clause, one can require that the Topic of which a clause is predicated and the topic of that clause must be construed jointly. The Topic and the nominative NP can be construed jointly by considering the nominative NP to be possessed by or otherwise pertinent to the Topic. The differences in types of joint construal will then account for the different relationships between the Topic and the nominative NP. In the sentences in 49, the nominative NP was a part of the Topic. In 55, the nominative NP is owned by the Topic.

55. Ang sakop ni Iyo' Bruno nagkadugo' ang mga bangkaw.
NOM group GEN ACT be bloody NOM pl spear
Iyo Bruno's group, (their) spears were bloody.

In 56, the Topic is the location of the nominative NP.

56. Kining lungsura ma'ayo ang aklatan.
this-NOM IN city PARTICULAR good NOM library
This city, (its) library is good.

If the sentences with preverbal possessors have the structure shown in 51 and the Topic and the nominative NP are not related by a specific rule, then the sentences in 50 do not constitute a violation of the MSSC.

2.3.3.4. Conclusion

Sentences with preverbal possessors show that either the MSSC is incorrect, or the Actor is not the subject of a pag-construction which contains a nominative NP, or the preverbal possessor and the nominative NP after the verb are not related by a specific rule. A recent proposal

of Chomsky's would choose the third alternative. Taking the third alternative to be correct tells us nothing about the correctness of the first two.

2.3.4. Interaction of the MSSC with topicalization

2.3.4.1. Apparent violation of the MSSC when the nominative NP is analyzed as a subject and a reply

Sentence 31.b., given in § 2.2.5.2, provides an apparent example of a violation of the MSSC if the nominative NP is taken as the subject. Sentence 31.b. is repeated here with a Δ marking the position with which ang kareta nga bulawan is connected. For the sake of clarity, clause boundaries are shown.

31.b. [_{S₁} Ang kareta nga bulawan gi'ingon ni Jose kang Maria .
 _{S₁} NOM cart LN gold OBJ tell GEN OBL
 [_{S₂} nga misinggit si Lito kang Pedro { nga gisa'ad ni Juan Δ
 _{S₂} LN ACT shout NOM OBL _{S₃} LN OBJ promise GEN
 sa hari.] _{S₃}] _{S₂}] _{S₁}]
 OBL king
 It was told to Maria by Jose that Lito had shouted to Pedro
 that the cart of gold had been promised by Juan to the king.

Lito is a nominative NP. If we take the nominative NP as the subject, then Lito is the subject of S_2 . Ang kareta nga bulawan is associated with the position marked by Δ , inside S_2 . If X is the position of ang kareta nga bulawan in 31.b., Y is the position with which it is associated, and Z is Lito, the subject of S_2 , we have the structure schematized below:

57. X ... [_{S₂} ... Z...Y ...] ...

S_2 has a specified subject not controlled by X. The MSSC should prevent any rule from involving X and Y. If the nominative NP is taken to be the subject, then topicalization violates the MSSC.

The violation does not establish that it is impossible to analyze the nominative NP as subject while retaining the MSSC. Calling 31.b. a violation rests on a too literal interpretation of the condition. Sentence 31.b. may point rather to the need for a convention on the interpretation of the MSSC. The schema in 57 represented the structure of 31.b. The structure could also be represented as in 58.

58. $X \dots [S_2 \dots Z \dots [S_3 \dots Y \dots] \dots] \dots$

If we are considering the nominative NP the subject, then Z is indeed the subject of S_2 and Y is indeed in S_2 , but the only subject of S_3 is Y. If Z is disregarded, and if the MSSC is interpreted as not blocking a rule from applying to a subject (as in English, but see 2.3.2.3.), then the MSSC will not prevent a rule from involving X and Y. Accordingly, I propose that a condition should be placed on the interpretation of the MSSC. In determining whether α in $[\dots Y \dots]$ has a subject, one must interpret α as the minimal cyclic node properly including Y. In applying the MSSC to sentence 31.b., only S_3 would be considered as α . The fact that S_2 has a subject would be irrelevant.

With the condition on interpretation proposed above, the MSSC is compatible with an analysis in which the nominative NP is the subject.

2.3.4.2. Violations when the Actor is taken as the subject

2.3.4.2.1. In finite clauses

Sentence 31.b. is an example of an undeniable violation of the MSSC when the Actor is taken as the subject of a finite clause. Ni Juan is the Actor in S_3 . In 31.b., kareta nga bulawan is associated with Δ despite the presence of a subject in S_3 , if the Actor is taken as the subject. Sentence 21.b. provides another example of such a violation.

We can conclude that if the MSSC is correct, then the Actor cannot be the subject of finite clauses if topicalization is subject to the condition.

2.3.4.2.2. Violation of the MSSC when the Actor is taken as the subject of a pag-clause which contains a nominative NP

Topicalization can apply to a nominative NP in a pag-complement.

Corresponding to 59.a., we find 59.b.

- 59.a. Gisugdan niya sa pagpilay ang ta'as nga kahoy.
begin LOC he- GEN OBL cutting down NOM tall LN tree
He began to cut down the tall tree.
- b. Ang ta'as nga kahoy gisugdan niya sa pagpilay.
NOM tall LN tree begin LOC he-GEN OBL cutting down
The tall tree he began to cut down.

In 59.b. and 59.a., a phonologically null PRO follows the pagpilay. The PRO is controlled by niya. In 59.b., ang ta'as nga kahoy is associated with a position inside a clause with a specified subject, if the Actor is taken as subject. Therefore, if the MSSC is correct and applies to topicalized sentences, then the Actor is not the subject of a pag-construction which contains a nominative NP.

2.3.4.3. Tentative conclusions

Analyzing the nominative NP as subject does not result in violations of the MSSC. Analyzing the Actor as subject, at least in finite clauses and pag-clauses which contain nominative NP's, leads to violations of the MSSC. If the MSSC is retained and if topicalization is subject to the condition, then the nominative NP, but not the Actor, can be analyzed as the subject.

Analyzing the nominative NP as the subject allows us to account for the fact that only the nominative NP can be extracted from its clause by topicalization, as was mentioned in § 2.2.2.1. In 60.b., the nominative NP is associated with a position Δ inside the lower clause, and the

sentence is grammatical.

- 60.a. Na'alinggatan sa mananagat nga gika'on sa iho ang karabao.
 notice LOC GEN fisherman LN OBJ eat GEN shark NOM buffalo
 That the shark was eating the buffalo was noticed by the fisherman.
- b. Ang karabao na'alinggatan sa mananagat nga gika'on sa iho Δ .
 NOM buffalo notice LOC GEN fisherman LN OBJ eat GEN shark.
 That the shark was eating the buffalo was noticed by the fisherman.

In 60.c., iho is associated with the position marked by Δ . Iho is not the nominative NP of the nga-clause in 60.a., and 60.c. is ungrammatical.

- 60.c. *Sa iho na'alinggatan sa mananagat nga gika'on Δ ang karabao.
 GEN shark notice LOC GEN fisherman LN OBJ eat NOM buffalo.
 That the shark was eating the buffalo was noticed by the fisherman.

If the nominative NP is the subject and the MSSC applies to topicalized sentences, then we can account for the ungrammaticality of sentences like 60.c. It seems desirable to consider the nominative NP the subject.⁵

2.3.4.4. Consequences of considering the nominative NP the subject

Considering the nominative NP the subject has consequences. First, it casts doubt on the configurational definition of "subject-of". Second, it makes it highly unlikely that the MSSC is applicable in reflexive anaphora. Finally, it suggests that topicalization and relativization in Cebuano do not proceed analogously to wh-movement.

1. In sections 1.3 and 1.4, it was shown that analyzing the nominative NP as c-subject required positing either ad hoc nodes in the PSR's or an arbitrary and otherwise unjustified movement rule. If we analyze the nominative NP as the subject in order to take advantage of the MSSC, then we must either accept the ad hoc node or rule, or else claim that subjects are not defined the same in Cebuano as in languages, if any, in which the configurational definition of subject applies. The choice will be made on the basis of one's convictions about the relative importance of avoiding arbitrariness as compared with giving up configurational definitions of subject in at least some languages.

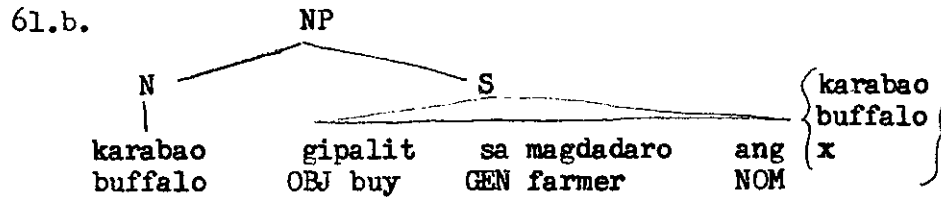
2. Now, if we use the MSSC to account for the difference in grammaticality of 60.b. and 60.c., clearly the MSSC will not block rules involving the subject of a clause and a position outside the clause. But we saw that if the MSSC is to be invoked to explain the inability of a NP in the main clause to be coreferential with a reflexive in a pag-construction, the condition will have to block the rule assigning coreference from applying to the subject of the pag-construction. Either the MSSC cannot be used to account for the difference in grammaticality of 60.b. and 60.c., or it cannot be used in accounting for reflexive anaphora.

3. In section 2.3.1.1 it was noted that if an element is moved into COMP the rule moving it is not restricted by the SSC. If movement into COMP is also excepted from the MSSC, then if we are to account for the difference in grammaticality of 60.b. and 60.c. by using the MSSC, it follows that topicalization does not proceed by moving an element into COMP.

Moreover, relativization is parallel to topicalization. Just as only a nominative NP can be topicalized, so also only a nominative NP can be relativized. If relativization does not proceed by moving an element into COMP, the MSSC can be invoked to restrict relativization properly. Forming relative clauses without movement into COMP is possible either by deletion or by base-generation.

If deletion is used, some special deletable morpheme will be needed. If x is such a morpheme, then the structure of 61.a. will be as in 61.b.

61. karabao nga gipalit sa magdadaro
buffalo IN OBJ buy GEN farmer
the buffalo that was bought by the farmer.



Alternatively, as shown, instead of a special deletable morpheme, karabao might be repeated. In either case, a deletion analysis is undesirable. If a special morpheme is used, the morpheme will be ad hoc. If the head is repeated, we will fall into the well-known paradoxes.

There seems to be no objection, however, to generating relative clauses in the base. In such an analysis, structures like that in 62 would be generated freely.



If the S in this sort of structure contains an unbound PRO, the structure can be interpreted as a relative clause with the PRO bound by the head. If such a structure contains a full nominative NP or an already bound PRO, it will not be assigned an interpretation by this rule. If it is not assigned an interpretation by any other rule, it will be marked as deviant. This analysis does not require any special morphemes or any dubious deletions. It does require that PRO, which I use to stand for an empty NP node, be assigned a case. As far as I can see, there is no reason not to assign cases to empty NP's. If there is none, then base-generating relative clauses seems possible and simple.

There is one objection to not using movement into COMP in the formation of topicalized sentences and relative clauses. Both topicalization and relativization, whether movement rules or interpretive rules, violate the Tensed-S Condition. As mentioned earlier, movement into COMP is specifically excepted from the Tensed-S Condition. If topicalization

and relativization proceed by moving an element into COMP, they will not violate the Tensed-S Condition. But surely to argue that on this account topicalization and relativization should move an element into COMP would be to use movement into COMP merely to mark some rules as exceptions to the condition. With the possible exception of reflexive anaphora, which has other unexplained problems, I know of no place where the Tensed-S Condition must be invoked, if the MSSC applies with the nominative NP as subject. There may be no reason to suppose that the Tensed-S Condition applies to finite clauses. But if it does not, then there is no reason to suppose that topicalization and relativization proceed by moving some element into COMP.

If we use the MSSC to account for the restrictions on topicalization and relativization, analyzing the nominative NP as the subject, topicalization and relativization should not proceed by movement into COMP. Indeed, there seems to be no need for a COMP node at all.

2.3.4.5. A difficulty with accounting for the restrictions on topicalization and relativization by using the MSSC

There is one serious objection to using the MSSC to account for the restriction of topicalization and relativization to nominative NP's. Suppose we have a sentence with a pag-construction which does not contain a nominative NP, as in 63.a.

- 63.a. Na'alinggatan sa mananagat ang pagka'on sa iho sa karabao.
 notice LOC GEN fisherman NOM eating GEN shark OBL buffalo
 The shark's eating the buffalo was noticed by the fisherman.

There is no corresponding topicalized sentence with either iho or karabao at the front. Both 63.b. and 63.c. are ungrammatical.

- 63.b. *Sa/*Ang karabao na'alinggatan sa mananagat ang pagka'on sa iho.
 OBL/NOM buffalo notice LOC GEN fisherman NOM eating GEN shark
 The shark's eating the buffalo was noticed by the fisherman.

- 63.c. *Sa/*Ang iho na'alinggatan sa mananagat ang pagka'on sa karabao.
 GEN/NOM shark notice LOC GEN fisherman NOM eating OBL buffalo
The shark's eating the buffalo was noticed by the fisherman.

Topicalization must be blocked from forming 63.b. and 63.c. Analyzing the Actor as the subject of pag-constructions would block 63.b., but would permit 63.c., since topicalization is not blocked from applying to subjects by the MSSC.

The problem here is exactly parallel to the problem with reflexive anaphora. The rule assigning coreference is blocked from applying even to the subject of the pag-construction, if the Actor is analyzed as the subject. It is the pag-construction that poses the problems. I would suggest that it is such constructions, not finite clauses, that act as tensed sentences with respect to the Tensed-S Condition in Cebuano. This suggestion is not wholly satisfying, however. In at least some instances, topicalization requires associating the topicalized NP with a position inside a pag-construction, as shown below in 64, in which Δ marks the position with which kanang taytayan is associated.

64. Kanang taytayan gikahadlok nako' sa pag'agi Δ .
 that-NOM LN bridge fear LOC I-GEN OBL going by way of
 That bridge I'm afraid to go over.

Relativization is possible in the same instances. If pag-constructions function like tensed sentences, then both topicalization and relativization will violate the Tensed-S Condition. Reflexive anaphora poses an even more serious problem, for the nominative NP in a nga-clause cannot be coreferential to a NP in the matrix sentence, as shown in 65.

65. *Mi'ingon si Rosa kang Fred nga gihatagan nako' ang iyang
 ACT tell NOM OBL IN give LOC I-GEN NOM his/her LN
 ka'ugalingon ug gasa.
 self OBL gift
 Rosa told Fred that himself/herself had been given a gift by me.

The MSSC will not block assignment of coreference in 65. If the Tensed-S Condition does not block it, what does? Treating the pag-construction like a tensed-S will allow us to account for 63.b. and 63.c., but not for 64 or 65.

The contrast between 63 and 64 is most striking. Topicalization and relativization can apply to a pag-construction just when it contains a nominative NP; otherwise, it acts like a tensed-S with respect to both rules. To me, this suggests that the whole approach just outlined may be wrong. It may be the case that a language-particular condition is needed to restrict relativization and topicalization to nominative NP's, that the MSSC cannot be so used. If this is so, then the argument for analyzing the nominative NP as the subject evaporates. The MSSC permits us to analyze the nominative NP as the subject, but provides no support for doing so.

3. General Conclusions

Topicalization and relativization apply only to nominative NP's. If this restriction is accounted for by invoking the MSSC, then the nominative NP should be analyzed as a subject. In the discussion of configurationally defined c-subjects, we saw that Cebuano should not be analyzed as having either deep or surface c-subjects. It seems to follow that the configurational definition of subject is not the one that applies in Cebuano. The nominative NP is the subject, but not the c-subject.

If the nominative NP is not the c-subject, then it is not clear whether topicalization and relativization violate the Sentential Subject Constraint or not. The Sentential Subject Constraint is not stated as applying to subjects, but to NP's directly dominated by S. If we abandon

the configurational definition of subject, according to which such NP's are c-subjects, should we expect the constraint to apply to non-configurationally defined subjects? Whether it will apply or not seems to be an empirical question. The data from Cebuano suggest that it will not, but since the constraint itself is in doubt and the analysis with the nominative NP as subject has certain problems, no firm conclusion can be reached.

All of these conclusions are based on the assumption that we should use the MSSC to restrict relativization and topicalization. This assumption can be challenged. The fact that a nominative NP inside a pag-construction but no other NP, including the Actor, which would probably be the subject when no nominative NP was present, can be topicalized or relativized suggests that perhaps the MSSC should not be invoked, that a language-particular condition restricting rules to nominative NP's should be imposed.

If a language particular condition is imposed, the support for all the conclusions given earlier vanishes. If we give up the configurational definition of subject, none of the constraints offers any difficulty to our analyzing the nominative NP as the subject. The MSSC prevents us from analyzing the Actor as the subject. But nothing now requires us to give up the configurational definition or to propose that Cebuano has subjects.

Footnotes to Part III

1. I would like to thank Chomsky for pointing out examples like 28 to me.
2. The judgments of grammaticality of 27, 29, and 30 are those of John McCarthy, not mine.
3. Chomsky leaves open the possibility that α is not always a tensed sentence, suggesting that α might be a language-specific parameter. We shall see that in Cebuano, α does not seem to be a finite clause.
4. With certain verbs, NP's in fixed positions are assigned coreference with a PRO found in the infinitive clause. For example, with decide the c-subject is coreferential with the PRO c-subject of the infinitive.
(i) John decided $\overline{\text{PRO}}$ to go
With urge, the PRO is interpreted as coreferential to the c-object.
(ii) John urged Mary $\overline{\text{PRO}}$ to go
When the position determines coreference in this manner, the position or the NP in it is said to control the PRO.
5. This argument was first suggested to me by Ken Hale.

PART IV

The Two Theories and Cebuano's Place in the World

0. Introduction

In Parts II and II, the question of which nominal, if any, should be analyzed as the subject in Cebuano sentences was discussed in two frameworks: the theory of relational grammar and the theory of transformational grammar.

In relational grammar, the Actor must be analyzed as the initial Subject and the nominative nominal must be the surface Subject, if the proposed universals are to be retained.

In transformational grammar, considerations of the word order suggested that Cebuano should have neither deep nor surface subjects, if subjects are configurationally defined. An analysis in which Cebuano has no subject is compatible with the Sentential Subject Constraint and the Modified Specified Subject Condition. An analysis in which the Actor is the subject when topicalization and relativization apply is not compatible with the Modified Specified Subject Condition. If the configurational definition of subject is abandoned, then the constraints are compatible with an analysis in which the nominative NP is the subject. It may be possible to use the Modified Specified Subject Condition to restrict topicalization and relativization to the nominative NP if the nominative NP is analyzed as the subject, although the application of the rules to nominals inside pag-constructions presents some problems for

an analysis which so uses the condition. If these problems can be solved, the analysis which makes use of the condition is preferable to one which merely does not contradict it, and the nominative NP should be analyzed as subject, the configurational definition of subject being given up, at least in Cebuano.

If the configurational definition of subject can be given up, then both theories agree in analyzing the nominative as the surface subject, although there would be no reason to analyze the Actor as the deep subject in transformational grammar.

In view of the similarity in the conclusion about surface subjects (always assuming that the configurational definition of subject is discarded for Cebuano), one may wonder whether relational grammar is a notational variant of transformational grammar. I would like to discuss this question before going on to see how analyzing the nominative NP as the subject fits in with generalizations about subjects.

1. Is relational grammar a notational variant of transformational grammar?

What precisely is meant by the statement that theory A is a notational variant of theory B? The strongest interpretation of such a statement would require that the theories be intertranslatable. A weaker interpretation would require only that theory A be able to be translated into theory B. I am going to examine only the weaker interpretation.

But what is meant by translating one theory into another? Here analogy with homomorphisms in logic may be helpful. Given two sets C and D with relations $\{R_1, R_2 \dots\}$ defined in C and with relations $\{Q_1, Q_2, \dots\}$ defined in D, a homomorphism from C to D is a function (h) which meets the following conditions:

1. To each member a of C , h assigns a member of D , $h(a)$.
2. For any n -place relation R_i in C , there is an n -place relation Q_i in D such that any n -tuple (a_1, a_2, \dots, a_n) belongs to R_i if and only if $(h(a_1), h(a_2), \dots, h(a_n))$ belongs to Q_i .

A simple example may be useful. Suppose $C = \{1, 2, 3, 4\}$ and $D = \{a, b, c, d, e\}$ and let R be the relation "is greater than" and Q be the relation "comes earlier in the alphabet." If h is defined by the following set of ordered pairs,

$h: (1, d), (2, c), (3, b), (4, a)$

then h is a homomorphism from the configuration of set C and relation R to set D and relation Q . This can be checked by examples. $(3, 1)$ belongs to R since 3 is greater than 1. Similarly $(h(3), h(1)) = (b, d)$ belongs to Q since b precedes d . On the other hand, $(3, 4)$ does not belong to R , and $(h(3), h(4)) = (b, a)$ does not belong to Q . The fact that no member of C is assigned to e does not interfere with h 's being a homomorphism.

A strictly technical application of the definition of a homomorphism to linguistic theories would be exceedingly complicated. We have to deal with the set of possible grammars, the set of possible languages, and the relationships assigned to parts of sentences. Roughly speaking, a homomorphism assigns a member of one set to every member of another and preserves the relations defined in the second set, assigning each a corresponding relation in the first set.

If relational grammar is a notational variant of transformational grammar and if being a notational variant means being homomorphic, then roughly speaking, the following two conditions should be met:

1. First, given a relational grammar RG_1 generating language L_1 , there should be a transformational grammar TG_1 which also generates L_1 . That is, there should be a transformational grammar corresponding to every relational grammar. The converse is not necessary. Relational grammar will be a

notational variant of transformational grammar if there is some definable subset of the set of possible transformational grammars which corresponds to the set of possible relational grammars.

2. Given any relation defined in relational grammar, there should be a relation in transformational grammar which will relate just those elements related by the relation in relational grammar.

The first condition is met. Peters and Ritchie showed that a version of transformational grammar which permitted deletion of specified elements was equal in power to a Turing machine. That is to say, a transformational grammar can be written to generate any decidable set. If relational grammars also generate decidable sets, then in one version of the theory, a transformational grammar can be written to generate any language generated by a relational grammar, at least potentially. Note that the particular version of transformational grammar examined earlier, which restricts deletion, may or may not be able to assign a transformational grammar for every possible relational grammar in the version of relational grammar considered here.

Whether the second condition is met is unclear. If it is, it must be possible to define the relations used in relational grammar in terms of notions permitted within the theory of transformational grammar. One of the tasks is to give a definition which will pertain to just those NP's analyzed as Subjects in relational grammar for all languages. Even if this can be done, it may prove impossible to define notions corresponding to the relations in relational grammar without changing the constituent structure.

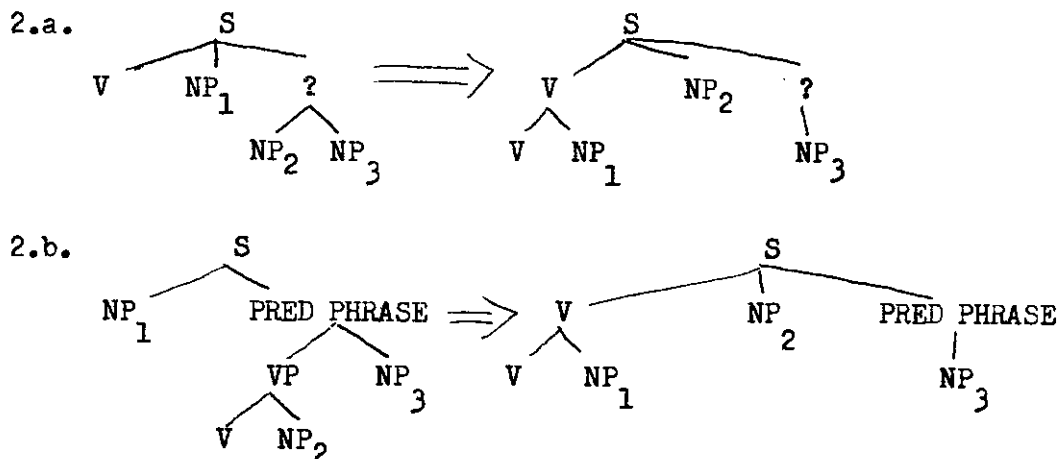
Let me clarify this last statement with an example. The configurational definition of subject is probably going to be abandoned for Cebuano, but considering how it would apply in Cebuano will point up the difficulty

I have in mind. In the relational grammar given, the Actor is the underlying Subject and the nominative NP is the surface Subject. What would be required to impose the same analysis in transformational grammar if the configurational definition of the subject were retained? In the surface structure of an objective voice sentence like 1, the Actor appears in position NP₁ and the nominative NP in position NP₂ shown in 1.b.

- 1.a. Luto'on ni Maria ang saging sa lata.
 cook OBJ GEN NOM banana OBL can
 The banana will be cooked in the can by Maria.

b. V NP₁ NP₂ NP₃

If we were to use the configurational definition of subject, we would need something like 2.a. or 2.b. in order to make NP₁ the underlying subject and NP₂ the surface subject.



To use the configurational definition, we have to combine V and NP₁ into a single constituent at some point or else to find some other means to prevent NP₁ from being dominated directly by S in surface structure. In relational grammar, on the other hand, the nominals are not combined with each other or the verb, but depend on the verb. Using the

configurational definition to translate one relationship, subjecthood, would lead us to destroy another relation, constituency. Since the configurational definition will probably be replaced, the example is not directly applicable, but it shows the sort of problem that can arise and must be examined in proposing definitions in transformational grammar of relations established in relational grammar.

I have not shown that relational grammar is not a notational variant of transformational grammar, but I hope that I have established that the question of whether it is or not is not trivial.

2. Cebuano's place in the world

So far I have been considering the question of which nominal if any should be analyzed as the subject in Cebuano within the frameworks of two theories. Recently, certain linguists have been seeking a universal characterization of the notion of subject by examining what have been analyzed as subjects in a wide number of different languages and seeing what they have in common, coming up with lists of "subject properties."

From the viewpoint of relational grammar, this procedure makes no sense. In the theory of relational grammar, subjecthood is a relation which a nominal either bears or does not bear to a predicate at a given stage. It is not a property or set of properties associated with a particular nominal. It is rather that which in conjunction with a series of general laws determines how a nominal behaves; i.e., termhood is the source of properties. By interacting differently with the general laws, subjecthood may be manifested differently in two languages. As a minor example, stating case marking on initial terms and reflexivization on final terms would produce surface structures in which different "properties"

would be displayed by subjects than those displayed by subjects in a language in which case marking was stated on final terms and reflexivization was limited with respect to initial terms. When considered from the standpoint of relational grammar, lists of "subject properties" confound so many variables as to be useless.

Nor do such lists have any direct role to play in transformational grammar. In transformational grammar, even if the current configurational definition of subject is replaced, the definition will be formal. A NP satisfying certain formal conditions will be a subject, and in virtue of being a subject, it will behave in certain ways in certain constraints.

The lists may have a certain usefulness in finding a reasonable analysis in transformational grammar, however. Indeed, it was as a heuristic device that Chvany (1973) proposed her lists of subject properties. Some writers have gone on to use the lists as hard and fast authorities about the proper way of analyzing subjects in various languages. Schachter (1976) has reached such odd conclusions about subjects in Tagalog on the basis of the lists that I would like to consider Cebuano subjects from the viewpoint of the lists in some detail.

Chvany (1975) gives the following list of properties of the "subject par excellence." (p. 15-16)

The "subject par excellence"

- a) is in the unmarked (nominative or prepositionless) form
- b) ...is the NP with which the verb agrees
- c) is also the "topic" of the sentence...
- d) is in initial (leftmost) position
- e) is the agent or performer of a verb of action
- f) can be the antecedent of a reflexive pronoun
- ... g) ... is the \overline{NP} most accessible to relativization and similar processes but is, in English and Russian, the least accessible to certain types of ellipsis.

Keenan (1974) includes these and goes on to add a set of properties connected with definiteness of reference.

In Cebuano, the Actor clearly meets criterion e. In Section 1.1.2 of Part II, we showed that it meets criterion f; it can be the antecedent of a reflexive. In the discussion of verbal morphology, it was noted that in formal writing the verb may agree with the Actor in number in the active voice, durative aspect. To a limited extent, that is to say, the Actor meets criterion b. In that it precedes the other NP's, though not the verb, it also meets criterion d.

It is the nominative NP which meets the other criteria. It is in the nominative case, is the topic, and is the most accessible to relativization and similar processes.

In Cebuano, one NP meets four criteria on the list and another meets three. Exactly the same situation is found in Tagalog. Looking at the division of properties, Schachter (1975, 1976) concluded that subject properties were shared by the Actor and the nominative NP, the two together corresponding to the subject in other languages. He observed that the rules involving coreference (e.g., Equi and reflexivization) are restricted with respect to Actors, while rules involving movement are restricted with respect to nominative NP's. Rules of the first type he considers "role related;" processes of the second type, "reference related." In his view, the concepts of role-relatedness and reference-relatedness explain the grouping of properties when the lists split.

The division of properties can be explained otherwise. In relational grammar, the processes associated with the Actor happen to be limited with respect to initial grammatical relations. Because the initial grammatical relations are based on the roles of the participants in the action,

rules limited with respect to initial grammatical relations appear to be ~~role~~-related. If the new/old information organization of the sentence, including information about definiteness, is used in deciding which advancements to apply, it is natural that the surface Subject, the nominative nominal, should display properties associated with reference-relatedness. Role-relatedness and reference-relatedness are effects, not causes.

In transformational grammar, the division can be explained by assuming that processes restricted with respect to the Actor are limited according to the Thematic Hierarchy or otherwise based on thematic relations, while properties displayed by the nominative NP are associated with the choice of one formal structure over another.

Even outside the framework of these theories, in the hazy realm in which "subject properties" are used as authorities rather than as heuristic aids, it seems to me that Schachter's conclusion, that no single nominal in Tagalog corresponds to subjects in other languages, does not follow.

We know one thing about the nominative NP: that if a sentence has a topic, the nominative NP is the topic. From Chvany's list, we see that in many languages topic and subject coincide. If we obtain a list of properties of subjects by examining the behavior of subjects, in many languages we will also be examining the behavior of topics. The list we compile may confound properties of subjects with properties of topics. We might hypothesize that in Cebuano the topic and subject are separate, that properties associated with the nominative NP are properties of topics, while properties associated with the Actor are properties of subjects.

Other languages in which the topic and subject do not necessarily coincide should provide a means to test this hypothesis. One small piece of evidence from Japanese tending to support the hypothesis has already been mentioned. In the discussion of relativization in Section 4.3 of Part II, it was pointed out that Kuno has argued that relativization in Japanese is limited with respect to topics rather than according to Keenan and Comrie's Accessibility Hierarchy. Further study should reveal whether the other properties associated with the nominative NP are associated with the topic in Japanese and whether the properties associated with the Actor in Cebuano are associated with the subject in Japanese. If so, then the lists of subject properties conflate the properties of subjects and properties of topics, and the Actor should be the subject and the nominative NP the topic in Cebuano and, presumably, in Tagalog. Philippine languages will then have a single nominal corresponding to the subject in other languages, not be typologically peculiar in having two nominals which jointly correspond to the subject.

3. General Conclusions

We began in Part I by asking whether verb-containing sentences in Cebuano had subjects, and if so, whether the Actor or the nominative NP was the subject. Seeking to answer the question in different frameworks, we found the following:

1. In relational grammar, the Actor is the initial Subject and the nominative NP is the final Subject.
2. In transformational grammar, if the configurational definition of subject is retained, Cebuano should have neither deep nor surface

c-subjects. If the configurational definition of the subject is given up, then the nominative NP may be analyzed as the subject.

3. If we move outside of the theories and consider only lists of "subject properties," no firm conclusions can be drawn about Cebuano subjects, for the lists do not distinguish subjects at different stages and may also confuse properties of subjects and properties of topics. The Actor does seem to be a subject at some point, and it may be the case that the nominative NP is only the topic, not both topic and surface subject.

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Autobiographical Sketch

I was born May 11, 1945, in Hillsboro, Ohio, the second of four children. I grew up in Ohio, Kentucky, and Maryland.

As an undergraduate I attended St. John's College in Annapolis, Maryland. St. John's offers only one course of study with no major or minor. Philosophy, mathematics, and physical sciences are stressed. In 1967 I received a B.A. degree magna cum laude.

Upon leaving St. John's I joined the Peace Corps. I trained at San Jose State College in Tagalog, Philippine history and culture, and teaching techniques for secondary school mathematics. Assigned to Central Mindanao State University in Musuan, Bukidnon, I taught arithmetic, algebra, and trigonometry in the high school and in the first year of college for two years. It was while I was living in Musuan that I began to study Cebuano.

Returning to the U.S., I spent six months looking for work and working at temporary jobs of diverse sorts.

In January of 1970 I began to work for the Anne Arundel County Health Department in Anne Arundel County, Maryland, as a Sanitarian. After two months on trash, sewage, and general nuisance complaints, I was transferred to the Air Quality Control Section, where I gathered and analyzed data on air pollutants, performed general maintenance of equipment, and devised in-train calibration procedures for rotameters. During this time, I also took a Public Health Service correspondence course on community hygiene and attended an intensive two-week course on statistical evaluation of aerometric data. I also audited a course on waste water treatment at the Baltimore Community College and took intermediate German, elementary Russian, and calculus I, II, and III in the evening college of Johns Hopkins University in Baltimore. In 1972 I quit my job to return to school.

In September, 1972 I entered the linguistics program at the Massachusetts Institute of Technology, where I have been studying since.

During the summer of 1974 I studied Russian grammar, conversation, and phonetics at the Leningrad State University, U.S.S.R., in the summer program of the Council on International Educational Exchange.

In the summer of 1975 I worked as a free-lance translator for Linguistics Systems in Cambridge, Massachusetts, translating articles on medicine, agriculture, and genetics from Russian into English.

During the fall semester of 1975 I was the teaching assistant in subject 23.771 "Mathematical Backgrounds for the Communication Sciences" at MIT. I had full responsibility for teaching the course.

So far only one of my papers has been published, "Two Consequences of Advancement Rules in Cebuano", NELS V (1974).