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1. Introduction

A prominent feature of Sangil speech is the high frequency of terms such as "up", "down", and "on the same level" for a variety of concepts which in the main have nothing to do with physical elevation. For example, when a Sangil tells of a distant land, he may characterize it as "up there" but be speaking of just another island at the same level as the one on which he is located. Thereupon he might call a different place "down" even though it is situated in precisely the same direction as the first. And at the very same time a point up the hill from him could be referred to, in addition to "up", as "on the same level" or even "down"! It is my purpose in this study to suggest a way of accounting for such phenomena in a natural language, and to show how the "performative" proposal of John Ross (1970) or the "hypersentence" approach of Jerrold Sadock (1969b) is of fundamental importance to this suggested analysis.<sup>1</sup>

Our first introduction to the problem of the elevationals was through the intricacies of leave-taking. Settling first among a closely related people, the Sangir of Saranggani Island, Philippines, my wife and I were soon visiting in the homes and needed a cultural equivalent for "Goodby". We were given such a term and proceeded to use it in a different home, only to learn that it was now quite inappropriate and should be replaced by another term. Already puzzled, we soon found occasions when neither term was acceptable and a third expression required under conditions that were not at all clear. Some time elapsed before a semblance of pattern began to emerge. As it turned out, the three leave-taking terms contrasted with respect to the elevation toward which the leaving progressed, i.e. "going upward", "going downward", and "going away on the same level".

But it was not quite that simple. A particular elevational might be used in an extended sense, as well as in a basic, literal sense. One could be leaving a point on a mountain and descending to the valley, but as long as he was returning to his own home he was "going upward" (a specification originally inspired, possibly, by the fact that houses are built high on supporting posts). Similarly, these Sangir (Sr), who are really an expatriate Indonesian people, speak of the southerly direction toward their native land as "going upward" (tarai), whereas toward the Philippines in the north is "going downward" (tanaè). The Sangil (Sl), however, though closely related to the Sangir and originally from the same area, have by now reoriented themselves toward the Philippines. To the Sangil, therefore, "going upward" (tallai) or toward their heartland is northward and "going downward" (tanaè), toward the south. Eastward or westward would, of course, be the same for both groups: "going away on the same level" (Sl: tamay, Sr: tamai). Against this difference in orientation, it was enlightening as well as amusing to overhear a Sangil and a Sangir we had taken north to our study base vigorously disagree over the "downwardness" or "upwardness" respectively of their common island home!

Under certain conditions, the Sangil have been known to reverse their political orientation and refer to the south as "up"; an instance of such a reversal is cited in sec. 4.3. But only once have I noted an Indonesian Sangir referring to the south, like the Sangil, as "down". When questioned

about his choice of terms, this well-schooled man replied, "Aren't you familiar with the map, and the fact that on it Indonesia lies below the Philippines?" To him, the main consideration was the physical position of his country on a graphic representation conventionally read from the "upper" to the "lower" edge of the sheet. He may have been using the elevations in their literal sense, as with a wall-chart, or in an extended sense, as with a table-map.

In addition to the literal meaning of these terms, their use with relation to one's home and one's native land, and their use with graphic devices, there are other extended meanings which may be distinguished. For instance, one's person at times is that which is "up" and everything else, "down" in relation. In fact, the common way to call another to oneself in Sangir is to tell him to "Come up." (dai) and to send him away, "Go down." (naè). Perhaps the underlying concept in any given situation is that the thing most central to the action or state of affairs is the thing which is "up". This hypothesis, if correct, would explain the circumstances observed when a Sangil tried to cut wire with my pliers. Encountering difficulty, the man was told by his more experienced companion, "The cutter is up; go up further.", being thus instructed to move the wire deeper into the jaws of the horizontally-held tool. Here the central part of the pliers was the focal point of the action.

For every term in the set for "going" (i.e. "going upward", "going away on the same level", and "going downward") there is a corresponding term in another set for "coming" (i.e. "coming upward", "coming on the same level", and "coming downward"). If for every pair of correspondences one isolates the common elevational components, i.e. "up", "same level", and "down", for which there are separate terms, there result three interrelated sets which may be displayed as in the following table. All the terms may be used in either basic or derived senses. (Where different, Sangir forms are given in parentheses following the Sangil.)

		GOING	COMING
UP	<u>dasì</u>	<u>tallai</u> ( <u>tarai</u> )	<u>nandai</u> ( <u>éndai</u> )
SAME LEVEL	<u>pay</u> ( <u>pai</u> )	<u>tamay</u> ( <u>tamai</u> )	<u>namari</u> ( <u>émahi</u> )
DOWN	<u>vava</u> ( <u>bava</u> )	<u>tanaè</u>	<u>nanaè</u> ( <u>énaè</u> )

What may appear to be inflectional affixes on these forms are actually non-productive. There is a separate form éndai in both languages which bears the meaning "there before us", the component of motion being virtually eliminated. From this point onward, the discussion will be restricted to Sangil unless otherwise indicated.

Of an entirely different sort is the association with the terms "up", "down", etc. of temporal concepts. The most common way to speak of times yet future is to represent them as "coming on the same level" ("next (mari) week", "two days from now (kémaring)"). Times already past are represented as "going on the same level" ("last (tamay) year", "that matter just mentioned (tamay)"). However, there is another, non-contrastive system for Sangil in which

time divisions still future are characterized, not as "on the same level", but as "coming up" ("the Sunday coming up (nandaì)"), and when past as "going down" ("earlier (vava)"). Whichever system of elevationals is used, future events always move toward the present and past events, away. Significantly, the idea "until" is commonly conveyed in Sangir by the general term for "to, toward" and "after" in both languages is signified by "from". Also, always implicit is the notion that one faces the past and future events approach from behind, so that they "overtake" ("overtaken (sautang) by nightfall"), "pass" ("Ramadan has passed (nalliu)"), and "precede" ("the forefathers (kamona)").

The genealogical line, on the other hand, though past in time is conceived in Sangil as "coming upward" to the present generation. There is also evidence that some kinship terms are etymologically related to the elevationals and to the terms for "high" and "low". The names of the winds and the directions from which they blow are similarly related to this broader classification of elevationals. But more to the point in this synchronic study is the patterning of other metecrological concepts. The sun is spoken of as "coming upward" in the morning, being "high" at noon, and being "down" in the afternoon.

One further category of meaning for the elevationals touches on moral concepts. The root daì is itself the general term for "bad, evil", and when inflected as a verb, denotes "come up to someone with evil intent". The opposite meaning, "good", does not so clearly involve elevationals except perhaps in an etymological manner. Of more interest is the fact that naè "down" is the direction of the Sangil paradise.

Of course a particular elevational need not denote the same relationships in all its occurrences in a given speech sequence. Typically, an elevational will bear several of the above-mentioned senses, often with a degree of interchange bewildering to the outsider. Such instances, of course, constitute a type of homophony, in which two or more real-world relations are symbolized by the same lexical form; e.g. dasì 'up', 'south', 'central part'. On the other hand, different elevationals in the text may bear senses which denote superficially identical relations in the real world. In these rather confusing cases, the elevationals are in effect synonymous; e.g. dasì (lit. 'up'), vava (lit. 'down') 'south'. And finally, pervading the whole is the versatile "up-down" antinomy; e.g. tallaì tanaè '(participate in) bouncing up and down', tallaì nanaè '(observe one) travelling up home and back'. The complexity in the patterning of the elevationals caused by the blending of homophony, synonymy, and antinomy is inevitable in the intricate staging of the Sangil discourse. The delicate interplay of the elevationals is indispensable to the identifying and the discriminating of such modalities as the locations, directions, and timings of the events in predication, and thus the more precise specification of the predications themselves.

We will be examining the elevationals and associated features in a particular Sangil discourse, though our conclusions will be found supportable by the corpus as a whole. The discourse under study was tape-recorded in 1964 at Mabila, on Balut Island, Davao Province, Republic of the Philippines. The speaker, Datu Koano Silungan Amillu, is the political and spiritual leader of the two or three thousand Muslim Sangil living on Balut, or to use the indigenous name, Maullung. This man is at least in his middle eighties since elsewhere he speaks convincingly of fighting the Spanish on Philippine soil prior, of course, to 1898. The discourse was designated by Koano himself as Tallasila Lumaugé 'The Lumaug Genealogy.' The text breaks naturally into four main

parts, of which the first is mostly expository, an annotated genealogy of the Sangil forbears and culture heroes. The second part is narrative, an account of the discovery and settling of Maullung. This account shades off into the third part, a somewhat emotional commentary on the adverse political fortunes of Koano and his people. This section is interspersed with anecdotes from Sangil history, and ends with a cursory review of the genealogy. The fourth part tells the story of a particular culture hero named Makaampo and, like Part Three, ends with the genealogy reviewed.

The text as a whole is not well-formed to the extent that there is no formal introduction or conclusion as in other Sangil texts. This lack is partly attributable to the informant's initial reticence to speak into the microphone and to my plying him with questions in order to begin the narration. I feel the text is still useful, however, because its internal sections are well-formed and interesting, because the discourse types are varied, and especially because of the richness in the patterning of the elevationals, the chief interest in this study.

## 2. Theoretical Framework

I wish in this section to introduce the problem, discuss the model on which some aspects of the solution are based, and propose the analysis I feel will best satisfy the requirements of the problem itself.

### 2.1 The Problem

Consider the following sentence from the text.

- (1) Tampaté ... vava su nandaì                      u valleng  
tomb                      down at coming-upward of house-of  
Angilé e.                      (2.9)  
Anghel there  
'The tomb is down at the ascent from Anghel's house.'

There are two elevationals involved in this bit of discourse, the term "down" and that component of the term "coming upward" which denotes the elevation "up". The latter is accompanied by an explicit mention of the point of reference from which the tomb is considered to be 'up', viz. the house of Anghel. With the former term, however, there is no such specification; nowhere in the discourse are we told the point with respect to which the tomb is also considered to be "down". From here on, I will be using the term elevational in a technical sense to designate the concepts 'up', 'down', and 'on the same level', and the term determinant to designate the reference point, whether or not explicit in context, from which a given elevational is reckoned.

Now in order to characterize the structure of elevationals like the first which have no explicit determinant, as well as to demonstrate the kind of mechanism by which all the elevationals may be derived, it will be necessary to summarize the performative, or the hypersentence analysis -- the differences between the two are largely irrelevant to this study.

### 2.2 The Performative Analysis and Pronominalization

Both the performative and the hypersentence analyses originate from the work of J. L. Austin of Oxford. In the William James lectures at Harvard University in 1955 and in their publication (1962), Austin pointed out the difference between the following two types of sentences:

- (2a) Prices slumped.  
I like you when you giggle.  
(2b) I pronounce you man and wife.  
I sentence you to two weeks in the Bronx.

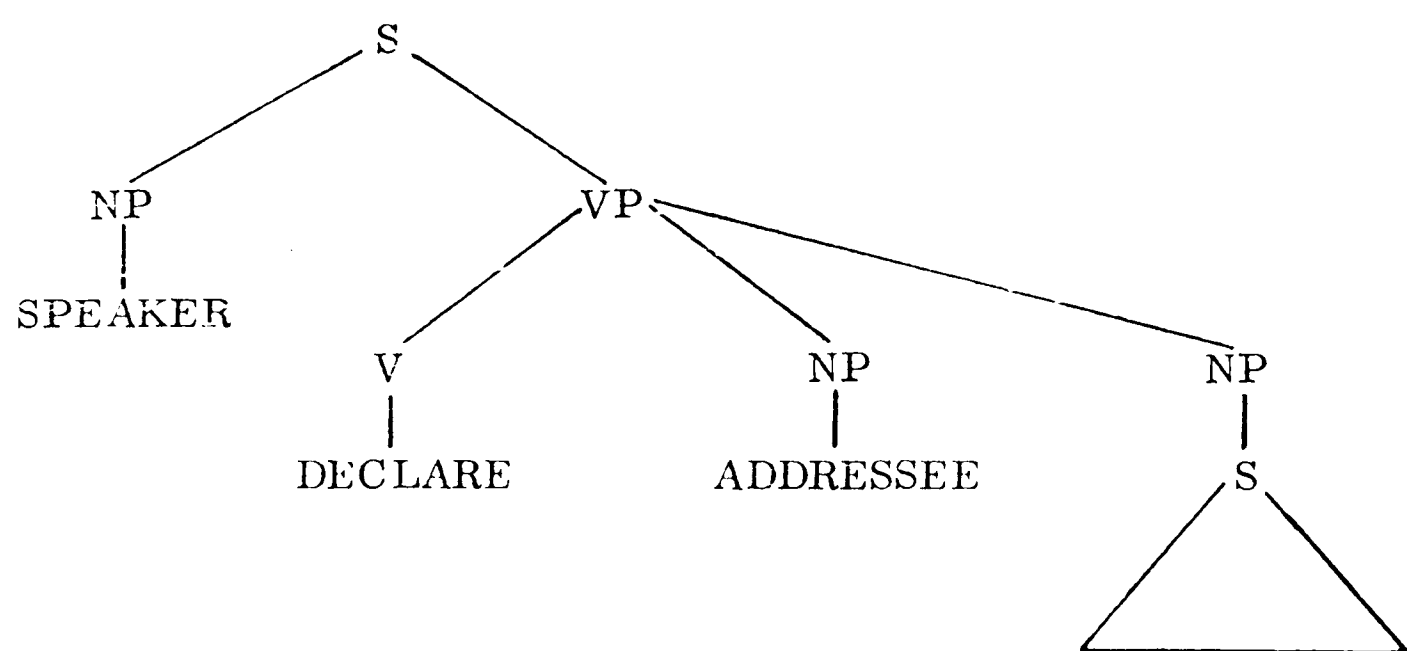
Sentences of the first set can be assigned a truth value, that is, can be said to be true or false, whereas those of the second set can only be spoken of as "felicitous" or "infelicitous". The first set Austin called constative sentences, and the second, performative. Performative sentences are said to require first-person subjects and second-person objects or indirect objects. They are always affirmative, in present tense, and characterized by main verbs such as:

advise, answer, appoint, ask, authorize, beg, bequeath, beseech, caution, cede, claim, close, command, condemn, counsel, dare, declare, demand, empower, enquire, entreat, excommunicate, grant, implore, inform, instruct, offer, order, pledge, pronounce, propose, request, require, say, sentence, vow, warn, write.

The test for performatives is alleged to be their grammaticality with the adverb hereby (cf. I hereby sentence you to two weeks in the Bronx. but \*I hereby like you when you giggle.). Austin allows for implicit performatives such as the second of the following otherwise identical pair.

- (3a) I order you to go.  
(3b) Go.

It is at this point that Ross begins his elaboration of Austin's analysis. Ross suggests that not only this imperative type of performative but Austin's constatives, which Ross calls declaratives, "must also be analysed as being implicit performatives, and must be derived from deep structures containing an explicitly represented performative main verb" (p. 223). This verb, it is claimed, together with its subject and indirect object are then deleted in the derivation. The deep structure also contains "an embedded clause [which] ends up in the surface structure as an independent clause" (p. 224). According to Ross's performative analysis, therefore, the underlying structure of all declarative sentences will be the following.



Notice that Ross's use of the term performative is much more comprehensive than that of Austin, in that Ross's performatives include the declaratives (nee constatives), and the declaratives in turn become a subclass of the performatives. Sadock, on the other hand, partly to avoid tampering with Austin's original definition, suggests the neutral term "hyper-sentence" for what Ross calls "performative".

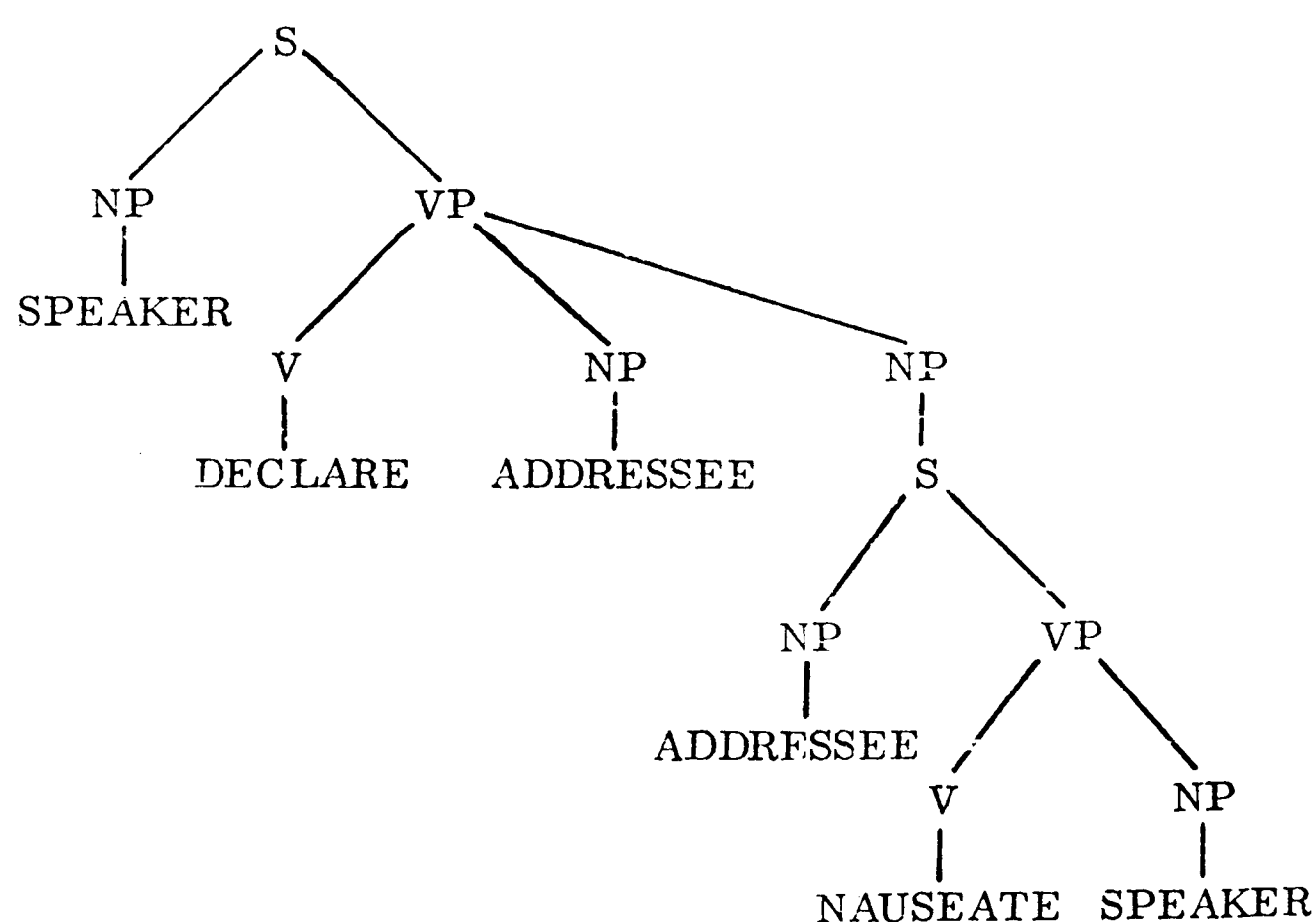
Throughout this paper, I will be using Ross's term performative, restricting its sense however for the sake of convenience to denote just the main or topmost structure, and not that structure plus the sentence complement embedded therein.

A striking benefit of the performative analysis is that it allows a well-known pronominalization rule to be applied for the derivation of first and second person pronouns. In rudimentary form, the rule was first introduced by Chomsky (1965), who said that "sameness of reference requires ... pronominalization" (p. 145). Langacker (1966) and Ross (1967) have detailed this rule more fully, the former reporting:

$NP^a$  may be used to pronominalize  $NP^P$  unless (1)  $NP^P$  precedes  $NP^a$  and (2) either (a)  $NP^P$  commands  $NP^a$  or (b)  $NP^a$  and  $NP^P$  are elements of separate conjoined structures.

While Langacker uses the word "may" and thus implies that the operation is optional, Sadock suggests that the operation is typically mandatory. But compare the sentence Nixon voted for Nixon. concerning which McCawley (1973) states: "It is often possible for a sentence to contain two identical full NP's which refer to the same individual but which, due to some difference in 'role' do not undergo pronominalization" (2-22).

Then Postal and McCawley pointed out in 1967 and 1968 respectively that since the noun phrases in the performative always referred to speaker and addressee, and since these noun phrases always commanded those in the complement of the performative, then every noun phrase in that complement was in an obligatorily pronominalizable position if co-referential with the noun phrases in the performative. Thus, noun phrases in the complement that were co-referential with the performative subject were pronominalized by first person pronouns, and noun phrases co-referential with the performative indirect object, by second person pronouns. The representation of a particular sentence, therefore, might be as follows.



= 'You nauseate me.'

Such an operation, says Sadock, explains the peculiar fact that in "a fully ordinary sentence of English" the speaker and addressee can only be referred to by pronouns. When Ross refers to this pronominalization rule, he underscores the fact that deep structure third person noun phrases which



normally derive in the surface structure as first and second person pronouns may, significantly, be realized on occasion as third person pronouns in surface structure as well; e.g.

- (4) The court is not amused, Mr. Nizer.  
Yours truly better get himself a seven.

This pronominalization rule, as refined through the performative analysis to include first and second person, will presently be seen to suggest a rule for the derivation of the Sangil elevationals.

### 2.3 The Theoretical Status of the Performative Analysis

On his performative analysis Ross imposes an important constraint which "prohibits any verb from having a performative interpretation when it is embedded as the complement of another verb" (p. 251). He adduces the following as evidence:

- (5a) I admit that I'll be late.  
(5b) I (hereby) promise that I'll be late.  
(5c) I admit that I (\*hereby) promise that I'll be late.

For this constraint, Ross is attacked from all sides, perhaps by no one with greater zeal than Bruce Fraser (1971). Fraser objects to both implications of Ross's claim, viz. that the performative dominates the entire structure and that it is unique to that structure. Concerning the performative's topmost position in the structure, Fraser cites counterexamples such as

- (6) I would like to congratulate you.

claiming that these may be taken as congratulations, etc. "even though the performative verb is embedded and is not the highest verb as required by Ross" (p. 2).

Concerning the performative's alleged uniqueness, Fraser states: "Promising entails predicting; admitting entails asserting. That is, by virtue of the meaning of promise and admit and their performative use as in 5a and 5b, the sentence commits the speaker to performing the act of predicting and asserting as well" (p. 4). He feels that the "force-multiplicity" of such composite performatives militates strongly against Ross's uniqueness constraint. Then follows a suggestion with far-reaching implications:

If the performative analysis is embedded into a linguistic theory (e.g. Generative Semantics) in which all semantic relations, save the most primitive ones, are all spelled out in the underlying representation, then such force entailment will also be spelled out as well (p. 4).

And, to the same effect, he concludes: "the performative analysis falls easily within the Generative Semantics framework, as now conceived, and without the onus of syntactic justification" (p. 28).

With this conclusion, Stephen Anderson (1971) is in substantial agreement. "The phenomena [Ross] adduces are not in general amenable to explanation in syntactic terms, and...where explanation seems possible, it is in terms of semantic structure" (p. 2). Sadock too claims that his proposal is congenial to the generative semantics approach, though he admits it may accommodate an interpretive semantics as well.

Unfortunately, none of the above men indicates the precise form that a performative analysis will take within the generative semantics theory. Such a formalization would be very useful indeed in explaining the structure of Sangil elevationals, for they certainly cannot be explained on syntactic grounds. In lieu of ready-made formalization, therefore, I have had to do a certain amount of innovating within the framework of generative semantics in order to account for the data considered herein.

### 2.4 The "Hyper-performative"

Now, Ross's proposal that "every deep structure contains one and only one performative sentence as its highest clause" (p. 261) meets also with different kinds of objections from Sadock, objections that motivate the latter to posit his super-hypersentence (1969a). One argument that calls for such a structure is the ambiguity of sentences such as

- (7) I pronounce you guilty.

which can mean either of the following:

- (8a) On occasion I pronounce you guilty (declarative reading).  
(8b) I hereby pronounce you guilty (performative reading).

Sadock states that for the declarative reading, both he and Ross set up a deep structure with a dominating "I declare to you that...". For the performative reading, Sadock's derivation is implemented through his super-hypersentence, an abstract structure which dominates the hypersentence and here overtly disambiguates 8b. from 8a. Ross, with his insistence that performatives are undominated, cannot have such a disambiguating higher structure and must settle for the inelegant alternative that performative meaning is signalled by the absence of something.

But there is another argument for the super-hypersentence: only if some such notion is accepted may one apply the above-mentioned rule for deriving first and second person pronouns in performatives such as 8b. It is not at all clear how Ross would derive these pronouns since he simply does not recognize the higher performative which would contain their antecedents. It will shortly become clear that if the performative analysis is to remain useful for the treatment of Sangil elevationals, it must include a structure such as the super-hypersentence, though I prefer to term this structure the hyper-performative.

### 2.5 The Performative Adverbial

Another difference, although a superficial one, between Ross and Sadock is the type of data to which they appeal in support of their hypotheses. Ross adduces his evidence primarily from syntactic features of English sentences. Sadock favors data from other languages, often of a socio-linguistic nature. But one type of phenomenon they both invoke to establish their theories, viz. the sentence adverbial. Consider Ross's example, of which the first sentence is said to derive from the second.

- (9a) Jenny isn't here, for I don't see her.  
(9b) I say to you that Jenny isn't here, for I don't see her.

Such a derivation is required by the for-clause, which

certainly does not provide a reason for Jenny's absence since she may in fact be present. The underlying structure, of course, includes a performative sentence with a cause adverbial as one of its constituents. For some time I have been interested in such structures and have collected the following examples.

- (10) [Philippine English] I am going into town today, because maybe you like to come along.  
Quite simply, on August 15 the United States was internationally broke.  
And, finally, Chomsky introduces selectional features in the CS and V (and, incidentally, of ADJ) by a rule which...  
[Sangil] Sañ tallañ. 'Again, I am leaving (viz. going up).'

Notice that none of these italicized adverbials relates to the main verb; they could only relate to verbs in higher, or performative-like sentences of the general form "I say to you".

This same line of approach is pursued by Sadock (1969b) when he cites such sentences as the following.

- (11a) Well, what was his name?  
(11b) For the last time, John likes his mother.

Concerning 11a, Sadock says, "In English and many other languages, words used to introduce sentences often coincide in phonological form with adverbs in the language" (p. 298). And with reference to 11b:

There are, however, other expressions in English which serve a similar introductory function, but are clearly not meaningless. They also are not constrained in occurrence and their grammatical and semantic relation to the sentence they precede is also remote. They too, are adverbial (p. 299).

Concerning both types of expressions, he concludes the following: "It is evident that all the anomalies of these introductory adverbs could be explained by assuming them to be parts of sentences in deep structure which are obliterated during the derivation of the sentence" (p. 300). The derivation of the Sangil elevationals frequently employs features of this "performative adverbial" approach.

## 2.6 The Elevational Analysis

Recall the specimen sentence and its two types of elevational determinants:

- (1) Tampaté ...vava su andañ u valleng  
tomb down at coming-upward of house-of  
Angilé e.  
Anghel there

'The tomb is down at the ascent from Anghel's house.'

### 2.6.1 Explicit Determinants

We consider first the component of andañ isolable as UP, the elevational whose determinant is explicit in the text. My proposal is simply that this elevational be derived by means of a matching operation analogous to the comparing of noun phrases in the pronominalization rules above. In those rules, it will be remembered, a noun phrase co-referential with the subject of the performative was pronominalizable as 'first person'; with the indirect object, as 'second person'; and with neither as 'third person' -- provided, of course, that the latter was commanded by a co-referential noun phrase at some point in the total structure. In the case of the elevationals, elements are again compared with elements in positions of command, but this time with respect to value rather than identity. An elevational greater in value than its determinant derives as the semantic primitive UP; an elevational lesser in value than its determinant, as DOWN; and an elevational neither greater nor lesser in value, i.e. equal to the determinant, as SAME LEVEL.

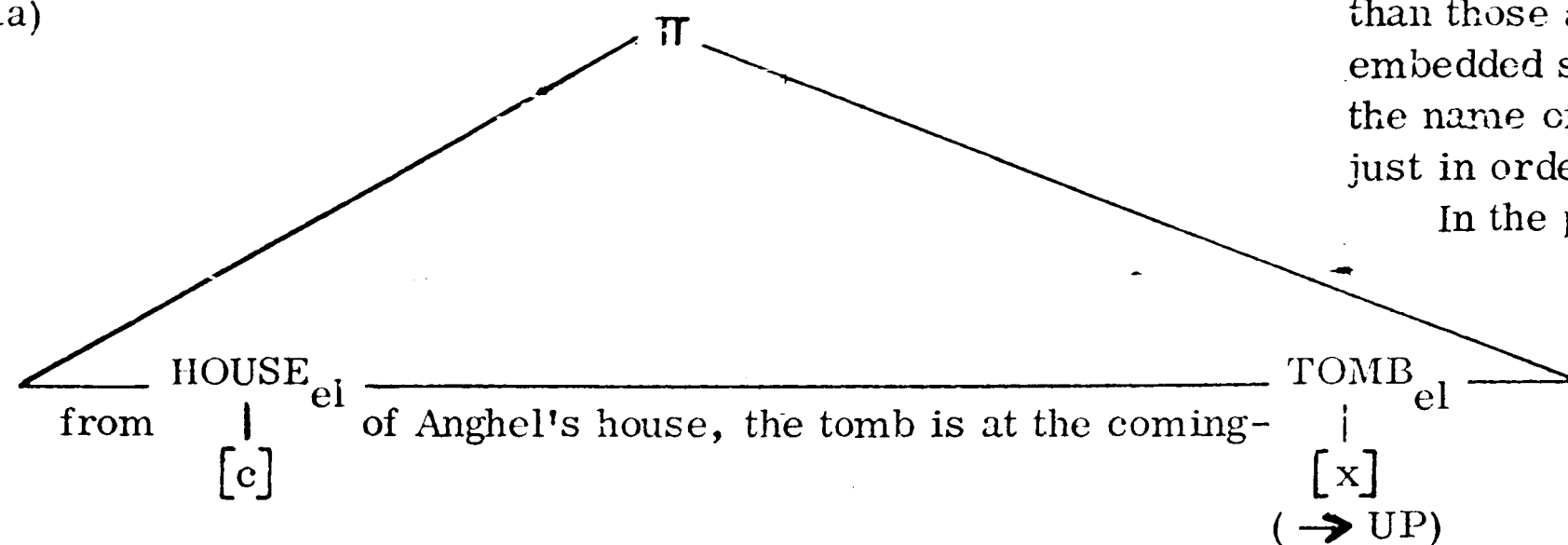
To achieve greater generality -- we will see why in a moment, let us speak not merely of the equality or kinds of inequality between two specific elevations, but of an elevational variable  $[x]$  being "greater than", "less than", or "same as" a constant  $[c]$ , in the present case the house of Anghel considered with respect to its elevation ( $\text{HOUSE}_{el}$ ). (Here I am using "determinant" to signify the object or place for which there is a contextually relevant elevation. Strictly speaking, it is the elevation associated with this place which is the true determinant. The distinction between a place and its elevation will be explored in sec. 4 of this paper.) These options may be formalized as a type of selectional rule:

$$[x] \rightarrow \begin{cases} \text{UP} & / [x] > [c] \\ \text{DOWN} & / [x] < [c] \\ \text{SAME LEVEL} & / [x] = [c] \end{cases}$$

In the example, the tomb elevation  $[x]$  is evidently conceived to be greater than the house elevation  $[c]$ , i.e.  $[x] > [c]$ , and so for the tomb the elevation UP is selected, and subsequently lexicalized in andañ 'coming upward'.

The semantic structure of just this part of the sentence would be as below. Except for the innovations explained in loco and the replacement of certain more familiar symbols, e.g. the syntactic S ('sentence') by the semantic  $\Pi$  (Greek initial for 'proposition'), the diagramming here and throughout is that in current use by the better-known generative semanticists (see especially G. Lakoff 1971, McCawley 1971). The relational statement  $[x] > [c]$  is a type of pre-supposition which is never specifically represented in the text, and though this fact is not sufficient in itself to exclude the statement from the tree structure, there is another consideration that confirms the exclusion (sec. 3.6).

(1a)

Presupposition:  $[x] > [c]$ 2.6.2. Implicit Determinants

We turn now to vava 'down', the elevational in ex. 1 for which there is no explicit determinant in the text. In the interest of consistency, this elevational must be derived in a manner similar to the derivation of the one preceding. To do so, however, a determinant is required for vava, for only if such a determinant is present somewhere in the structure can the matching operation above be implemented. The way I propose of providing the required determinant is by means of a locative adverbial in the implicit performative of this sentence. The entire structure might be read as follows, the posited adverbial appearing in italics:

- (12) *At elevation [k] the speaker says to the addressee that the tomb is at elevation [x] (in a direction conceptually lower than the location of the speaker).*

Notice that it is unnecessary to associate with the constant  $k$  in this underlying locative adverbial any features other

than those actually required to account for the facts in the embedded sentence. This is, we do not need to specify here the name of or any other fact about the narrator's location just in order to determine the elevation of the tomb.

In the preceding section it was stated that in the eleva-

tional relationships a greater generality is desirable than would be afforded by a simple "greater than", "less than", or "same as". The reason now becomes clear. In some ultimate sense the elevation of the tomb does not have an absolute, fixed value but is relative, a variable  $[x]$  with any

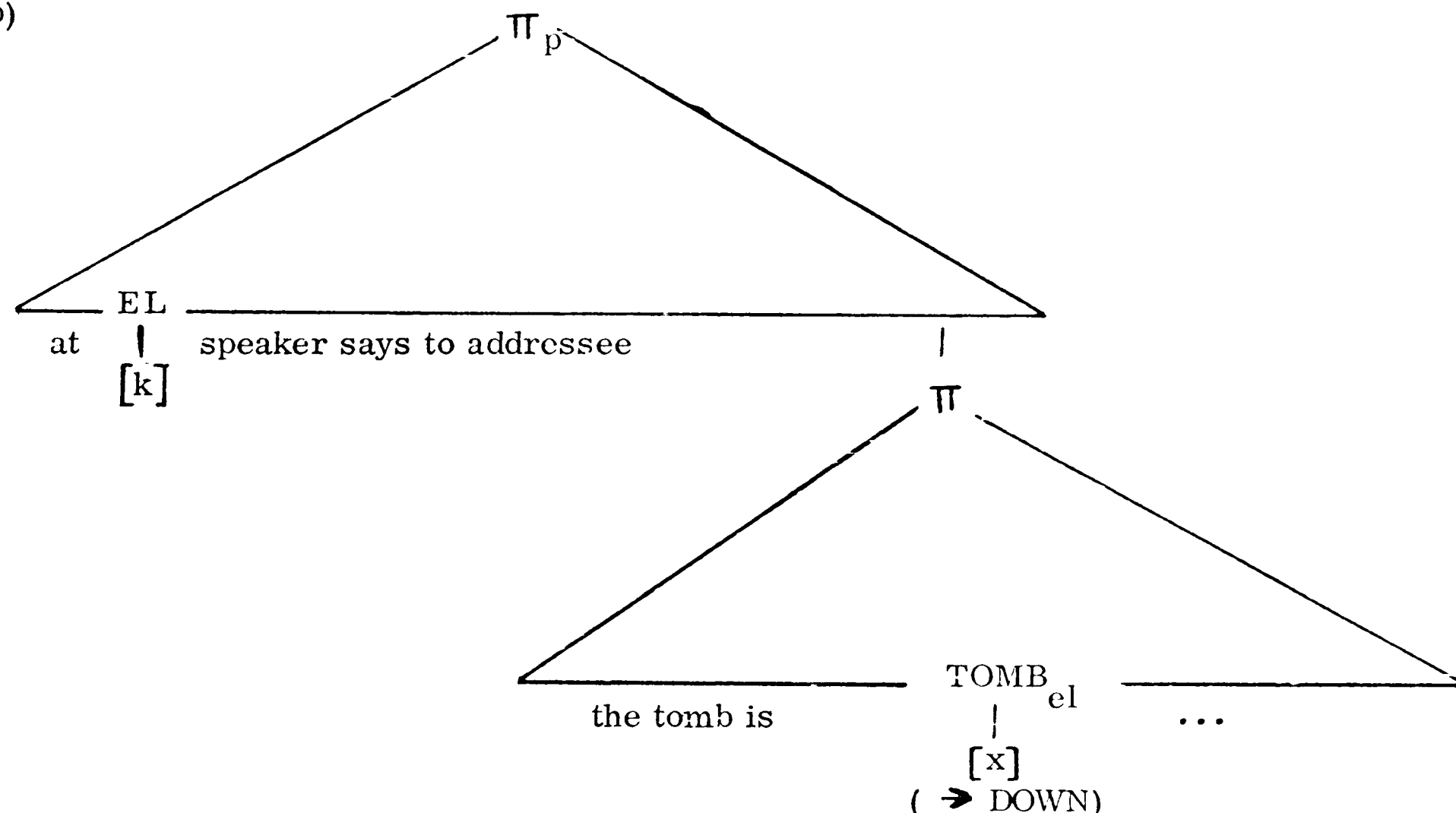
value -- even different values simultaneously -- provided that what values it has are assigned with respect to relevant points of reference. The situation is reminiscent of the philosopher's famous problem, "A small elephant is a large animal", and the fact that an entity may have two opposing values at one and the same time. The explanation of both anomalies is of course that each opposing value is being related to an entirely different criterion: the elephant was small compared to the average elephant but large compared to the average animal, while the tomb was 'up' with respect to the 'house of Anghel' but here with respect to the speaker, 'down'.

In any case, the selectional rule for just the "speaker" determinant applies quite routinely:

$$[x] \rightarrow \begin{cases} \text{UP} & / [x] > [k] \\ \text{DOWN} & / [x] < [k] \\ \text{SAME LEVEL} & / [x] = [k] \end{cases}$$

Here  $[x] < [k]$  and so the output is DOWN, which is then lexicalized to vava 'down'. In the tree structure of this part of ex. 1, a performative ( $\Pi_p$ ) is seen to dominate.

(1b)

Presupposition:  $[x] < [k]$



### 3. Essentials of the Elevational Structuring

In this section I will begin applying the proposal of the preceding section, concentrating on interesting aspects of particular elevationals from the text, and bringing in theoretical considerations only as they touch on the discussion of these specimen sentences. I will be citing examples comparable to the above but gradually expanding the range of materials on which to observe the basic theory in operation.

#### 3.1 Elevational Determinants in Text

The first citation is the following bit of discourse.

- (13) Namamua si Meilikano... nakea valle su kota dasi.  
settled here Americans made house at fort up  
'Americans settled here (on Maullung)... and they  
constructed a house at the fort up there (on another  
island to the north).'

Notice in this fragment of the text the occurrence of the elevational 'up' to denote the orientation of a small, low-lying island fort located in a northerly direction, or toward the Philippine heartland, from the greater landmass of Maullung. The determinant for this elevational, or that with respect to which the fort is conceived of as 'up', is Maullung itself. This fact is explicitly specified in the deictic 'here', by which the speaker locates an action in the story at the place from which he is speaking at the moment.<sup>2</sup>

As against this deictic 'here', the explicit determinant in the previous example was a noun phrase in surface structure, 'the house of Anghel'. In addition, the elevation there in ex. 1a was literal, involving a measureable difference in physical height, while here the "upness" is figurative, the direction toward the Sangil homeland. Then too, the previous elevational was a component of a term which also denoted motion; here the elevational is lexicalized by a pure, non-composite form. And finally, notice that in the other example both the elevational and its determinant occurred within the same sentence, but in the present case this elevational relationship crosses sentence boundaries. We will have more to say of the relationship between such sentences but meanwhile, the tree structure and derivation rule for ex. 13:

- (13) (see p. 35)

#### 3.2 Elevational Determinants in Performatives

The preceding section, then, deals with the explicit mention of the reference point from which a particular elevation is calculated. I have already shown, however, that this determinant is not always specified in the text. The following example illustrates another elevational for which the determinant is implicit.

- (14) Nivavateveng duà  
was-carried-now-(contrastive)-by wave-(intensive)  
tallai su dallukù kébì.  
going-up in forest all  
'All of it was now carried up into the forest by the  
gigantic wave.'

In this sentence, attention is called to the elevational in

tallai, analyzed as UP. Neither in the utterance itself, it will be noted, nor anywhere in the context is there any explicit indication of the point from which this term signifies the "upness" of the forest. What serves here to establish this relationship could only be the ocean near the setting of the story and its conceptual elevation there during the narration. Clearly, the formalizing of this type of elevational calls for the performative technique, as shown in the tree below.

This illustration, in contrast with ex. 1b, features literal, physical elevation vs. a figurative system, and elevation in composite with motion, 'go' and 'up' in tallai, vs. pure elevation in the single-morph form vava 'down'.

- (14) (see p. 35)

#### 3.3 Elevational Determinants in Hyper-performatives

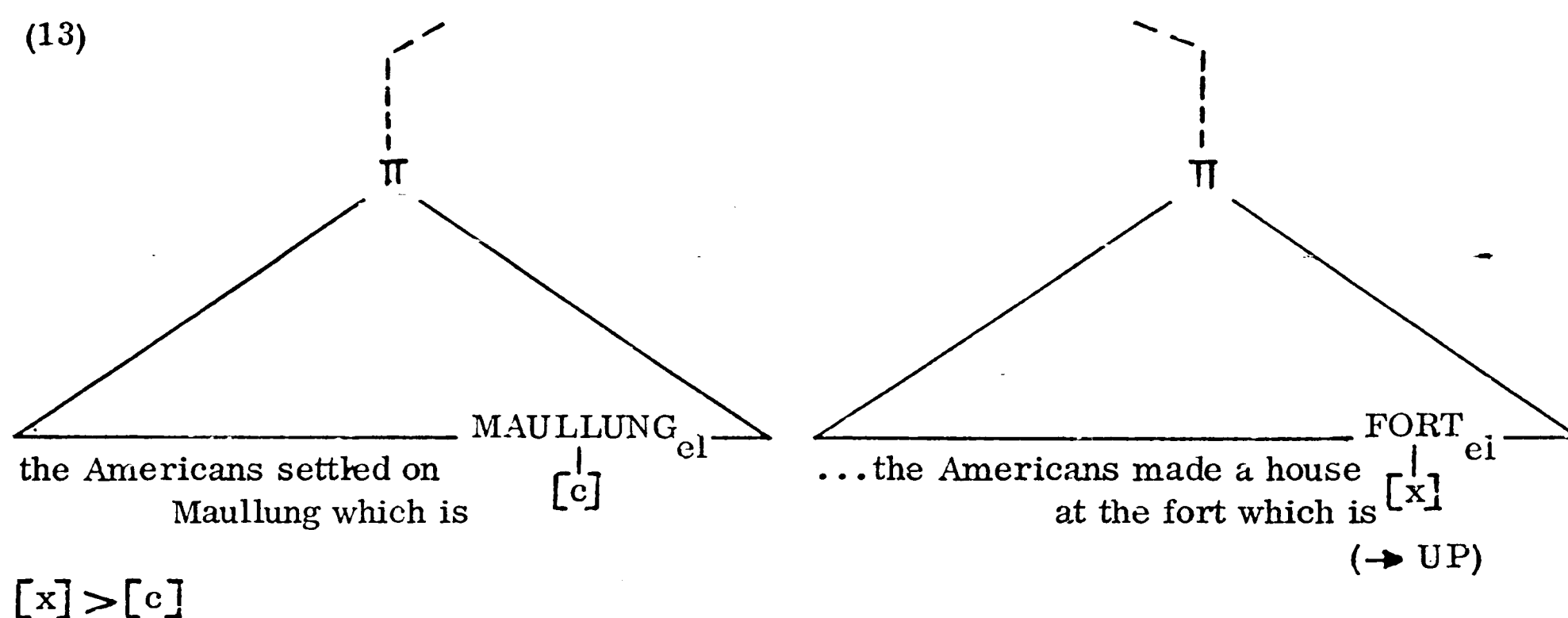
In this section I wish to cite evidence from the text suggesting that on occasion a determinant must be even higher in the structure than the performative, a suggestion which favors Sadock's notion of the super-hypersentence. Observe this passive injunction from the text.

- (15) I amangku deakete tanaè i.  
father-my be-sought-now going-down this  
'Let my father's name be sought (by you) going  
down this (genealogy).'

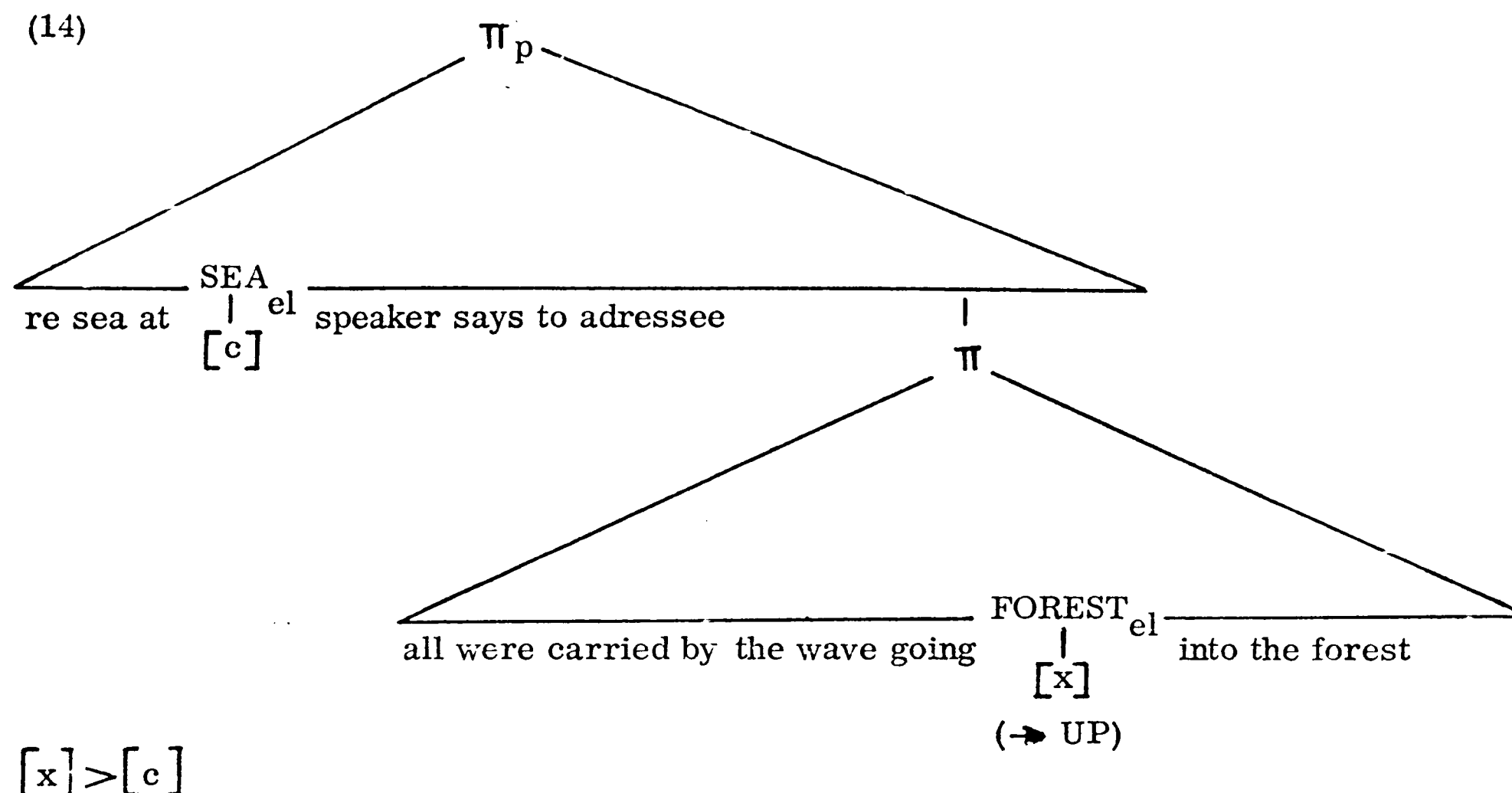
In an earlier section I mentioned a man who considered Indonesia to be "down" with respect to the Philippines because "below" it on a map. I said then it was unknown whether this was a literal usage, as would be the case if the map was vertical on the wall, or an extended usage, as when the map was flat on the table. The present example, however, is a clear-cut instance of the latter since the document was in fact horizontal. The genealogical record was spread out before us on the floor as Koano directed me to look for his father's name toward the "bottom" of the list.

More to the point, however, this sentence constitutes a case of an elevational in the complement of a performative different in type from those considered thus far. As with the declaratives, there must be a determinant to fix the value of the elevational in this injunctive and, since there is no such determinant explicit in the text, one must be posited in a structure which commands the one containing the elevational. At this point, however, a problem becomes apparent. If we continue to assert that the determinant is in a performative immediately dominating the  $\Pi$  containing the elevational, then we are as good as admitting that this determinant could become explicit. For the performative supposedly containing it could itself become explicit, and indeed would have if Koano had merely preposed the Sangil equivalent of 'I enjoin you'. But even if the performative had been overtly expressed, it is highly unlikely -- though not impossible -- that it would have contained the information needed for the determining of the elevational in question. The needed information is, of course, some reference to the beginning of the genealogical listing or perhaps to the top of the scroll, such a reference being required as the point from which the 'down' in tanaè could be reckoned. Though Koano might have said 'Concerning this genealogy I enjoin you...' it is quite improbable that he would normally make explicit mention of the top of the list. Consequently, this elevational determinant must be specified in a structure higher than

(13)



(14)



the injunctive performative.<sup>3</sup>

This conclusion of course leads me to concur with Sadock's contention that even a performative must at times be superposed by a higher performative. His reasoning, recall, largely concerned pronominalization; mine concerns the determination of elevation. But I am interested in pronominalization as well, for without the hyper-performative ( $\Pi_{hp}$ ) I could not derive the pronouns 'I' and 'you' in 'I enjoin you', the performative part of the structure that might have been expressed here and in fact was expressed in an injunctive elsewhere in the text, though involving no elevational.

Of course the problem first noticed here is by no means restricted to the injunctives. In another text I note an instance of an explicit performative that was declarative in type: *lā mēbēke si kaw...* 'I narrate to you...', and the declarative performative in English is often quite proper: *I tell you (it's true, etc.)*. If the complement in this Sangil example were to contain elevationals, it is clear enough that its performative could not provide the determinants required. From these considerations we may infer not only that the rule deleting the performative verb may be no more obligatory in the case of the declaratives than of the imperatives, but also that the hyper-performative should probably be posited for the majority of Sangil sentences. Although many of the examples in this study might be represented thus semantically, with a hyper-performative like ex. 15 below, none of my other examples actually require me to assume the implausibility of a determinant in the regular perform-

ative. For this reason I will not return to the hyper-performatives in future sections.

(15) (see p. 36)

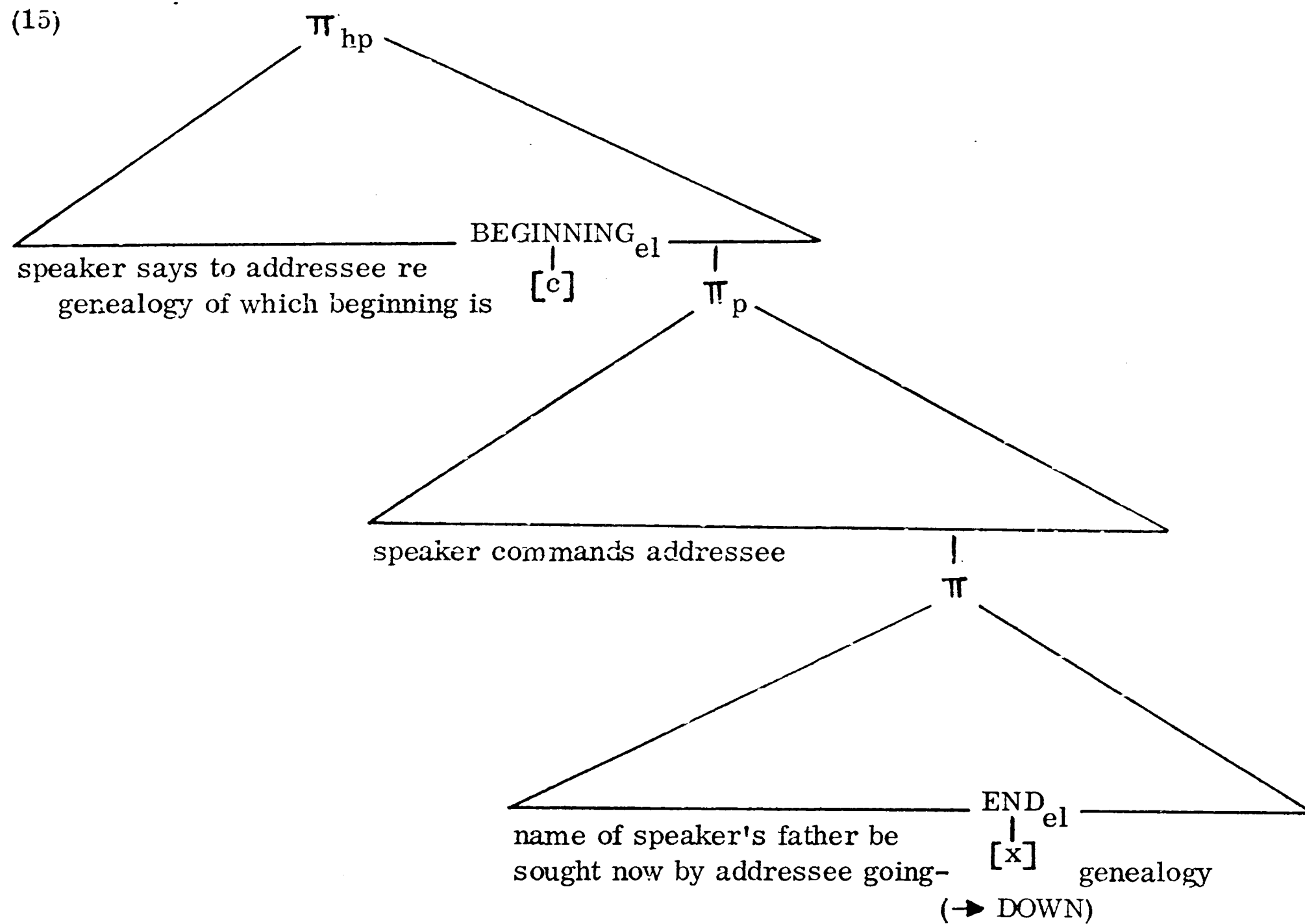
### 3.4 Multiple Elevationals

It has been shown that the determinant of a given elevational may occur in a number of places in the overall structure, but in any case, there is only one determinant for each elevational in surface structure. The converse is not true; it is quite possible for more than one elevational to be dependent on a single determinant. Note for example how the same constant  $[c]$  determines double elevational in the following sequence of sentences

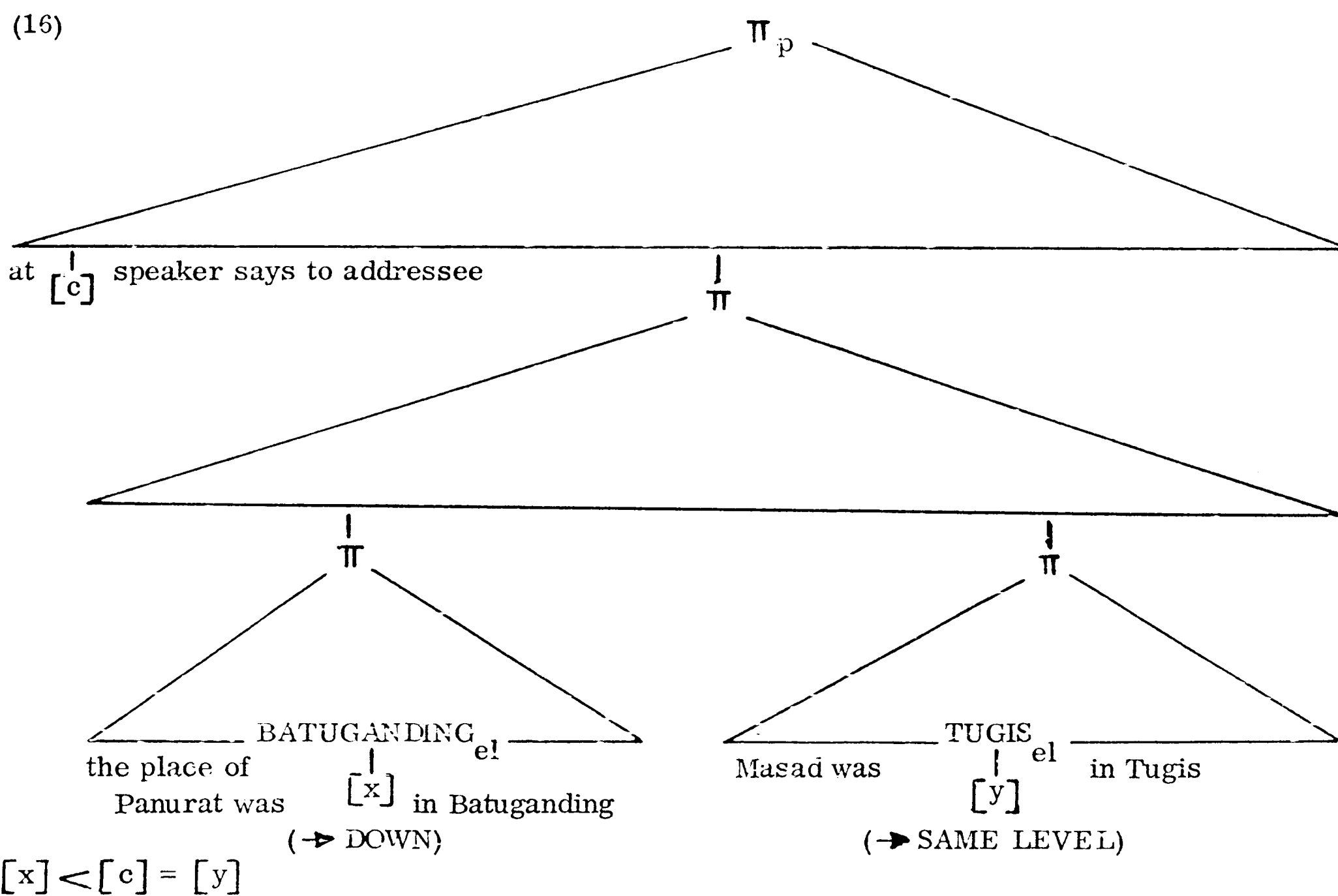
- (16) *I Pamullaté, vava su Vatuganding tampæ... I Masadé*  
*Pamurat down in Batuganding place-his Masad*  
*pay su Tugisé.*  
*same-level in Tugis*  
 'As for Pamurat, his place was down in Batuganding (to the south of the speaker)... Masad was over in Tugis (in a westerly direction and so at a neutral elevation).'

In this example the determinant is implicit and so is accounted for in a performative, but a determinant which is explicit in the text may also serve to establish a series of elevational through part of a discourse. I have an example





$$[x] < [c]$$



$$[x] < [c] = [y]$$

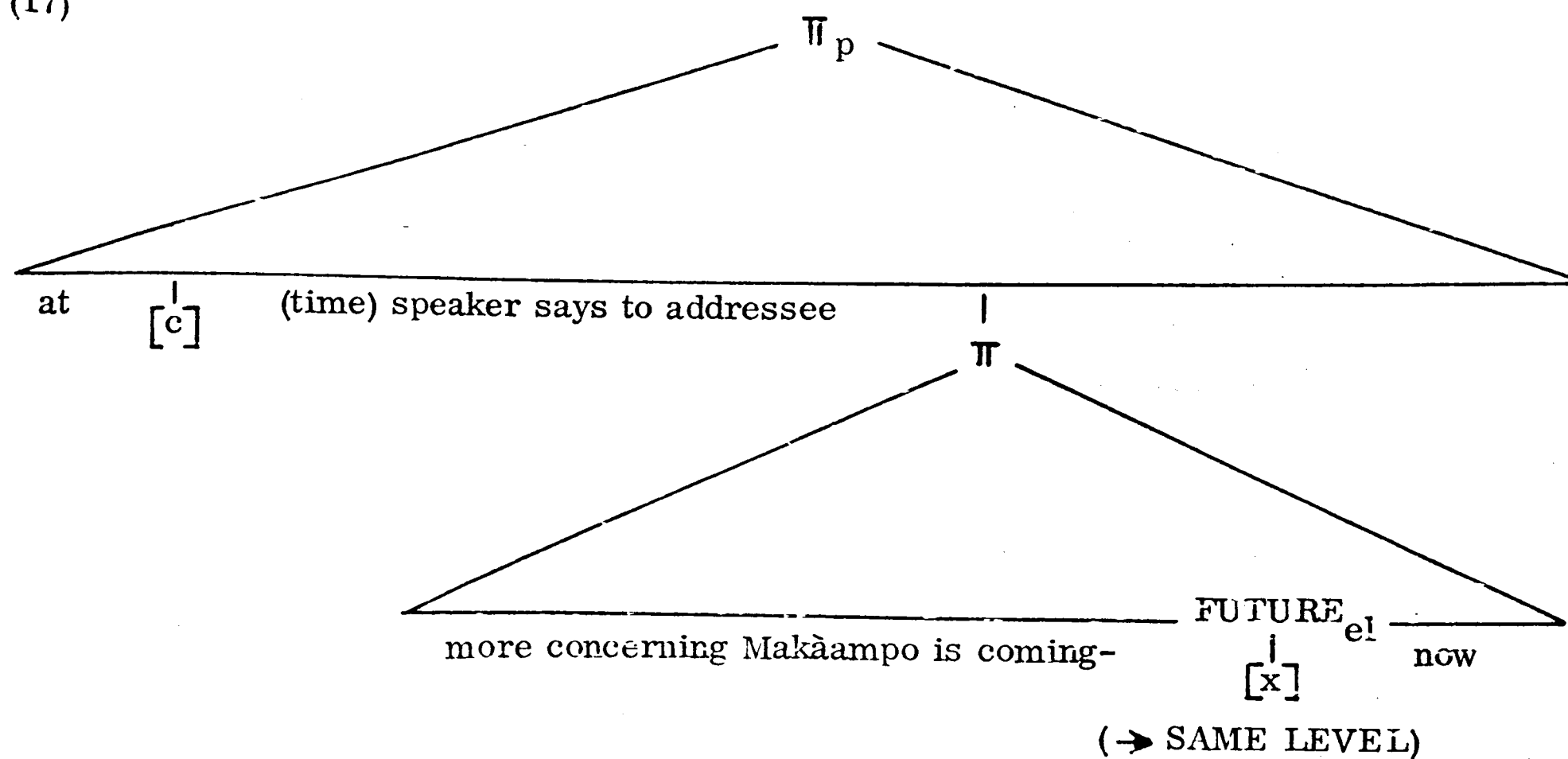
of such a structure, and the process is too similar to require citation.

Although the elevationals in the present example are in separate sentences, they are both subject to the same elevational mechanism and we are therefore obliged to combine them under a single performative. This fact points to the performative as one means of formalizing the notion of the unit greater than the sentence, a notion which has long been entertained by some linguists who are not transformationalists and which is now gaining currency among some who are.

This example illustrates again (cf. sec. 2.6.2) why I

have chosen to express elevational and determinant not as modals with a fixed value, but as variables which are quantified according to the requirements of the context. While it would not be impossible to formulate rules where elevational and determinant had specific values, such rules would certainly be complex and unwieldy if used to derive several interrelated elevationals in a single text. Note that in examples such as this the determinant would have had to be marked, not as a single variable with alternative quantifications, but (1) with as many elevations as there were different elevationals with which to compare it, and (2) for

(17)



$$[x] = [c]$$

cross-reference to that particular elevational with which comparison was to be carried out. (Compare also sec. 3.6, where in the illustration one elevational becomes the determinant for a second.) In the light of all such elevational alternation, the use of the variables, as below, seems much more economical.

### 3.5 Performatives Embedding Whole Discourses

Now the above hypothesis that a performative may embed sequences of sentences is very different from the original proposal by Ross, who suggested that there is a performative for every independent sentence in a discourse. In connection with a temporal use of the elevationals, I wish now to further justify the concept of a performative dominating and embedding strings of sentences and even an entire discourse. First, the data.

- (17) Makàampo i, saũ namari i...  
 Makàampo this more coming-level now  
 'Concerning this Makàampo, more is now coming  
 (in the immediate future)...'

This parenthesis in the text refers ahead to the section about Makàampo, a section which in fact followed a few moments later. In my analysis, the conceptual elevation of present time, marked in the performative and later deleted with it, determines the elevation of future time in the performative's complement, which is retained and becomes the text.

But the workability of a performative derivation for temporal elevationals suggests the possibility that many if not all the temporals in a text could themselves be produced by a similar technique. For since a performative is always in present time, the tense of its complement could be said to be present just in case its tense modal is equal in value to that of the performative; if it is less the tense is future and if greater, past. And if it is true that one performative may dominate an entire discourse, then the tense of each "independent" sentence in that discourse might be determined by the simple matching operation which specifies 'past', 'present', or 'future' for every temporal that is greater, same, or less, respectively, in relation to the one criterion in the performative. Of course, this first approximation to a theory would have to be refined to account for such discourse features as flashback and preview, plus the

fact that the discourse itself takes place through time and a speaker can refer to something he has said earlier or will say later, a point that is illustrated in this very section.

(17) (see above, this page)

### 3.6 Transitivity of the Elevational Relations

In sec. 2.6.1 it was suggested that relational statements like  $[x] > [c]$  are a type of presupposition and that there were good grounds for excluding them from the tree structure. In the present section I wish to show that such an exclusion, with its resulting gain in simplicity, is highly desirable because of the property of transitivity which characterizes the elevational relations. Such examples as the following are not uncommon in Sangil text.

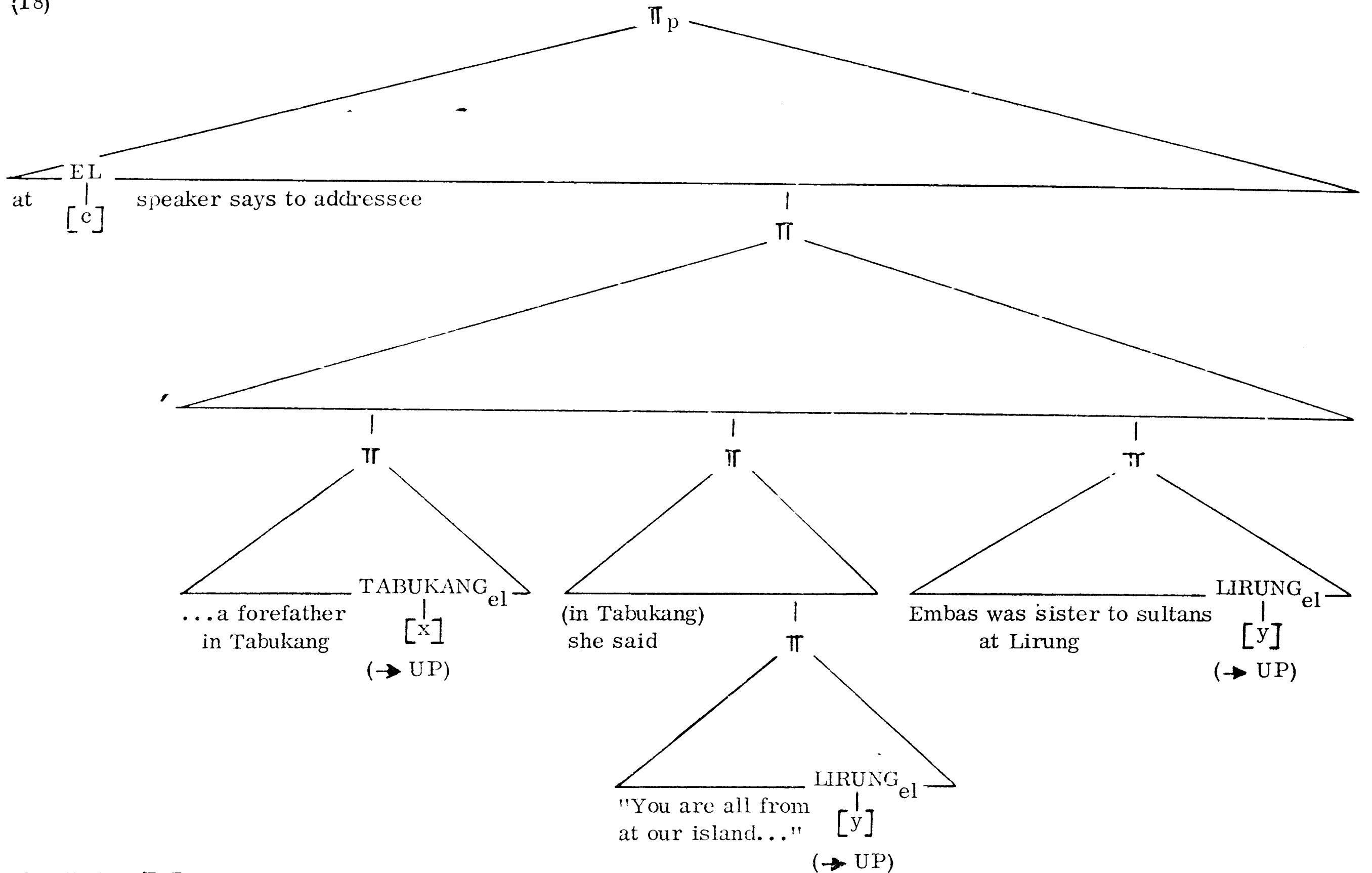
- (18a) ...i upung dasi su Tavukang... kunge  
 forefather up at Tabukang saying-her  
 'I kaw bdu dasi vawang kitè...'  
 you from up land-of us  
 '...a forefather up in Tabukang (in relation to  
 Mabila)... she (Nabuisang in Tabukang) said "You  
 are from up at our island" (Lirung)...'

It would be possible to account for these relative elevations (Tabukang is 'up' in relation to Mabila, etc.) by positing the statement  $[x] > [c]$ , or whatever, in the semantic structure defining the properties, or "range" (sec. 4.1) of each place variable -- except the first, which is a determinant. (Notice here that the elevational of the first relationship, Tabukang, becomes the determinant for the second.) This idea would work well enough until we added another elevational of the same system but of a certain restricted type.

- (18b) i Embasé tupung sutang bdu dasi Llilung.  
 Embas collateral-of sultan from up Lirung  
 'Embas was sister to sultans from up at Lirung  
 (re Mabila).'

With this sentence the loop has been closed geographically, Lirung being related elevationally back to the Philippines from whence we started. It will be clear that if each new elevational is to be qualified in its semantics by a statement

{18}



$$[c] < [x] < [y]$$

of its relationship to whatever it is compared with, then in the semantic structure of Lirung two such statements must be made: one relating it to Tabukang, the other to the Philippines. And really troublesome extensions of the same phenomenon are easily possible, each new place having to be elevationally related, not only to the one immediately preceding, but also to others preceding that. Hence, in a given system of elevationals, the total number of possible relationships and therefore elevations, increases geometrically with the increase of the places related, the formula being

$$\frac{x^2}{2} - \frac{x}{2} \text{ where } x \text{ equals the number of places related. For}$$

example, while three places may yield three relative elevations as in our examples above, four places may yield six elevations, five may yield ten, seven 21, and so on. And the number of elevational relationships a place may be called upon to bear in its semantic structure increases as the number of places less one; so for three places the last one accounts in its semantics for two of the interlocking relationships and resulting elevationals, four places for three elevationals, five for four, and so forth. Infrequent in text? Perhaps, but the phenomenon does occur and since such inter-relationships are of more than theoretical interest, they must be accounted for in a plausible way.

To burden the underlying structure with all these relational statements is as unnecessary as it is intolerable in view of the fact that an elevational relationship of any given type is always transitive. This is to say that given two statements such as  $[c] < [x]$  and  $[x] < [y]$ , it will invariably follow that  $[c] < [y]$ , and of course there is no limit on the number of statements that might enter into such

a chain. Potentially at least there is much less complexity and redundancy in the semantic representations with the latter divested of the relational statements and these statements being placed in presuppositional format accompanying each tree system.

(18) (see above, this page)

#### 4. Some Further Details

In the present section I wish to tuck in some tag ends left from the application of the proposal in the preceding section. In doing so I shall have to go into somewhat more detail on the basic characteristics of certain remaining examples.

##### 4.1 Elevation and Reference

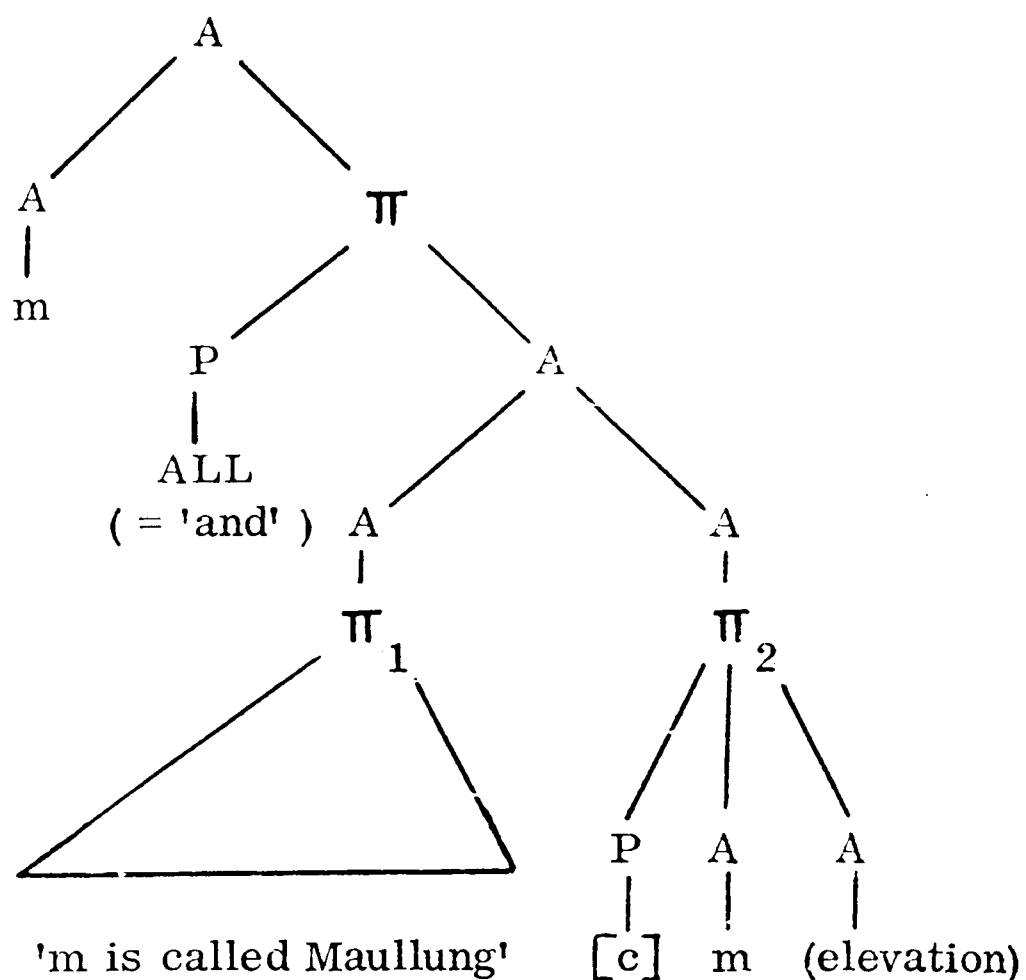
In sec. 2.6.1 of this study I remarked that we must further investigate the exact nature of the elevational determinant, specifying in particular the relation between the object or place involved and its elevation. This is more than an academic matter since the unit in question may be called upon not only in connection with its property of elevation -- its determinant in the strict sense, which is really the sense in which we have been talking about the unit so far -- but also in connection with its referential property. This is to say the unit in question may be required at times to establish the existence and identity of a subsequently-mentioned place, doing so independently of its elevation-fixing function but without relinquishing that function. In the following example, note the utilization of both elevational and referential pro-



perties of Maullung, Maullung itself being specified in the "discourse performative".

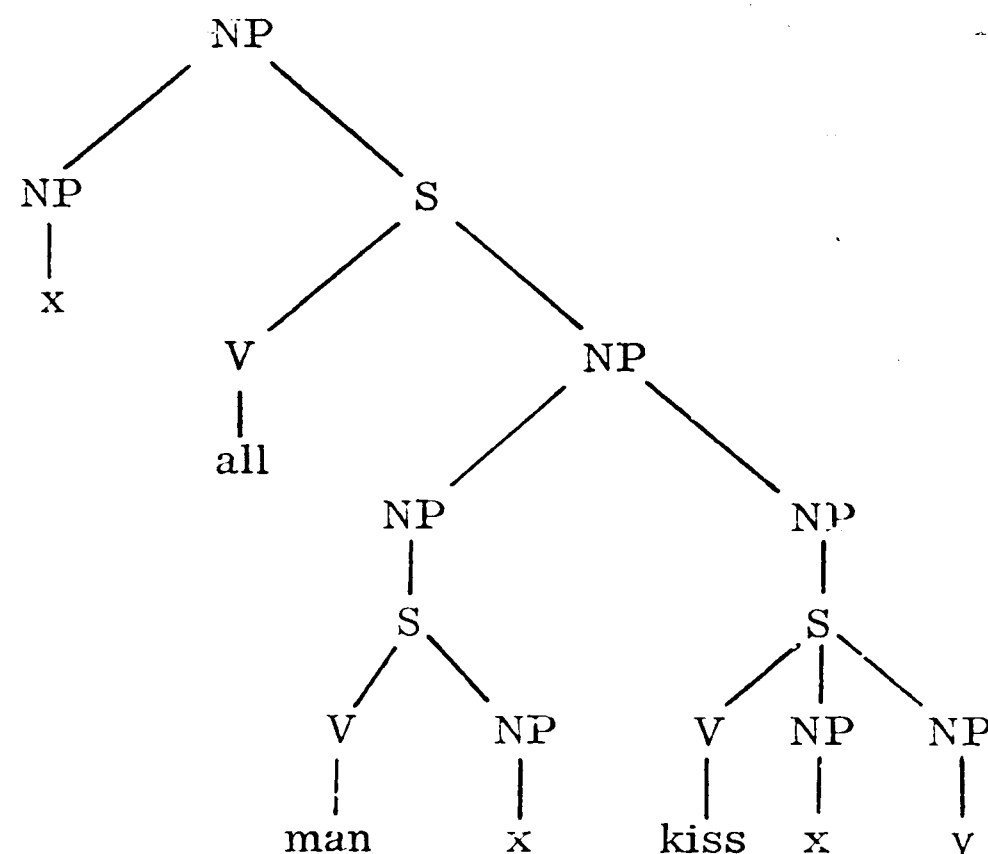
- (19) Bò, i upungku nakoà tallai su anung  
 after forefathers-my went going-up to place-of  
Manémbu, namisalla Manémbu. Adi Manémbu  
 Manobo confer-with Manobo so Manobo  
nigiang éntanane, nigiang wakèe;  
 were-given land-of-it were-given water-of-it  
nipapaména i.  
 were-caused-to-settle this  
 'Afterward, my forefathers went up (from Maullung)  
 to Manobo territory (an island to the north) to confer  
 with the Manobo. Thus the Manobo were given land  
 here and they were given water-sources here (both  
 on Maullung); they were made to settle this land  
 (Maullung).'

Thus, for any given place-entity in a text, we are now interested in two of its properties, elevation and reference, which must be specified separately in the semantic structure yet still be represented as intimately associated. A solution that seems to satisfy the requirements is the analysis of each place entity along the following lines.



Maullung is here represented as one constituent in a semantic, or logical proposition (not itself shown here). I call this constituent an argument (A) after G. Lakoff; McCawley sees this as a "noun phrase". This argument analyzes as a relativization tree in which the left-hand branch consists solely of an index (here m), a variable of the kind routinely used in logic to represent any element about which a predication is made. The right-hand branch is a proposition which assigns the variable its values, or "defines the range" of the variable. This proposition consists of a predicate (P) (again following Lakoff; for McCawley, a "verb"), which is the universal quantifier ALL, and another argument which in turn consists of two arguments, each a complementation structure whose propositions impose separate values or "conditions" on the variable. These latter condition propositions are conjoined by the ALL because, according to McCawley (1973) "quantifiers and conjunctions are the same thing and a conjoined sentence [or, proposition] really consists of a quantifier applied to a set of sentences that is defined by enumeration" (4-21). Also, "the material that goes into a noun phrase... comes from an underlying

sentence, e.g. instead of the man who kissed Sally originating as a relative clause construction (as that is usually understood), it will originate as something like [the following]" (4-29):



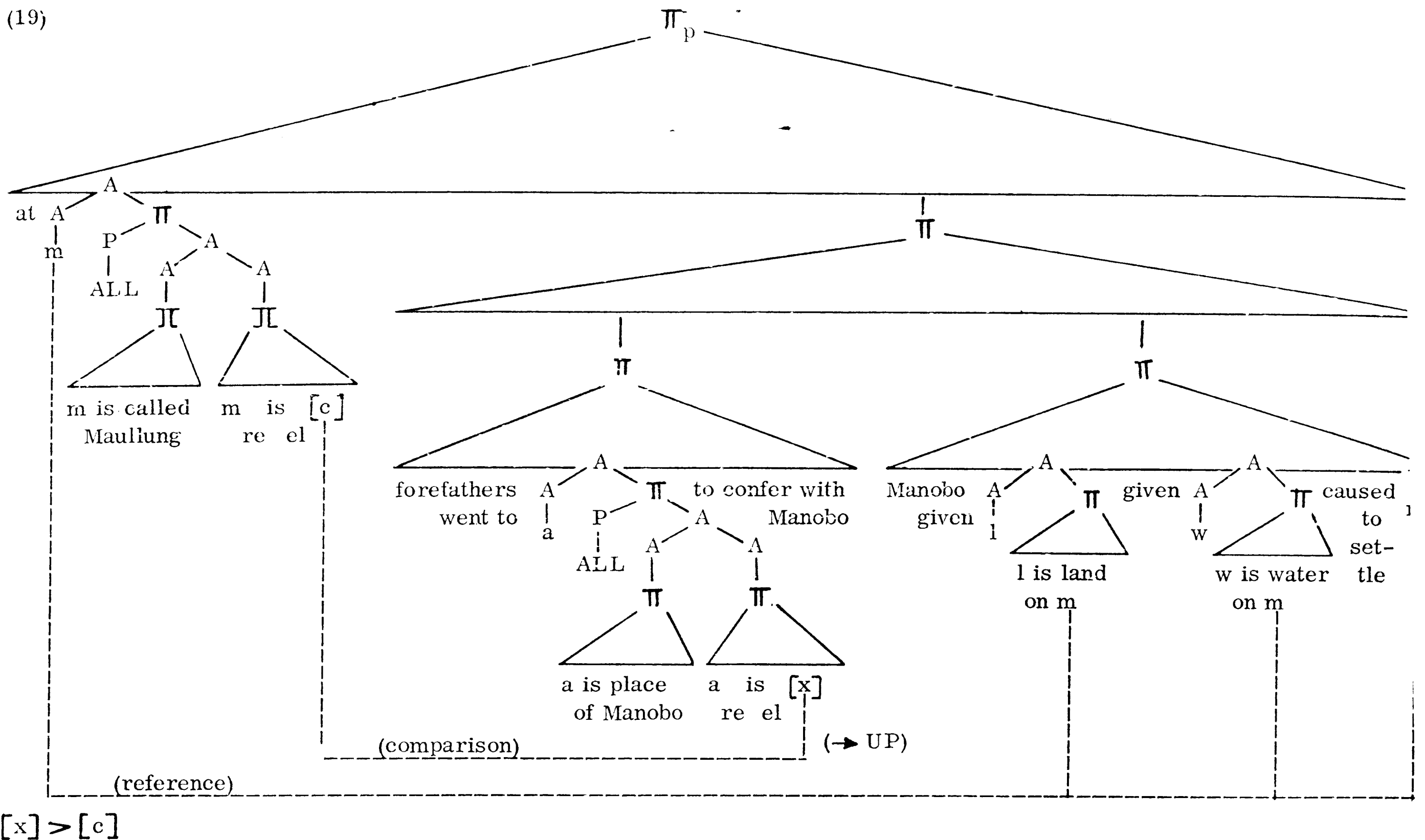
Turning to the conjoined condition propositions themselves, the first ( $\Pi_1$ ) states that the variable m may range over all possible values satisfying the condition that they are 'called Maullung'. This condition, of course, is sharply delimiting, as are all naming operations, to the point of particularizing an individual out of the class and m is thus allowed to be only one specific place on the face of the earth, at least in the intention of the story teller. It is this first proposition -- unanalyzed here but with a suggested analysis in sec. 4.3 -- that defines m, the referential property of Maullung we found to be essential to the structure of the discourse.

The elevational property so closely associated with the referential is featured in the second condition proposition ( $\Pi_2$ ). The latter states that m is also bound by the condition 'm is [c] with regard to elevation', i.e. m has a definite though unspecified elevation [c] which can determine as 'up', 'down' or 'same' the elevation of any place with which it may be compared. Concerning the general form of this proposition, note that [c] is a characterization; it does not partake of the nature of a relationship until actually used in a comparison with some other particular elevation. As an unspecified characterization, [c] can for present purposes be represented as a two-place predicate involving, besides m, the complement 'elevation', since from a notational as well as a logical point of view [c] is otherwise under-denoted. However, 'elevation' is by no means crucial here and its omission would have little effect on my overall proposal.

Assuming its validity, then, 'elevation' is really an index and should properly be represented by its own index symbol with accompanying condition proposition. But we would have no use for such an index referentially (as in fact we do m) and the additional elaboration would only increase unnecessarily the complexity of the structure. I have therefore chosen to represent 'elevation' simply as an unanalyzed element, indicating this by means of the parentheses. For after all, it is an axiom of generative semantics that one need analyze only into those units basic enough to satisfy the requirements of a particular algorithm, and not necessarily into the "most basic" units, whatever these might be (McCawley 1973).

Now the predicate of  $\Pi_2$  is of an unusual kind, consisting of nothing but the variable [c]. What makes this variable

(19)



$[x] > [c]$

unusual is not so much its occurrence as a predicate, though generative semanticists normally recognize variables only as arguments (but compare McCawley 1968, 1971, where it is suggested that variables be used in connection with predicates, not standing alone as here but in association with certain actions which they identify or differentiate). Rather, the variable  $[c]$  is unusual because it symbolizes not an object but a characterization, and as such is available only for operations of the comparison type previously described. The predicate variable is not available, as variables typically are, for use as a referential index and so cannot indicate co-identical objects in a real or imagined world. Consequently the elevational variable is not bound by a condition proposition of its own, as is the referential variable  $\underline{m}$ , for example, but is free to "float" semantically according to the vagaries of the context. Though its elevation is conceived of as unchanging in itself, where the variable is used with an entity "higher" than itself it is relatively "lower", and where used with a "lower" entity it is relatively "higher". It is the distinctive character of this variable which obliges me to enclose it in square brackets, whereas the more familiar referential variables I have symbolized conventionally without brackets.

It should be clear that the structure I have here described for elevational determinants will also characterize the elevationals themselves, the one exception being that the variable in the former is a constant  $[c]$  -- constants being only a particular kind of variable -- while variables in the latter are not. It should also be clear that the reference-elevation structure will be the same for an explicit sentence of text as for the extra-textual performative, for instance, of ex. 19, which prompted this section. In the case of the performative, remember, a particular place referent with a specific elevation is posited only if required by the text. In

other words, we do not wish to burden the performative with any apparatus other than that strictly required by the facts of the language specimen. The additional apparatus is required however in ex. 19, the complete representation of which would look something like this. (The broken lines indicating comparisons and reference operations are not an essential part of the diagram but are only for convenience in reading it.)

(19) (see above, this page)

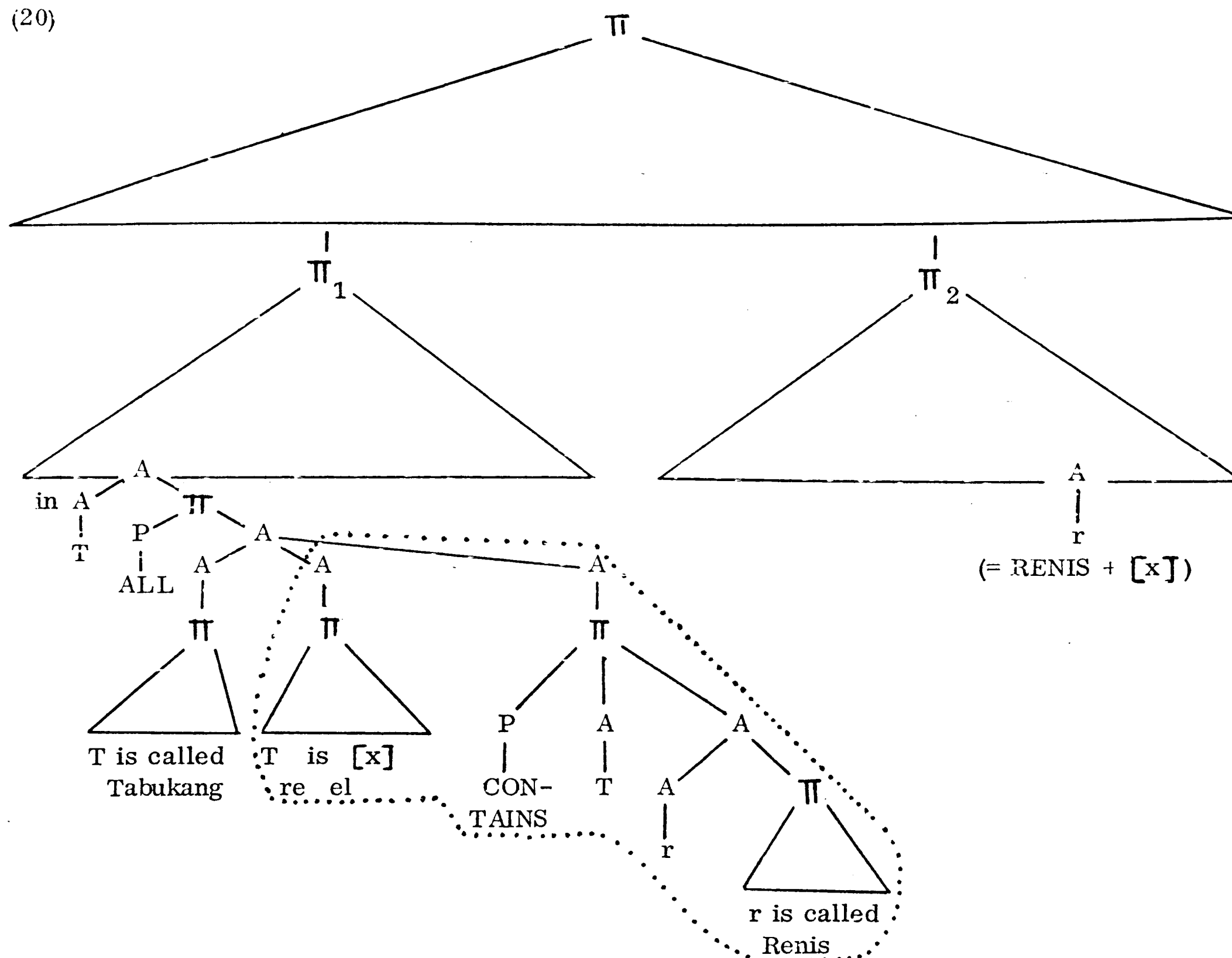
#### 4.2 Elevation and Referential Variation

Characteristic of the manipulation of place entities in a story is the fact that the teller may mention a certain area generally, then pinpoint a locality within that area. Or he may identify a particular place and then speak of the broader area containing it. Again, two points may be cited individually, then combined in a reference to the place of which both are a part. And other possibilities of this sort come readily to mind. How may this variation in place indices be properly related to the elevational mechanism herein described? McCawley (1968) offers a promising suggestion:

Since a plural noun phrase generally refers to a set [of individuals], it can be expected that its index will behave like a set, and indeed there are syntactic phenomena which show that it must in fact be possible to perform set-theoretic operations on indices and that syntactic rules must be able to make use of the results of such operations (p. 142).

Accordingly, McCawley marks plural noun phrases with set symbols, e.g.  $\underline{A}$ , and singular phrases with the symbols for

(20)



members of sets, e.g.  $x$ .

I will here assume that an areal place referent may, like the plural phrase, be viewed as a set consisting of the particular localities which comprise that area, e.g. Orange County consists of the communities of Newburg, West Point, Tuxedo, Greenwood Lake, Warwick, Goshen, and so forth. With this location-set convention in mind, we turn to two particularly interesting portions of the text.

- (20) Naranà i Bulléhang su Tavukang... Arus' i  
sired-children Bullehang in Tabukang heir of  
Bulléhang... nakisahè su Renisé. Kidò nipallidé  
Bullehang reef-hunted in Renis soon went-  
i sille; nivavang anging nandaì.  
adrift they were-brought-by wind coming-up

'Bullehang sired children in Tabukang... The heir of Bullehang... went reef-hunting in Renis (a place in Tabukang). Presently they went adrift and were brought up here (to Maullung) by the wind.'

After an earlier reference to the Sultanate of Tabukang, the storyteller now restricts the scene of the action to Renis, reputedly an island within that Sultanate. The change may be indicated by symbolizing Tabukang with the set-index  $T$ , which represents collectively all the places making up Tabukang, and Renis with the member-index  $r$ , one of the places contained in  $T$ , then simply replacing  $T$  by  $r$  in the subsequent structure. This analysis in terms of set and member might not seem especially advantageous until it is realized that the elevation associated with Tabukang is equally appropriate to Renis, and this fact can be conveniently accounted for simply by introducing the elevational condition in a position of command over the operation locating

Renis in Tabukang ('A commands B if B is dominated by the first S node up the tree from A, and if neither node dominates the other': summary of Langacker (1966) by Ross (1968)).

The following tree is intended to exhibit this structure, other details being explained below.

(20) (see above, this page)

Now, there is a good bit of structure represented under  $\Pi_1$ . I think, however, that the containment of  $r$  in  $T$  is rightly specified here at the first mention of Tabukang, not only because  $T$ 's elevation can then command  $r$ , but also because this is the only apparent way of justifying here the set-index  $T$  -- which will be needed later -- rather than the individual-index  $t$ . I suggest, therefore, that when an area must be symbolized as a set at any given point in the discourse, its member-localities be specified at the area's introduction into the discourse. I am not sure one need mention the entire membership of the set; it seems sufficient to indicate only those members which are actually mentioned in the text. I am more certain, however, that all relevant facts about a given entity must be specified initially, even though some of those facts are not utilized until later in the discourse.

Similar in effect is the conclusion reached by Charles Taber, though he is working with a different type of semantic problem and in the stratificational model. He writes (1966) of a Sango fable in which the existence of "a certain rat" is first predicated, then mention of "a very small one" follows. Taber's comment:

We have an asymmetrical identification of the two: for one, no particular identifying quality is cited; for the other, the quality of smallness is cited. Then in the next



nominal reference to the first rat, he is suddenly identified as "this big rat". Quite obviously, this identification, especially with the "this" which indicates that it is a rat already known, rests on the contrast between "small" and "big". In other words, the assignment of "small" as an identifying abstraction to one automatically assigns "big" to the other even if "big" is not realized in the first occurrence. If...the network represents all references to a particular object as a point, then it follows that all pertinent identification for that object will have to be attached at that point, including that identification which is implicitly assigned by contrast with identification furnished for another object [*italics his*] (124, 5).

Since "points" in a stratificational network and "referential indices" in a tree structure are convertible concepts, Taber's principle of first-occurrence inventory would seem to hold for the containment of locationals as well as the distinguishing of objects, and thus his work supports my own.

Once the necessity is established for this cataloging of semantic features initially, it becomes apparent that the procedure must be used to cover situations where the member is introduced into the story before its containing set, i.e. where the locality is mentioned first and only then the area of which it is a part. Even here it is essential in my view that the "area index" be prior in the structure to the "locality index", since an elevation predicated once in connection with an area index will suffice for any of the locality indices in that structure. If the locality were therefore represented higher in the structure than the area, then both would have to be marked for elevation, most often redundantly since the elevations are usually the same (but not always; see ex. 21).

Before leaving this example, let me mention that the elevation of Tabukang, the containment of Renis in Tabukang, and the place-name Renis, though all crucial to the semantic structure, are not explicit at this point in surface structure. Now, presuppositional material of this type can under certain conditions be represented by including it in the performative, viz. when the entity with which it is associated itself appears in the performative (e.g. Maullung in ex. 19). But none of the conditions here on T can be marked as implicit in this manner, for the very reason that T -- and perhaps other information -- is explicit in surface structure ( $\Pi_1$ ), and the condition propositions are by means of this intervening material isolated from the notational jurisdiction of the performative. Therefore in order to set apart these propositions as presupposition at this particular point in the structure, I have chosen to enclose them with dotted lines. Some of such material may at a later point be withdrawn from the distinguishing convention and made explicit, as in fact Renis is in  $\Pi_2$ . Notice that the above treatment, like Morgan's (1969), concludes that at least some presuppositions are conjunctively linked to elements in the underlying sentence structure; the more common position, and the one I have taken in connection only with the never-explicit elevational relation statements (sec. 2.6.1), has been that presupposition is structurally independent of assertion.<sup>4</sup>

I pointed out above that an elevation posited for an area usually characterizes its subdivisions as well. In the following example however one such subdivision undergoes a change of elevation as the story progresses.

(21) Narumpà su vanua ini... Ondò... vava su Tuvé  
reached at land this ondo-fruit down at Tub

nanausé nibébd su sasì.

continued was-poured in sea

'They reached this island (Maullung)... (When they were hungry, had cooked ondo fruit, and found it poisonous) the ondo fruit was poured in the sea down at Tub (on Maullung, south of Mabila).'

Up to this point in the narrative, the travel between Indonesia and the Philippines required mention only of the island of Maullung as a whole. Now the south-shore cove of Tub is singled out from other points on Maullung but, unlike Renis in Tabukang, this time with a distinctive elevation. The reason is clear: the narrator's frame of reference, which had been Maullung per se and thus had included Tub, has now narrowed, presumably to his home valley of Mabila, leaving Tub excluded and contrastive. This differentiating of Maullung place referents and their elevational properties is again represented by first positing a set-index, here Maullung, assigning an elevation, and itemizing its pertinent membership, here b (Mabila) and Tub, all at the first occurrence of Maullung in the story. Then, when Tub is isolated as the object of special comment, we cancel by negation the elevation that had applied to Tub by virtue of its set-membership, and assign it an appropriate elevation.

In the following display of these relations, notice again the necessary involvement of presuppositional information both within the performative and without. For though certain material is absent from the surface structure, the facts of the text cannot be satisfactorily accounted for without positing this material somewhere in the underlying structure. It is true that Maullung is represented in the surface structure by a deictic phrase signifying 'this land', but it must be present in the performative as well to allow for deicticization (see footnote 2) and it is there that its structural relations must be spelled out.

(21) (see page 43)

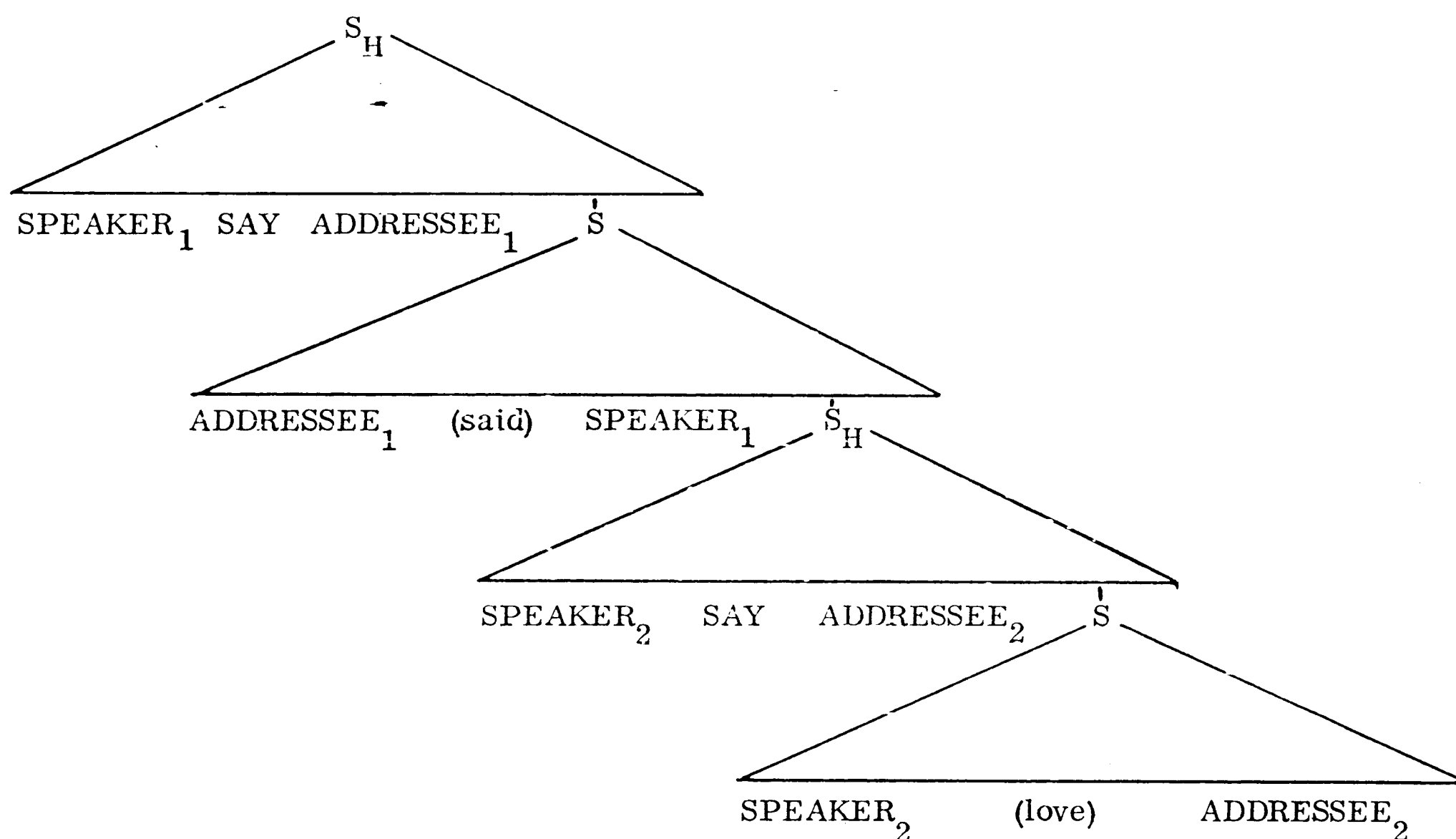
#### 4.3 Elevation and Event

One by-product of the preceding two sections was the demonstration of how elevational variables enter into the derivation of noun phrases. The present section shows how these variables participate in semantic structures which end up as surface verbals. This analysis yields an additional benefit in the further justification of the "atomic predicate" of generative semantics, i.e. the concept of the propositional predicate as essentially a component of the meaning of a lexical unit, verb or other, rather than the totality of that meaning.

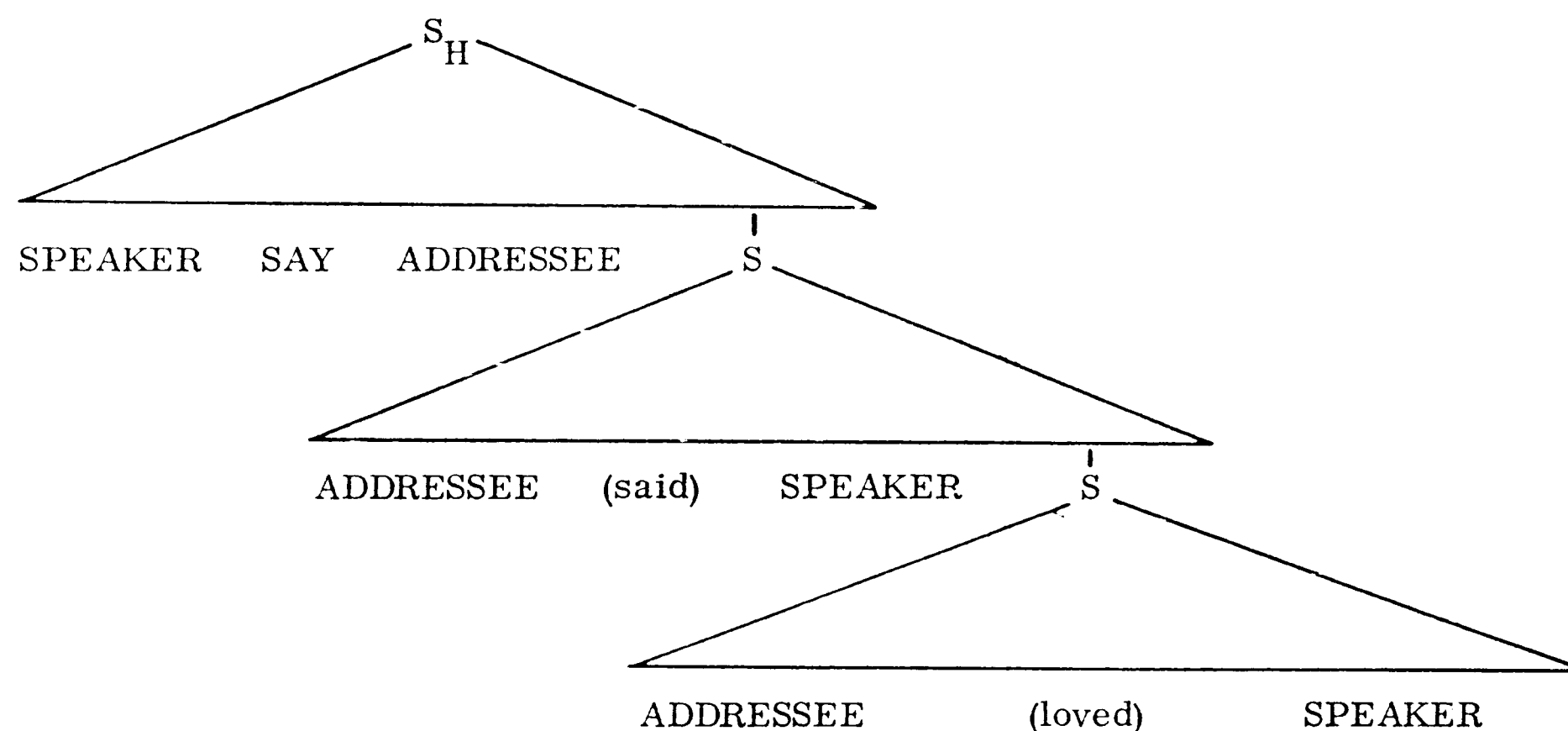
The data used here are terms mentioned earlier such as tallà 'going upward'. Semantically, these units consist not only of the component of elevation, which has been the primary consideration thus far, but also of an action component, viz. motion toward the specified elevation. As assumed in the illustrations above the elevational components of these semantic composites pattern in full conformity with the system already described for the pure elevationals.<sup>5</sup> However, before proceeding to the business of isolating elevational from motional meaning, I must deal with a curious problem in my main illustration in which the elevational system may appear to have broken down -- if indeed I have understood it correctly in the first place.



(23a) You said to me, "I love you."



(23b) You said to me that you loved me.



narrational determinants I will continue as in previous sections to put in the highest, or discourse-embedding performative. The more troublesome question is where to find another performative to which intra-narrational determinants may be relegated. The work of Sadock, I think, provides the clue.

In brief, Sadock (1969b) posits an embedded performative intermediate between the main and complementive clauses in direct quotational sentences. One must do so, he reasons, in order to implement the first and second person pronominalization rule in the direct quotation complement. The derivation of pronouns in an indirect quotation requires no such intermediate performative. Compare these different structures in the examples above, this page.

Now an analysis comparable to that of Sadock's embedded performative should also work for the Sangil narration-oriented elevationals notwithstanding Ross's objection to such structures, an objection to which Fraser's reply was sufficient in my estimation (sec. 2.3).

I will use an illustration from English to demonstrate the kind of thing I think is going on in the Sangil switch of elevational determinants.

(24a) I went up to Maine.

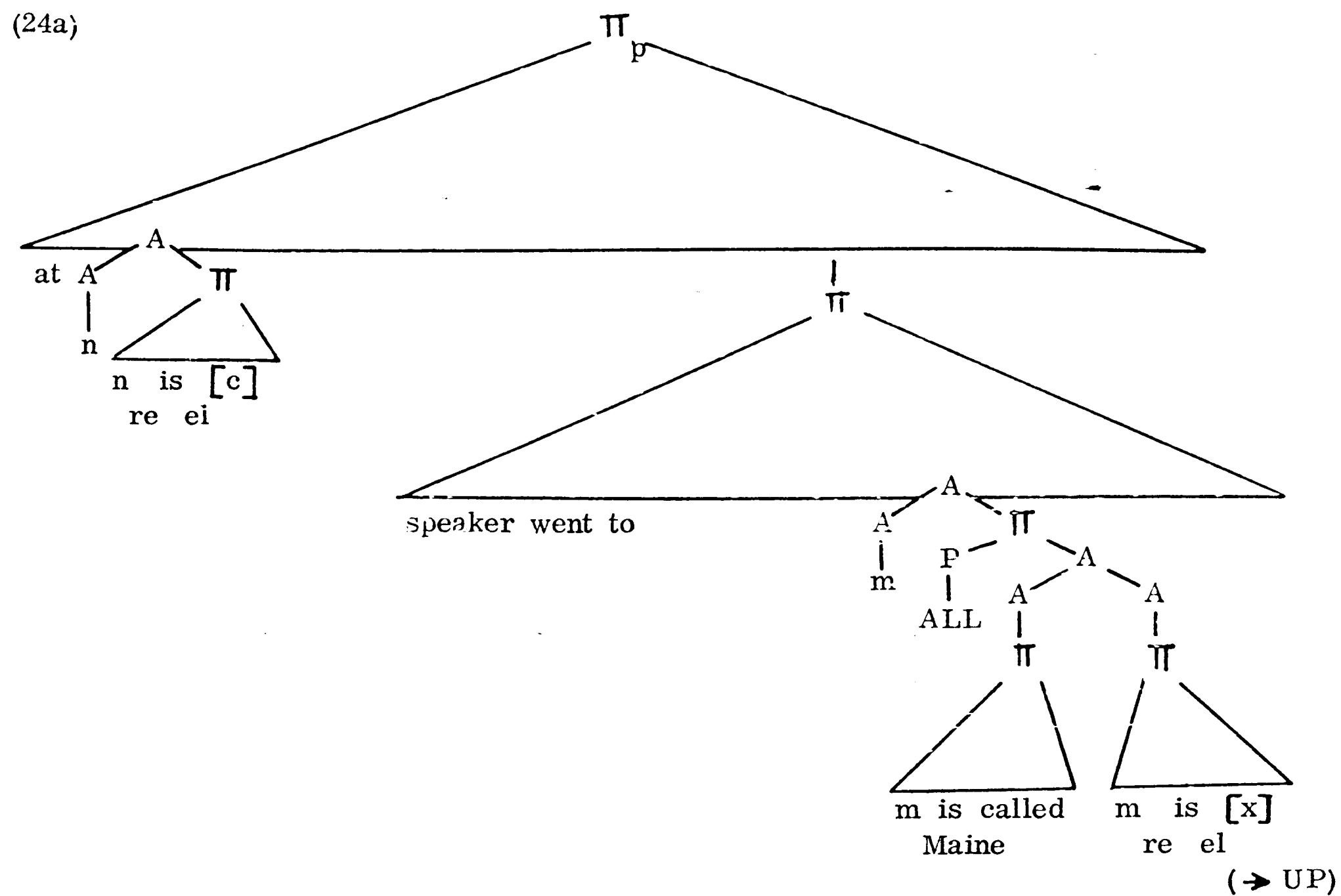
(24b) I went down to Maine. (i.e. I went, as they say, "down" to Maine.)

In (a), the location at which I perform my speech act is the Village of Greenwood Lake, New York, the elevation of which is specified in the embedding performative (its name need not be). I am assigning the constant [c] to the elevation of New York, much as we assigned this same variable to Maullung in Koano's story. When [x] is assigned to Maine and is determined to be greater in value than [c], the going to Maine is lexicalized as being in an upward direction.

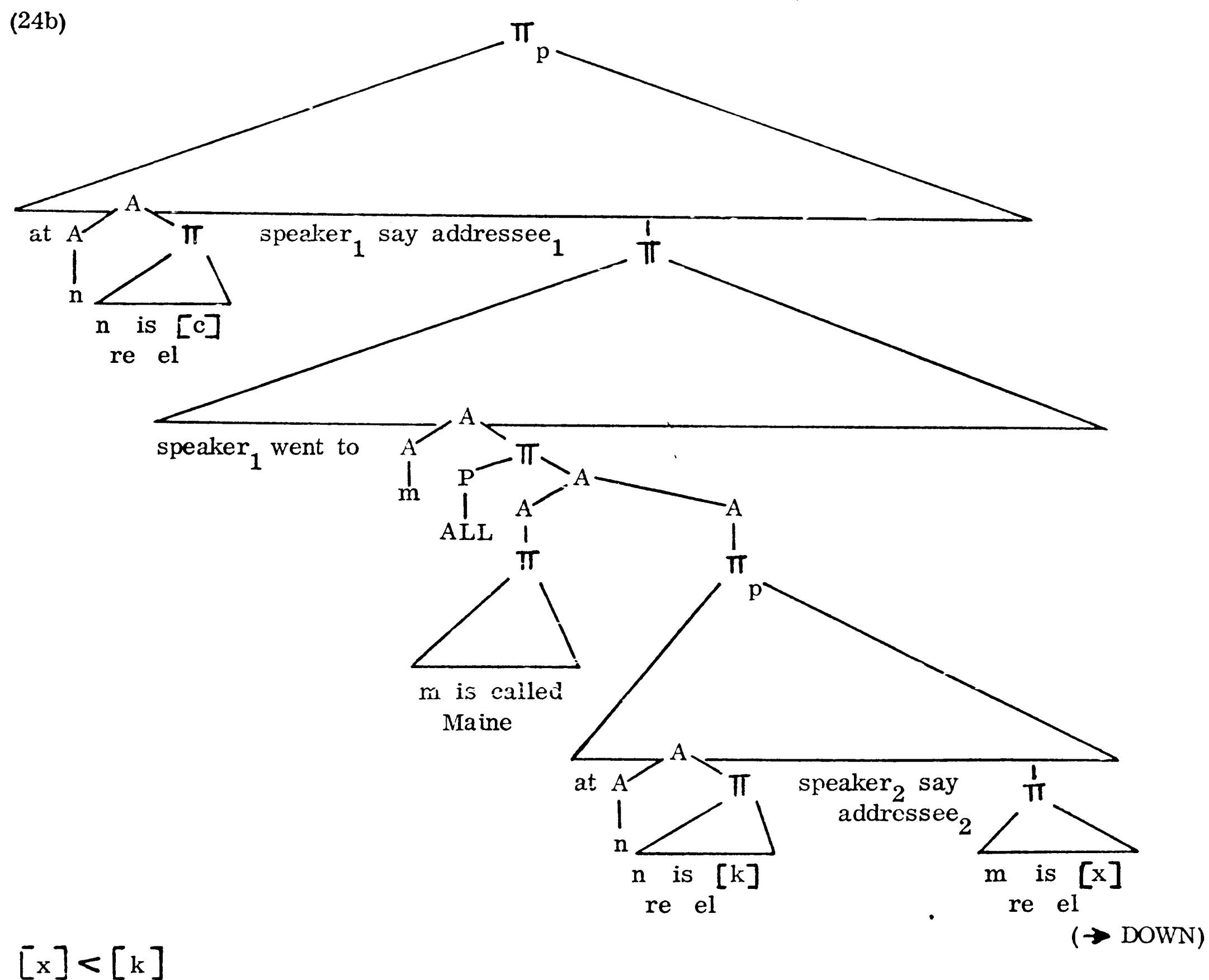
(24a) (see page 45)

In (b), however, though I am still at the conceptual elevation of New York when I make my statement and this fact is again noted in the top performative, the elevational system in which I am now interested is not my own but that of the New Englanders, to whom Maine is not "up" from New York but "down". Wherever the new determinant is to be represented, it is certainly not in the topmost proposition





$[x] > [c]$



$[x] < [k]$

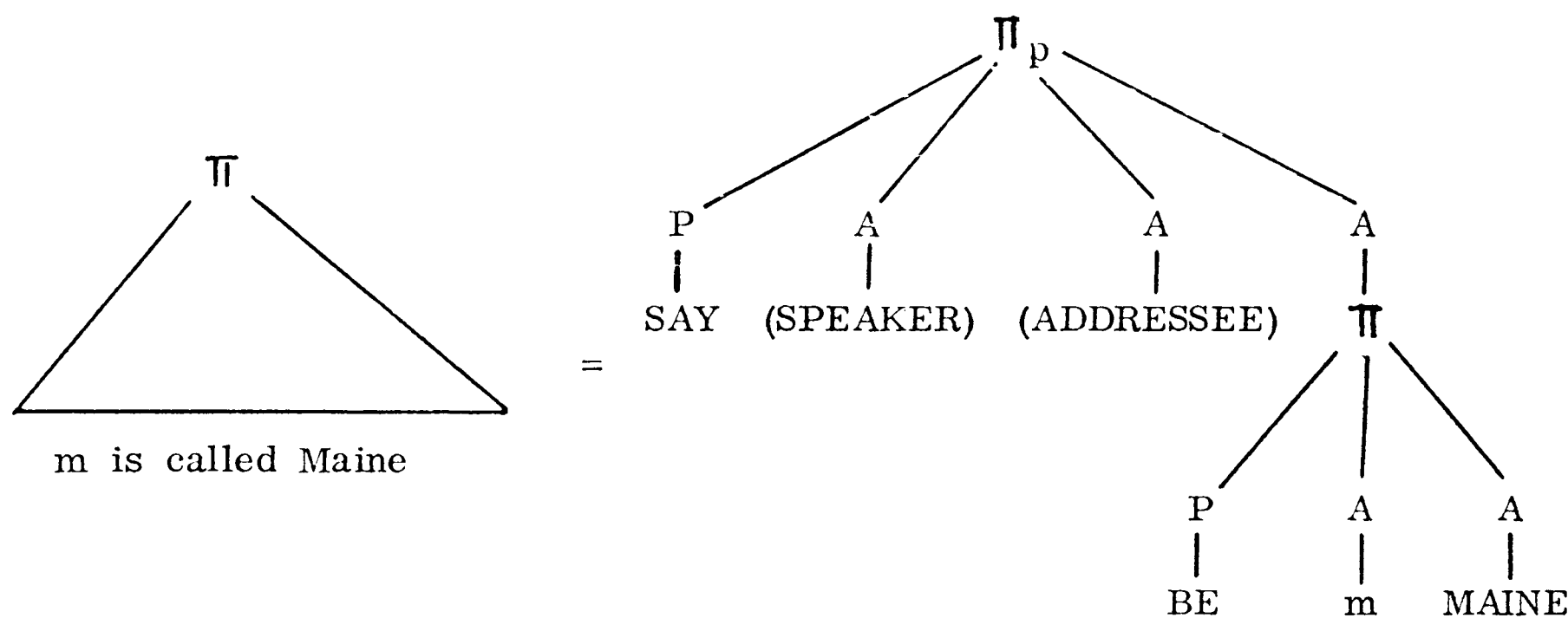
here only my own frame of reference can be specified. The  
eterminant must be in another performative embedded lower  
the structure. I have chosen to place this performative  
among the conditions on the variable m since only in this  
osition does it uniquely dominate the specifying of Maine's

elevation, the sole element in the utterance which is ex-  
plicitly calculated from the New Englander's point of view.  
This lower performative, of course, specifies that to the  
New Englander the elevation of New York is [k], an elevation  
which is greater in value than the [x] of Maine. Maine is

therefore "down" with respect to New York.

(24b) (see page 45)

One cannot help but notice the functional resemblance between this lower performative with the embedded condition proposition, on the one hand, and the proper-name condition proposition, on the other. In fact, it may turn out that proper-name conditions, such as 'm is called Maine' are simply unanalyzed trees whose more basic structure is, as below, a performative with an embedded condition proposition. Predicate raising would combine SAY and BE into CALL, and SPEAKER and ADDRESSEE would be of general enough reference to then completely delete and trigger the passive transformation.



But these observations on "Maullung" and its two-fold elevation are somewhat of a digression, though an interesting one and necessary if the illustration here and quotative materials generally are to be properly understood. The point is that terms such as tallaì 'go upward' are clearly analyzable as having elevational and motional components of meaning. To isolate such components in the generative semantics approach the semantic unit corresponding to the lexical is decomposed into "atomic predicates" (so called by Lakoff and Chambers -- cf. the related "atomic statement" of Reichenbach (1947); McCawley and Franz focus more on the analysis per se and use the term "(lexical) decomposition"). Each atomic predicate occurs in a separate proposition in the semantic structure and by so doing facilitates the disambiguating of multiple readings for a sentence like

(25) John almost killed Harry.

The crux of the matter, as McCawley (1973) reports Morgan (1970), lies in precisely what part of the total meaning is in the scope of the "modifier" almost: (a) in the reading 'John almost did something which, had he done it, would have had the effect of Harry's dying' (e.g. he intended to kill Harry but changed his mind), almost has as its scope the entire proposition; (b) in the reading 'John did something which almost had the effect of Harry's dying' (e.g. he fired at Harry but the bullet missed), almost has as its scope the 'cause Harry to become not alive' part of the meaning; and (c) in the reading 'John did something which had the effect of Harry's becoming almost not alive' (e.g. he fired at Harry and wounded him so seriously that he was in grave danger of death, but he recovered from the wound), almost has as its scope the 'Harry not alive' portion. McCawley then explains these structures by positing ALMOST as itself a predicate whose complement for any given reading is the part of the

meaning that is "modified by" or is in the scope of ALMOST. With kill decomposed into its alleged five atomic predicate DO, CAUSE, BECOME, NOT, and ALIVE, the three readings can be exhibited as follows.

(25) (see page 47)

The Sangii terms of elevation-motion can be handled in a comparable manner, except that instead of almost I am using the temporal adverb 'soon' (mallià) and also the locative 'in Bongor' (su Vongoré). In the first case, the sentence

(26) I Taho mallià tallaì.  
Taho soon going-up

is at least two-ways ambiguous, meaning either (a) 'Having gone, Taho will soon be at the place conceived as "up".' or (b) 'Taho is soon leaving to go up.' Presumably, in (a) the semantic element SOON predicates its qualification upon the part of the structure including [x] or 'up' whereas in (b) the temporal must qualify only the 'Taho goes' part. I take it that the semantic structure of these two readings is fairly represented by the following figures.

(26) (see page 47)

Again, the sentence

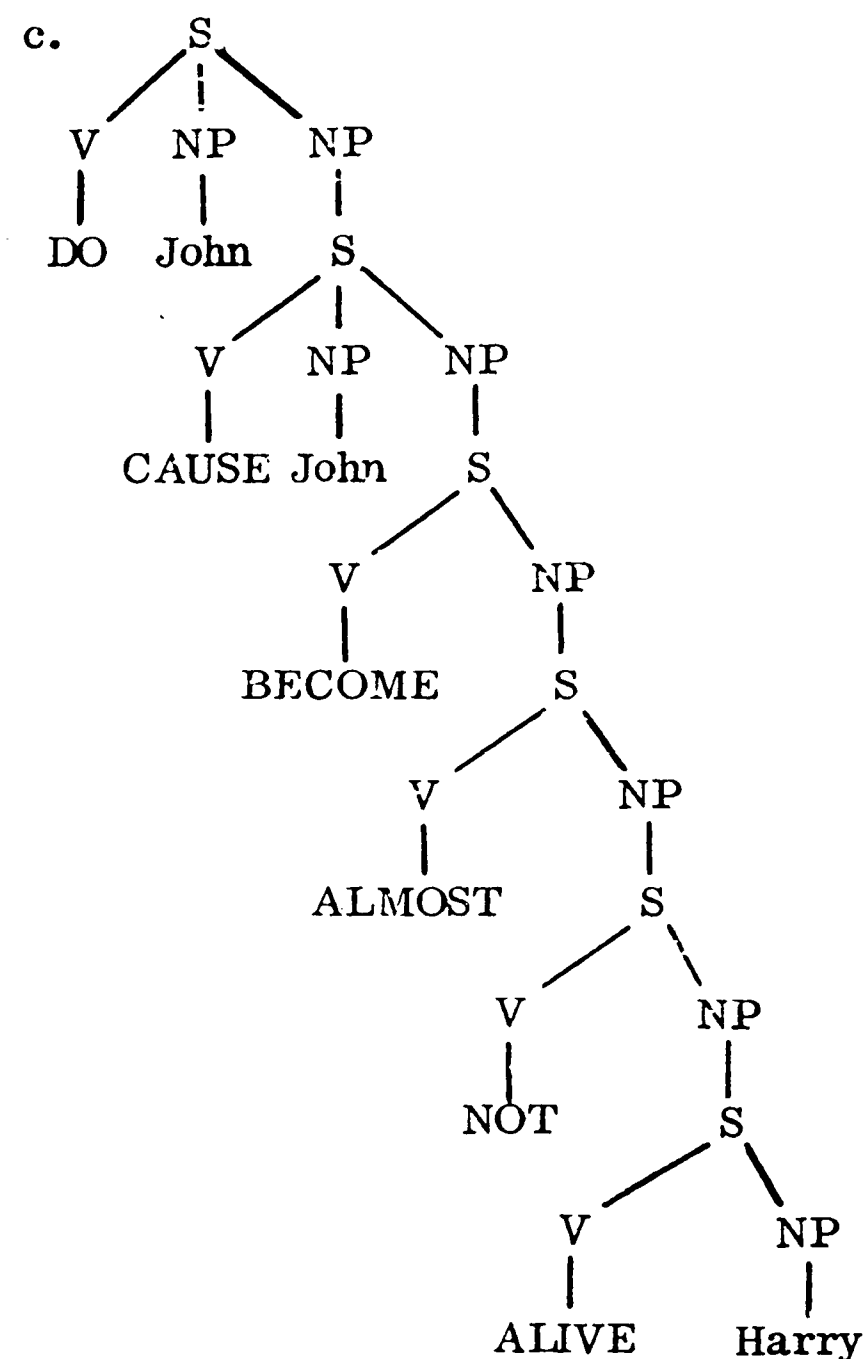
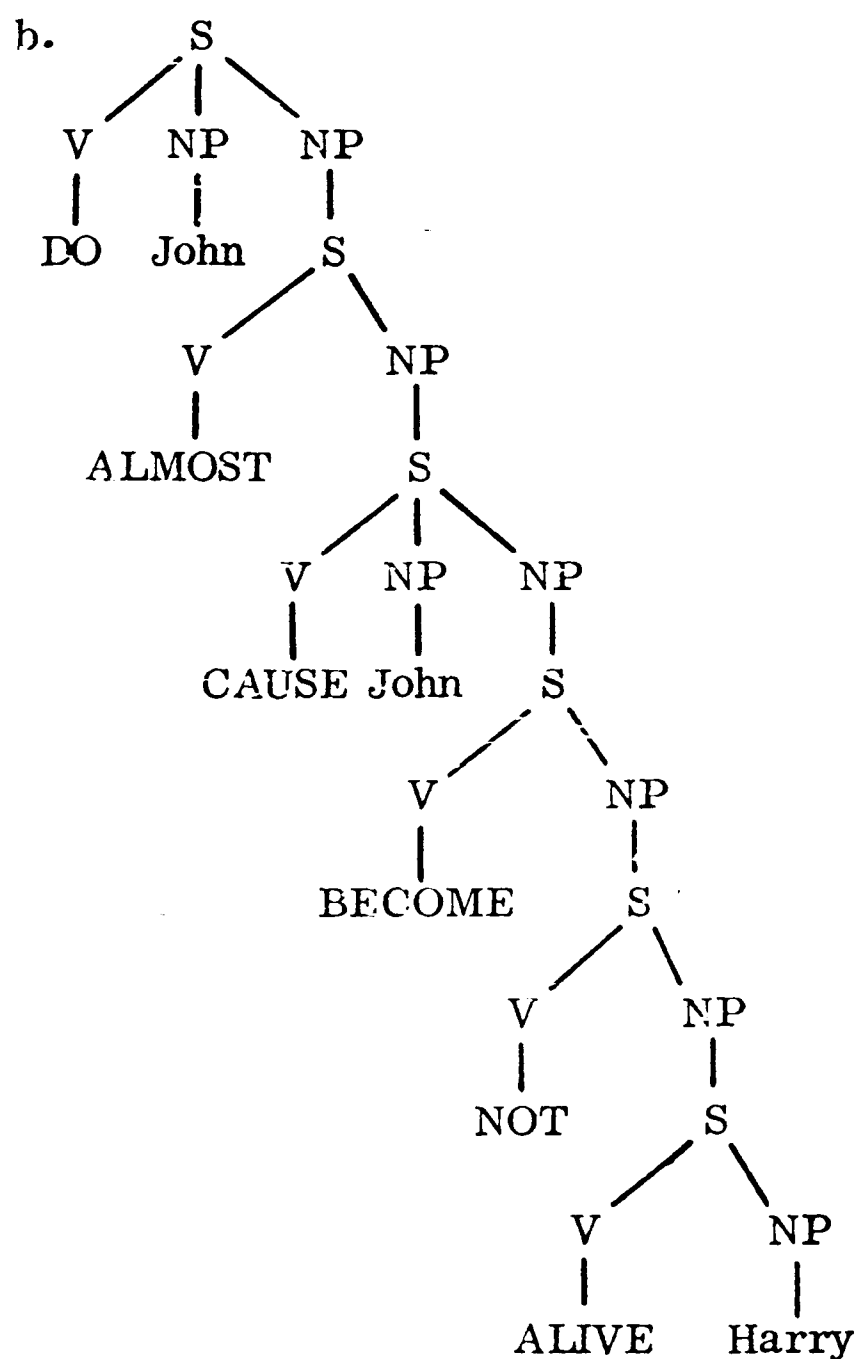
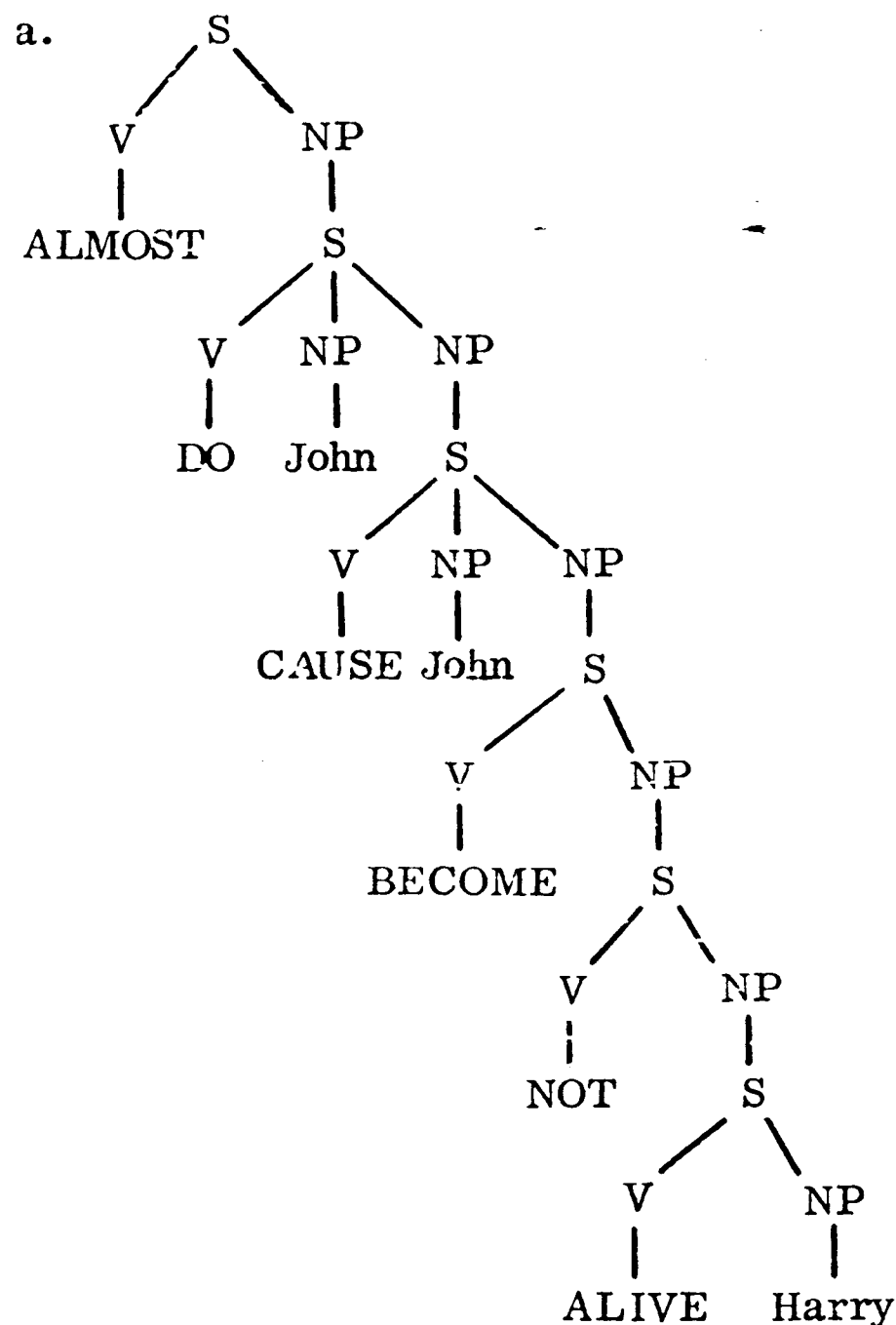
(27) I Taho tallaì su Vongoré.  
Taho going-up in Bongor

is ambiguous between the readings (a) 'Taho is going "in" or to Bongor, which is up.', where the locative has as its scope the part of the meaning in which 'up' occurs, and (b) 'Taho is going "in" or through Bongor to some higher but otherwise unspecified place.', where only 'Taho is going' is in the scope of the locative. The tree structures are identical to those preceding except that the further analyzable "(in Bongor)" now occurs in place of SOON.

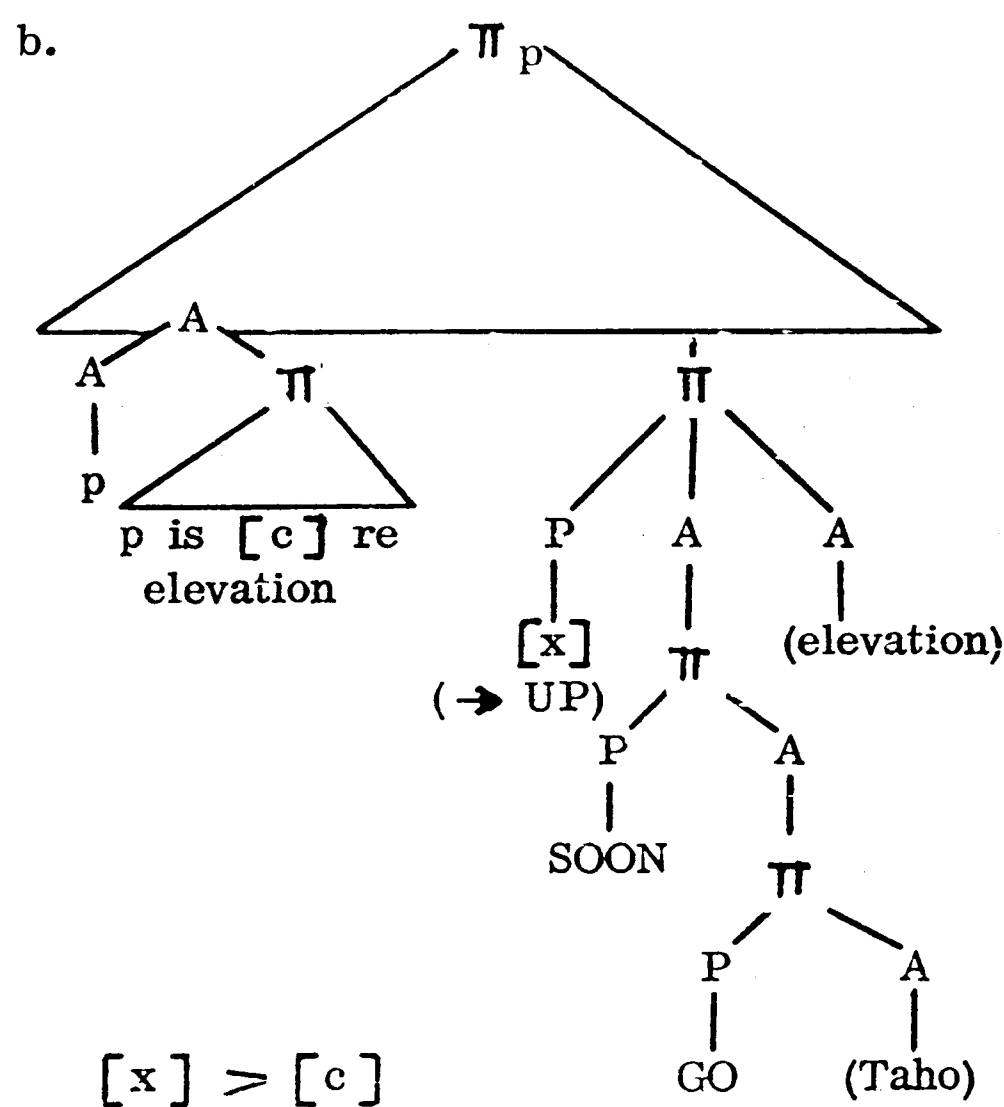
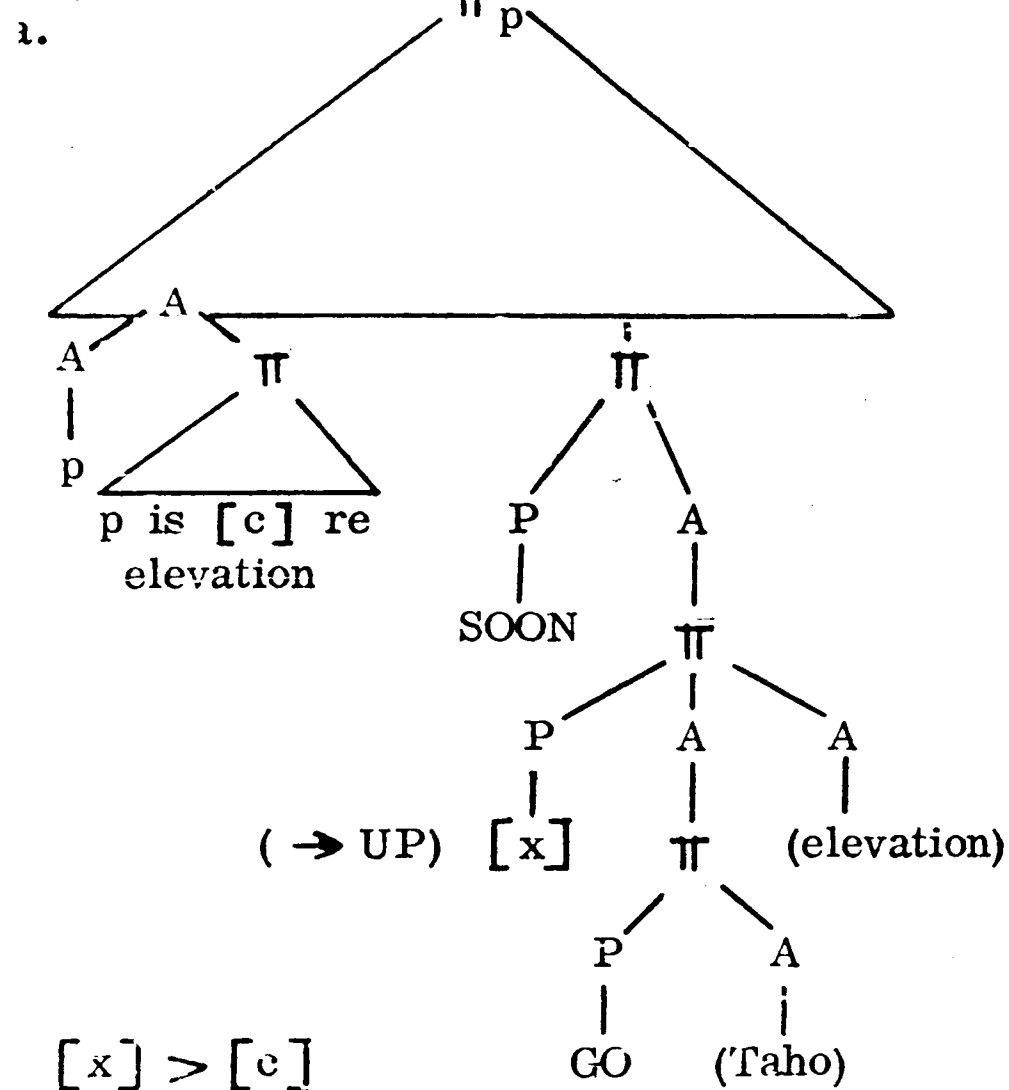
These semantic structures derive their surface forms through a series of transformations including those specified by the following types of rules: a selectional rule, which matches the elevational variable in the infra-structure with that in the performative and assigns [x] the value of UP; a predicate-raising rule, which combines the atomic predicates GO and UP into the single unit GO-UP; a tree-pruning rule, which rids the structure of the superfluous A and Π nodes left by the predicate-raising operation; and a lexicalization rule, which inserts the surface form tallaì in place of the GO-UP.

But, besides the "modification" factor stressed by McCawley, there is another important motivation which requires the distinguishing of elements such as GO and UP in semantic structure: the selection operation to which the elevationals are subject implies their accessibility for the implementing of that operation. In other words, their variables must be free-standing and unmerged with other elements of meaning in order for the operation to succeed. This fact alone forces the recognition of an elevational

(25)



(26)



constituent separate from a motional in the underlying structure of *tallai*, etc. Beyond this, however, there is considerable evidence that the motional element must in its own right be viewed as discrete and free itself to enter into a selection operation, viz. the determining of the "go-come" polarity. I cannot go into detail on this matter here, but I can predict that the kind of structure characterizing the notionals will closely resemble that of the elevationals in several respects, including the fact that the point of reference from which the motional is reckoned may be either in the text or in a performative.

For instance, in the final representation below of ex. 22, it may be obvious that COME as in  $\Pi_3$  could be generalized to MOVE -- or some other such atomic predicate --

and this movement then oriented with respect to a "determinant" of direction which is here *m*, the index specified in the performative as the narrator's location in Maullung. (To the same effect, see a suggestion by Gleason; 1969, p. 49.)

One additional note on this tree: In  $\Pi_5$  there is a temporal adverbial  $\Pi_{5a}$  in which the index *T* is represented as being equivalent to 'Tabukang + [x]'. It should be fairly evident that this [x] is obtained in exactly the same way as TABUKANG here or HOME in  $\Pi_4$ , viz. it is one of the conditions which characterize *T* and which are accordingly specified at the introduction of *T* into the structure at  $\Pi_4$ . To specify 'T is [x]' in  $\Pi_5$  would therefore be redundant -- though its specification under the embedded performative of



$\Pi_4$  is not, since there it is theoretically a new speaker with a different frame of elevational reference who also is affirming 'T is [x]'. (The numbering of propositions in the diagram is for convenience only and implies nothing about their contiguity in the text; actually at least one and often a number of propositions intervene between the propositions represented here.)

(22) (see inside back cover, folding out)

## 5. Conclusion

What I have tried to do in this paper is to report what I consider to be an interesting feature of Sangil discourse structure, and to suggest a fresh approach to the analysis of this and similar features. There are, of course, phenomena which are quite parallel in other languages, e.g. in English:

(28) This is the up-town train. The one for down-town left earlier.

John is from down East; Agnes is from out West.

In using such expressions, we normally consider ourselves to be speaking metaphorically, but I am not at all sure the Sangil are. This is their customary way of speaking, seldom using other, more literal forms that might render the elevationals metaphoric by contrast. The ubiquitousness of the elevationals is no more remarkable than the rarity with which orientation is expressed in any other way.

In any case, it is hoped that some of the techniques of this analysis will be useful in the treatment for any language, not only of elevationals, but of such other orientational features as the points of the compass, wind directions, right-center-left, inner-outer, proximate-remote, source-destination, past-present-future, complete-incomplete, as well as of comparison and even role structure (e.g.  $\underline{x}$  is father to the boy but is son to the old man). In short, this type of approach may help in the analysis of any fact of speech which requires a point of reference that is relative. The determination of certain values in a text by their relation to other values is intuitively more satisfying than the virtual dismissal of all such relationships as extra-linguistic, on the one hand, or on the other, lexical.

The performative approach as used here should prove helpful in dealing with several kinds of phenomena which are "outside" the text of various languages but which are clearly relevant to the production and interpretation of their discourses. One such phenomenon indicates that at least some locational deictics must be derived from place phrases in performative structures. Another feature which may best be accounted for by the performative is embedded quotational materials, not only of the traditional "direct" and "indirect" type as described by Sadock but also of place, person, and other "proper" names, some identificationals (e.g. That's a "crinoid".), so-called and as-they-say expressions (e.g. I am inclined to think that K-F's example of bachelor is a special kind of word where we "find" the markers that we have already put in.; Inevitably, he has not escaped "time's irreparable outrages".), and perhaps even live figures (e.g. sales clerks with "permanent-press" smiles). However, the major contribution of the performative analysis remains that it is an effective device for significantly extending minimal linguistic context, an extension which is essential in adequately accounting for the facts of discourse at least for Sangil. The performative's paucity of syntactic justification decried

by Fraser and others is thus of little consequence; indeed any justification at all is a bonus. Clearly, the performative pertains to the semantics.

Further work is needed to incorporate in this analysis certain other Sangil terms which frequently bear a close semiotic relationship to the elevationals. These are da 'landward, inland', and dade 'seaward', which often denote simple 'up' and 'down' respectively, in either a literal or extended sense. Related motionals are sasaè 'going seaward' and nansaè 'coming seaward'. The 'landward' counterpart of these motionals find their equivalent only in the terms already discussed, tallai and nandai 'going upward' and 'coming upward' respectively. I have already mentioned the need for follow-up on the motional components of these terms, and certainly the temporals warrant a hard look from the elevational perspective.

A different kind of unfinished business is the inclusion of other features of Sangil into the performative analysis. For example, there is a sharply restrictive system of male-female sibling reference, in which the terms a male uses for a male sibling and those a female uses for a female sibling are very different from those used in cross-sex reference. Not only is relative sex involved in this system but also relative age. The central question is whether the phenomena are truly linguistic or merely socio-cultural in nature. If they are linguistic, then it would seem that the point in the grammar from which they must be controlled is again, in a performative structure, and the manner in which they must be controlled is through the determining of variables as in the elevational analysis.

## Summer Institute of Linguistics

## FOOTNOTES

1. I am grateful to H. Alan Gleason, Jr. and Jack Chambers for early inspiration and encouragement in this study, and to Don Frantz for later suggestions that were most useful.

2. It will be observed that the deictic 'here' is symbolized in tree structure by the place-name MAULLUNG. Actually, such deictics are always a sort of pronominalization for which the co-referential antecedents are place-names or definite descriptions. It is these antecedents rather than the pro-forms which refer to them that must be posited in the deepest, or semantic structure.

It may be objected, however, that the place-name MAULLUNG is not relative enough; it does not locate the farm of the Americans -- as required by the deictic -- with respect to the place at which the speaker tells the story, a place identified by essentially situational criteria. But the situation is quite the reverse. It is the deictic which must be interpreted rather as an absolute, fixing with certainty the point from which the smaller island is counted as 'up'. And the truth is that apart from the "relative" deictic, there is no other completely unambiguous way to indicate the island of Maullung. If the speaker-reference implied by the deictic had been altogether absent from the account and the name 'Maullung' used instead, the audience might well have been in doubt as to precisely what place was intended, the Maullung they knew and on which they were situated or

another location of the same name.

If such an ambiguity is here to be avoided, the name or description must be pronominalized in surface structure by a deictic like 'here'. Such pronominalization again is reminiscent of the Chomsky dictum: "sameness of reference requires...pronominalization", and Langacker's formulation noted in sec. 2.2. It seems, then, that there is good motivation for the extension of the pronominalization rule to place-phrases as well as to person and object ("thing") phrases. Observe, however, that in the pronominalization of the "remote" person, object and place phrases (e.g. 'they', 'that', 'there') the antecedents are normally indicated in the context, whereas in the case of the corresponding "proximate" phrases (e.g. 'I', 'you', 'this', 'here') the antecedents are necessarily absent from the text and so must be posited in a performative structure.

3. The suggestion has been made here that going "down" genealogical table, or anything else for that matter, "would seem in no more need of particular explanation [semantically] in Sangil than in any other language" since the notion "downness" can be fully accounted for lexically in the morpheme "down". But this comment may only indicate the obtuseness of the matter. If one checks the English dictionary meaning of down he finds such primary senses as 'toward or to a lower position' which assumes a reference point that is not a part of the definition ("lower" than what?) and is therefore not a part of the lexicon. Another sense is 'toward the ground or bottom' but again caution is indicated. The phrases, The miner finally made it to ground level. and I have to reach up to touch bottom. certainly do not suggest movement in a "downward" direction. For this to be a true definition we must again assume something that the lexicon does not give us, viz. that "the bottom", etc. is lower than some particular point from which the "downness" is being reckoned. It is such assumed reference points which in principle cannot be supplied by the lexicon that I am attempting to account for in the semantics. So that once the relationship is established between these reference points -- sometimes assumed, sometimes explicit -- and the point of the discussion focus, then and only then is sufficient information available to select the appropriate elevational morpheme (up, down, or whatever) from the lexicon.

After all, as Lyons points out (1971), to explain a comparative requires the determination of the standard with which the comparison is effected, whether that comparative is explicit (Our house is bigger than yours.) or implicit (Our house is big. from 'Our house is bigger than the normal one.'). whether qualitative (He's a good cook.) or quantitative (The storm warning is up.). The treatment of elevationals here in ex. 15 in the same manner as elevationals and other comparatives elsewhere is in the interest of rhetorical integrity and procedural consistency.

4. See brief discussion in Lakoff (1971b).

It will be observed that I have employed two criteria for disposition of presuppositional material in the semantics: capability and transitivity. If a presuppositional proposition is necessary to the underlying structure of a text, (1) could not conceivably become explicit and (2) is a transitive relation, then I have considered such a proposition naturally independent and excluded it from the main tree diagram; e.g. '[c] < [x]', as in sec. 3.6. If the proposition is not transitive, then it is included in the main structure; e.g. 'r is called Renis', as above. According to these criteria, membership and inclusion relations like

'T contains r', which can become explicit and are transitive, could be either dependent or independent with respect to the main structure, according to whether or not the transitivity feature is to be utilized in a manner comparable to '[c] < [x]' in sec. 3.6. The latter relationship is never in the central structure in part because never explicit, notwithstanding my conversation with the man about the cartographical "downness" of Indonesia and the reference points involved; that language about language constituted not analyzable text but meta-language.

5. There are in Sangil other lexical sets which are distinguished by the elevational components of their members, though these are not as easily recognized morphologically as tallai 'going up', tanað 'going down', etc. Instances are: saka 'travel up' vs. désung 'travel down' (as mountain), avì 'climb up' vs. lousé 'climb down' (as tree), and sake 'climb up into conveyance, embark' vs. tumpa 'climb down out of conveyance, debark'. Elevational components of this kind enter together with the other elevationals into the same relationships as characterize the system as a whole.

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