# STRUCTURAL AMBIGUITY IN THE VIETNAMESE RELATIVE CLAUSE

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1. Introduction.    The purpose of this paper is to demonstrate how the relationships between the relative clause in Vietnamese and certain constructions structurally ambiguous with it may be described in terms of their underlying or deep structure.  A secondary purpose is to show that these subordinate constructions can be profitably described in terms of the transformational-generative method of embedding.[1]

Both Liêm (1966) and Cadière (1958) refer to Vietnamese as being governed by certain "laws".  In his preface, Liêm states (1966:xvi):

Vietnamese is an uninflectional and, at least phonologically speaking, monosyllabic language.  That means that there are only two syntactic and morphological devices in Vietnamese:  the use of word order, and the use of function words.

This limited number of grammatical devices in Vietnamese is closely related to and characteristic of the Vietnamese

linguistic behaviour, which would seem to be governed by
two behavioural laws: the law of indeterminacy; and the
law of simplicity.

Liêm's reference to the "law of indeterminacy" and his subse-
quent illustration of it are reminiscent of what Cadière also affirmed
as the "loi d'indétermination" for Vietnamese.  Liêm cites (1966:
xvii)  as an example of this law the fact that the sentence,
<u>nó</u>    <u>về</u>       <u>tôi</u>   <u>về</u>       + falling intonation, "can be understood
he    return    I    return
in different ways according to the larger linguistic matrices."  It
could be understood to mean variously:

If he goes home, I'll go home too.
When he goes home, I'll go home too.
Every time he goes home, I go home too.
Because he is going home, I am going home too.
Because he went home, I went home too.
Since he might be going home, I am going home now, etc.

The term "law of indeterminacy" suggests imprecision and raises
the question whether the syntactic patterns of Vietnamese can be des-
cribed in a formal way, particularly in areas where ambiguity exists.
We wish to show in this paper that by distinguishing underlying from
surface structure following Chomsky (1965), it can be shown how var-
ious ambiguous readings relate to each other in terms of their unam-
biguous underlying structures.  It can also be shown how these unam-
biguous underlying structures converge to become ambiguous through
the application of certain transformations.

Liêm observes that Vietnamese employs only word order and
function words to indicate its grammatical patterns.  What makes
this situation of particular interest is the fact that the function
words may frequently be deleted and the word order changed with a
resulting structural ambiguity.  Transformational theory affirms
that a native hearer, however, understands an utterance because he
is able to relate the utterance to its proper underlying representation.
In other words, he is able in terms of the context to replace the
deleted grammatical function words and make adjustments of word
order.

It shouid be noted that a hearer is usually unaware that ambiguity
exists since he understands only the  meaning which the context sug-
gests.  Or, he may not realize that some sentences are ambiguous
because one of the possible readings is false or anomalous.

Another law which is said to govern Vietnamese is called by
Liêm the "law of simplicity"  and by Cadière the "loi de succession".
"The Vietnamese language," Liêm states (1966:xviii), "is said to be

governed by the law of simplicity in the sense it tends to use simple constructions, and compound constructions, rather than to use complex constructions."

In illustration of this, sentence 1) below is said by Liêm to be composed of two coordinate parts joined loosely by an "Independent Clause Coordinator," thì.

1) <u>Nó</u> <u>về</u>   <u>nhà</u>    thì (nó)  <u>gặp</u>   <u>một</u>  <u>người</u> <u>khách</u>
   <u>he</u> <u>return</u> <u>house</u>    he   meet   one   person <u>visitor</u>
(When he returned home,   he met a visitor.)

In contrast to this, sentence 2) would be said to be complex because the first phrase is introduced by an "Extra Dependent Introducer," khi.

2) <u>Khi</u> <u>nó</u>  <u>về nhà</u>      thì  (nó) <u>gặp</u>  <u>một</u> <u>người</u> <u>khách</u>
   <u>when</u> <u>he</u> <u>return house</u>    he  meet  one  person <u>visitor</u>
(When he returned home,      he met a visitor.)

, Several problems are apparent in this treatment. First, if thì is an "Independent Clause Coordinator," its presence in the second sentence is anomalous. Second, as the translations given for the two sentences indicate, the meaning of the sentences is identical. That is, whatever relationship exists between the two parts in the second sentence also exists in the first. Third, the first sentence could be ambiguously understood to mean also 'If he returns (returned ...'; 'Since he returns (returned)...'; 'Because he returns (returned) ...'; etc. So that it would seem to be helpful to be able to treat both sentences in the same way and to speak of the first as having the introducer deleted. It is the purpose of this paper to show that treating these subordinate constructions as embedded sentences in underlying structure results in a more satisfactory description of their relationship to the main clause or matrix sentence.

2. Base Component.   This section will present rules for generating sentences in Vietnamese. The rules are not complete in that they will not generate all possible sentences in Vietnamese. They are, however, the rules necessary to produce the kinds of sentences discussed in this paper. Following them, some subcategories of grammatical classes will be noted.
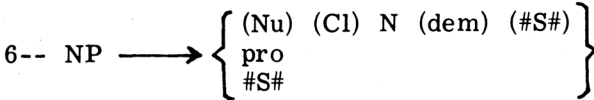
1-- #S#  ⟶ NP + PP

The sentence (#S#) in Vietnamese is said to be composed of an obligatory noun phrase (NP) and an obligatory predicate phrase (PP). The noun phrase subject very frequently is deleted in surface structure, but it is always present in underlying structure.[2]

2-- PP  ⟶ (Cond) (Caus) (tns) VP (T) (L)[3]

The predicate phrase (PP) consists of the verb phrase (VP) and

those optional elements which, although they seem to be in some way related to the verb, do not subcategorize the verb in any way. These elements are condition (Cond), cause (Caus), tense (tns), time (T), and location (L). An example of sentences containing all elements of the predicate phrase is: Nếu mà chúng tôi hết bánh mì
                                    if      we      all gone bread

tôi sẽ    mua   ở   bên   chợ   ngày mai bởi vì có   khách
I fut.    buy   at  beside market tomorrow because have company

đến.    'If we are out of bread, I will buy some at the market to-
come
morrow because company is coming.'

$$3\text{-- VP} \longrightarrow \left\{ \begin{array}{l} \text{V ( (cho) NP) (NP) (Man)} \left\{ \begin{array}{l} \text{Purp} \\ \text{Vb Comp} \end{array} \right\} \\ \underline{\text{là}} + \text{NP} \end{array} \right\}$$

One kind of verb phrase consists of an obligatory verb (V) with all other elements optional. These optional elements include a noun phrase indirect object which may or may not be preceded by cho, a noun phrase direct object, manner (Man), and either purpose (Purp) or verbal complement (Vb Comp). The other kind of verb phrase, which is equational in nature, consists of là plus a noun phrase. [4] The following sentences illustrate the verb phrase first with purpose, then with verbal complement, then with là plus noun phrase:

Tôi sẽ    sẵn lòng   đưa con   cái áo    để mà con đi
I will   willingly  give child Cl. dress so that child go

học     không trễ.
study   not   late     'I will willingly give you your dress so
you won't be late to school.

Tôi hân hạnh để mà thấy ông.
I happy      to   see grandfather   'I am happy to see you.'

Ông            ấy   là bác-sĩ.
grandfather    that is doctor       'That man is a doctor.'

4--   Cond ⟶ nếu mà + #S#

5--   Caus ⟶ bởi vì + #S#

Condition (Cond) is composed of nếu mà plus a sentence and Cause (Caus) of bởi vì plus a sentence.

Nếu mà anh           tôi đi lính   (thì) mẹ   tôi sẽ khóc.
if        older brother  my go soldier      mother my will cry
'If my older brother goes into the army, my mother will cry.'

Bởi vì    người ta    nói   không thật (thì) tôi không tin.
because   they        speak not   true       I   not   believe
'Because they don't tell the truth, I don't believe them.'

$$6\text{-- } NP \longrightarrow \left\{ \begin{array}{l} \text{(Nu) (Cl) N (dem) (\#S\#)} \\ \text{pro} \\ \text{\#S\#} \end{array} \right\}$$

The noun phrase consists, in one form, of an obligatory noun preceded by an optional numeral (Nu) and/or classifier (Cl) and followed by an optional demonstrative (dem) and/or sentence. It may, in other forms, be composed of a pronoun (pro) or a sentence in factive construction.

| Những | người | cảnh sắt | đó | người | mà | đã | giúp | tôi |
|-------|-------|----------|-----|-------|-----|------|------|-----|
| Plural | Cl. | policeman | dem | Cl | | past | help | me |

| (thì) | siêng | lắm. | |
|-------|-------|------|
| | hardworking | very | 'Those policemen who helped me are |

very hardworking.'

| Nó | cũng | ăn | xoài. | |
|-----|------|-----|-------|
| they | also | eat | mango | 'They also eat mangos.' |

| Ông | ấy | thương | con | $\left\{ \begin{array}{l} \text{là} \\ \text{thì} \end{array} \right\}$ | dễ hiểu. |
|-----|-----|--------|-----|-----|--------|
| grandfather | dem | love | child | | easy understand |

'That that man loves his child is easy to understand.'

The major categories in Vietnamese, that is, nouns and verbs, may be said to comprise smaller subcategories. Nouns are subcategorized according to the classifiers they accept or by their refusal to accept classifiers (see Hoa 1957).

Verbs are subcategorized in a number of ways. They may be subcategorized as to those which take an object (such as mua 'to buy'); those which do not take an object (such as ngủ 'to sleep'); and those which may either accept or refuse an object (such as làm 'to make, to work'). Those which take an object are further subcategorized as to those which may take an indirect object (such as đưa 'to give'); and those which may not take an indirect object (such as thấy 'to see').
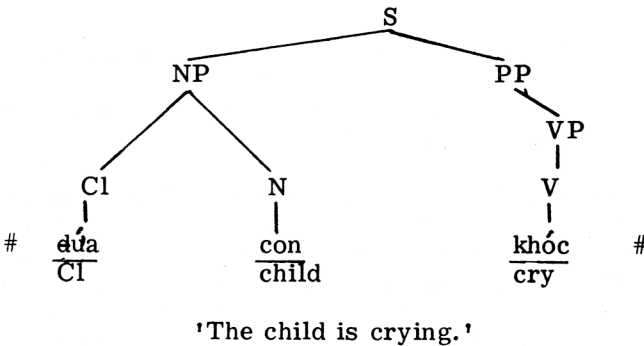
In addition to their ability to occur with direct and indirect objects, verbs are subcategorized by the other elements within the verb phrase. There are those which take verbal complement but not purpose (such as ngạc nhiên 'to be surprised'); those which take purpose but not verbal complement (such as cho 'to give'); and a few which may take either purpose or verbal complement (such as trễ 'to be late'). They are also subcategorized according to whether they can take manner (as, for example, đi 'to go'); or cannot take manner (as, for example, vui 'to be happy'). Of those which do not take manner, some may take a factive construction (such as tốt 'to be good') while others may not (such as đẹp 'to be beautiful'). [5]

3.  **Relative Clause Ambiguity.**    The relative clause in Vietnamese may
may be defined as a sentence embedded within the noun phrase.  That
is, its presence is manifested in deep structure by the inclusion of the
optional element (#S#) in the rule NP ——➤ (Nu) (Cl) N (dem) (#S#).
Embedding may occur in any position where the NP may occur (i.e.
subject, direct object, indirect object, etc.).  The only condition
required for embedding is that a noun in the matrix sentence be held
in common with a noun in the embedded sentence.

To illustrate the way in which relative clause formation is ac-
counted for here, we will give a representation of the deep structures
of sentences 1) and 2) below and will use these deep structures to il-
lustrate various possibilities for the embedding of the relative clause.

1) Đứa   con   khóc.        'The child is crying.'
   ‾CI‾   child  cry

2) Đứa   con   trẽ.         'The child is late.'
   ‾CI‾   child  late

Underlying Tree A:  Sentence 1)

```
                              S
                   _____
                 NP                         PP
               /    \                         \
             Cl      N                         VP
             |       |                          |
   #        đứa      con                         V
             ‾CI‾    ‾child‾                     |
                                              khóc      #
                                              ‾cry‾
```

'The child is crying.'

Underlying Tree B:  Sentence 2)

```
                              S
                    _____
                 NP                         PP
               /    \                         |
             Cl      N                        VP
             |       |                         |
   #        đứa      con                        V
             ‾CI‾    ‾child‾                    |
                                             trẽ   #
                                             ‾late‾
```
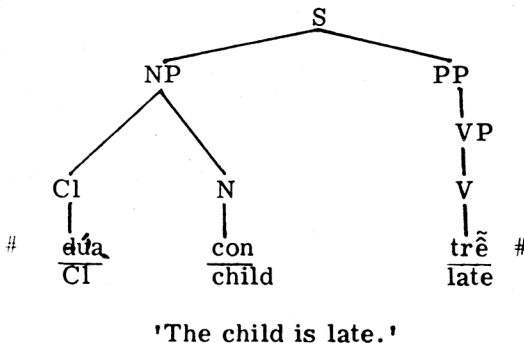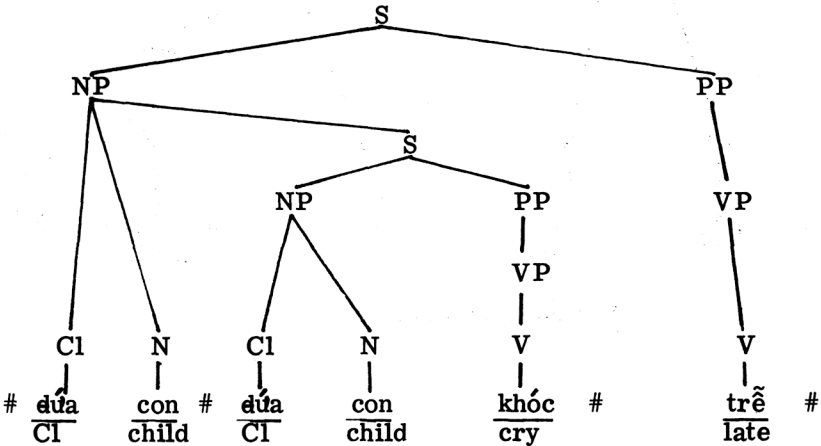
'The child is late.'

Underlying Tree C:  Embedding of 2) into 1)
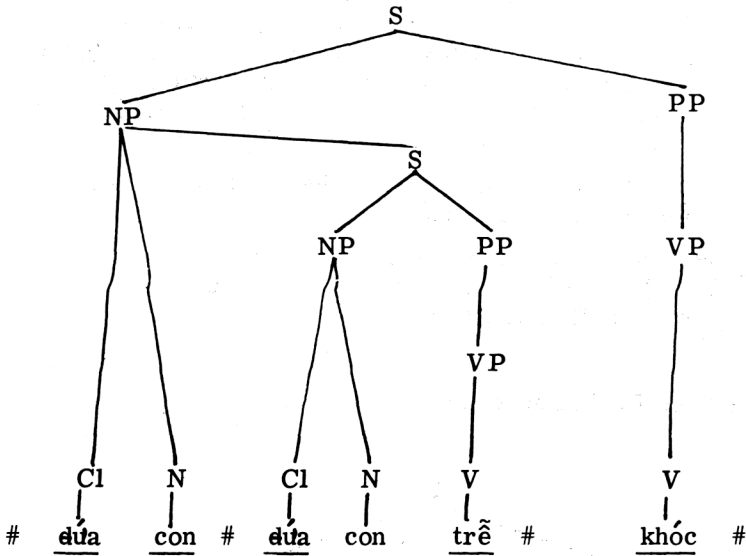


'The child who is late is crying.'
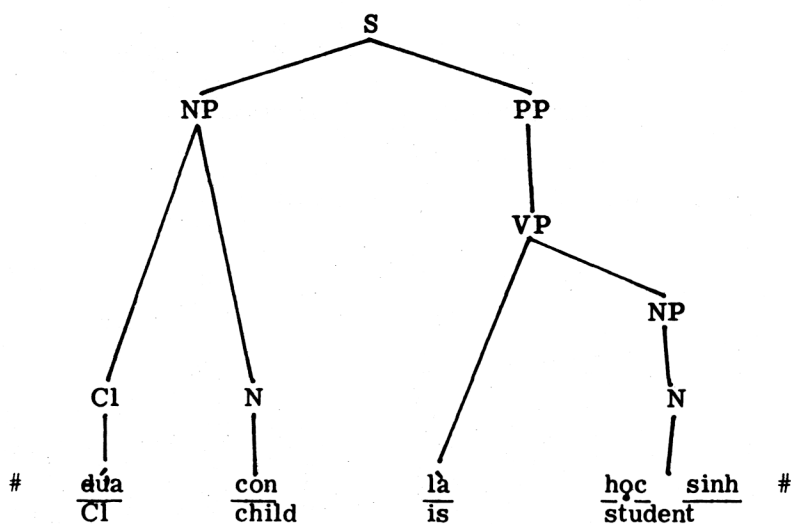
Underlying Tree D:  Embedding of 1) into 2)



'The child who is crying is late.'

The preceding trees illustrate how two sentences can be embedded when the noun subject of the intransitive verb sentence is shared by the noun subject of the stative verb sentence. The same operation may also be performed with other types of sentences in which shared nouns are not in subject position. Example 3) below has a subject noun which is identical to the indirect object noun of example 4). Trees G and H below indicate how each of these sentences may be embedded as a relative clause within the other.

3) Đứa con   là   ngừơi học sinh.   'The child is a student.'
   Cl  child  is   Cl   student

4) Tôi sẽ  cho  đứa  con  một  cái  aó.
   I   fut  give  Cl   child  one  Cl   dress
   'I will give the child a dress.'

**Underlying Tree E: Sentence 3)**



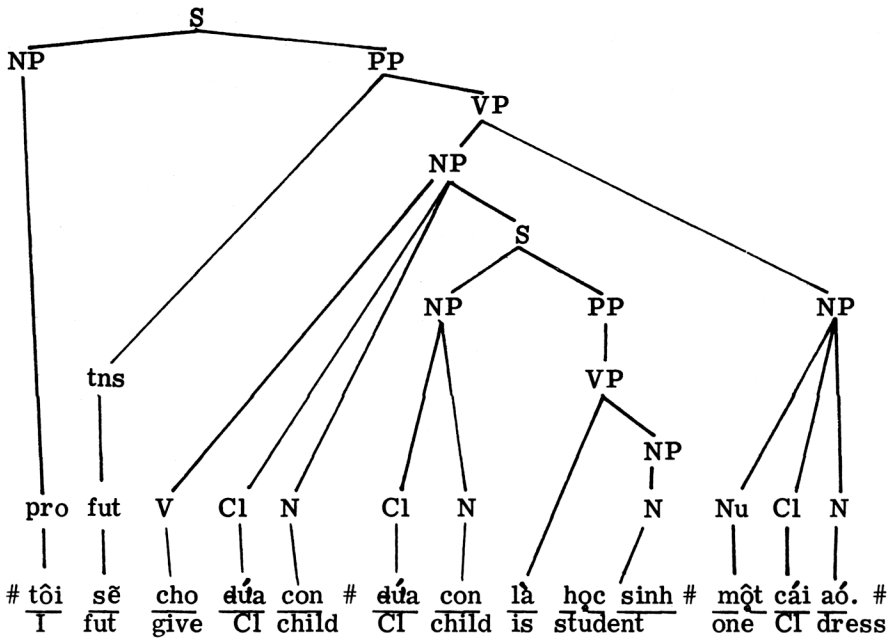'The child is a student.'

Underlying Tree F: Sentence 4)



| # | tôi | sẽ | cho | đứa | con | một | cái | aó | # |
|---|-----|-----|------|-----|------|-----|-----|------|---|
| | I | fut | give | Cl | child | one | Cl | dress | |
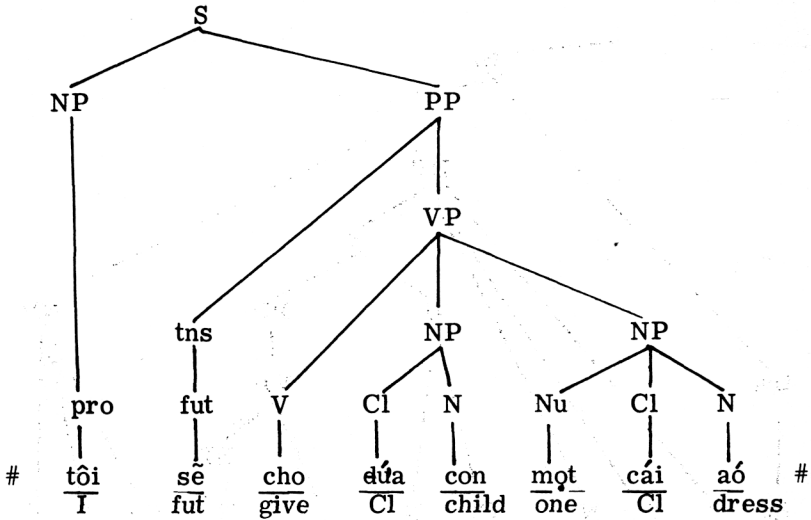
'I will give the child a dress.'

Underlying Tree G: Embedding of 4) into 3)



| # | đứa | con | # | tôi | sẽ | cho | đứa | con | một | cái | aó | # | là | học | sinh | # |
|---|-----|------|---|-----|-----|------|-----|------|-----|-----|------|---|-----|------|------|---|
| | Cl | child | | I | fut | give | Cl | child | one | Cl | dress | | is | | student | |
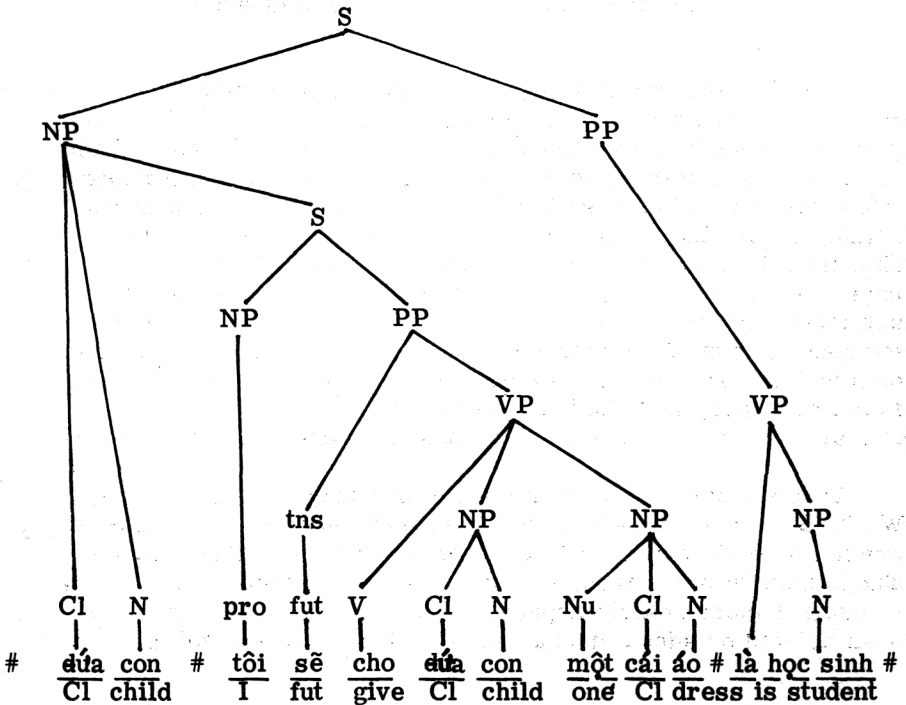
'The child to whom I will give a dress is a student.'

Underlying Tree H:  Embedding of 3) into 4)

```
                         S
        NP                          PP
         |                            VP
         |                    NP
         |                          S
         |               NP    PP      NP
        tns                     VP
         |                        NP
  pro   fut   V   Cl  N   Cl  N      N   Nu  Cl  N
   |     |     |   |   |    |   |    /     |   |   |
  # tôi  sẽ  cho  đứa con # đứa con là học sinh # một cái aó. #
    I    fut give  Cl child  Cl child is student    one Cl dress
```

'I will give the child who is a student a dress.'

Only two transformations are obligatory to convert trees G and H to the surface structure required by the phonology.[6] The first transformation removes the second occurrence of the shared noun and replaces it with the word mà. Mà is a grammatical marker of many uses as will be seen in the following section, and it is not readily translatable into English. Perhaps for these reasons Emeneau (1951:206) called it "probably the hardest word in the language to describe accurately." The condition necessary for the application of transformation (1) is that a noun of the matrix sentence and a noun of the embedded sentence with accompanying numeral and demonstratives, if such are present, must be identical. It is not necessary that the two classifiers be identical since there is to a small degree a selection of classifiers used with the same noun.[7]

In this transformation and those following, the symbols Q, U, W, X, Y, Z are variables. That is, they represent segments which are not directly pertinent to the transformation or they may be null. The segments in the transformations are numbered in such a way as to make it more readily apparent to the reader what elements have been deleted or added or changed in order. The symbol $\emptyset$ is to be

read zero.  The material on the left side of the arrow gives the
structural description of segments to which the transformation may
apply.  The structual change is given on the right side of the arrow.

Transformation (1) Obligatory:  Replacement of second N with
mà.

$$\#S\#$$

\# Q (Nu) (Cl) N (dem) [X (Nu) (Cl) N (dem) Y] Z \# $\longrightarrow$
   1  2   3   4   5    6  7    8   9   10   11

1 2 3 4 5 6 Ø 8 + mà Ø 11

Condition:  2 = 7,  4 = 9,  5 = 10;  \#S\# is not dominated by
Cond, Caus, Purp.

Transformation (2) takes classifier + mà and, where they are
not already next to the shared noun of the matrix sentence, moves
them to that position.  This transformation will apply to sentences in
which the shared N within the embedded sentence is in some position
other than subject (see Tree G).  It also removes cho where it occurs
within the indirect object construction.

Transformation (2), Obligatory:  Extraposition of (Cl) N

NP                      \#S\#

\# Q [W N (dem) [X (cho) (Cl) mà Y] Z \# $\longrightarrow$
       1         2    3   4      5

1 Ø 4 + 2 5

Condition:  X contains a verb

The application of these rules to the preceding underlying trees
will produce the following grammatically acceptable sentences in
Vietnamese:

5) Đứa  con   đứa mà khóc trễ.
   Cl   child  Cl      cry late
'The child who is crying is late.'

6) Đứa  con   đứa mà trễ khóc.
   Cl   child  Cl     late cry
'The child who is late is crying.'

7) Đứa con    đứa mà tôi sẽ  cho  một cái áo   là
   Cl   child  Cl    I fut give one  Cl dress is

học sinh.
student

'The child to whom I'm going to give a dress is a student'

8) Tôi sẽ  cho đứa con    đứa mà là học sinh một cái áo.
   I  fut give Cl  child  Cl    is student one Cl dress

'I'm going to give the child who is a student a dress.'

In addition to the obligatory transformations already given, there are other transformations which are optional. These transformations are freely chosen to apply or not to apply to sentences which fulfill the conditions of their descriptions.

Transformation (3) optionally inserts the word thì before the predicate phrase of a matrix sentence or any non-embedded sentence or following condition, cause, or time, where these are sentence initial. It need not apply, but its non-application results in the occurrence of certain ambiguities as will be seen later.

Transformation (3) Optional: Insertion of thì.

$$
\left\{
\begin{array}{l}
\#\left\{\begin{array}{l} T \\ Cond \\ Caus \\ Cond + Caus \end{array}\right\} \quad X \quad \# \\[2em]
\underbrace{\#S\#}_{1} \quad \underbrace{[X \qquad \underset{2}{PP}, Y]}
\end{array}
\right\} \longrightarrow 1 + \underline{thì} \quad 2
$$
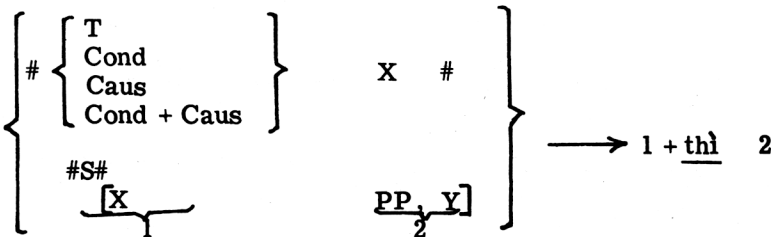
Condition: #S# is not a constituent of another node.

This transformation, if chosen to apply to the preceding trees, would produce sentences such as the following:

9) Đứa con    thì khóc.      'The child is crying.'
   Cl   child      cry

10) Đứa con    thì là học sinh.  'The child is a student.'
    Cl   child      is student

11) Đứa con    đứa mà trễ  thì khóc.  'The child who is late is
    Cl   child  Cl    late     cry       crying.'

12) Đứa con    đứa mà tôi sẽ  cho  một cái áo   thì là
    Cl   child  Cl    I  fut give one  Cl dress     is

học sinh. 'The child to whom I will give a dress is a student.'
student

Transformation (4) optionally deletes Cl or m̀a or both from an embedded sentence where they occur.

Transformation (4) Optional: Deletion of Cl and/or m̀a.

$$\# Q \underbrace{\left[ U \left[ W \underbrace{\text{(Cl)}}_{2} \underbrace{\text{m̀a}}_{3} X\right] \underbrace{Y\right]}_{4} Z \# \right]}_{1} \longrightarrow 1 \ (2) \ (3) \ 4$$
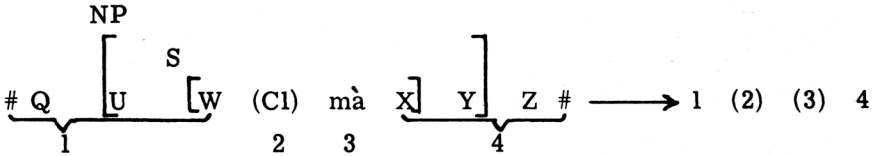
The application of this transformation produces sentences such as:

13) Đứa con    (đứa) (m̀a) khóc (th̀i) trẽ.
    Cl̄ child    Cl̄     cry     late
'The child who is crying is late.'

14) Tôi (th̀i) sẽ cho đứa con    (đứa) (m̀a) l̀a học sinh
    T̄     fut give Cl̄ child    Cl̄     is student

một cái áo.
one Cl̄ dress
'I will give the child who is a student a dress.'

15) Đứa con    (đứa) (m̀a) trẽ (th̀i) khóc.
    Cl̄ child    Cl̄     late     cry
'The child who is late is crying.'

Transformation (5) optionally moves the relative clause to the end of the sentence.

Transformation (5) Optional: Extraposition of relative clause.

$$\# \underbrace{W \left[ X \underbrace{\text{[Y]}}_{2} Z\right]}_{1} \underbrace{Q}_{4} \# \longrightarrow 1 \ \emptyset \ 3 + 2 \ 4$$
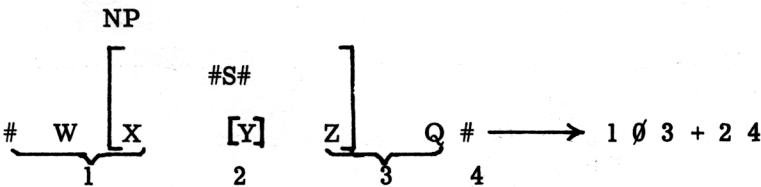
This transformation, if applied, would take sentences 13), 14), and 15) above and make them read:

16) Đứa con    (th̀i) trẽ (đứa) (m̀a) khóc.
    Cl̄ child     late     cry
'The child is late who is crying.'

17) Tôi (th̀i) sẽ cho đứa con một cái áo (đứa)
    T̄     fut give Cl̄ child one Cl̄ dress Cl̄

(mà) là  học sinh.
who is  a student
'I will give the child a dress who is a student.'

18) Đứa con    (thì) khóc (đứa) (mà) trễ.
    Cl  child         cry   Cl       late
'The child is crying who is late.'

Two types of ambiguity may result from the application of the preceding transformations.  The first type is ambiguity of embedding. If one were to select Underlying Tree C and apply to it transforma-tions 1) and 4), the resulting sentence would be: Đứa con    khóc trễ
                                                  Cl  child   cry late
meaning 'The child who is crying is late.'  If, on the other hand, one should select Underlying Tree D and apply to it transformations 1), 4), and 5), the resulting sentence would also be Đứa con    khóc trễ
                                                                                  Cl  child   cry late
but meaning this time 'The child is crying who is late.'  So that, given the form Đứa con    khóc trễ  in isolation, it is impossible to
               Cl  child   cry late
say which of sentences 1) and 2) was the matrix sentence and which the embedded.  And although the total information in both cases is the same, the emphasis is quite different.

The second type of ambiguity, which more strongly affects the meaning of a sentence,was mentioned in the introduction.  It is ambiguity of antecedent.  This is illustrated below.

Underlying Tree I
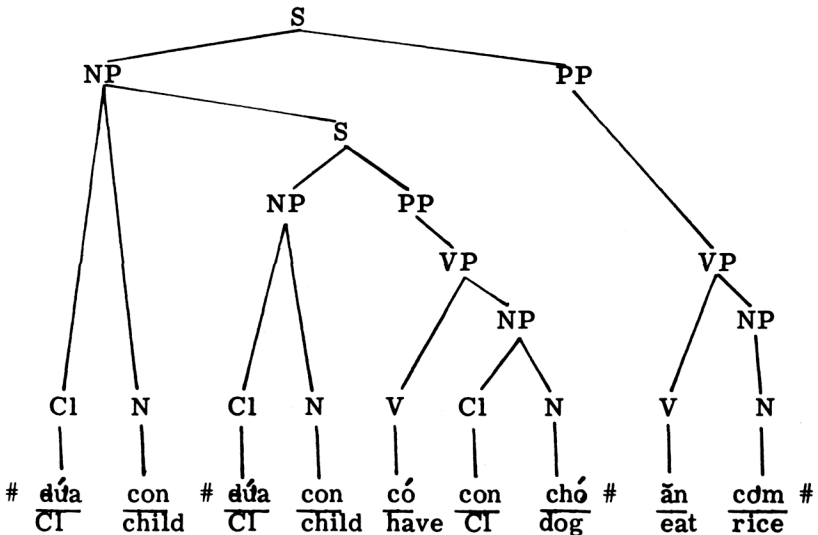


'The child who has a dog is eating rice.'

Underlying Tree J
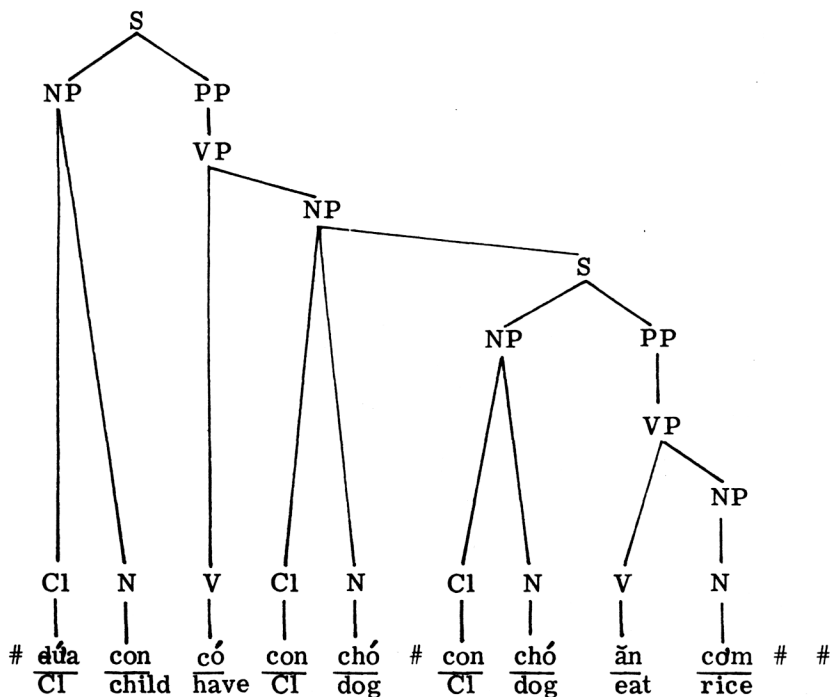


'The child has a dog which is eating rice.'

If one applies transformations 1) and 4) to trees I and J above, deleting both Cl and mà , the sentence Đứa con     có     con chó

CÍ child have CÍ dog

ăn     cơm     results in both cases.  So the sentence could be under -
eat     rice
stood to mean either 'The child who has a dog is eating rice.' or
'The child has a dog which is eating rice.' It could be disambiguated
by placing thỉ before the word ăn as coming from Tree I or by
placing thỉ before  có as coming from Tree J (Transformation 3)).
It can also be disambiguated by replacing Cl and mà deleted by
Transformation 4).

4.  Ambiguity With Other Constructions.    In addition to the am-
biguity which may exist between two possible structural interpreta-
tions of the relative clause as shown previously, the relative clause
may also be ambiguous with certain other constructions.  These
include the verbal complement, purpose, condition, cause, con-
dition plus cause, time, and factive.  This section will show the
underlying representation of each of these constructions and give the
transformations which may apply to them to produce at some point a
reading which is ambiguous with the relative clause.

## 4.1  Verbal Complement.

Underlying Tree K
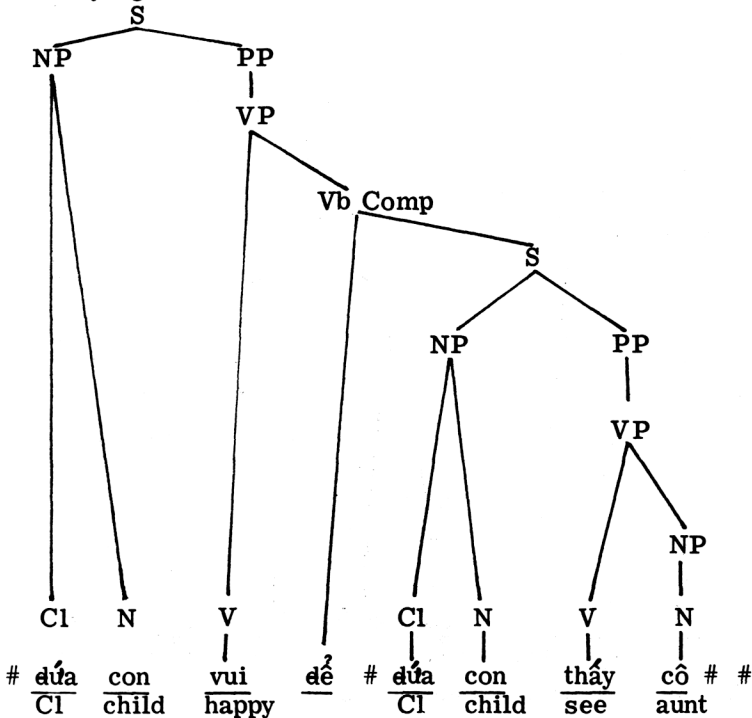


'The child is happy to see his aunt.'

To the underlying tree above, obligatory transformation (1) presented with the Relative Clause will apply to replace the shared noun in the embedded sentence with mà. This produces the combination (Cl) mà. For the verbal complement construction, however, it is also necessary to delete Cl, should this be present. Obligatory transformation (6) does this.

Transformation (6) Obligatory:  Deletion of Cl.
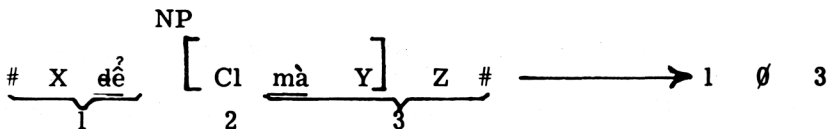


The application of transformation (1) and transformation (6) to Tree K above will produce the following sentence:

19) Đúa con vui đế mà thấy cô.
    Cl   child happy     see aunt
'The child is happy to see his aunt.'

Transformations (9) and (10) are optional and may be applied to delete mà whenever it occurs with nếu or đế and to delete đế when it precedes an embedded sentence. These transformations are numbered to apply after the transformations presented in sections 4.2 and 4.3.

Transformation (9) Optional: Deletion of mà with nếu or đế.

$$\# \ X \ \begin{Bmatrix} \text{nếu} \\ \text{đế} \end{Bmatrix} \quad \text{mà} \quad Y \ \# \quad \longrightarrow \quad 1 \quad \emptyset \quad 3$$
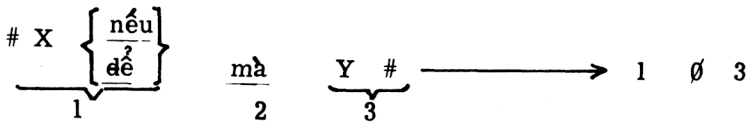
Transformation (10) Optional: Deletion of nếu, đế, bởi vì, khi.

$$\# \ W \ \begin{Bmatrix} \text{nếu} \ (\text{mà}) \\ \text{đế} \\ \text{bởi vì} \\ \text{khi} \end{Bmatrix} \quad \#S\# \quad Z \ \# \quad \longrightarrow \quad 1 \quad \emptyset \quad 3$$
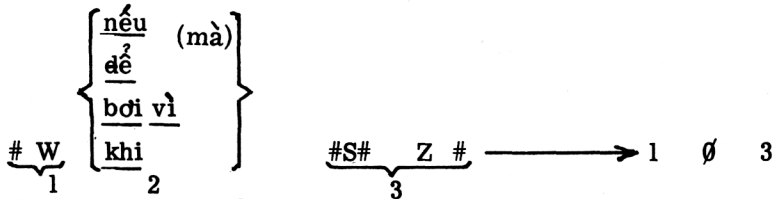
Condition: When 2 is dominated by T, Cond, or Caus, Z may not be null.

After the application of transformations (9) and (10), sentence 19) above may have either đế or mà deleted or both as shown below:

20) Đúa con vui   (đế) (mà) thấy cô.
    Cl   child happy          see aunt
'The child is happy to see his aunt.'

In its minimal form, that is with all optional elements deleted, Underlying Tree K with a verbal complement construction becomes ambiguous with the relative clause construction. The sentence
Đúa con   vui   thấy cô. ,
Cl   child happy  see aunt (sentence 20), could also be understood as having been derived from the embedding of the sentence
Đúa con   vui.
Cl   child happy ('The child is happy.') into the sentence
Đúa con       thấy cô.
Cl   child  see   aunt ('The child sees his aunt.') and the application of transformations (1) and (4). If the sentence were derived in this way, it would mean 'The child who is happy sees his aunt.' It could also be understood as having been derived from the embed-

ding of the sentence Đứa con    thấy cô.
                      C̅l̅  child  see  aunt  ('The child sees his aunt.')
into the sentence Đứa con    vui.

           Cl    child   happy ('The child is happy.') and the
application of transformations (1), (4), and (5). In this case it
would mean 'The child who sees his aunt is happy.'

4.2 <u>Purpose</u>.    The purpose construction has an underlying struc-
ture <u>very similar</u> to that of the verbal complement except that for it
Purp is chosen from the rule expanding the verb phrase (see base
rule 3) instead of Vb Comp.

Underlying Tree L:
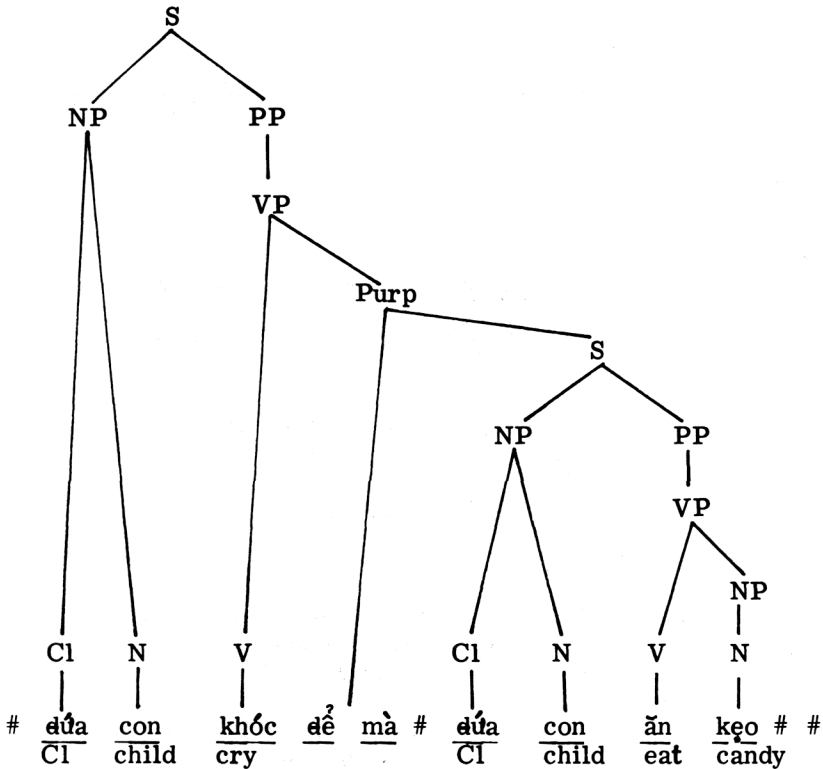


'The child is crying to eat candy.'

No transformations are obligatory to this construction. Of the
transformations already presented, transformation (3) may apply
to the above tree to insert thì before the predicate phrase. So the
sentence Đứa con   (thì)  khóc đế mà đứa con    ăn    kẹo
         C̅l̅ child          cry          C̅l̅ child eat  candy   is a

grammatically acceptable sentence.

Transformation (7), however, will optionally delete the second occurrence of a particular noun phrase within a sentence or replace it with a pronoun.

Transformation (7) Optional:   Deletion of shared NP or replacement with pro

#S#

$$\left[ X \quad NP \quad Y \quad NP \quad Z \right] \longrightarrow 1 \quad 2 \quad 3 \quad \left\{ \begin{array}{c} \emptyset \\ pro \end{array} \right\} \quad 5$$
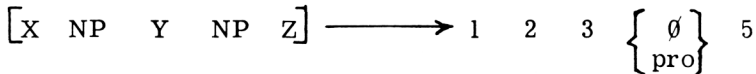
Condition:  2 + 4

Should the noun phrase subject of the embedded sentence not be shared by that of the matrix sentence, transformation (7) will not delete it but allow it to remain, as in the sentence:

Đứa con    khóc đế mà mẹ        cho    kẹo.     'The child is crying
Cl  child   cry        mother give  candy    so that his mother will give him candy.'

Optional transformations (9) and (10) may apply to delete đế or mà or both, so the possible sentences generated with purpose will include:

21)  Đứa con    (thì)  khóc (đế)(mà)(đứa con)    ăn   kẹo.
     Cl  child        cry               Cl  child   eat  candy

     'The child is crying to eat candy.'

22)  Đứa con    (thì)  khóc (đế)(mà)(mình)    ăn   kẹo.
     Cl  child        cry              self     eat  candy

     'The child is crying to eat candy.'

23)  Đứa con    (thi)  khóc (đế)(mà)  mẹ        cho    kẹo.
     Cl  child        cry           mother give  candy

     'The child is crying so that his mother will give him candy.'

Of these sentences, several possible combinations are structurally ambiguous with the relative clause.  The form,

Đứa con    (thì)  khóc (mà)  ăn   kẹo.
Cl  child        cry         eat  candy     of sentence 21) and 22) could

also be derived from the embedding of the sentence

Đứa con    ăn   kẹo     'The child is eating candy' into the sentence
Cl  child  eat  candy

Đứa con    khóc     'The child is crying.'  The form,
Cl  child  cry

$\underline{\underline{\text{Đứa}}}$ $\underline{\text{con}}$   $\underline{\text{khóc}}$ $\underline{\text{ăn}}$ $\underline{\text{kẹo}}$   of sentences 21) and 22) might also be
CI  child   cry   eat  candy
derived from the same embedding or from the reverse embedding.
So that it might mean 'The child is crying to eat candy,' 'The child
who is eating candy is crying,' or 'The child is eating candy who is
crying.'

Sentence 23) could be produced in minimal form by embedding
$\underline{\underline{\text{Mẹ}}}$    $\underline{\text{cho}}$ $\underline{\text{đứa}}$ $\underline{\text{con}}$   $\underline{\text{kẹo}}$   'The mother gave the child candy'
mother give  CI  child  candy

into $\underline{\underline{\text{Đứa}}}$ $\underline{\text{con}}$   $\underline{\text{khóc}}$   'The child is crying'  with the resultant
     CI  child   cry
meaning 'The crying child is the one to whom the mother gave candy.'

Structural ambiguity between the verbal complement construction
and the purpose construction is limited to the occurrence of the small
subcategory of verbs which may occur with both purpose and verbal
complement as noted in section 2.  Within this small subcategory of
verbs which may occur with both constructions structural ambiguity
seems almost always to exist.  Trees M and N illustrate this.

Tree M might pass through all the transformations relevant to it
and come out in surface structure $\underline{\underline{\text{Đứa}}}$ $\underline{\text{con}}$   $\underline{\text{trẽ}}$   (để)(mà) đi bộ
                                   CI  child  late            walk
meaning 'The child was late so as to walk.'  That is, he came late
on purpose so that he could walk.  If the optional (mà) were deleted,
the above sentence would be identical with the sentence produced by
Tree N after it had passed through all the transformations pertinent
to it.  Only in this case the meaning would be 'The child was late in
walking.'  That is, he learned to walk later than most children.  In
its minimal form, the above sentence could also be derived from a
relative clause construction so that it could mean either, 'The child
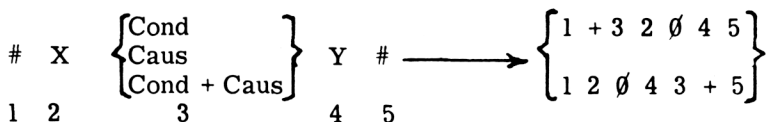who is late is walking,' or 'The child who is walking is late.'

Underlying Tree M:  Purpose

```
                          S
                 ┌────────┴────────┐
               NP                  PP
                                   │
                                   VP
                                   │
                                  Purp
                              ┌────┴──────┐
                                          S
                                    ┌─────┴─────┐
                                   NP           PP
                                ┌──┴──┐
        Cl      N      V                Cl    N      V
    #   đứa    con    trẽ    đế   mà  #  đứa   con   đi bộ  #  #
        ─────  ─────  ────   ──   ──     ────  ─────  ─────
        Cl    child  late                Cl   child  walk
```

'The child was late so as to walk.'

Underlying Tree N:  Verbal complement

```
                        S
                ┌───────┴───────┐
              NP                PP
                                │
                                VP
                                │
                             Vb Comp
                          ┌─────┴──────┐
                                       S
                                  ┌────┴────┐
                                 NP         PP
                              ┌──┴──┐       │
                                            VP
                                            │
        Cl      N      V              Cl    N      V
    #   đứa    con    trẽ    đế    #  đứa   con   đi bộ  #  #
        ─────  ─────  ────   ──       ────  ─────  ─────
        Cl    child  late             Cl   child  walk
```

'The child was late in walking.'

**4.3  Condition.**

**Underlying Tree O**



'If the child is late he will cry.'
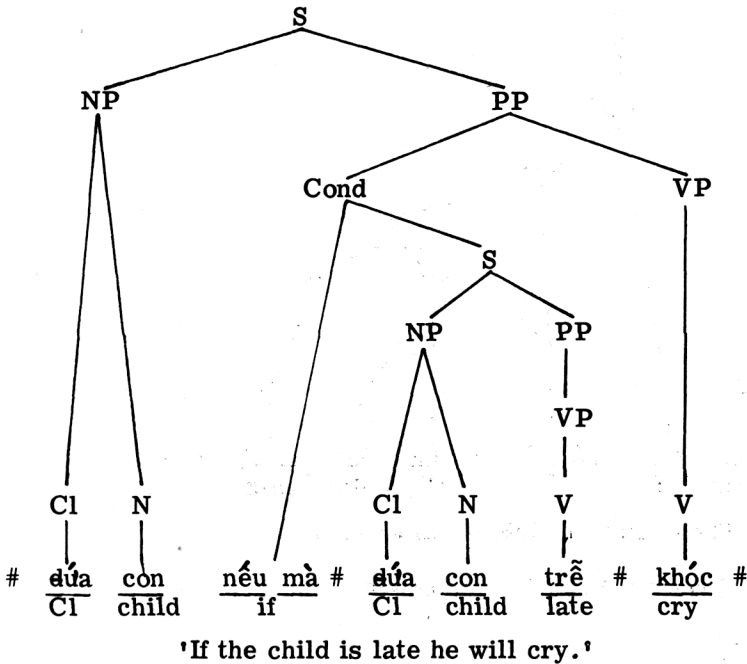
No transformations are obligatory in converting Tree O to sur-
face structure.  So, the sentence Đứa con   nếu mà đứa con    trễ
                     Cl  child   if   Cl  child late
khóc 'If the child is late he will cry.'  is grammatically acceptable
cry
in Vietnamese.  There are, however, several optional transforma-
tions which may apply to produce sentences which are more commonly
used.  Transformation (3) may apply to insert thì before the pre-
dicate phrase of the matrix sentence.  Transformation (7) will
optionally delete the second occurrence of đứa con  or replace it
                                    Cl  child
with a pronoun.  A shared noun will not always be present, however
as in the sentence Đứa  con   nếu mà mẹ       đánh   em
                   Cl  child   if  mother spank younger-brother
(thì) khóc 'If his mother spanks his younger-brother the child will
     cry
cry.'  Transformation (8) will optionally move the part of the sent-
ence dominated by condition, cause, or both to either the beginning
or the end of the sentence.

Transformation (8) Optional:  Extraposition of Cond, Caus, or Cond
                                                + Caus

$$
\#\ \ X\ \ \begin{Bmatrix} \text{Cond} \\ \text{Caus} \\ \text{Cond + Caus} \end{Bmatrix}\ \ Y\ \ \#\ \ \longrightarrow\ \ \begin{Bmatrix} 1 + 3\ 2\ \emptyset\ 4\ 5 \\ 1\ 2\ \emptyset\ 4\ 3 + 5 \end{Bmatrix}
$$

$$
1\ \ 2\qquad\qquad\ \ 3\qquad\quad 4\quad 5
$$

If transformation (8) has operated to move Cond, Caus, or Cond +
Caus to the front of the sentence, transformation (3) may optionally
insert thì following it.  If transformation (8) has operated to move
Cond, Caus, or Cond + Caus to the end of the sentence, transformation
(10), which deletes grammatical markers such as nếu, will not allow
these to be deleted in this position.  Mà however, may be deleted by
transformation (9) in whatever position the construction occurs.

    The following sentences are illustrative of those containing
condition:

  24)  Đứa con    (nếu)(mà)  trễ  (thì)  (nó)  khóc.
       ‾C‾l̅  child      if     late        he   cry

       'If the child is late he will cry.'

  25)  (Nếu)(mà)  đứa con    trễ  (thì)(đứa con)    khóc.
           if     ‾C̅l̅  child late        ‾C̅l̅  child    cry

       'If the child is late he will cry.'

  26)  Đứa con    khóc nếu  (mà)(nó)   trễ.
       ‾C̅l̅  child   cry    if    he    late

       'If the child is late he will cry.'

  27)  (Nếu)(mà)  mẹ      đánh  em             (thì)  đứa con  khóc.
           if     mother spank younger-brother         ‾C̅l̅  child cry

       'If his mother spanks his younger brother, the child will cry.'

  28)  Đứa con    khóc nếu  (mà)  mẹ      đánh  em.
       ‾C̅l̅  child   cry    if     mother spank younger-brother

       'If his mother spanks his younger brother, the .child will cry.'

    Sentence 24) above illustrates a number of possible ambiguities.
If, from that sentence, nếu and nó are omitted leaving thì and either
taking or leaving mà, the sentence could be understood as being de-
rived from Tree D by the application of transformations(1), (3), and
(4).  Its meaning would be 'The child who is late is crying.'  If all
deletable items are omitted from sentence 24), it could be under-
stood as being derived from Tree D by the application of transfor-
mations (1) and (4) with the same meaning as was just noted.  Or it
could be understood as being derived from Tree C by the application
of transformations (1), (4) and (5) with the meaning 'The child is late

who is crying⁹; from Tree M (if đi bộ is replaced by khóc) by the
                                    walk                    cry
application of transformations (7), (9), and (10) with the meaning
⁹The child is late (on purpose) so as to cry⁹; or from Tree N (also
with đi bộ replaced by khóc) by the application of transformations
(1), (6), (9), and (10) with the meaning ⁹The child is late in crying.⁹

## 4.4  Cause.

Underlying Tree P
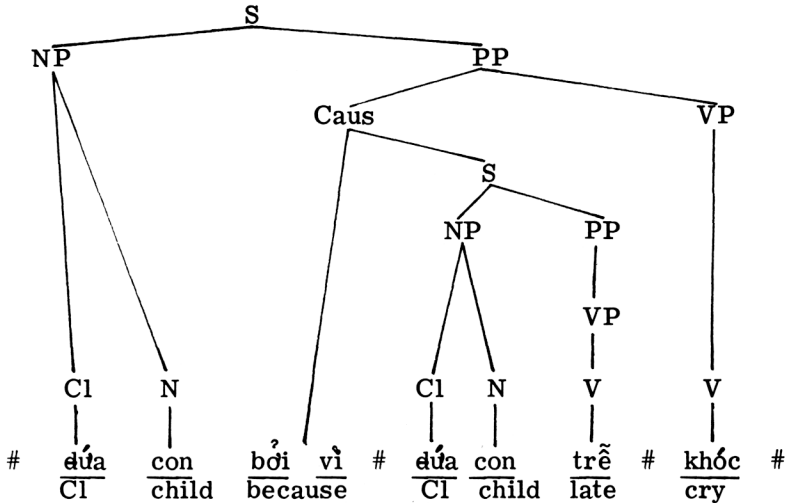
⁹The child is crying because he's late.⁹

A sentence containing cause is very similar in underlying struc-
ture to the conditional sentence.  It is also similar to the conditional
sentence in the transformations which it may undergo.  Like the con-
ditional sentence, the causal sentence requires no transformations to
convert it to surface structure.  The sentence Đứa con    bởi vì đứa
                                              Cl  child  because Cl
con  trẽ khóc  ⁹The child is crying because he's late⁹ is gram-
child late cry
matically acceptable.

To underlying tree P, however, several optional transformations
may apply.  Transformation (7) may delete the shared noun phrase
or replace it with a pronoun.  Transformation (7) will not apply,
however, where no shared noun is present as, for example in the
sentence  Đứa con    bởi vì  con chó  chết khóc  ⁹The child is
          Cl  child because Cl  dog  die  cry
crying because the dog died.⁹   Transformation (10) will optionally
delete bởi vì if transformation (8) has not moved Caus to the end of

the sentence. If transformation (8) has moved Caus to the beginning of the sentence, transformation (3) may optionally insert thì to follow Caus. It may, in any case, insert thì before the predicate of the matrix sentence.

The following sentences, then, may be generated from the underlying tree containing cause:

29) (Bởi vì) đứa con    trẽ (thì) (đứa con)    khóc.
    Because CI  child  late        CI  child   cry

   'The child is crying because he is late.'

30) (Bởi vì) đứa con    trẽ (đứa con) (thì)    khóc.
    Because CI  child  late  CI  child         cry

   'The child is crying because he is late.'

31) Đứa con    (bởi vì)  (đứa con)  trẽ (thì) khóc.
    CI  child  because   CI  child  late      cry

   'The child is crying because he is late.'

32) Đứa con  (thì) khóc   bởi vì  (đứa con)  trẽ.
    CI  child       cry   because CI  child  late

   'The child is crying because he is late.'

33) (Bởi vì) con chó chết (thì) đứa con    khóc.
    Because CI  dog die        CI  child   cry

   'The child is crying because the dog died.'

34) Đứa con  (thì) khóc bởi vì  con chó chết.
    CI  child       cry  because CI  dog die

   'The child is crying because the dog died.'

It can easily be seen that when the causal particle, bởi vì, is deleted, the causal sentence is identical with the conditional sentence when its particle, nếu mà, is deleted and is thus ambiguous with it. In its minimal form in sentences 29), 30), and 31), with all optional items deleted, the causal may be ambiguous with relative clause, condition, purpose, and verbal complement. This was demonstrated for this particular sentence in Sec. 4.3. The vocabulary in the illustrative sentences has been restricted for ease in reading and presentation, but the same results could also be shown from other sentences.

4.5 Condition + Cause.    As may be noted in the phrase structure rules, it is possible in Vietnamese to have a sentence containing both condition and cause. This might be demonstrated by the following underlying tree.
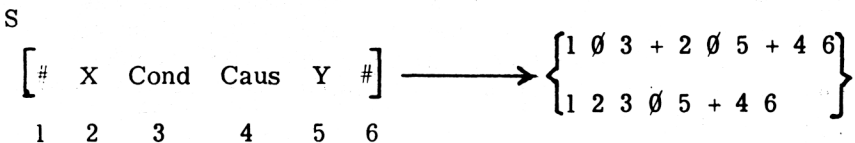
**Underlying Tree Q**



```
#tôi  nếu  mà#khách  đến#bởi vì#họ  sẽ  muốn  bánh mì#sẽ  mua  bánh mì#
 I    if -company -come -because -they -fut -want -bread-fut -buy -bread
```
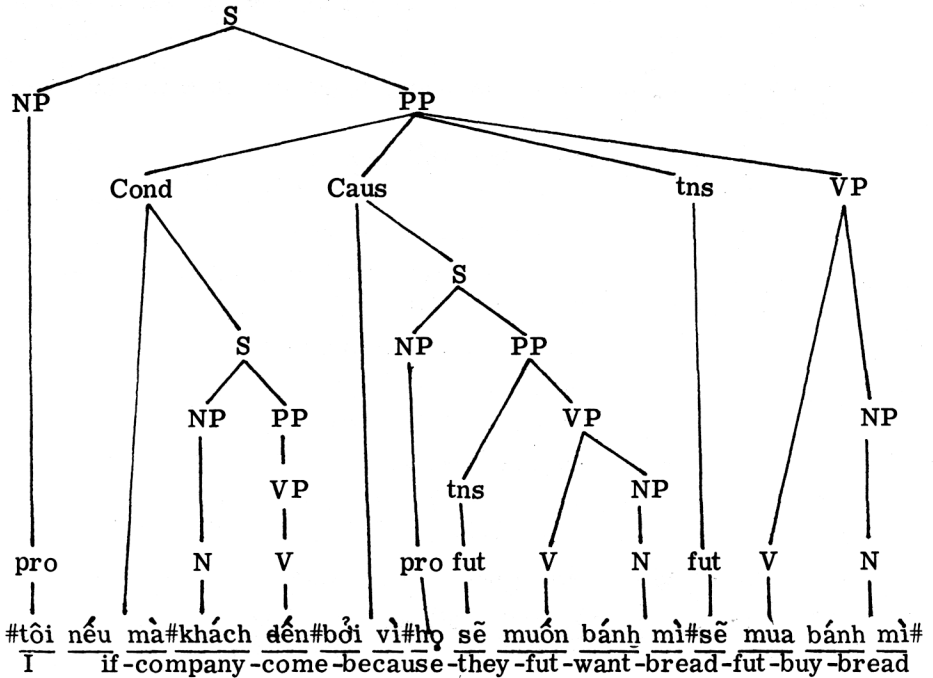
'I will buy bread if company comes because they will want it.'

The transformations given in the preceding discussions of condition and cause will also apply to this construction to optionally delete the second occurrence of bánh mì, to add thì, to move Cond + Caus to the beginning or end of the sentence, and to delete the condition and cause markers. Transformation (11) gives further possibilities for ordering of this double construction.

Transformation (11) Optional:  Extraposition of Cond + Caus

$$
S\begin{bmatrix} \# & X & Cond & Caus & Y & \# \\ 1 & 2 & 3 & 4 & 5 & 6 \end{bmatrix} \longrightarrow \begin{Bmatrix} 1\ \emptyset\ 3 + 2\ \emptyset\ 5 + 4\ 6 \\ 1\ 2\ 3\ \emptyset\ 5 + 4\ 6 \end{Bmatrix}
$$

The following sentences will serve to illustrate this construction:

35) (Nếu) (mà)  khách  đến  (bởi vì)  họ   sẽ   muốn  bánh mì
    ____  If    company come  because  they  fut  want  bread
    tôi sẽ   mua  (bánh mì).
    I   fut  buy   bread

'If company comes I will buy bread because they will want it.'

36) Tôi (nếu)(mà) khách   đến  sẽ   mua bánh mì bởi vì
    I      if      company come fut  buy  bread     because
họ    sẽ    muốn   (bánh mì).
they  fut   want     bread

'If company comes I will buy bread because they will want it.'

37) (Nếu)(mà) khách   đến  tôi sẽ   mua bánh   mì  bởi vì
    If      company come I  fut   buy  bread     because
họ    sẽ    muốn   (bánh mì).
they  fut   want     bread

'If company comes I will buy bread because they will want it.'

38) Tôi sẽ   mua bánh mì nếu mà       khách   đến bởi vì
    I  fut   buy  bread      if        company  come because
họ    sẽ    muốn (bánh mì).
they  fut   want   bread

'If company comes I will buy bread because they will want it.'

It is possible for the two sentences embedded in the condition and
cause nodes to be identical as in trees R and S. And it is in this
case that structural ambiguity with the relative clause is likely to
arise.

Underlying Tree R
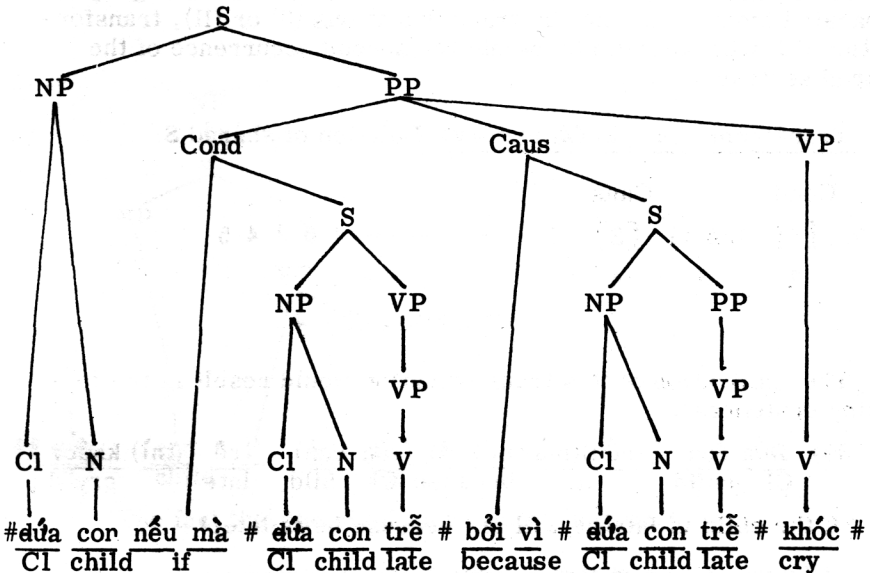


'If the child is late he will cry because he is late.'

**Underlying Tree S**

S

NP                                    PP

Cond                    Caus

S                              S

NP      PP              NP      PP              VP

VP              VP  tns            NP      NP

pro        N    dem  V        N    dem  V  fut  V    N   dem  Cl  N

#tôi nếu mà#người đó nghèo#bởi vì#người đó nghèo#sẽ cho người đó cái áo#
I-if-person-that-poor-because-person-that-poor-fut-give-person-that-Cl-dress

'If that person is poor I will give him a shirt because he is poor.'
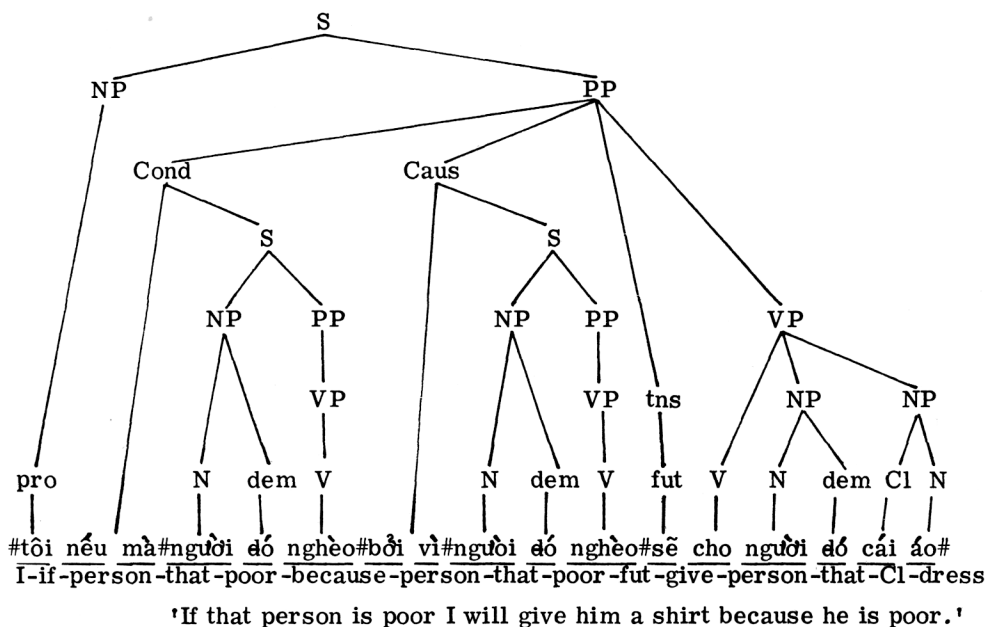
The transformations noted for tree Q will also apply to trees R and S. If, however, the condition and cause constructions are not separated from each other by transformations (8) or (11), transformation (12) will obligatorily delete the second occurrence of the shared sentence.

<u>Transformation</u> (12) <u>Obligatory</u>: Deletion of shared S

Cond                Caus

\# X [S] bởi vì [S] Y \# ⟶ 1 ∅ 3 4 5

1    2    3    4    5

Condition: 2 = 4

The application of this transformation would result in the following sentences:

39) Đứa con    (nếu)(mà)(bởi vì) (đứa con)    trễ  (thì) khóc.
    Cl   child         if    because  Cl   child   late       cry

'If the child is late he will cry because he is late.'

40) (Nếu)(mà)(bởi vì) đứa con  trễ (thì)(đứa con)   khóc.
       If   because  CI  child  late        CI  child       cry

'If the child is late he will cry because he is late.'

41) Đứa con  (thì) khóc nếu mà bởi vì  (đứa con)   trễ.
     CI  child        cry   if  because  CI  child  late

'If the child is late he will cry because he is late.'

42) (Nếu)(mà)(bởi vì)  người đó nghèo  (thì) tôi  sẽ   cho
       If   because  person dem poor        I  fut  give
(người   đó)   cái áo.
 person that   CI  shirt

'If that person is poor I will give her a dress because she is poor.'

Since, according to my informant, the grammatical markers
nếu mà and bởi vì in this construction may be deleted (see transfor-
mations (9) and (10), the range of ambiguities for this construction
with tree R would be the same as that given for trees O and P (Sec.
4.3). That is, it could become ambiguous in its minimal form with
relative clause, purpose, verbal complement, simple condition, or
simple cause. Tree S could be ambiguous with all of these except
verbal complement since the verb nghèo does not occur with verbal
complement.

4.6 Factive.

Underlying Tree T
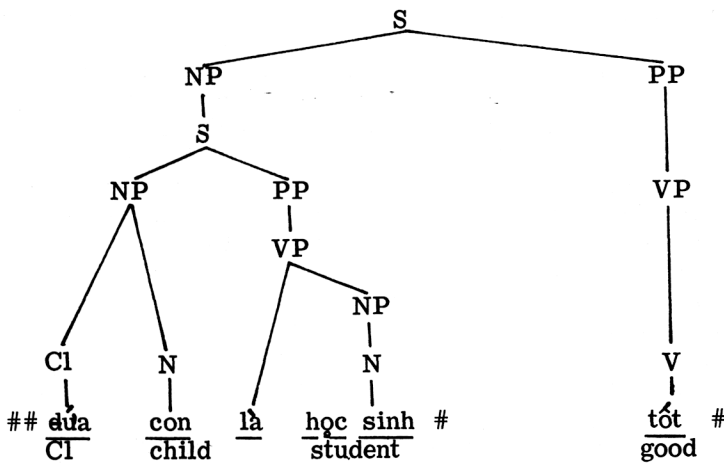


'The fact that the child is a student is good.'

The factive construction is limited in that it may occur with only
a small number of verbs such as tốt 'good,' xấu 'bad,' khó 'dif-

ficult,⁹ or dễ ⁹easy⁹ plus a verbal complement, etc. No restric-
tions, however, have been noted concerning the sentence occuring as
the representation of NP except that imperatives or question are dis-
allowed.

No transformations are required to convert underlying tree T to
surface structure. The sentence, Đứa con   là học sinh tốt,   is
                                  Cl   child   student  good
grammatically acceptable. Transformation (3) may be applied to
place thì before the verb tốt.

In some instances the sentence manifesting the noun phrase
subject of the matrix sentence might undergo obligatory transforma-
tions. The equational sentence occurring here as the noun phrase
undergoes no obligatory transformations, but it may have là deleted
by optional transformation (13).

Transformation (13) Optional: Deletion of là

\# X là Y \# ——————————————→ 1 2 ∅ 4 5
1 2 3  4 5

Condition: 2 and 4 may not contain \#.

In surface structure, tree T should produce the sentence:

43) Đứa con   (là)   học sinh   (thì)   tốt.
    Cl   child        student          good

⁹The fact that the child is a student is good.⁹

This sentence, in its complete form is ambiguous with a sent-
ence containing relative clause in which the Cl and mà have been
deleted (⁹The child who is a student is good⁹). It is also ambiguous
with a sentence containing condition (⁹If the child is a student he is
good⁹); cause (⁹Because the child is a student he is good⁹); condi-
tion plus cause (⁹If the child is a student he is good because he is a
student⁹); or purpose (⁹The child is a student so that he will be good⁹).

Should thì be omitted from sentence 43), three possible relative
clause constructions could be understood: 1) ⁹The child who is a
student is good.⁹ 2) ⁹The child is a good student.⁹ (literally ⁹a
student which is good⁹) 3) ⁹The child who is good is a student.⁹

4.7 Time.   A sentence containing a time construction may also be
ambiguous with several of the constructions already presented.
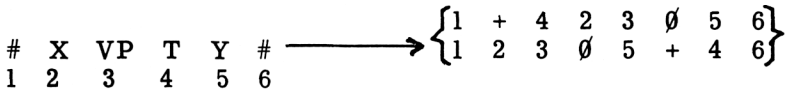
Underlying Tree U
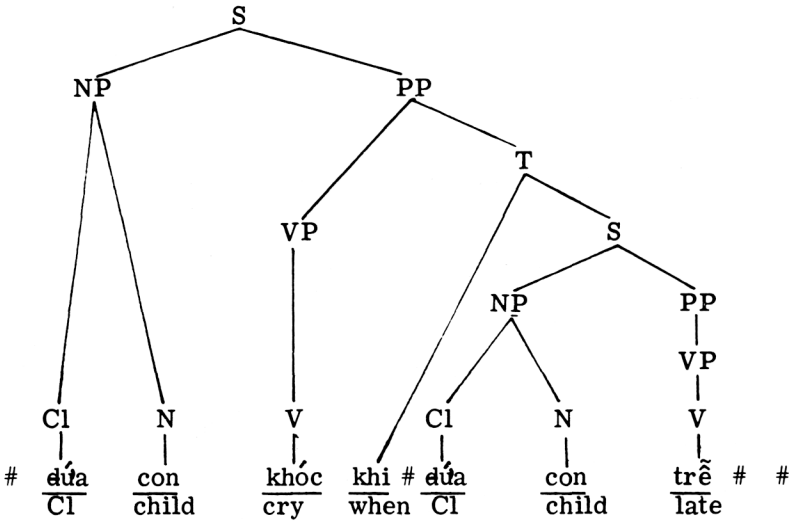


'The child cries when he is late.'

No obligatory transformations apply to tree U, so the sentence
Đứa con      khóc  khi   đứa con    trễ   'The child cries when he
C̅l̅ child     cry   when  C̅l̅ child   late
is late' is permitted in surface structure.  Transformation (14)
allows the time construction to occur in other positions within the
sentence.

Transformation (14) Optional:  Extraposition of T

$$\text{\# X VP T Y \#} \longrightarrow \begin{Bmatrix} 1 & + & 4 & 2 & 3 & \emptyset & 5 & 6 \\ 1 & & 2 & 3 & \emptyset & 5 & + & 4 & 6 \end{Bmatrix}$$

# X VP T Y #
1 2 3 4 5 6

Transformation (7) may optionally delete the second occurrence
of đứa con      or replace it with a pronoun.  Transformation (10)
   C̅l̅ child
may remove khi if time is in any position other than sentence final.
Transformation (3) may insert thì to follow the time construction
where it is sentence initial.

The following sentences are among those generated by tree U:

44) (Khi)  đứa con    trễ (thì) (đứa con)   khóc.
    When   C̅l̅ child  late        C̅l̅ child  cry

'When the child is late he cries.'

45)  Đứa con    khóc khi   (đứa con)    trẽ.
     ‾C‾l̄ ‾c‾h‾il̄d̄ ‾c‾r‾ȳ ‾w‾h‾en̄ ‾C‾l̄ ‾c‾h‾il̄d̄ ‾l‾āt̄e

     ⁹When the child is late he cries.⁹

It should be apparent from sentence 44) that when the time marker
is deleted, the resulting sentence could be derived from a conditional
or causal sentence or the combination of condition and cause.  Since a
noun in the embedded sentence is shared by a noun in the matrix sent-
ence, the sentence is also ambiguous with the relative clause.  And
because the verb trẽ ⁹late⁹ may occur with both purpose and verbal
complement, as has already been demonstrated, the sentence is also
ambiguous with these two constructions.

5.  Summary.  To show the range of possible ambiguity within the
relative clause, all the sentences generated from tree D by the ap-
plication of relevant transformations are here presented.  And it is
noted with what other constructions each sentence is ambiguous.
Since a given underlying tree has one unambiguous meaning, and
since these sentences may all be derived from tree D, they may all
have the meaning, 'The child who is late is crying.'  But, because
they may also be traced back to other underlying tree structures,
they may have other possible meanings as follows:

Rel Cl (reverse embedding) 'The child who is crying is late.'
V‾b̄ Comp     'The child is late in crying.'
P‾ūr̄p     'The child is late so that he can cry.'
C‾ōn̄d̄     'If the child is late he will cry.'  .
C‾āūs̄     'Because the child is late he is crying.'
C‾ōn̄d̄ + Caus  'If the child is late he will cry because he is late.'
T‾īm̄ē     'When the child is late he cries.'

In its most fully expanded form, the derived form of tree D:

Đứa con    (đứa)(mà)  trẽ  (thì)  khóc        is unambiguous.
‾C‾l̄ ‾c‾h‾il̄d̄ ‾C‾l̄   ‾l‾āt̄e   ‾c‾r‾ȳ

with mà deleted, it                is unambiguous

with mà and thì deleted            is ambiguous with
                                       Vb Comp

with thì deleted                   is ambiguous with
                                       Vb Comp

with đứa deleted                   is ambiguous with
                                       Cond
                                       Cond + Caus
                                       Purp

with đứa and thì deleted           is ambiguous with
                                       Cond

                                   Cond + Caus

with đứa and mà deleted

is ambiguous with
Vb Comp
Cond
Caus
Cond + Caus
Time

with đứa, mà, and thì deleted

is ambiguous with
Vb Comp
Purp
Cond
Caus
Cond + Caus
Time
Rel Cl (reverse
embedding)

with Rel Cl sentence final,
Đứa con (thì) khóc (đứa)(mà) trẽ

is unambiguous

with thì deleted

is unambiguous

with thì and đứa deleted

is ambiguous with
Purp
Cond
Cond + Caus

with thì, mà, and đứa deleted

is ambiguous with
Purp
Cond
Caus
Cond + Caus
Time
Rel Cl (reverse
embedding)

with đứa deleted

is ambiguous with
Purp

with đứa amd mà deleted

is ambiguous with
Time

with mà deleted

is unambiguous

with thì and mà deleted

is unambiguous

FOOTNOTES:

1. I wish to express appreciation to E. Austin Hale for his help in the organization and writing of this paper, and to acknowledge the help of Richard S. Pittman. Nguyễn Đăng Liêm checked over all the Vietnamese illustrations used in the paper and gave other helpful advice. The paper is based on the author's field observations, and particularly on the speech of Miss Trần Thủy Vân, formerly of Hảiphong, now of Sàigòn.

2. The verb có 'to have' in its use as 'there are...' is said by Liêm (p. 243) to be subjectless. An alternate treatment would be to consider có in this use as an intransitive verb whose subject must be postposed by an obligatory transformation. For example, in the underlying form

   Hai ngửời    có          the absence of an object
   two  people  there are

   marks có as being intransitive. So an obligatory transformation would change the order of the elements to the surface structure form

   Có        hai  ngửời
   there are two  people

3. Although tense is here said to be optional, it might possibly be considered as always present in deep structure and frequently deleted in surface structure as is the NP subject in rule 1.

4. The copula là may be deleted in surface structure everywhere except where it occurs within the VP of a matrix sentence (i.e. a sentence within which another sentence has been embedded).

5. Additional information about verbs and verb constructions may be found in the articles by Thomas and by Gage and Jackson already mentioned.

6. Sentences in surface structure are those to which the phonological rules may apply so that they may be spoken and would be recognized by a native Vietnamese speaker as being grammatical sentences in Vietnamese. All the numbered Vietnamese sentences in this paper are surface structure. That is, all their possible readings have been said to be grammatically correct by native Vietnamese speakers. This does not, however, mean that all possible readings of these sentences are found in normal or natural speech. Some of them, though grammatical, are awkward or unusual forms.

7. e.g. $\left\{\begin{matrix}\text{đứa} \\ \overline{\text{ngửời}} \\ \overline{\text{Cl}}\end{matrix}\right\}$  $\dfrac{\text{con}}{\text{child}}$        $\left\{\begin{matrix}\text{cái} \\ \overline{\text{con}} \\ \overline{\text{Cl}}\end{matrix}\right\}$  $\dfrac{\text{dao}}{\text{knife}}$

8. The verbal complement construction in Vietnamese seems to be distinct from the nominal construction in that the nominal may not occur with để mà. Furthermore, the noun subject of the verbal complement construction is always shared by the noun subject of the matrix sentence, the noun subject of the factitive construction may or may not be.

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