

TRANSFORMATIONAL PRINCIPLES IN PRESENT PARTICIPLE

Albertus Suwardi

Dosen bahasa Inggris Universitas Teknologi Yogyakarta

Email: albertus_suwardi@yahoo.com

Abstrak: Sebuah kalimat mempunyai dua tingkatan representasi; d-structure dan s-structure. Affect Alpha mengubah d-structure menjadi s-structure. Dalam S-structure, pergerakan head terjadi untuk memenuhi tuntutan morfologis atau sintatis. Sebuah kata kerja bergerak menjadi Tns atau atau PART karena morfem yang terikat tak dapat muncul di konstruksi sintatis tanpa terikat oleh morfem bebas. Sebuah modal auxiliary yang juga menempati posisi TTns, bergerak ke posisi C karena suatu kalimat interogatif memerlukan infers dalam bahasa Inggris.

Kata-kata kunci: prinsip-prinsip transformasi, present participle

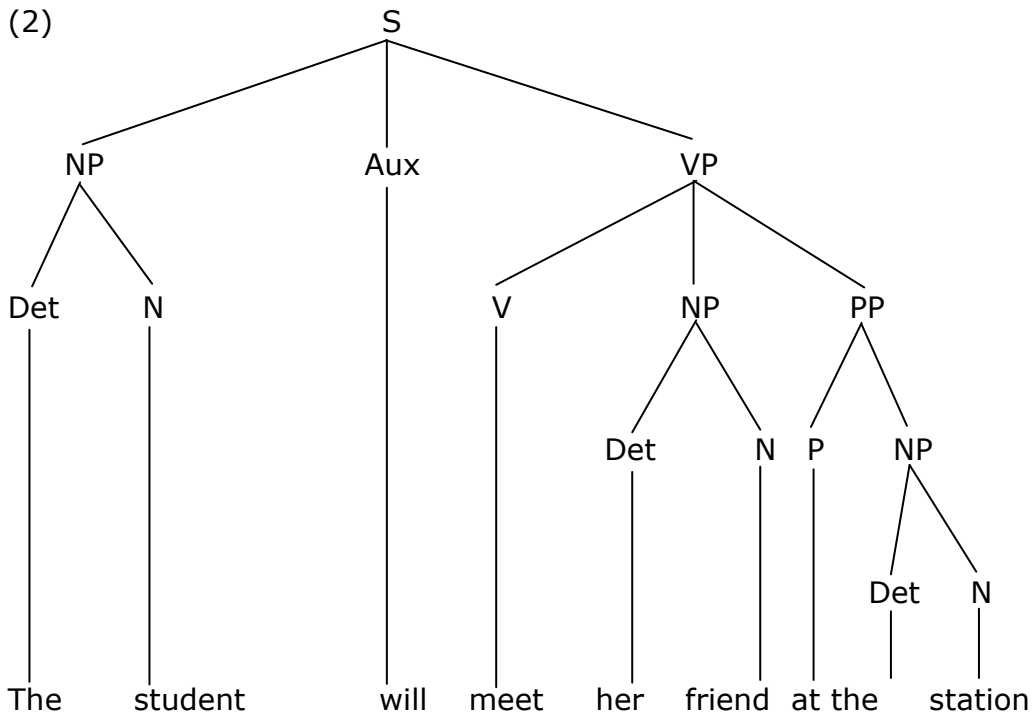
Introduction

The earlier transformational theories introduce *phrase-structure rules*. Based on these principles, a sentence is made up of words, and the words go together to create larger units. Let's start by taking a look at the following ordinary English sentence:

(1) The student will meet her friend at the station.

Certain strings of words in (1) go together to form larger units. For example, the two words at the beginning of the sentence *the student* go together to form a *noun phrase* (NP). On the other hand, the string of words *student will meet* does not form any kind of unit. *Her friend* and *the station* are also examples of noun phrases in (1). The nouns *student*, *friend*, and *station* are the heads of these noun phrases respectively. They are the most important elements—the pivots around which the entire phrase turns. Phrases can also be parts of larger phrases. For example, the noun phrase *the station* combines with the preposition *at* to form the *prepositional phrase* (PP) *at the station*. In this case, the preposition *at* is the head of the phrase.

From the sentence in (1), the phrase-structure tree associated with the sentence is described in (2):



From the phrase-structure tree above, the phrase-structure rules can be generalized from (2) in (3):

- (3) a. $S \rightarrow NP \text{ Aux } VP$
 b. $NP \rightarrow (\text{Det}) (\text{AP}) \text{ N } (\text{PP})$
 c. $VP \rightarrow V \text{ NP } \text{ PP}$
 d. $PP \rightarrow P \text{ NP}$

Discussion

The later transformational theories refine the phrase-structure rules into the X' theories. The main reason for this refinery is that the phrase-structure rules miss a generalization. All NPs immediately dominate an N' . All VPs immediately dominate a V' . All PPs immediately dominate a P' .

Chomsky (1981) proposed the general schema in (4) to eliminate the redundancy and to increase the explanatory power by generalizing the phrase-structure rules. His approach is known as X' theory (where X , Y , and Z are just variables standing for any syntactic category).

- (4) a. $XP \rightarrow (\text{Spec}) X'$
 b. $X' \rightarrow X' (YP)$
 c. $X' \rightarrow X (ZP)$

Although the X can stand for N , V , A , or P , the X 's on both sides of the arrow should be filled with the same choice in any given instance of (4a), (b), or (c). So, VP must dominate a V' , an A' can only immediately dominate another A' or an A , and so on.

Based on these principles, the previous phrase-structure rules in (3) really looks like a problem. It does not fit the X' format at all. Within the X' system, there is always a one-to-one relationship between heads and phrases. Every NP has a head N in it and every head N is the head of some NP and so on. In (3), there is S on the left side, but it does not appear to dominate anything of category S. On the right side, there are NP, Aux, and VP. Going the other way, the Aux category would seem to be a head also, but there is no Aux'' or AuxP anywhere to be found. To overcome this problem, Chomsky (1970) proposes that S is essentially an 'Aux-phrase' which has Aux as its head. Since Aux represents the inflected tense, the name of the Aux changes to 'Inflection', which is usually abbreviated to 'I' or 'Infl'.

The term *inflection* in Chomsky's (1986b) theory, only refers to an affix which indicates the tense syntactic feature. Since inflection does not only cover tense affixes [-es] and [-ed] but also participle affixes [-ing] and [-en], the term *tense* (TNS) is used for the tense affixes and the term *Part* is used for both present and past participle affixes.

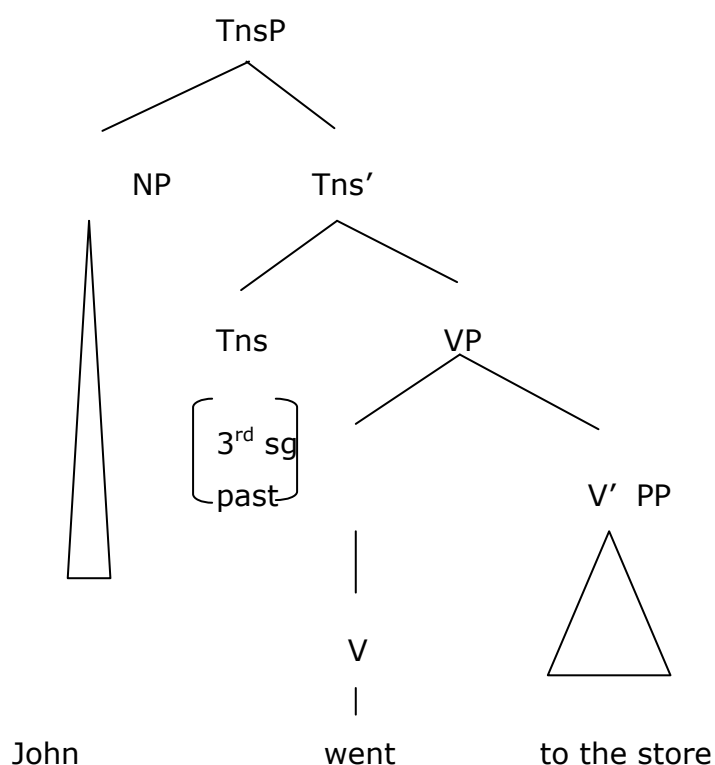
Based on these reasons, the rules in (3) can be replaced with something much neater and consistent with X' theory.

(5) a. TnsP → NP Tns'

b. Tns' → Tns NP

The subject of the sentence is now the specifier of TnsP (Tense Phrase) and the VP is the complement of Tns. The head of *TnsP* is Tns, which contains two pieces of information: the tense of the sentence (e.g. past, or present) and the subject-verb agreement information, as in (6). It is because tense and subject-verb agreement are marked by inflectional endings on the verb that the whole sentence is called 'TnsP'.

(6) John went to the store.



To see concretely why Tns needs to have tense and agreement information, let's examine a construction called 'VP-ellipses'. Under certain circumstances, when two sentences are conjoined, the second VP can be deleted:

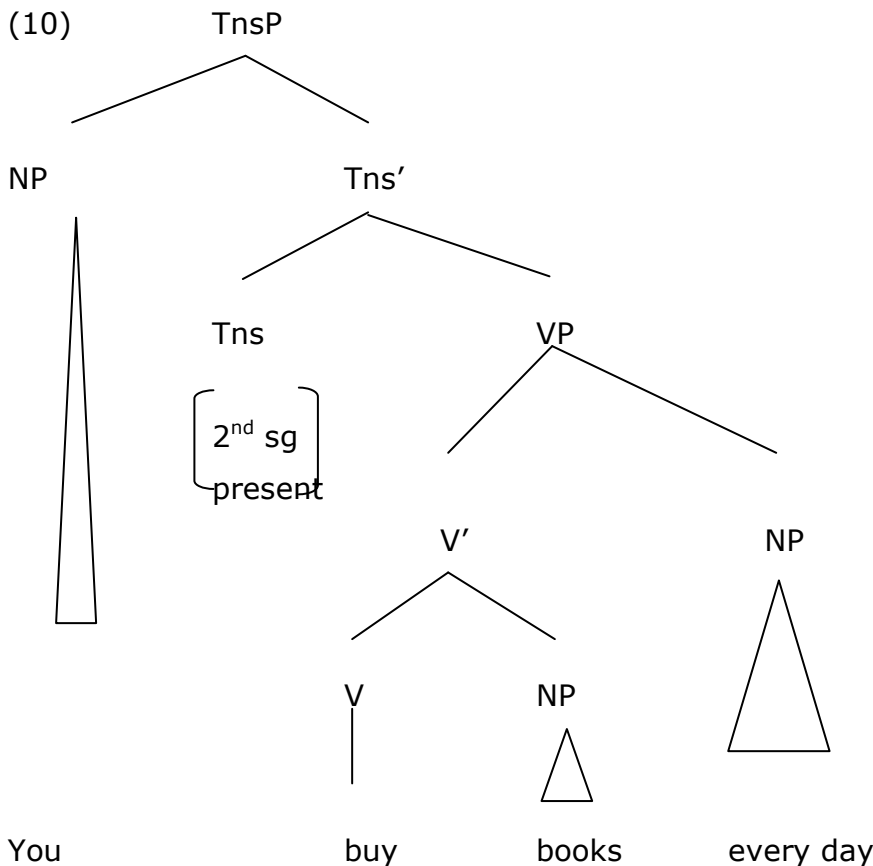
(7) Mary can't go to the store but John can.

In (7), the VP in the second conjunct is identical to the VP in the first conjunct (*go to the store*), but it remains unpronounced, leaving behind the auxiliary *can*. But, consider what happens when there is no overt auxiliary:

(8) I buy books everyday but John doesn't.

Because there is no auxiliary, the dummy verb *do* must be inserted in the second conjunct. Hence, the dummy verb shows up in specifically the present tense (*doesn't* vs *didn't*) and third person singular form (*doesn't* vs *don't*). Therefore, it must be the case that the tense and subject-verb agreement information are inflectionally present in Tns even when there is no auxiliary to *spell them out*. In order to remember this, when drawing a phrase-structure tree with no auxiliary, the tense and agreement information should be indicated in Tns. Thus, the sentence in (9) has the tree in (10).

(9) You buy books every day

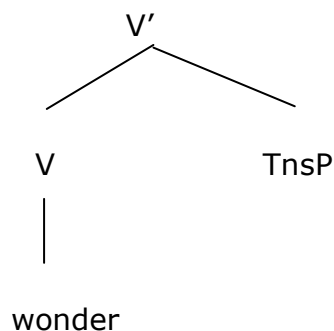


Based on the description above, it can be simply said that a sentence is mainly a *Tense Phrase* (TnsP). Now, let's consider the following sentences in the light of the discussion on the other elements of a sentence.

(11) Mary will meet her friend at he station.

(12) I am wondering whether *Mary will meet her friend at he station*.

Clearly (11) is a sentence, so it must be a TnsP. It seems equally clear that the italicized string in (12) is also a sentence. The question is what to do about *whether*. Clearly, it can be said that the V *wonder* takes a TnsP complement, as in (13):

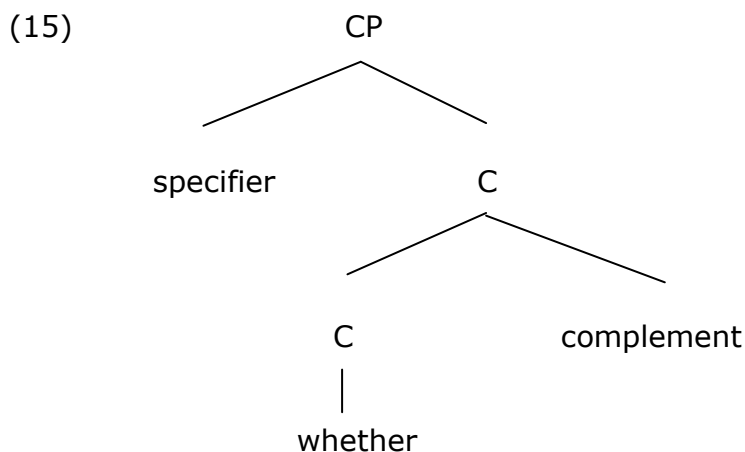


That would predict that (14) should be grammatical, and it is not:

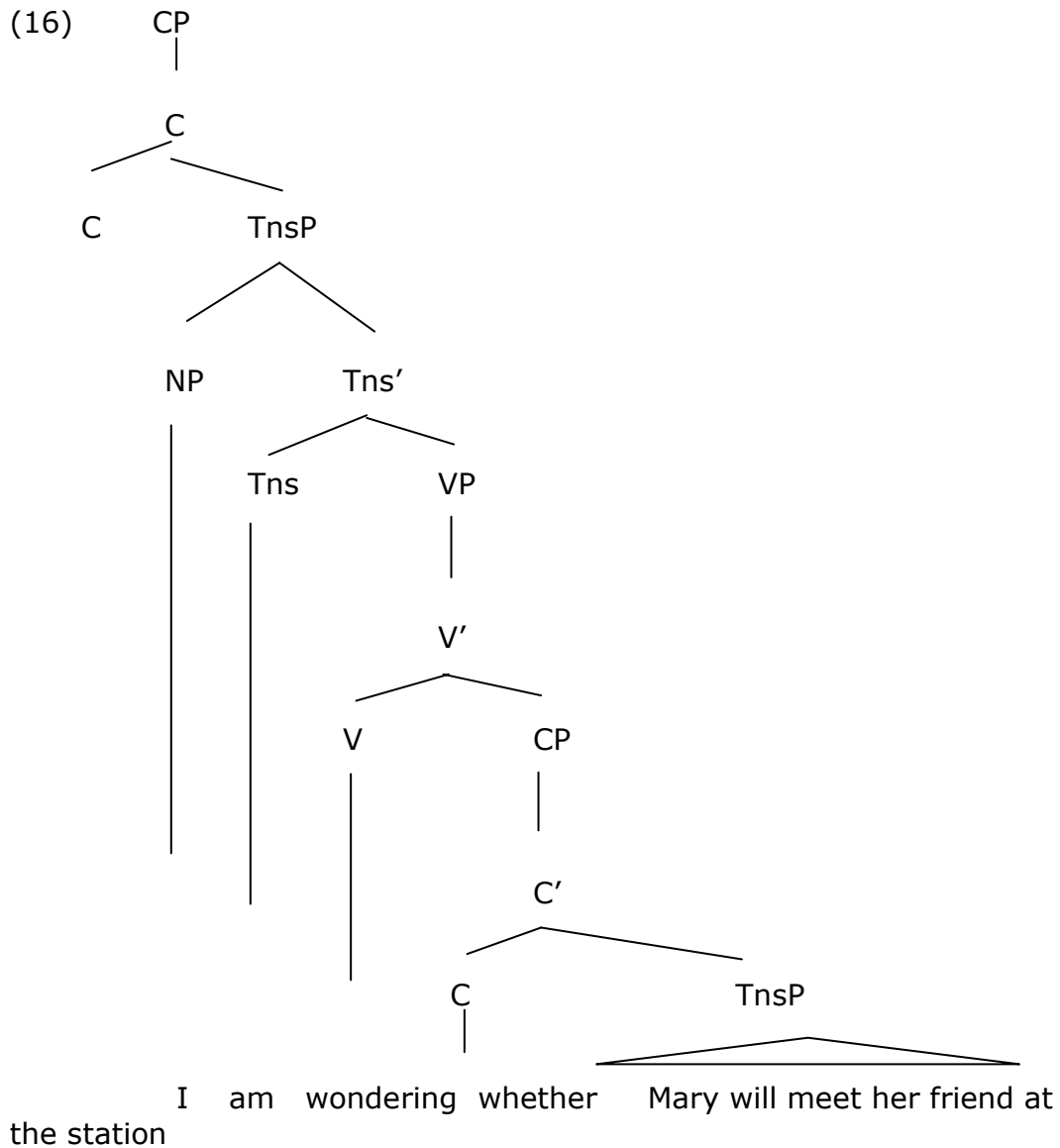
* I wonder Mary will meet her friend at the station.

In order to account for (12), while not allowing (14), what should be noted is that the TnsP *Mary will meet her friend at the station* combines with some other category, whose head is *whether*.

Elements like *whether* or *that* (as in *I know that Bill is here* (are traditionally referred to as *complementizer*. They get that name because they are added to the beginning of a TnsP in order to help the TnsP fit in as the complement of a verb. If the complementizer C is the head of CP, then X'-Theory tells us that it must have a specifier and a complement in a three-level structure:



In this case, the TnsP *Mary will meet her friend at the station* is the complement of C. It has no specifier. Putting all of this together, the tree for (12) can be drawn as



In a main clause a C does not have an overt form, but the presence of a CP can still be traced. In (16), it is seen that *will* appear within the sub clause *Mary will meet her friend at the station*, and *Mary* is at the leftmost position. *Will* cannot move to a position before *Mary*.

(17) * I am wondering whether will Mary meet her friend at the station.

There is no position before *Mary* which *will* can occupy, and therefore (17) is not acceptable. Sentence (18) in which *will* appears before *Mary* is acceptable.

(18) Will Mary meet her friend at the station?

Sentence (18) is acceptable because *will* has a position to occupy, namely, the position of a C which is not filled. In (17) the C position is filled with the complementizer *whether*.

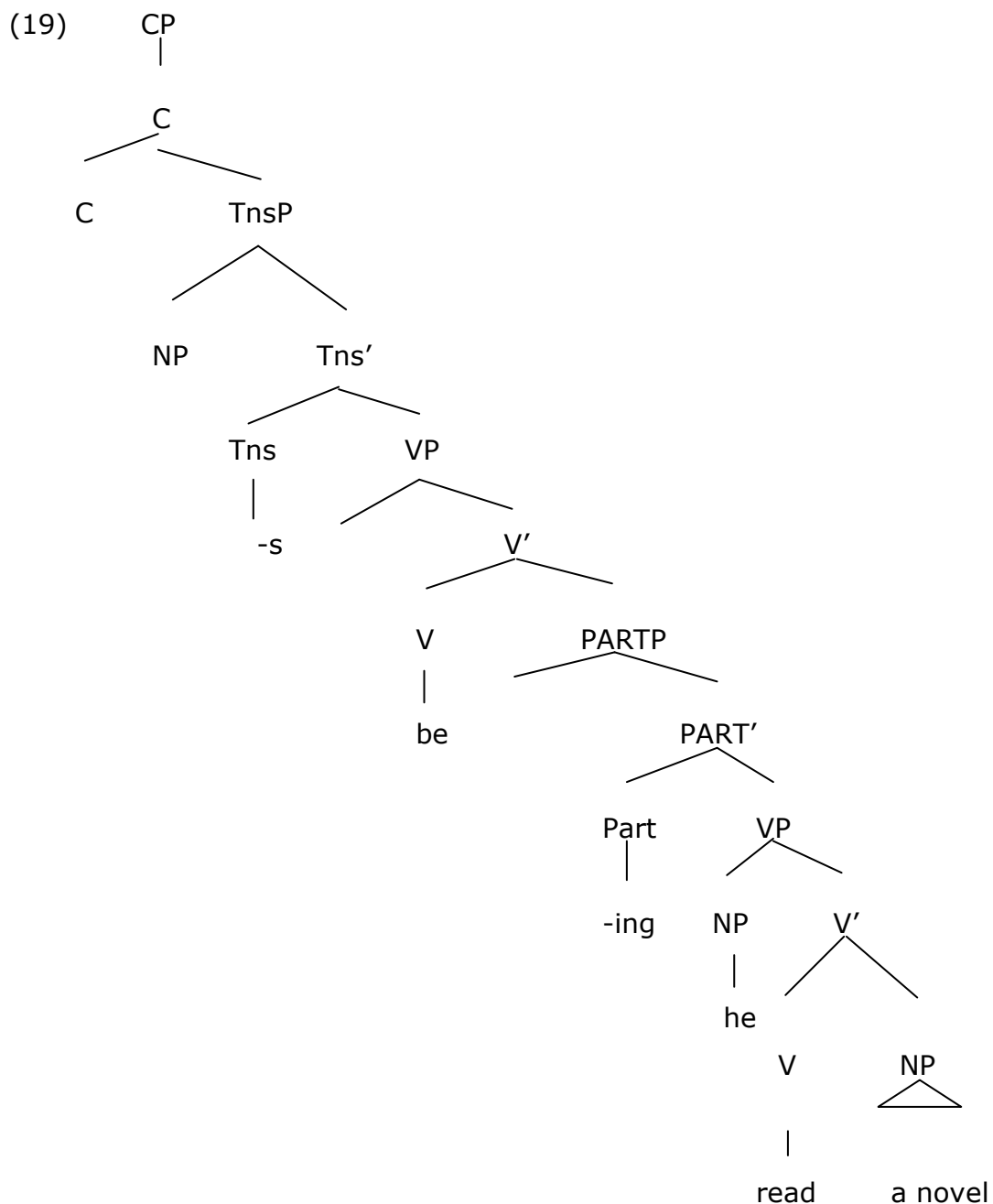
Based on the above explanation, therefore, according to Chomsky (1986b), an ordinary clause basically consists of three elements: a Complementizer Phrase (CP), Tense Phrase (TnsP), and Verb Phrase (VP). A C subcategorizes for a sentence (S) that is, in fact, equal to a TnsP. Tns consists of some syntactic units expressing tense, agreement and negative information. Tns subcategorizes for a VP, which is an obligatory element in English.

Besides Tns, a sentence may also contain a participle (PART) inflection like in (17) and (18).

(17) He is reading a novel.

(18) The children are playing in the yard.

Sentences (17) and (18) have [-ing] to show the progressive aspect. In (17) Tns takes a VP headed by *be* as its complement, and *be* takes PART as its complement. Part, the *-ing* inflection, takes the VP [*he read a novel*] as its complement. The elements of (18) are similar to those of (17) except that in (18) Part takes the VP [*the children play in the yard*] as its complement. The structure of (17) can be represented in (19).

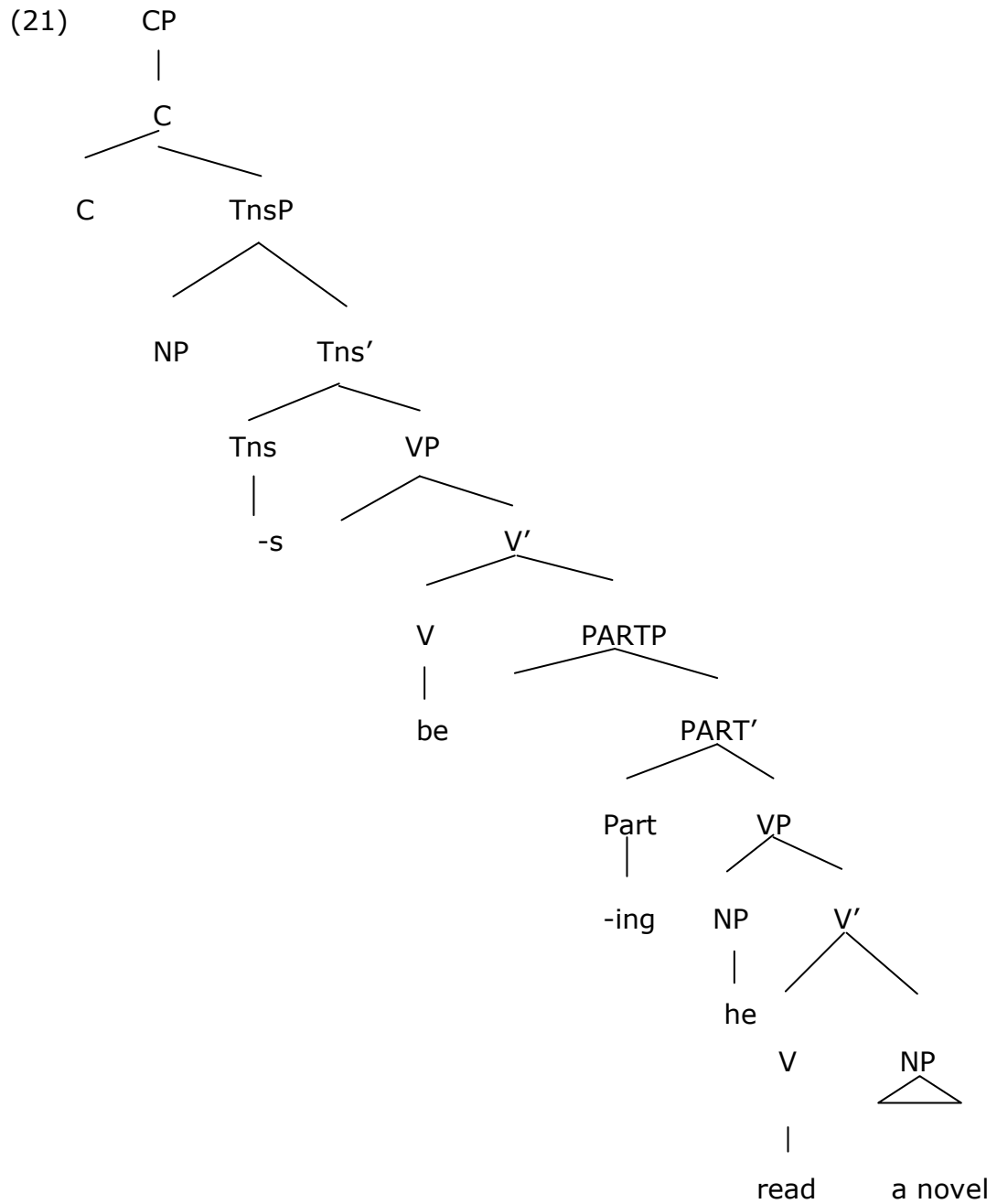


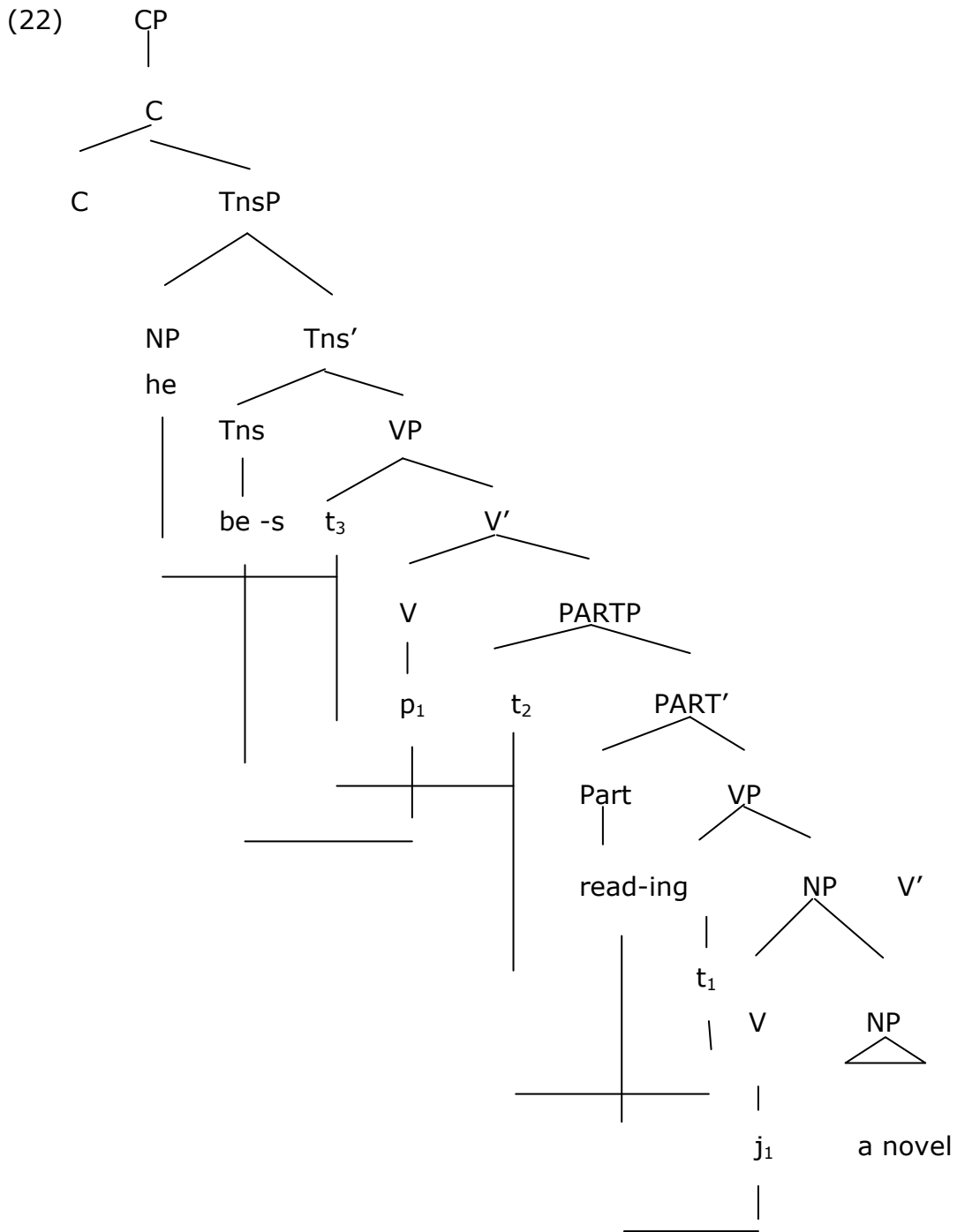
As can be seen in (19), PARTP is a complement of *be*, and *be* is the head of a phrase which becomes the complement of Tns. PART takes the VP [*he read a novel*] as its complement.

In the principle and parameter approach, two levels of sentence representation are known: d-structure and s-structure. D-structure is the representation of the elements which a head requires. In the case of a sentence (S') the head is C. C requires a TnsP as its complement, and Tns a VP. Affect Alpha changes the d-structure into the s-structure (Dwidjatmoko, 2002 : 69). The s-structure of a sentence is the level of the representation in which all syntactic requirements are met. Affect

Alpha is applied to meet the requirements. (20) has (21) as the d-structure, and (22) as the s-structure.

(20) He is reading a novel.





He moves from its base-generated position, or the position at the d-structure as a specifier of VP to the specifier position of PARTP, moves again to the specifier of VP, and finally moves to the specifier of TnsP. *He* has made a cyclic movement. The verb *read* moves from its base-generated position as a head of VP to the position of Part as the specifier of PART' and is attached to the Part-ing, forming *reading*. The movement of *read* is

needed to satisfy a morphological principle. As bound morpheme, Part-ing cannot stand by itself in a syntactic construction. It must be attached to a free morpheme. *Be* also moves to the Tns position, and forms *is*.

Conclusion

Transformationally, a sentence consists of a CP, TnsP, and a VP. A sentence is always a Tense Phrase with *Tense* [-s or -ed] as a head. Since a sentence has always a chance to be subcategorized by a complementizer, the phrase-structure tree of an S, begins with a CP, which has C as the head to give an empty slot for another CP, or for the auxiliary to form interrogative status.

A sentence has two levels of representation: d-structure and s-structure. Affect Alpha changes the d-structure into the s-structure. In the s-structure, a head movement takes place to satisfy a morphological or syntactic requirement. A verb moves to a Tns, or a PART because a bound morpheme cannot occur in a syntactic construction without being attached to a free morpheme. A modal auxiliary, which also occupies a TTns position, moves to a C position because an interrogative sentence needs an inversion in English.

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