NATIONAL OPEN UNIVERSITY OF NIGERIA

SCHOOL OFARTS AND SOCIAL SCIENCES

COURSE CODE: ENG421

COURSE TITLE: NEW TRENDS IN SYNTAX

COURSE GUIDE

ENG421
NEW TRENDS IN SYNTAX

Course Team Dr. Adeyemi Adegoju (Developer/Writer) - OAU
Dr. Ibrahim Olaosun (Co-writer) - OAU
Mr. Akintoye Samson Japhet (Co-writer) - UI
Dr. M. T. Lamidi (Editor) - UI
Dr. I. Omolara Daniel (Programme Leader) - NOUN
Mr. Theodore O. Iyere (Coordinator) - NOUN

NATIONAL OPEN UNIVERSITY OF NIGERIA

National Open University of Nigeria
Headquarters
14/16 Ahmadu Bello Way
Victoria Island
Lagos

Abuja Office
5, Dar es Salaam Street
Off Aminu Kano Crescent
Wuse II, Abuja
Nigeria

e-mail: centralinfo@noun.edu.ng
URL: www.noun.edu.ng

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Introduction

ENG421 is a three-credit unit 400 level course. It is designed for students whose major discipline is English. The course consists of eighteen units that present the new trends in syntactic explorations within the generative thinking. The material has been developed with local examples suitable for Nigerian students.

This course guide tells you briefly what the course is about, what course materials you will be using and how to work your way through these materials. It suggests some general guidelines for the amount of time you are likely to spend on each unit of the course. It also gives you some guidance on your tutor-marked assignments. You are advised to attend the tutorial classes to discuss your difficulties with your tutors.

Course Aims

There are objectives to be achieved in each unit of the course. Read these objectives and know them before studying each unit. Nonetheless, the overall aims of this course is that by the time you finish this course, you should be able to:

- identify the various Minimalist modifications to the original formulation of Transformational Generative Grammar;
- ascertain how they work and how to apply them in your syntactic analysis; and
- determine their strengths and weaknesses.

Working through This Course

To finish this course successfully, you are advised to study the units, locate the recommended textbooks and read them. Do not forget other materials provided by NOUN. At particular points in each unit, you will find self-assessment exercises. You are advised to do them because they are geared towards testing your understanding of the topic discussed.

You will also find tutor marked assignments at the end of each unit. You are required to submit these assignments to your Tutor for assessment purposes. These tutor marked assignments will count towards your overall performance in the course. There will be a final examination at the end of the course. The course will take you about seventeen weeks to complete. All the components of the course are listed below. You have to allocate your time to each unit in order to complete the course successfully and on time. Do not jump units; study all of them because they have been developed hierarchically.

Course Materials

The major components of the course are:

(a) Study units
(b) References
(c) Assignments file
(d) Presentation schedule

Study Units

There are seventeen study units in this course. They are as follows:

Module1 Innovations in Minimalist Program

Unit 1 Derivations and Representations in the Minimalist Program
Unit 2 Overview of the Common Operations
Unit 3 The Spellout Stage

Module 2 Economy Principles in the Minimalist Framework

Unit 1 Shortest Move
Unit 2 Greed and Procrastinate
Unit 3 Last Resort
Unit 4 Least Effort

Module 3 Operations and Stages in the Transformation Process

Unit 1 Bare Phrase Structure
Unit 2 Phrasal Categories in the Minimalist Program
Unit 3 Feature Checking Theory
Unit 4 The Copy Theory of Movement

Module 4 Syntactic Processes

Unit 1 DP Movements: Passivisation and Ergativity
Unit 2 Determiner Phrase
Unit 3 Pronominalisation and Reflexivisation
Unit 4 Major CP Derivations
Unit 5 Topicalisation in English
Unit 6 Clefts and Pseudo-Clefts in English

A unit is to be covered within a week. This will include the Self Assessment Exercises and the Tutor-Marked Assignments.

Textbooks and References

Reference materials for further reading are listed at the end of each unit. Few of the references are textbooks. You will have to get Napoli (1996) and Radford (1995). They are available in leading bookshops in the country. Many of the texts are articles, some of which can be downloaded from the internet free. However, subscription may be required in some cases. You are advised however to keep to the NOUN course material where you cannot cope with the texts in the references. You should note that most of these materials are not written for learners just coming into the field. A guide like this course material would thus be helpful in simplifying the reference materials for you.

Assessment

This course is assessed in two ways: tutor marked assignments and a final examination. In doing these assignments, you are expected to utilize the knowledge gathered during the course. As the University is now largely automated in its operations, the tutor marked assignments are now done online and the grading immediate. This has largely helped in reducing the burden of slowness in accessing results by students. You are thus advised to adhere strictly to the deadlines given for their completion as stated in the presentation schedule and the assignment file. You are expected to do four Tutor-Marked Assignments (TMAs) and the best three of these would be used for you. The tutor marked assignments will carry 30% of your total course grade. You are also expected to take an end of semester examination which is 70% of your total mark. This examination is also currently done on the electronic platform. It is thus obvious that you need to master your computer skills and become very techno-friendly.

Tutor-Marked Assignment

Nonetheless, you are encouraged to attempt the Tutor-Marked Assignments found at the end of each unit. Doing this will greatly help your understanding of the course material. Even though your assessment will now be electronic, you should not sacrifice the better understanding that attempting these TMAs would grant on the altar of indolence. As noted above, TMAs carry 30% of your final assessment.

Final Examination and Grading

The final examination of ENG421 will carry 70% of the total course grade. The examinations will comprise questions reflecting the kinds of Self Assessment Exercises and the Tutor-Marked Assignment problems you have previously encountered in the course work. Expect questions

from any part of the course. You are advised to go through your Self Assessment Exercises and Tutor-Marked Assignments before the examination. Make sure you have enough time in revising the entire course. The examination is now conducted on the electronic platform by the University.

Course Marking Scheme

The following table lays out how the actual course marking is broken down.

Assessment	**Marks**
The best three of all the assignments submitted will be assessed Final examination	Totalling 30% 70% of overall course marks
Total	100% of course marks

Course Overview

Unit	Title of Work	Weekly Activity	Assessment
	Course Guide		
	Module 1 Innovations in Minimalist Program I		
1	Derivations and Representations in the Minimalist Program	1	TMA 1
2	Overview of the Common Operations	2	
3	The Spellout Stage	3	
	Module 2 Economy Principles in the Minimalist Framework		
1	Shortest Move	4	TMA 2
2	Greed and Procrastinate	5	
3	Last Resort	6	
4	Least Effort	7	
	Module 3 Operations and Stages in the Transformation Process		
1	Bare Phrase Structure	8	TMA 3
2	Phrasal Categories in the Minimalist Program	9	
3	Feature Checking Theory	10	
4	The Copy Theory of Movement	11	
	Module 4 Syntactic Processes		
1	DP Movements: Passivisation and Ergativity	12	TMA 4
2	Determiner Phrase	13	
3	Pronominalisation and Reflexivisation	14	
4	Major CP Derivations	15	
5	Topicalisation in English	16	
6	Clefts and Pseudo-Clefts in English	17-18	
	Revision	1	
	Total	**20**	

How to Get the Most from This Course

In distance learning, the study units replace the University lecturer. The advantage is that you can read and work through the study materials at your pace, using the place that suits you best. Think of it as reading the lecture instead of listening to the lecturer. Just as a lecturer might give you in-class exercises, your study units provide exercises for you to do at appropriate times.

Each of the study units follows a common format. The first item is an introduction to the subject matter of the unit and how a particular unit is integrated with other units and the course as a whole. Next is a set of learning objectives. These objectives let you know what you should be able to do by the time you have completed the unit. You should use these objectives to guide your study. When you have finished the unit, you should go back and check whether you have achieved the objectives. If you make a habit of doing this you will significantly improve your chances of passing the course. Self Assessment Exercises are interspersed throughout the units. Working through these tests will help you to achieve the objectives of the unit and prepare you for the Tutor-Marked Assignments and the examination. You should do each Self Assessment Exercise as you come to it in the study unit. There will be examples given in the study units where necessary. Work through these when you come to them.

Facilitators/Tutors and Tutorials

There are eight weeks of tutorials provided in support of this course. You will be notified of the dates, times and location of these tutorials, together with the name and phone number of your tutorial facilitator as soon as you are assigned to a tutorial group. Your tutorial facilitator will mark and comment on your assignments, keep a close watch on your progress, and on any difficulties you might encounter as well as provide assistance to you during the course.

Do not hesitate to contact your tutor by telephone or e-mail if you need help. Contact your tutorial facilitator if:

1 You do not understand any part of the study units or the assigned readings;
2 You have difficulty with the Self Assessment Exercises; and
3 You have a question or a problem with an assignment.

You should try your best to attend the tutorials. This is the only chance to have face-to-face contact with your tutor and ask questions which are answered instantly. You can raise any problem encountered in the

course of your study. To gain the maximum benefit from course tutorials, prepare a question list before attending them. You will gain a lot from participating actively.

Summary

ENG421 is a further development upon the knowledge acquired in ENG222. The course will equip you with the skills required in the current model of Transformational Generative Grammar. Only few undergraduate students have access to this kind of text. You should use the opportunity to apple interest making a career in the Syntax aspect of your field. As you did in ENG222, we also do hope that you will find this course interesting and rewarding. We wish you success with the course.

Important Terms and Conventions

Here, you are introduced to some of the frequently used terms. You are advised to read through this section before you ever begin to read through the modules. It will save you some efforts thereafter.

AGREE	Operation Agree
Cancellation	To decode this convention, see ~~**walk**~~ below.
c-command	constituent command
CONJ.	conjunction
CONJP	Conjunction Phrase is a functional phrase headed by a conjunction the way a preposition heads a Prepositional Phrase (PP).
COPY	Operation Copy
Covert Syntax	This is the stage in syntactic derivation where the transformation that applies to the phonetic aspect of the derivation cannot be easily accounted for in the corresponding semantic aspect. Similarly at this stage, the transformation in the semantic aspect will not be evident in the phonetic aspect.
CP	Complementizer Phrase
DP	Determiner Phrase (the functional category of nominals)
FocP	Focus Phrase
GB or **GBT**	Government Binding Theory
GOAL	See this explained under Operation Agree
Interpretable	You can find this explained in Module 1, Unit 1.
LF	Logical Form (the 'semantic component' of the MP)
m-command	maximal command
MERGE	Operation Merge

MOVE	Operation Move
Move-α	a movement rule in GB
MP	Minimalist Program
nom	Nominative case
num	number
Overt syntax	this is the stage in syntactic derivation where the transformation that applies to the phonetic aspect of the derivation is evidently accounted for in the corresponding semantic aspect.
PF	Phonetic Form (the 'phonological component' of the MP) PF is actually the term for pronunciation in the Government Binding Theory. The Minimalist Program in Chomsky (2005) refer to the pronunciation as the Articulatory Perception (AP). However, we will still be using PF in lieu of AP in order to maintain a link with what we learnt in ENG 202.
plu.	plural
PROBE	See this explained under Operation Agree
pron.	pronoun
PPT or **PPA**	Principle and Parameter Theory /Approach
pres.	present tense
pst.	past tense
Spell-out	the stage where the phonetic aspects of a syntactic derivation split from their corresponding semantic aspects
T	tense category label
TGG	Transformational Generative Grammar
Tns.	tense
TP	Tense Phrase
un-interpretable	You can find this explained in Module 1, Unit 1.
v	the functional head for the verb usually called the light verb.
***v*P**	the phrasal structure of the light verb. This is a miniature of a sentence.
~~**walk**~~	Here the cancellation of this item (and any other item) symbolises its deletion in the utterance. This is not a general convention. It is used in the text to aid comprehension.
α,β...	unknown undefined terms or values

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NATIONAL OPEN UNIVERSITY OF NIGERIA

National Open University of Nigeria
Headquarters
14/16 Ahmadu Bello Way
Victoria Island
Lagos

Abuja Office
5, Dar es Salaam Street
Off Aminu Kano Crescent
Wuse II, Abuja
Nigeria

e-mail: centralinfo@noun.edu.ng
URL: www.noun.edu.ng

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MODULE 1 INNOVATIONS IN MINIMALIST PROGRAM I

This module deals with the basic principles that are crucial to your understanding of this grammatical framework. You therefore have to be patient in reading the module. The team that wrote this text made serious efforts to simplify it. However, you may still have to pay much attention in order to cope with the new terms and the new interpretation given to a particular concept. In a new theory, you expect new things. What you need to bear in mind right from the outset is that those new things are not as difficult as you may take them to be.

UNIT 1 DERIVATIONS AND REPRESENTATIONS IN THE MINIMALIST PROGRAM

CONTENTS

1.0 INTRODUCTION

Hello student, you are welcome once again to the Minimalist Program (MP), the current framework of the Transformational Generative Grammar. Do I see you shaking? Why should you panic? This is a

simple framework that you can easily understand. The minimalist framework does not in any way make syntax difficult. Rather, it helps to simplify it. The Minimalist Program (which we may henceforth be referred to as MP) reveals the inner workings of a very simple linguistic computer. It is a further development on the theory of syntax with a goal toward minimality. Due to this, some economy-driven principles have been adopted to replace some other principles in Government and Binding Theory (GB) which is more appropriately known as Principles and Parameters Theory (PPT).

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- define the two concepts of economy in the minimalist framework
- discuss how these operations affect the transformational processes.

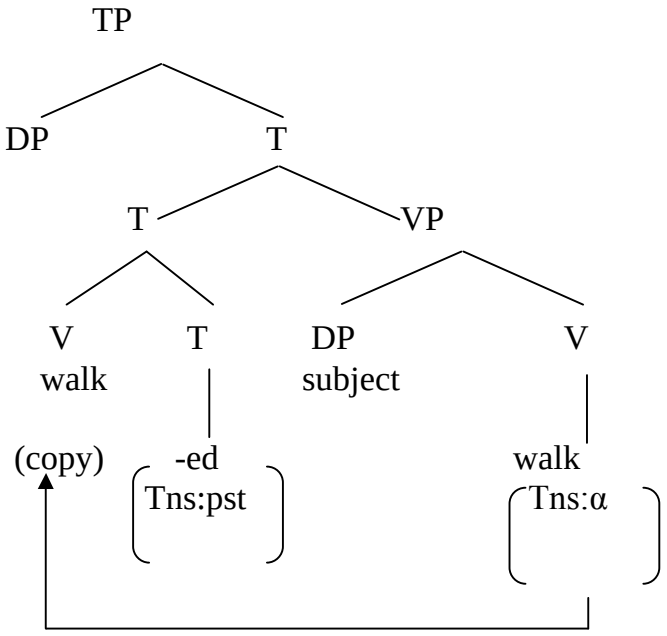
3.0 MAIN CONTENT

The minimalist framework provides a number of radical changes in the technical structure of the theory of syntax. Some of the most important ones are given below.

3.1 Economy of Derivation

The Minimalist Program aims at developing further ideas involving *economy of derivation* and *economy of representation*. Economy of derivation as a principle states that movements (i.e. transformations) are feature-driven. This means that they are informed by the feature composition of the items involved in the transformation. You will learn more on the notion "features" later in module 3. In this module, you just need to have a broad idea of the kind of linguistic features mainly involved in the syntactic operation. These features are called morphosyntactic features. They are the types that mark tense, gender, number and case. This means that a transformation may occur because an *un-interpretable feature* (a feature not fully specified) in a lexical item may require a merger with another item where this feature is *interpretable* (better specified) before that feature can be fully understood. Hence we talk of *interpretable* and *un-interpretable* features as the basis of syntactic transformations.

1.



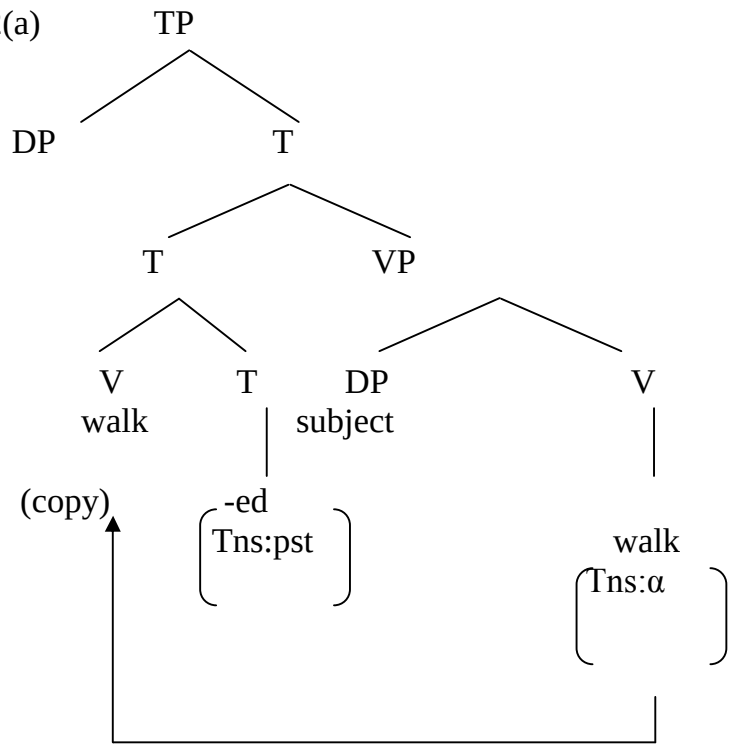
The verb *walk*, while written under V node in the diagram above, does not show tense marking. Hence we can say its tense feature is not interpretable. For us to reveal this tense feature, we need to copy the verb and move it to the T (tense) node where tense feature is interpretable. So the movement of verbs to the T occurs in order to match interpretable tense features of T with the un-interpretable tense features of the verb.

Another example of an interpretable feature is the plural inflection on regular English nouns. For instance, we can consider the word *balls*. This word denotes several balls. We can therefore see the relevance of the plural inflection. It makes the number feature of the ball *interpretable*.

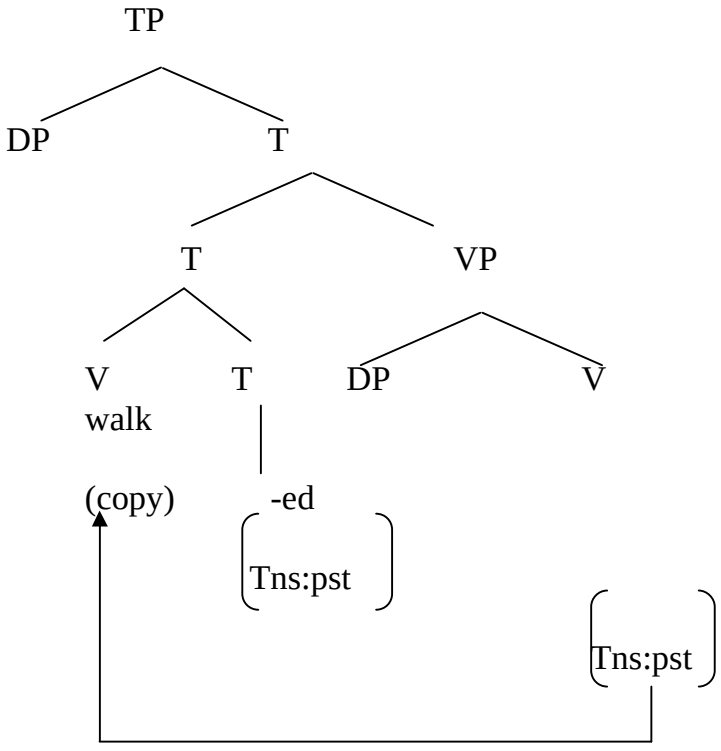
3.2 Economy of Representation

Economy of representation is the principle that grammatical structures must exist for a purpose, i.e. the structure of a sentence should not be more complex than what is required in satisfying constraints on grammaticality.
Due to economy of representation, the original copy of the verb in (2) below has to be deleted in the PF structure of the derivation. You can see that when the verb has more than one copy in (a), the derivation becomes ungrammatical.

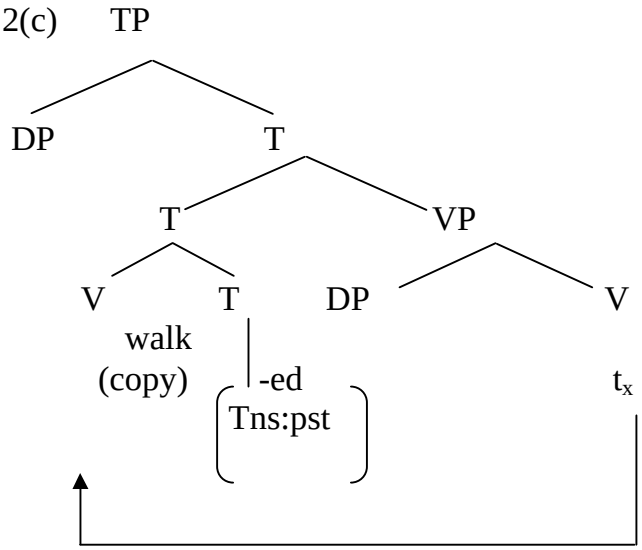
2(a)


TP
DP
T
T
VP
V
walk
T
DP
subject
V
(copy)
-ed
Tns:pst
walk
Tns:α

2(b)

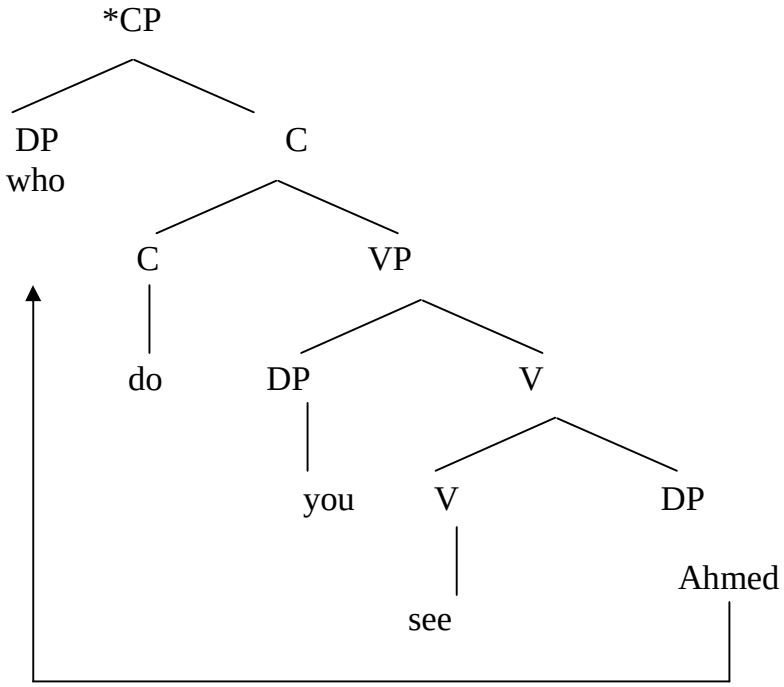

TP
DP
T
T
VP
V
walk
T
DP
V
(copy)
-ed
Tns:pst
Tns:pst

2(c)

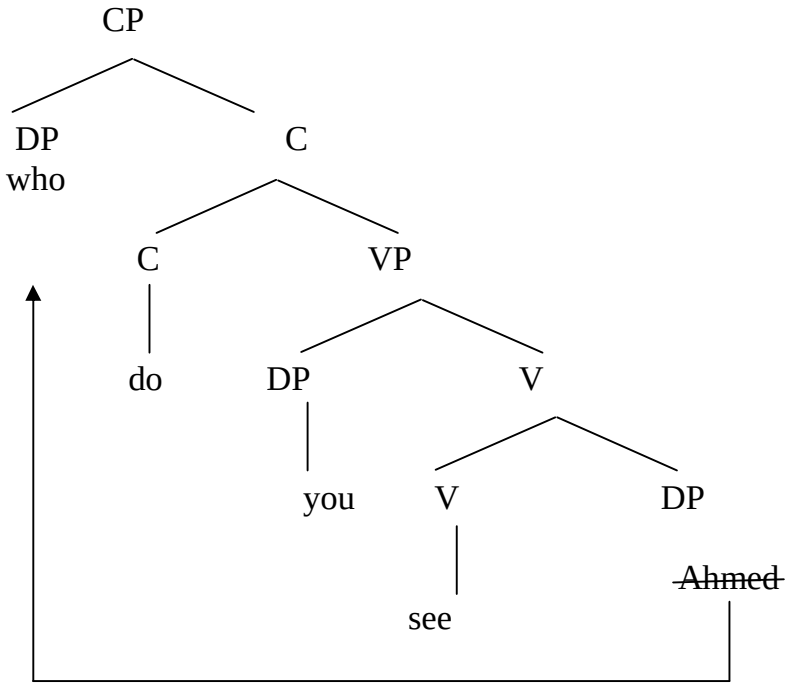


As a new user of this theory, you can easily observe the movement principle stated above in wh- constructions. An instance is given in (3) below.

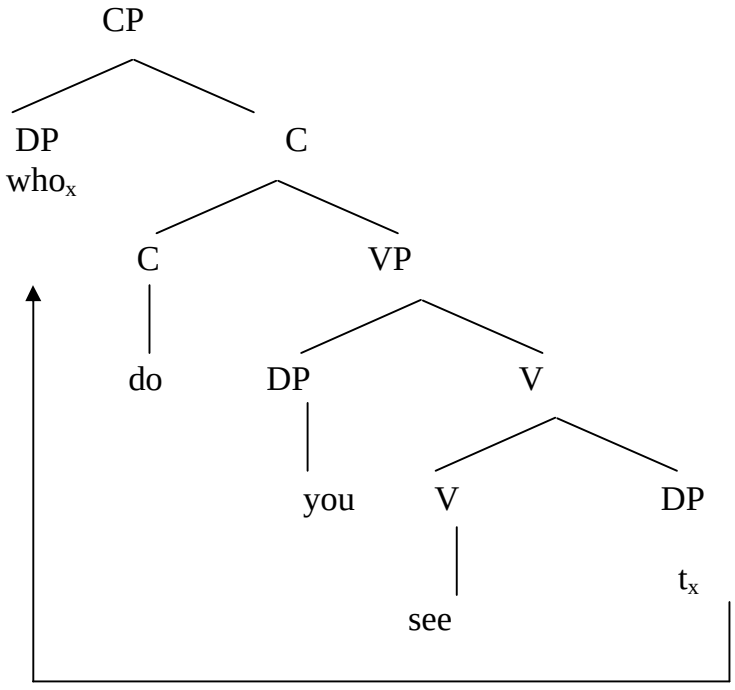
3(a)



3(b)



3(c)



3.3 Redundancy in Representation

Language rules usually have some exceptions. Economy in representation requires that we need obligatory movements in order to match the items having un-interpretable features with those items that can provide corresponding interpretable features. This is true in the word *sheep* merging with the word *two* to form *two sheep.* A similar thing happens when the word *book* merges with the morpheme *–s* to form

books. However, redundancy sets in when we have *two books*. This is simply due to the fact that the numeral has already revealed the plural number feature of *book*. The plural suffix marker *–s* is therefore doing virtually nothing as far as interpreting number feature is concerned. It is redundant. Cases of redundancy like this can be found in various degrees in natural languages.

SELF-ASSESSMENT EXERCISE 1

What are the two major areas where structural economy is necessary in the MP?

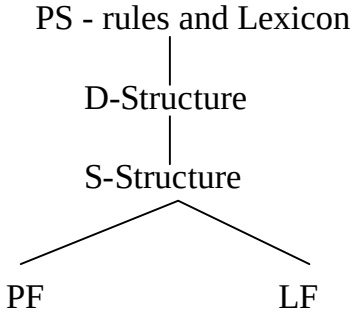
3.4 The simplification of X-bar Theory in favour of Bare Phrase Structure

The elegant but complex X-bar theory is replaced with the Bare Phrase Structure. Instead of having every phrase projecting an intermediate category, the syntactic operation simply selects the words directly from the lexicon, merges them one at a time until the final outcomes emerge. This bothers more on building words into phrases rather than constructing colossal clausal architectural frames before inserting words into them.

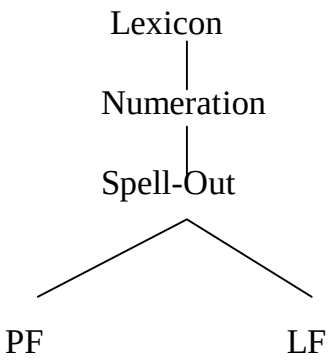
3.5 Removal of Levels of Representation

The MP grammatical model eliminated the distinction between D-Structure and S-Structure in favour of a derivational approach. Instead of moving through the two levels of representation as shown in (3) below, the model simply moves from the lexicon to the PF and LF without specifying the D- and S- Structure representation levels.

4. Government and Binding Framework



5. Minimalist Program Framework



3.6 Elimination of the Notion of Government

In X-bar theory, case is assigned under government. This governing domain has to be achieved under strict structural terms. Hence, the issue of *C-command* or *M-command* is very important before an NP can be assigned any case. You will recall that in Government Binding model, c-command implies that a governor directly dominates the governed constituents while m-command implies that the maximal node of the governor (instead of the governor itself) dominates the governed constituents. While dominance matters in the GB model because phrase architecture starts from the phrasal level to the lexical nodes, it is not crucial in the minimalist framework where computation begins from the lexical items before progressing to the phrasal level. Obviously, an inherent case is not assigned through structural mean. This is one of the challenges facing the theory that bases case assignment on government. On Case assignment, the minimalist framework takes Case as a morphosyntactic feature. The Case feature only requires syntactic operations that will help in making it interpretable. In this way, the minimalist framework takes care of structural Case as well as inherent Case.

3.7 The Inclusion of *Spell-out*

The minimalist framework introduces a single point of interaction between syntax and the interfaces (sound and meaning). This point is called the *Spell-Out*. The Spell-out bifurcated into two interface levels. These levels are PF (phonetic form) and LF (Logical Form). The Spell-out is very important in any derivation because it denotes the point where the phonetic aspect of the derivation is not necessarily expected to have simultaneous transformations with its corresponding semantic aspect. We are still going to have a detailed discussion on this concept in another unit within this module.

3.8 Derivation by Phases

In the Minimalist model, syntactic derivations occur in particular stages or domains called *phases*. A phase is a syntactic domain. A simple sentence is decomposed into two phases: CP and *v*P (vP, also known as light verb phrase, is a functional phrase which selects the lexical VP as its complement; CP means complementizer phrase through which we analyse Wh movement). CP Movement of a constituent out of a phase is only permitted if the constituent has first been moved to the left edge of the phase. This is the initial conception. Actually, the debate on phases is wider than this. In order to avoid biting more than we can chew, we shall restrict ourselves to the broad knowledge of the concept. However, if you want to read ahead of the class, consult some of the reference materials provided at the end of this unit.

SELF-ASSESSMENT EXERCISE 2

List all the operations discussed in this unit and show how they differ from the ones in Standard Theory.

4.0 CONCLUSION

In this unit, we have been able to demonstrate that the syntactic framework, which is the subject of this course, is simple. This goal is achieved through the central objective of economy in syntax. The Minimalist Program has a goal to minimize rules. Therefore certain features of the Principles and Parameters Theory (PPT) are not in use in the Minimalist framework.

5.0 SUMMARY

In this unit, we have seen the following important issues:

- There are two major goals of structural economy in minimalism. These are derivational and representational.
- On some occasions, a language may render some redundant forms due to laxity in the economy of representation.
- Some of the well-known principles of Government-Binding theory are discontinued in the minimalist framework.

6.0 TUTOR-MARKED ASSIGNMENT

1. State two cases of redundancy either in tense or in plurality marking in English.
2. Discuss briefly the various innovations that the MP brought into modern syntax.

7.0 REFERENCES/FURTHER READING

Chomsky, Noam (1995). "Chapter 3: A Minimalist Program for Linguistic Theory", in *The Minimalist Program*. Cambridge, Mass.: MIT Press. (reprinted from Chomsky, Noam. 1993. "A Minimalist Program for Linguistic Theory", in Hale, Kenneth and Samuel J. Keyser (eds.). *The View from Building 20*. Cambridge, Mass.: MIT Press, 1-52.).

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UNIT 2 OVERVIEW OF THE COMMON OPERATIONS

CONTENTS

1.0 INTRODUCTION

The transformations in the Minimalist Program are products of syntactic operations informed by morphosyntactic features. We shall restrict our discussion in this unit to the operations that are involved in the syntactic transformations within the minimalist framework.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- define some basic operations of transformational processes in the Minimalist Program
- discuss the transformational processes in terms of these operations.

3.0 MAIN CONTENT

3.1 Operation Select

The derivation of a clause begins with an *array* (A). This is an unordered list of lexical items selected from the lexicon. We attempt an instance below.

1. $\left\{ A: \text{go, he,}\ldots\ldots\ldots \right\}$

In (1) above, *A* is the array which contains the list of the selected items from the lexicon. This list is called *numeration* because it shows the number of time a particular item occurs in the array i.e. that a particular item has been selected three or four times in the list. Each lexical item (LI) is taken from the numeration one at a time and added to a tree formation which forms a set (∑) of syntactic object (SO).

3.2 Operation Agree

In Minimalist Program, each lexical element is a bundle of features. They can be any of the following:

(a) phonological features, i.e. [+back], [+cor], [-ATR],
(b) semantic features, i.e. [+HUMAN], [+MALE]; and,
(c) morphosyntactic features, i.e. [+ PAST], [3SG], [+ACC].

From the list of features above, the morphosyntactic features are the most relevant for our discussion in this unit, because they form the basis of all syntactic transformations in the Minimalist Program.

Morphosyntactic features are also known as formal features. These formal features are necessary for syntactic computations. We have been told in unit 1 that morphosyntactic features are classified into two groups: namely, *interpretable* and *un-interpretable*. We shall continue with its application in this unit. A feature that is interpretable in one item may be un-interpretable in the other. For instance, gender is interpretable in English pronouns, but it is not interpretable in the verbs.

(2) he [+masc]
go [α masc]

Hence it becomes necessary for a verb to be associated with a pronoun before the gender feature of such a verb can be interpreted (via the pronoun).

(3)

he	go
[pron]	[V]
[masc]	[α gender]

In the earlier version of the MP, this process is called *feature checking*. However in the minimalist framework, where we have *operation agree*,

this means that two elements that have related features – are matched by agreement (AGREE). The features that undergo such agreement operation are said to have been *checked* or *valued*.

An *Agree*-relation can be created when an element still has some of its features *unvalued* (un-interpretable). For instance, this can be a verb, as we have in (4) below.

(4) go
[V]
[α NUM]

The verb in (4) above has a number feature [NUM] which has not been valued either as singular [+Sgl] or plural [+plu]. This element having unvalued features is said to be *active* because it has to *probe* or look for another element known as a *goal* before the uninterpreted feature can be valued. This item that we call *goal* should be an element that can provide a complementary feature-match for the unvalued features of the probing element.

(5) he go
[masc] [α GEND]
[sgl] [α NUM]

The element *probing* for a *goal* is called a *probe*. So the verb in the above instance is a probe forming an *agree-relation* with the DP (*he*) which serves as its goal. It is also important to note that the goal itself (the DP being targeted) is also active because it depends on the verb before it (the DP) can value its case features.

(6) he go
[D] [V]
[masc] [α GEND]
[sgl] [α NUM]
[α CASE] [nominative]

3.3 Operation Copy

After *agree* has applied, there may apply other operations where the *goal* has to be copied, moved and merged with the *probe*. We shall begin our illustration with the first one, operation copy. See how this applies in the derivation in (7) below. As operation copy applies, (7) becomes (8).

(7) You can swim

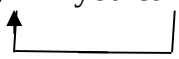
(8) you **can** can swim

The modal to be moved is first copied (in bold) as in (8) above. This is what is known as the **copy theory of movement**. By this term, we mean that we need to create a copy of any item we want to move. The newly created copy will be moved while the original copy of the item remains unmoved in its initial position. You will see what happens to the original copy when we treat Operation Delete, later in this unit. The copy theory of movement will be discussed in greater details in Module 3, unit4.

3.4 Operation Move

See how this applies in our illustration as the copied modal is moved to the sentence-initial position in (9) below.

(9) you **can** can swim

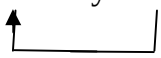


3.5 Operation Merge

This operation simply means the merger of two syntactic objects (SOs). Note that the term *syntactic object* (SO) is not used here to denote the object of a verb; rather it means any item that can undergo syntactic operations.

We illustrate in (10) below how the moved copy of the modal is merged to the initial position of the basic clause: *you can swim.* The general assumption is that such a derivation should be marked because it has an extra copy of the moved item.

(10) *Can you can swim



3.6 Operation Delete

This usually applies in order to remove unwanted or redundant elements of the derivation in the PF. Only the last copy will be retained in the pronunciation. Therefore, any other copy (including the original copy) has to be deleted in the PF so that it will not provide additional semantic notion which can crash the derivation. See how this applies to the original copy of the modal in our sample derivation in (11) below.

You can swim

Operations COPY and MERGE apply to this to yield (11) below.

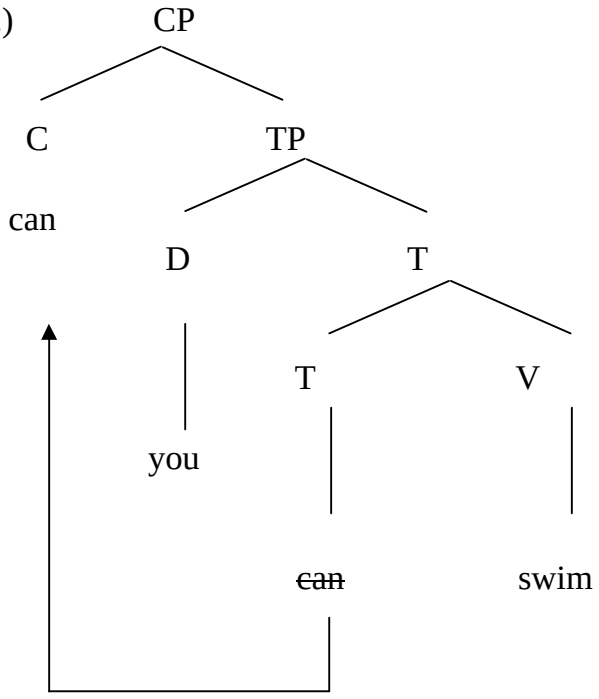
11 (a) *Can you can swim

(b) Can you ~~can~~ swim

(c) Can you ~~can~~ swim > Can you swim?

The derivation in 11(a) is ill-formed because the original copy of the moved modal is retained in the PF. (See PF in the glossary) For 11(a) to become well-formed, only the last copy of the moved item will be retained in the PF. Hence, Operation Delete must apply to remove the redundant copy from the PF.

(12)



Take note that our diagram in (12) above does not really imply that the modal is base-generated under the tense node. In the Minimalist Program, the modal would form Mod P (Modal Phrase) between the T head and the VP. We skip this here so that we can minimise the complexity of our diagram especially at this introductory stage.

3.7 Spell-out

The derivation will continue through operations *agree, copy, move* and *merge* until the formation is ready to be sent to the phonological system. At this point, the sound aspect of the derivation (π) is split from the meaning aspect (λ). This is illustrated in (13) below.

(13)

π	λ.
[hi:]	male, singular,…..
[gəʊ]	move…..

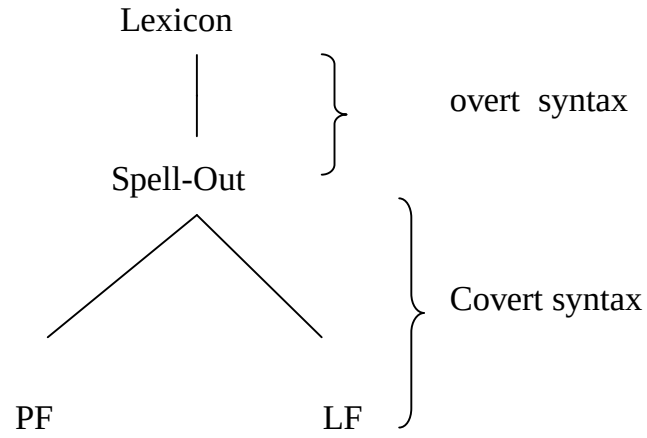
This stage is called the *spell out*. This term simply implies that henceforth phonological processes such as contraction, assimilation and deletion can no longer affect the meaning aspect of the derivation as it progresses further.

For instance, the contraction that reduces '*he will go*' [hi: wil gəʊ] to '*he'll go*' [hıl gəʊ] does not necessarily reduce the meaning because it does not apply to the semantic aspect where the meaning lies. It largely affects the pronunciation, so it is a PF process. Likewise, any further semantic process beyond the spell-out is not expected to trigger any phonological process in the derivation. Therefore, any operation that takes place after spell-out operation is said to be in *covert syntax* because it will only affect one out of the two aspects of syntax and therefore cannot be made overt in the other aspect of syntax unaffected. On the other hand, the pre-Spellout operations are considered to have occurred in the *overt syntax* because each of the syntactic processes has both phonological and semantic representations.

3.8 PF and LF Representations

After the spell-out stage, the phonetic aspect of the derivation is labelled PF (Phonetic Form) while the semantic aspect is labelled LF (Logical Form).

Any derivation that does not violate any principle before reaching LF is said to converge at LF. This derivation has thus satisfied bare output condition. Each of the items that form the array in the numeration is called an SO (syntactic object) and before LF is reached the syntactic objects keep merging with other syntactic objects in order to form a larger syntactic object at each merger.



SELF-ASSESSMENT EXERCISE

1. Go over the unit again and copy out what each the following terms and conventions denotes in the Minimalist Program (as given in the text):
2. List all the operations discussed in this unit and show how they differ from the ones in the Standard Theory model (Chomsky 1965).
   (i) array, (ii) ∑, (iii) numeration, (iv) LI, (v) SO

4.0 CONCLUSION

This unit underscores the relevant of morphosyntactic features in syntactic derivations.

5.0 SUMMARY

In this unit, we have been introduced to some of the basic operations of transformational processes in the Minimalist Program. We listed the major operations involved in these processes. We had a brief discussion on these transformational processes and the effects they have on syntactic derivations.

6.0 TUTOR-MARKED ASSIGNMENT

1. Discuss briefly the various computation operations in the Minimalist Program.
2. Describe a simple transformation procedure of this structure *'Can he go?'* stating each of the stages and operations involved in its derivation right from the lexicon to the PF and the LF.

7.0 REFERENCES/FURTHER READING

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UNIT 3 THE SPELL-OUT STAGE

CONTENTS

1.0 INTRODUCTION

In this unit, we will describe what is called Spell-out and explain how it works. The illustrations we are using here are mainly adopted to help us understand the concept. Normally, you should expect a text with standard terms which will definitely be more difficult than what you are reading now.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- define the Spell-out concept in the Minimalist framework
- discuss how it affects the PF and the LF processes.

3.0 MAIN CONTENT

3.1 The Spell-Out

We merely mentioned Spell-out in unit one. Here we are going to discuss it. This term actually denotes a stage in the derivation of structures. However, it is very germane to the entire derivation because it determines the representation of the derivation at the PF and the LF interface. Beyond this point, the phonetic realization will not require simultaneous transformations for the semantic realisation. For instance, in the derivation of *I can't go*, we can have the following.

1	(i)	go	[ˈgəʊ]
	(ii)	I go	[aɪ ˈgəʊ]
	(iii)	I can go	[aɪ kən ˈgəʊ]
	(iv)	I cannot go	[aɪ kən ˈnɒt ˈgəʊ]
	(v)	I can't go	[aɪ ˈkænt ˈgəʊ]

2. Stages and Operations in the Derivation

Structures	Items selected and the operations used (merger/deletion)	Previously merged tree to which operations apply.
i) go	**MERGE [gəʊ]: {to move}**	Nil
ii) I go	**MERGE [ˈaɪ]:{1sg}**	[gəʊ] :{to move}
iii) I can go	**MERGE [ˈkæn]:{be able}**	[aɪ ˈgəʊ] :{ 1sg, to move}
iv) I cannot go	**MERGE [ˈnɒt]:{neg}**	[aɪ kən ˈgəʊ] :{1sg, not, be able, to move}
v) I can't go	**DELETE [ɒ]:{}**	[aɪ kən ˈnɒt ˈgəʊ]:{1sg, not, be able, to move}

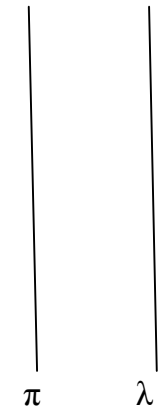
If you look through the derivational account above, you will notice that each lexical entry is represented in pairs. The derivation attempts to produce the sound and the meaning representation of each entry. These are the Phonetic Form (PF) and the Logical Form (LF) respectively. Can you tell the difference between the derivations at stage (iv) and (v)? Do you notice that this phonological change of the Negator from [nɒt] to [nt] may not really have much impact on the meaning? At this time, when a phonological change does not require any corresponding semantic change, we assume that the sound aspect of the derivation has been split from the meaning aspect; hence a change in the PF does not affect the LF. This happens because the change occurs after the Spell-out.

3.2 The Sound and Meaning Pair of Derivation

In section 3.1 above, we have two paths of derivation; the pie derivation and the gamma derivation. The pie derivation shows the phonetic transformation while that of gamma shows the semantic transformation. The verb (go) has both representations. In our convention here we have the PF representation of the pronunciation enclosed in squared bracket ([…]), and we also have the LF representation of the meaning enclosed in braces ({…}). We also try to reproduce the analysis in a simpler way below. You should note that what we have here is not the convention. We adopt the method in order to make the discussion clearer.

3. go

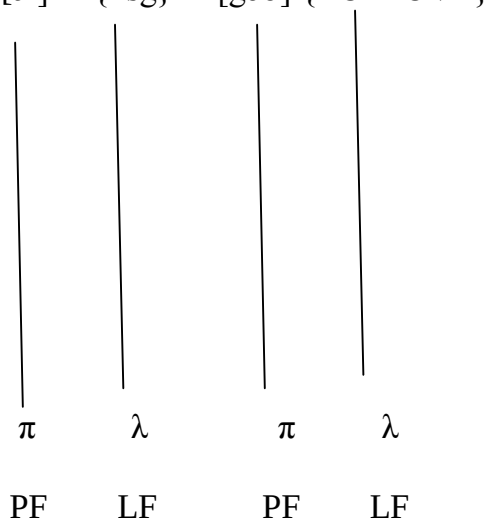
[gəʊ]: {TO MOVE}



For a structure having more than a word, each of the words is expected to have the two representations. See this in (4) below.

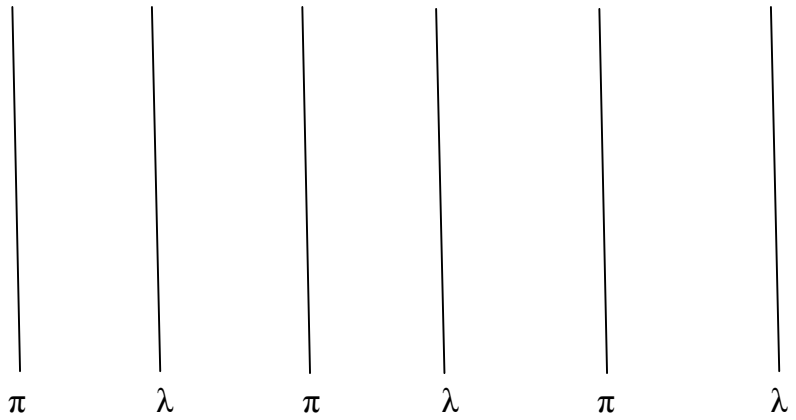
4 (a) I go

[aɪ] {1sg} [gəʊ] {TO MOVE}



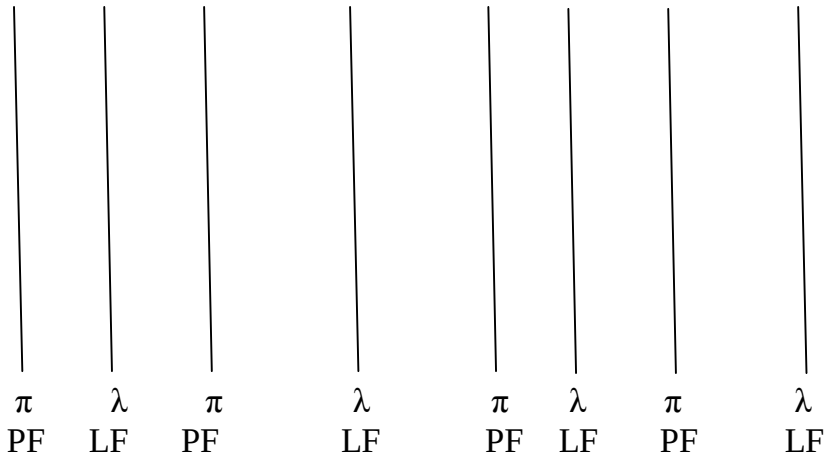
(b) I can go

[aɪ]: {1sg} [kæn] {BE ABLE} [gəʊ] {TO MOVE}



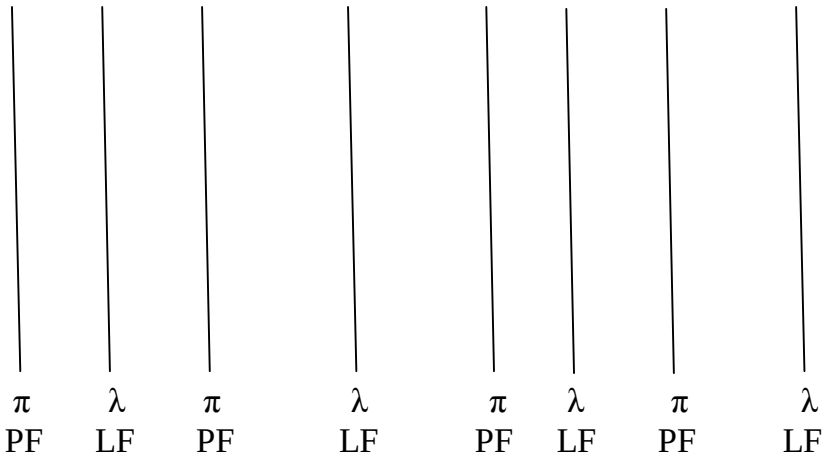
(c) I can not go

[aɪ] {1sg} [kæn] {BE ABLE} [nɒt] {neg} [gəʊ] {TO MOVE}



(d) I can't go

[aɪ] {1sg} [kæn] {BE ABLE} [nt] {neg} [gəʊ] {TO MOVE}



3.3 Spell-Out and Competence

Have you met a second language user of English who says 'two book' instead of 'two books'? Do you know that such speakers often intend the latter while they actually speak out the former? In the Minimalist framework, we assume that these speakers eventually place the plural marker in the structure, but that process happens only after the phonetic form that lacks the plural marking has been formed. For them, the plural marker exists in their thought which constitutes the LF, but it does not occur in their pronunciation where the PF is derived. We can proceed to say that they have passed the spell-out stage before they added the plural marker. The transformation that added the plural marker only applied to the LF because the speaker actually referred to more than one book. However, the spoken aspect of the derivation does not give plurality marking because it has been severed (spelt-out) from the derivations before the plural marker is merged.

What actually happens here is that the spell-out stage can be reached at any time in the derivation. While a more careful speaker allows all important transformations to apply to both the PF and the LF, a careless perhaps merely casual speaker would have long spelt-out the PF while the derivation still continues in the LF.

The discussion above has direct application in ESL (English as Second Language) situation. What we usually call *grammatical errors* in the purist-based pedagogical grammar are not usually linguistic errors. This sometimes is nothing more than a merely pedagogical view of the different levels in their communicative competence. The language user in this case is not aware of any error. His intention differs from the

teacher's assessment. He may intend to use the word *went* while he uses *go.* The abrupt conclusion that such student does not know the past form of the verb is not always the case. Many of these students actually know that *go* will be realised as *went* in the past form. They also would naturally use the basic form in their speech while the inflected form is being derived in their thought.

SELF-ASSESSMENT EXERCISE

1. Describe the Spell-out to a colleague of yours?
2. List all the operations discussed in this units and show how they differ from the ones in Standard Theory.

4.0 CONCLUSION

In this unit, we have seen the concept of spell-out in the derivation. We have also seen that the spell-out stage can be reached at any stage in the derivation.

5.0 SUMMARY

In this unit, we have considered the following important issues:

Derivations occur in pairs. One part of the derivation represents the sound component while the other represents the meaning component. The sound component is represented with pie symbol (π) while the meaning component is represented with gamma symbol (λ). The sound component forms the PF while the meaning component forms the LF. The Spell-out is the stage where a change that applies to an aspect in the derivation pair (i.e. PF) will not inform corresponding change in the other (i.e. LF).

6.0 TUTOR-MARKED ASSIGNMENT

1. State two cases of early spell-out in the use of bare plural marking among Nigerian users of English.
2. Discuss briefly how the use of bare tense marking (i.e. not marking past tense) can be due to Spell-out time rather than grammatical incompetence.

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MODULE 2 ECONOMY PRINCIPLES IN THE MINIMALIST FRAMEWORK

This module is specially written to revisit the minimalist economy principles discussed in Module 4, Unit 4 of ENG 202 (Advanced English Syntax). We have a goal of retelling the same story in a language you can easily understand. At this time, we feel that you need to really understand the way the Program works rather than the terms.

UNIT 1 SHORTEST MOVE

CONTENTS

1.0 INTRODUCTION

In the introduction to minimalism in ENG 202, some economy principles of the Minimalist framework were mentioned. These are Shortest move, Greed, Procrastinate, Last resort and Least effort. We are going to consider the first one in this unit.

2.0 OBJECTIVES

At the end of this unit, you should be able:

- to identify the economy principle and how it works
- to apply it in syntactic analysis.

3.0 MAIN CONTENT

3.1 What is Shortest Move?

In the Government and Binding Theory, there is a movement rule that is known as *Subjacency Condition*. This rule helps to constrain the power of the *move-alpha* rule in order to prevent it from generating ungrammatical forms. Both the *move-alpha* and the *Subjacency condition* regulating it have been replaced in MP with *Operation Move*. Shortest Move economy principle is therefore the means through which the moved item regulates how far it can be moved. In this case, the movement is licensed by the moved item itself rather than being licensed by an external operation like the *Move-alpha*. The minimalism concept here is that the distance covered by syntactic objects in movement should be minimized.

Here we can revisit the concept of economy of derivation discussed above. The convention is that short steps are more economical than long ones. The idea of minimality is strongly upheld by scholars such as Zwart.

Economy of derivation

In deriving a representation, make the shortest possible movements.
(Zwart, 1996:12)

Minimality:

In a derivation, don't move across a place where you could have landed.
(Zwart, 1996:12)

3.2 How does it operate?

Each object being moved has within it the features that match it with the nearest suitable destination. The item will only land in the nearest suitable destination without any need for external checks such as are provided by the subjacency condition.

Consider this following.

1. What did you call what they killed?

In this expression, we have two wh-words. Both have the same form: *what*. These *wh* words represent the same semantic object *a snake*. However, the first *what* refers to *cobra* the name of the snake, while the second *what* refers to the same snake but as the creature that was killed.

Logically, it is expected we should assume that the embedded clause has been formed before it is merged with the matrix clause, this will inform the decision of putting the index *a* on *snake* (to become $snake_a$) being part of the embedded clause while we put the index *b* on *cobra* in the matrix clause (to get $cobra_b$). Therefore the first *what* that is semantically representing *cobra* will be co-indexed with *cobra* hence becoming ($what_b$), while the *what* representing *snake* will also be co-indexed with *snake* to become ($what_a$) Then we are going to have (2) below.

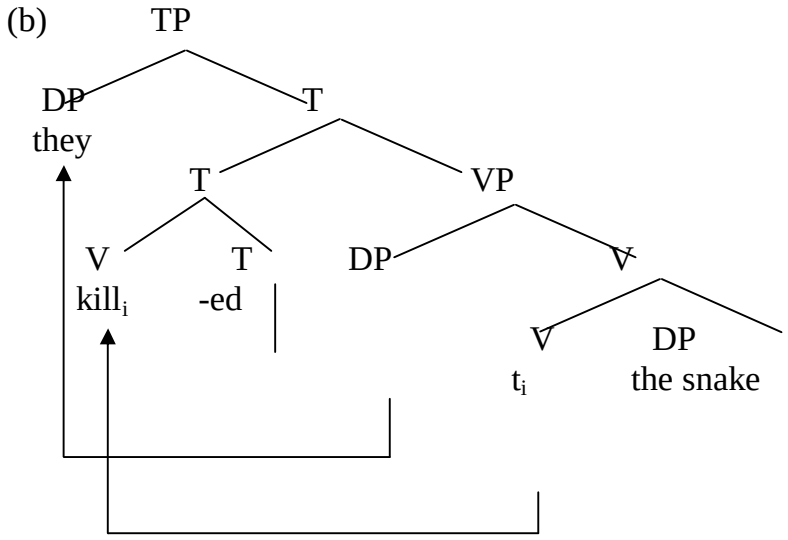
2. $What_b$ did you call $what_a$ they killed?

If you study this structure more carefully, you will discover that the wh-words are formed at different times. The first to be formed is $what_2$. You can see this as it appears below.

We should assume the initial statement to be as follows:

3 (a) They killed the snake.

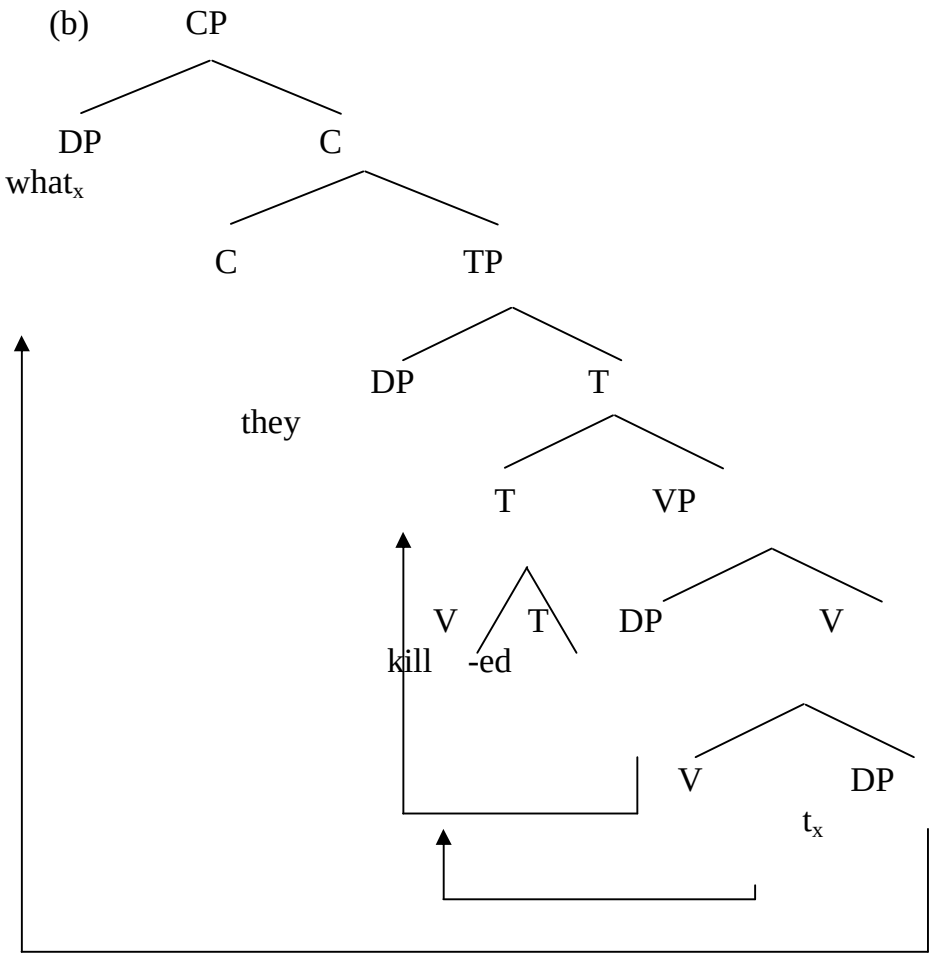
(b)



By moving the object (*the snake*) to a wh- position, we are going to have:

4 (a) $what_2$ they killed x_2

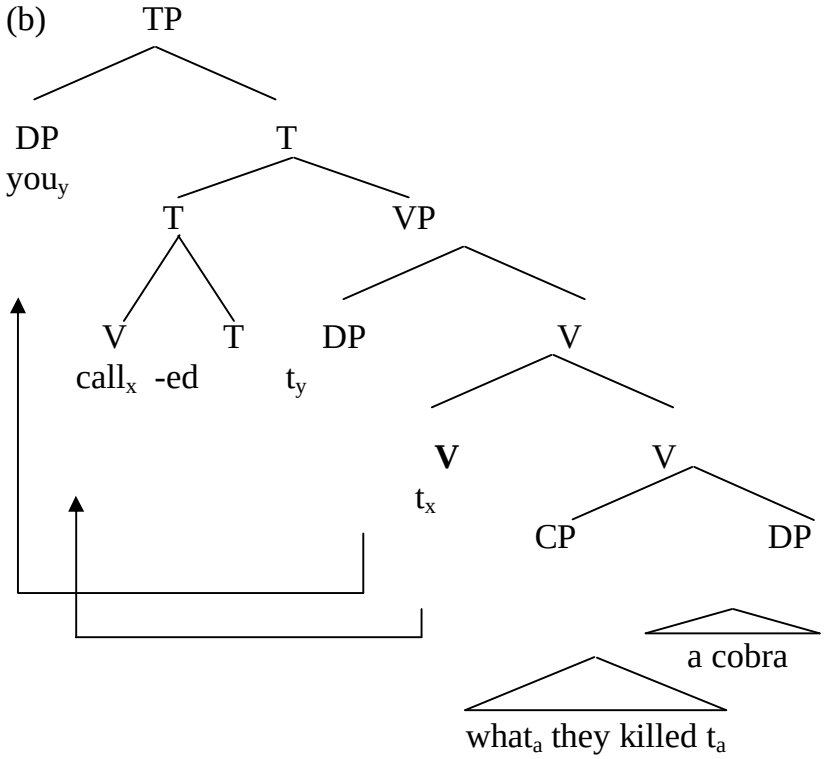
4 (b)



By making the entire wh-clause an object of the di-transitive verb (*call*), the derivation becomes this:

5 (a) You call [what they killed] a cobra

(b)

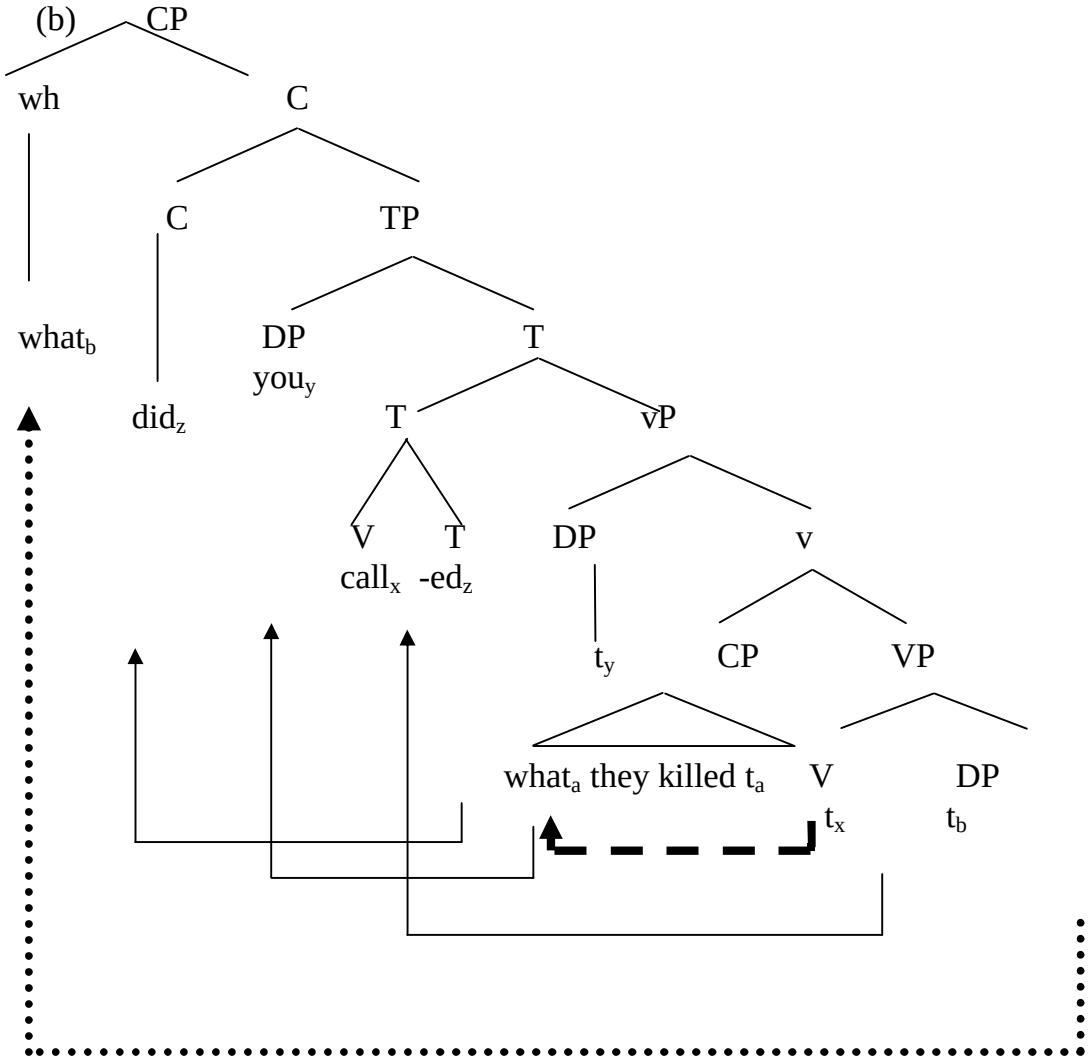


Do not mind the complexity of the tree diagram above. In the tree diagram above, we have two objects in the sentence: the direct object (the NP: *a cobra*) and the indirect object (the CP: *what they kill* which is a noun clause). Due to this complex VP structure, we develop a functional verbal structure having a v head written in lower case. This kind of verb is called a light verb. It is used in ditransitive constructions where a single verb will have two objects.

Moving *cobra* the object of *call* to a wh-position, it becomes *what* as shown below. Note that the *wh* movement paths are marked here with heavy rounded dashes. Now we have two *wh* positions. But the wonderful thing to know here is that these positions are not confused with each other due to the shortest move principle. The *wh* element in the embedded clause (*what* they killed) has its shortest move location within that clause; therefore, it cannot proceed to the matrix clause. Below, we tagged the wh position in the matrix clause $_b$ while we tagged the one in the embedded clause$_a$.

6 (a) What$_b$ did you call what$_a$ they killed?

(b)

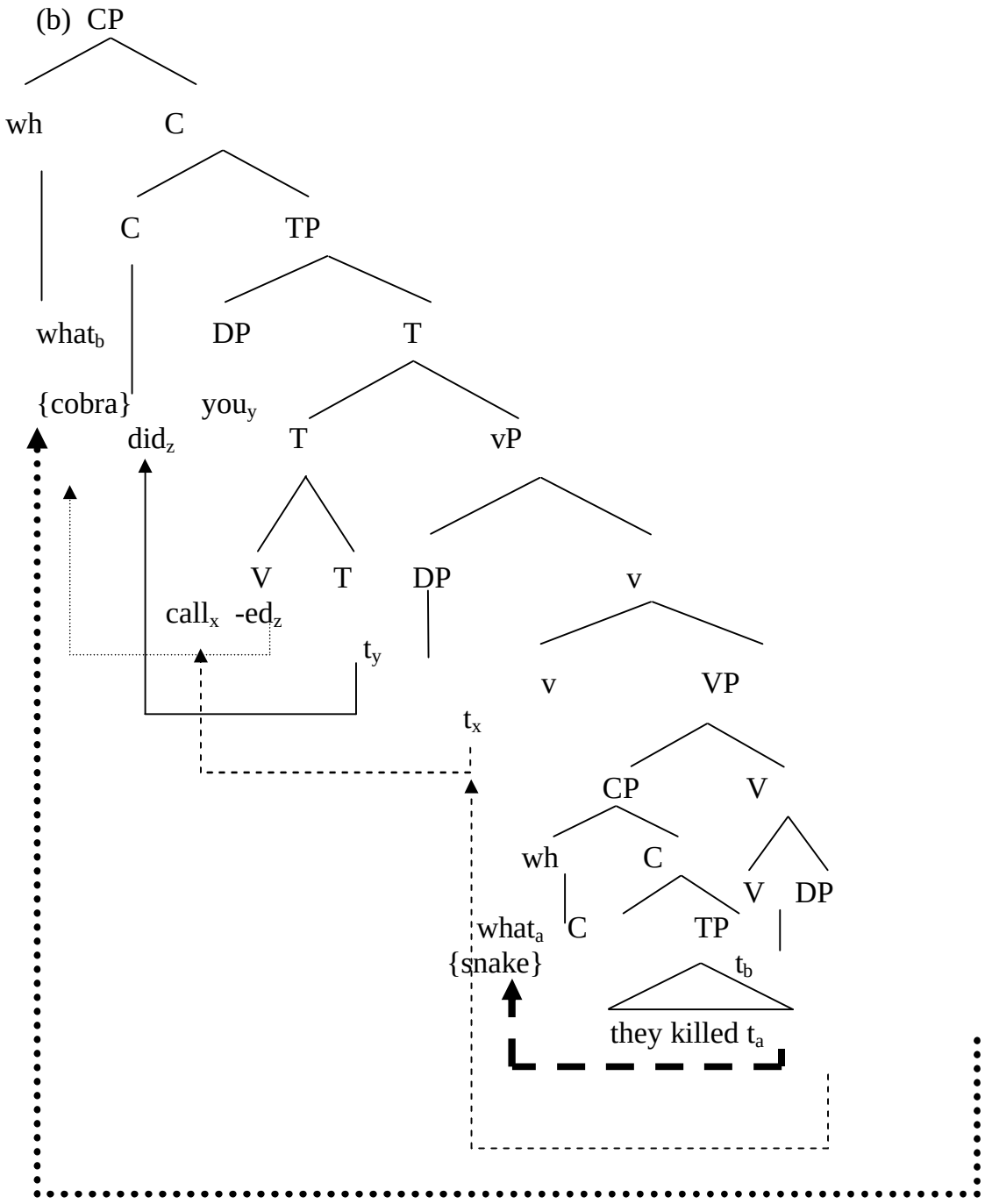


3.3 Why Do We consider it an Economy Principle?

The two instances of *what* are copied from different locations having different features. *What$_a$* is representing the object of *kill*; it therefore carries a bundle of features that still represent its earlier agreement with the features of *kill*. These features remain in it while it is moved. It cannot be copied into a position meant for *what$_b$* which represents the object of *call.* Therefore, it still has all its features with which it displays its agreement with the verb. We reproduce the structure below. Note that we have included the semantic representation of the moved items enclosed in braces {}; while the first *what* is decoded as *cobra* the second one is decoded as *snake*.

7 (a) $What_b$ did you call $what_a$ they killed?

(b)



Try and trace out the movement of the two *wh* words in the the tree diagram above. Take note of the following conventions.

i) round dashes tense movement
ii) flat dashes verb movement
iii) unbroken line DP (noun) movement
iv) heavy flat dashes wh movement
v) heavy round dashes wh movement

Although, it was the same snake that was also called a cobra, the truth is that the morphosyntactic features of *snake* as an object of *kill* differ from the morphosyntactic features of *cobra* as an object of *call*. So each of these *wh* words carries the features with which it initially agrees with the verb in its initial phase of derivation. While being moved, the moved item cannot skip the nearest *wh* slot that matches its morphosyntactic features.

SELF-ASSESSMENT EXERCISE

1. With your pencil, trace the paths of each of the movements in the tree diagram in (7b) above, and distinguish them from one another.
2. How does Shortest move help simplify movement rule? Discuss this with your colleagues.

4.0 CONCLUSION

In this unit, we have discussed the shortest move economy principle. This principle is replacing the Subjacency Principle of the Government and Binding theory.

5.0 SUMMARY

In this unit, we have seen the following important issues:

Shortest move prefers a shorter movement to a longer one. The items moved carries along its features which help determine a suitable landing site. A suitable landing site should not be skipped during movement.

6.0 TUTOR-MARKED ASSIGNMENT

Use the Shortest Move Principle to explain the movement operations in the following expressions.

(a) How do you describe how he did it?
(b) When did he say what you told him?
(c) What he said was what I heard.

7.0 REFERENCES/FURTHER READING

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UNIT 2 GREED AND PROCRASTINATE

CONTENTS

1.0 INTRODUCTION

In this unit, we are going to discuss two among the economy principles. These are greed and procrastinate principles. Greed principle actually shows that items that are moved have within them some features that inform such movement operations. On the other hand, procrastinate justifies the reasons for a delay in syntactic movement.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- identify the application of greed and procrastinate as economy principles
- apply these principles in your syntactic analysis.

3.0 MAIN CONTENT

3.1 Greed

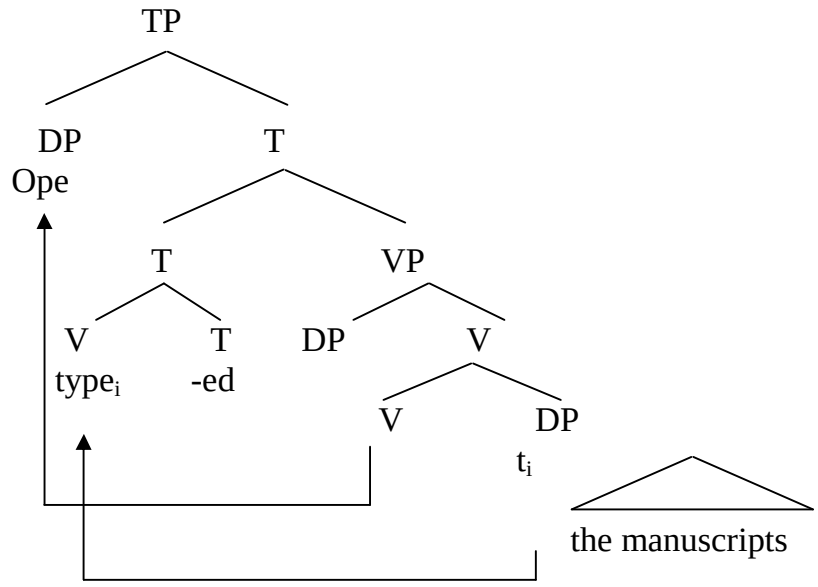
You should have read that Greed requires that an element will not move unless it wants to check its own feature. This principle provides evidence for the reason for syntactic movement. We are going to evaluate this with language data and see how it works. Let's first consider the principle as follows.

Greed:

Move only to contribute to personal licensing
(Zwart, 1996:2)

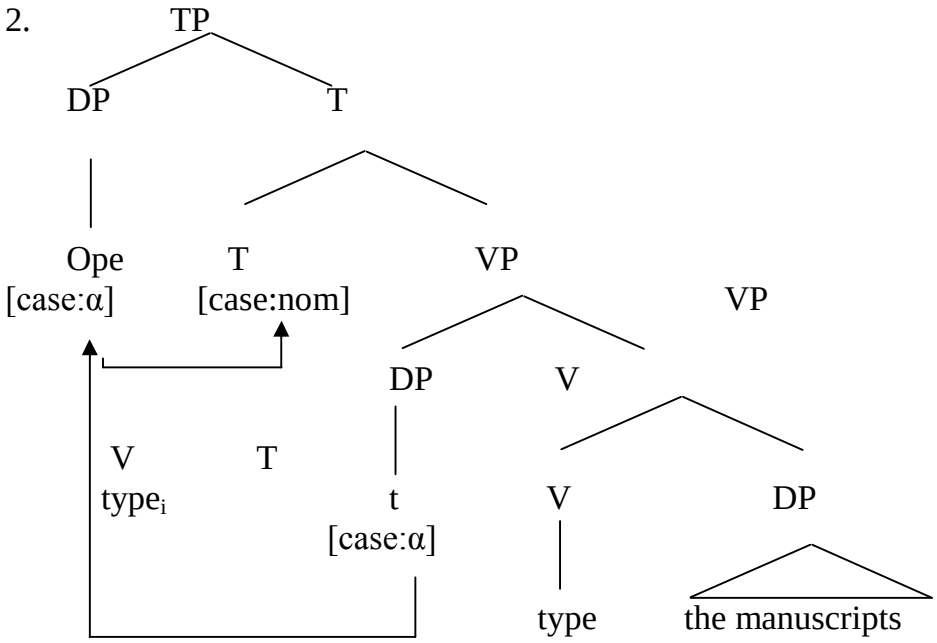
An item will not move unless it has uninterpreted features that can be interpreted in the landing position where it moves to. The diagram below illustrates this sentence: *Ope typed the manuscripts*. The movement of the verb *type* from V to T is due to greed. This means that the verb moves by itself in order to satisfy its own un-interpretable tense feature and lands at T where tense feature is interpretable. We assume that the verb could not have changed its form from *type* to *typed* if it remains at V.

1.



Ope also moves from the subject position of the VP and lands at the Specifier position of the TP. This happens because the subject has an un-interpretable case feature. It is believed that the T can interpret nominative case. For the nominative case of the subject to be interpreted, this subject has to be copied to merge with T where nominative case is believed to be interpretable.

2.



3.2 Procrastinate

This is an economy principle that ensures that, during computation, any element that can wait should wait. This simply means that syntactic operations especially movement operations can be delayed only to occur later in the derivation. Consider the following expressions.

3. What is your name?
4. Your name is what?

Both 3 and 4 above are questions, but they differ in derivation. The first one has succeeded in moving the *wh* operator to the sentence-initial position before the phonetic realization is reached. On the other hand, the second question delayed the movement of the *wh* operator from being moved to the sentence-initial position until after the pronunciation stage is reached. Even if the inversion actually took place as expected, it occurred covertly. So it does not have phonetic evidence of the movement.

After same meaning, it can be deduced that the question that does not involve overt movement actually permits the movement later after the structure has been removed from the PF (the pronunciation stage). This movement could not meet up with the PF realization because it was delayed. This is a case of procrastinate as found in this model. As we can see here, the procrastination has saved us the effort of moving the *wh*- operator in the PF (the pronunciation). It is therefore more economical than the situation where there is no delay in movement.

Procrastinate may yield ungrammatical structures as the case when pronoun function as object of some phrasal verbs such as *cut off, take up,* and *turn down* etc. Consider the instances in (5) and (6) below.

5 (a) Tom turned John down
(b) Tom turned down John
6 (a) Tom turned him down
(b) *Tom turned down him

We believe that *John* is also raised in 5(b), but that does not happen until the Spell-out. The movement happens after *John* has been placed after the particle. So only the semantic content of *John* actually undergoes that movement.

For the derivation in (6), the raising of the pronoun *him* cannot be delayed to occur after the Spell-out. Therefore 6(b) which enforces Procrastinate on the raising of the pronoun will make the derivation to crash.

SELF-ASSESSMENT EXERCISE

Briefly describe to a friend how these two economy principles can affect syntactic movement.

4.0 CONCLUSION

The two principles described above have to do with movement. Greed shows why the movement must occur. Procrastinate on the other hand shows why the movement must be delayed.

5.0 SUMMARY

In this unit, we learnt that items are moved because they have un-interpretable features to be interpreted. We also learnt that such movement can be delayed. The former results from the principle called Greed, while the latter is simply called Procrastinate principle.

6.0 TUTOR-MARKED ASSIGNMENT

1. Discuss the economy principle involved in the derivation of each of these expressions.

(a) You can go?
(b) They came when?

2. Explain how greed can inform verb movement in English.

7.0 REFERENCES/FURTHER READING

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UNIT 3 LAST RESORT

CONTENTS

1.0 INTRODUCTION

A syntactic movement is considered a Last Resort operation when it occurs purposely to save the derivation from crashing. In such a case, that operation becomes so necessary that it cannot be ignored or delayed further.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- identify the Last Resort economy principle and how it works
- apply the principle in syntactic analysis.

3.0 MAIN CONTENT

3.1 *To*-Insertion as a Last Resort

We can also see the use of *to* particle as last-resort in indicating indirect object in di-transitive constructions.

1. He gave the book out.
2. He gave me.
3. He gave me the book

The following structures are all ill-formed.

4. *He gave the book me.
5. *He gave me it
6. *He gave it me

The ill-formed structures above are rescued with the insertion of *to* particle to derive the well-formed structures in (7) and (8) below.

7. He gave it to me
8. He gave the book to me.

3.2 *Do*-Insertion as a Last Resort in Polar Questions

In the construction of polar questions in English, the auxiliary verb will be copied and moved out of the TP. Since the subject remains in the TP, the result will be an inversion.

9. He can read
10. Can he read?
11. He read
12. *Read he?

Verb movement is a feature in Elizabethan English. The ill-formed structure above could still converge (not crashing) as shown below.

13. Readeth he?

However, contemporary English does not allow the kind of movement in (13) above. So only the auxiliary can be copied in this manner. As a result of this, The Last resort operation that rescues this derivation from crashing is the insertion of the *do* auxiliary. The rescued structure is shown below.

14. Does he read?

3.3 *Do*-Insertion as a Last Resort in Sentence Negation

Negation in English involves the movement of the auxiliary into the Negation Phrase (NegP). This NegP is higher than the TP. So the auxiliary has to be copied and moved to merge with the negator (Neg).

15. He can read
16. He can*not* read

In as situation where there is no auxiliary verb, we cannot generate sentence negation without *not*. (Take note; this generalisation does not include the use of negative adverbs such as *rarely, hardly, no longer* and *seldom*. It does not include the use of another set of words we call *n-words* in the literature. These are *, no one* and *anybody*.)

17. *He not read.

In Elizabethan English, the verb will be copied out of the TP into the NegP. That is why we have the following construction in the Bible using Elizabethan English.

18. He readeth not.

Contemporary English does not move the main verb into the NegP. In the absence of any auxiliary to be moved the derivation tends to crash. In order to rescue the derivation, the grammar inserts *do* auxiliary between the subject and the negator as a last resort operation.

SELF-ASSESSMENT EXERCISE

Briefly describe to a friend how these two economy principles can affect syntactic movement.

4.0 CONCLUSION

This principle explains why some derivations that would have crashed could still be rescued. This clearly shows that language is rather linguistic than strictly being logical. Language has a self-repair method.

5.0 SUMMARY

In this unit, we have discussed some of the cases of Last Resort principle in English expressions. These are just cases cited to illustrate the principle.

6.0 TUTOR-MARKED ASSIGNMENT

Cite two examples each for the following:

i. *to*-insertion as last-resort
ii. *do*-insertion as last-resort

7.0 REFERENCES/FURTHER READING

Chomsky, Noam (1991). "Some Notes on Economy of Derivation and Representation", in Freidin, Robert (ed.). *Principles and Parameters in Comparative Grammar*. Cambridge, Ma.: MIT Press [also published as chapter 2 of Chomsky 1995].

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UNIT 4 LEAST EFFORT

CONTENTS

1.0 INTRODUCTION

By this economy principle, we mean that when more than one means of derivation is possible, the shorter one is usually preferred to the longer one. This refers to the choice of a derivation in which minimum effort is required with the idea that a derivation would naturally prefer minimal efforts to task-laden ones.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- to identify the economy principle of least effort and how it works
- to apply it in a relevant syntactic analysis.

3.0 MAIN CONTENT

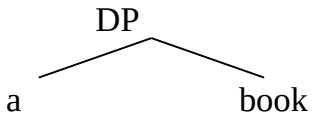
3.1 DP Construction: Possessive Adjective versus Possessive Pronoun

It is more economical to derive a DP with possessive adjective than the one with possessive pronoun.

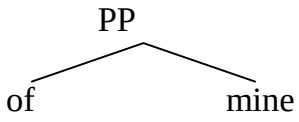
1. my book (possessive adjective)
2. a book of mine. (possessive pronoun)

In (3) below, we have the stages involved in the tree –to- tree merging operation of the DP tree of the possessive pronoun. The first tree is given in (a), the second tree is given in (b), and the merger of the two trees is given in (c)

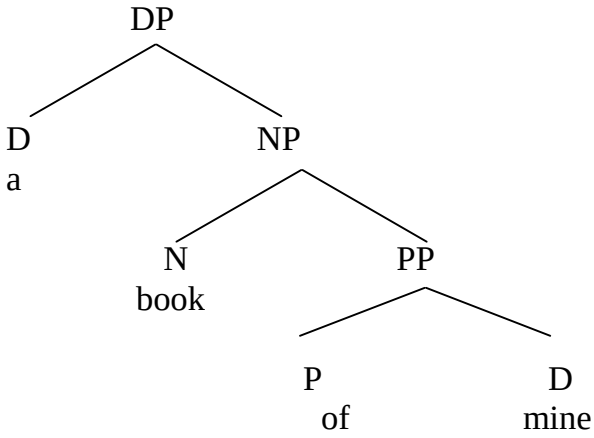
3 (a)



(b)

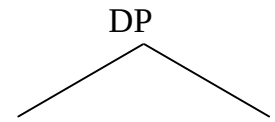


(c)



For the possessive adjective, we have a simpler DP structure. See this in (4) below.

4.



We can notice that the use of possessive pronoun carries more rhetorical elegance than linguistic economy. No wonder it tends to be more frequent in formal discourse than in spontaneous casual interactions. Expressions involving possessive pronouns are not as common as those using possessive adjectives.

5 (a) a boss of mine
(b) a servant of mine
(c) a cook of mine

Compare the expressions above with their less formal counterparts below.

6 (a) my boss,
(b) my servant and
(c) my cook

3.2 Reduced Clause

The reduced clause is more economical since it involves fewer words than a fully stated clause. This fact is noticeable in the expression below, which becomes shorter because the embedded clause is reduced.

7 (a) The man whom you saw
(b)The man you saw

It is expected that speakers may have to use more of these reduced expression when they are talking freely. In this case, they will tend to give least effort to derivational tasks especially when they are not constrained by formal rules of discourse.

Other forms of reduction are also possible through simple discourse based ellipsis. For instance, the following question may have up to three answers as a result of elliptical constructions.

8. Will you go?

Possible answers are given below:

9 (a) Yes, I will go.
(b) Yes, I will.
(c) Yes.

The last answer, which takes the least effort to derive, will be preferred to the other answers.

You can also consider the following pairs of expressions

10 (a) Can you see that?
(b) Can you see?

11 (a) Do you speak Igbo?
(b) Do you?

The second item in each pair is produced with less effort. These shorter forms are instances of least effort principle. That is why people prefer using these shorter forms.

3.4 The Use of Pro Form

The use of pro form is also very important in the operation of this principle. The pro forms usually have their long conventional forms which often involve longer syntactic constructions. The use of the pro

form helps in reducing the PF by deleting repeated PF strings and replacing them with appropriate shorter PF forms. An instance is given below. The replaced string and its adverbial pro form are italicised.

12 I promised to come for lunch and he *came for lunch*.
13 I promised to come for lunch and he *did so*.

In the LF, the deletion of the second string (*came for lunch*) can still be recalled through the first string (*to come for a lunch*). So the LF of the pro form (*did* so) can easily be recovered.

Let us also consider the following example.

14 (a) Do you think *he will come?*
(b) I think *so.*

SELF-ASSESSMENT EXERCISE

State five different cases of Least Effort principle in English, using examples different from those cited in the text.

4.0 CONCLUSION

Least Effort is a construction-economy principle. It shows that linguistic goals require less strenuous efforts which will yield more productivity in output. This is normal, and it is what makes language what it is in actual sense.

5.0 SUMMARY

In this unit, we discussed some cases of Least Effort in derivation. These include reduction of clauses, elliptical constructions and the use of pro forms.

6.0 TUTOR-MARKED ASSESSMENT

Provide two instances of least effort principle of the following types.

1. Pro forms
2. Elliptical constructions

7.0 REFERENCES/FURTHER READING

Chomsky, Noam (1991). "Some Notes on Economy of Derivation and Representation", in Freidin, Robert (ed.). *Principles and Parameters in Comparative Grammar*. Cambridge, Ma.: MIT Press [also published as chapter 2 of Chomsky 1995].

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MODULE 3 OPERATIONS AND STAGES IN THE TRANSFORMATION PROCESS

In this module, you will be exposed to some basic ideas on the structure of the Phrase marker in the Minimalist Program. We shall discuss the phrase architecture as it builds from the lexical base up to the phrasal top. We shall also discuss some of the changes in the categorical labels on the phrase markers. You will learn about the movement mechanism: how it is initiated, and how it is represented.

UNIT 1 BARE PHRASE STRUCTURE (BPS)

CONTENTS

1.0 INTRODUCTION

The native speakers derive their syntactic structure by merging words together to form phrases. Categorical labelling of those phrases comes up after the structures have been fully formed. In this unit, we will discuss how the native speakers achieve this.

2.0 OBJECTIVES

At the end of the unit, you should be able to:

- explain what is meant by bare phrase structure
- use it in analysing simple language data.

3.0 MAIN CONTENT

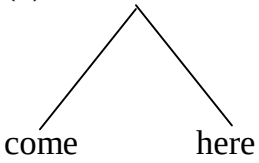
Bare Phrase Structure (often abbreviated BPS) is a major development of MP. This theory contrasts with X-bar Theory, which preceded it, in four important ways.

3.1 The Derivational Structure of the BPS

This implies that the structure is built from the bottom up, word by word to derive a phrase. X-Bar Theory, on the other hand, is representational because the tree is first constructed before words are inserted into its end nodes. For instance, the X-Bar Theory will start its structural representation from the top by stating the phrasal category (i.e. VP) which will now yield its constituents (i.e. V and NP) before lexical items (i.e. *see* and *John*) will be inserted. The BPS, on the other hand, will start with the lexical items (i.e. *see* and *John*) which will merge to form the phrase (i.e. VP). This is what we meant by *bottom up*.

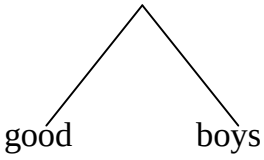
1 (a) come

(b) come



2 (a) boys

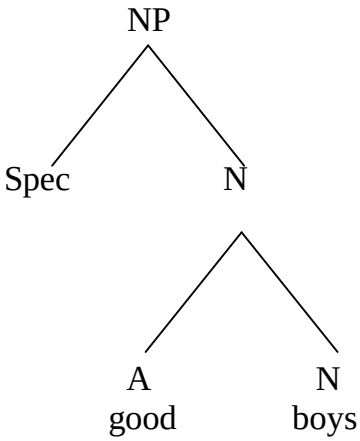
(b) boys



3.2 Flexibility of the Phrase Marker

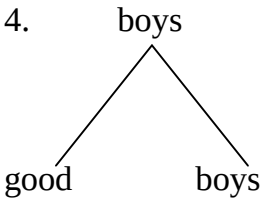
BPS does not have a rigid preconceived structure in MP, while in X-Bar Theory, every phrase should have a Specifier and a complement. If these nodes are not filled, we will still assume they exist in the structure.

3.



While the Specifier position in (3) has to be assumed vacant just because the position must exist in GB analysis, the minimalist framework will not acknowledge any position that does not have lexical representation right from the lexicon.

4.



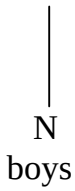
The principle simply adds one word to another, and it merges them into trees. The selection of words precedes the formation of syntactic trees. Since we use only the word we have alone in forming the tree, we cannot generate any vacant slot in the tree formed. Why do we have to create a Specifier position for *good boys* when we know that the derivation does not have any Specifier right from the outset?

3.3 Binary-branching Trees

BPS has only binary branching

On the other hand, the minimalist framework presents its data on phrase markers using only binary branching nodes. When an item occurs alone, it will not be mapped into any tree diagram. You cannot have a tree diagram until you have at least two items. This idea is different from what obtains in GB where a single item (*boys*) will still be put under a non-branching NP tree as seen below.

5. NP

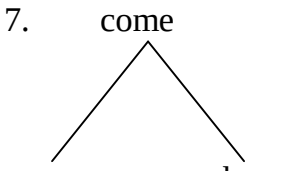


See how the minimalist framework parses the following items with BPS:

6 (a) come
(b) come here
(c) come here tonight .

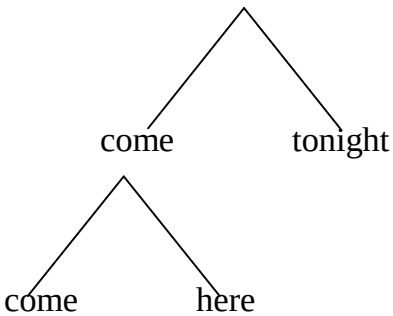
For 6(a) tree formation cannot be used yet because this is a single item. For 6(b) and 6(c), there are more than one item in the structure, therefore trees can be formed. See these trees in (7) and (8) below.

7.



(come + here)

8.



(come here + tonight)

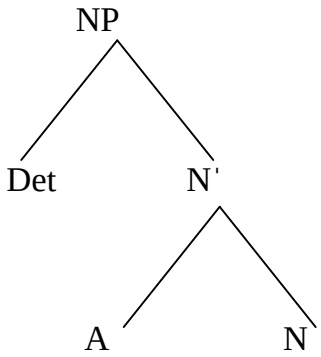
Do you wonder why the phrase markers in (7) and (8) are labelled *come* rather than *here* or *tonight*? This happens because the phrase is a verbal structure which could have been represented with VP in GB framework. Here, the head word of the category is used instead of the V label. You can proceed to Section 3.4 for more discussion on this.

3.4 Phrasal Label

BPS does not distinguish between a "head" and a "terminal", but X-bar generates head-driven structures. In the diagram below, the use of N' (N-bar) has clearly shown that N (noun) is the head of the phrase. No

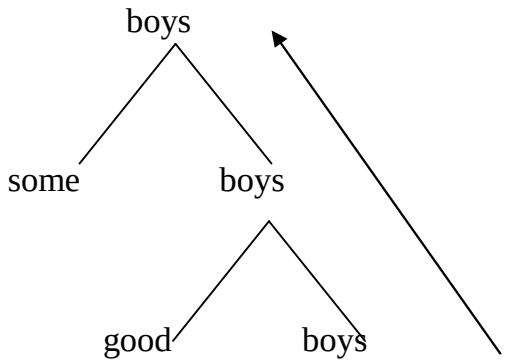
wonder, the phrase is labelled NP (Noun Phrase). This is how phrases are described in using the X-bar theory of the GB.

9.



In the case of Minimalist Program, Bare phrase structure labels the representation by the actual words involved in derivation. The native speaker is less concerned about what is the head, but the line of the derivation from the base (bottom of the tree) can determine this. This is not a mere diagram but a logical path of reason reproduced from the line of derivation. See this minimalist concept in the diagram below, and compare it with the X-Bar concept above. You can see how the minimalist representation creates a path of reason for the word *boys* in (10) below.

(10)



Boys is the most important word in the derivation. This word keeps merging with other words right from the base until a desired syntactic structure is formed.

3.5 Operation Merge in the BPS

BPS has two important operations; these are Merge and Move. When Merge operates on two objects (say α and β), it merges them into an unordered set with a label (either α or β, in this case α). The label identifies the properties of the phrase.

Merge (α, β) → {α, {α, β}}

(Merge alpha and beta, to derive another alpha which is a conglomeration of alpha and beta)

We can assume that Operation Merge is being applied to these lexical items: *build* and *houses.* Let *build* be α, while *houses* represents β, we are going to have the following:

Merge (build, houses) → {build, {build, houses}}

Deciding on which of the two items should take the label of the phrase is a simple thing in this case. The phrase *build houses* can easily permit an elliptical representation of *build* than it will ever permit *house.* This means that *build* and *build houses* behave more alike than *houses* and *build houses* actually do. We therefore represent the phrase build house with the keyword *build* as follows.

11 (a) They planned to <u>build houses</u>

(b) They planned to <u>build</u>

(c) *They planned to <u>house</u>

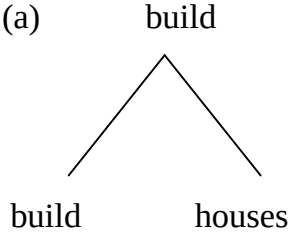
12 (a) We found <u>good boys</u>

(c)We found <u>boys</u>

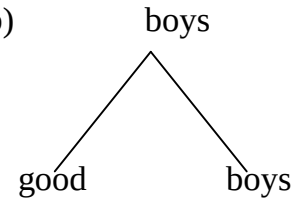
(c)*We found <u>good</u>

If we study the underlined items in the sentences above, we will notice that *build* can replace *build* or *build house,* but *house* cannot replace any of these. We can also see that *boys* can replace *good boys,* but *good* cannot. With this, we can justify the bare phrase structure of representation as they appear in (13) below.

13 (a)



(b)



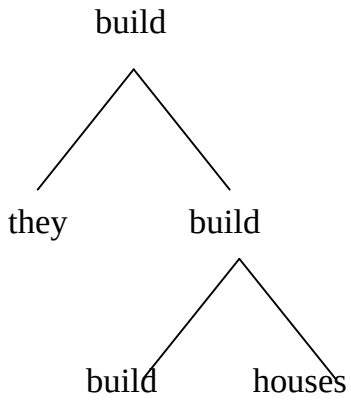
In (13), the VP level is represented with *build* while the NP level is represented with *boys*. This is how merging operation is represented in the BPS.

It is also possible to merge items with structures already built. In this case, we assume that a new syntactic element say γ combines with an already formed phrase {α, {α, β} in order to form a larger phrase {γ, {γ, {α, {α, β}}}} where γ projects as the head. This can be properly represented symbolically as follows:

Merge (γ, {α, {α, β}}) → {γ, {γ, {α, {α, β}}}}

If we want to continue the building of the tree structure in 13(a), we can take the pronoun *they* as the new syntactic item to be merged to our earlier-formed phrase: *build houses.* This recent merger results in the derivation of this newly-formed phrase: *they build houses*.

In this particular phrase *they build houses*, *build* is still the keyword of the derivation. So we can say *build* 'projects' as the label (This is what is still
referred to as 'head' in GB).



SELF-ASSESSMENT EXERCISE

1. Describe to a friend why BPS trees are considered bottom up in derivations.
2. Use this structure read books to compare the BPS bottom up with the X-Bar top down derivations.

4.0 CONCLUSION

The BPS is a useful tool in the Minimalist framework. It keeps the analysis closer to the actual language data rather than the categorical labels. At each level of the derivation, the analysis has a keyword from the language data which heads represent the major category in the structure.

5.0 SUMMARY

In this unit, we have seen how syntactic structures are formed through a unified generalized transformation. We have also peeped into two important Chomskian concepts in Minimalist Program. These are bare phrase structure and binary branching nodes.

6.0 TUTOR-MARKED ASSIGNMENT

Analyse the following in BPS

i. Sing songs
ii. Bad eggs
iii. Come to John
iv. John eats bread
v. He can sing

7.0 REFERENCES/FURTHER READING

Chomsky, Noam (1994). “Bare Phrase Structure”. MIT Occasional Papers in Linguistics #5, Cambridge, Mass.: MIT Department of Linguistics and Philosophy. (also published as Chomsky, Noam. 1995. “Bare Phrase Structure”, in Webelhuth, Gert (ed.).

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UNIT 2 PHRASAL CATEGORIES IN THE MINIMALIST PROGRAM

CONTENTS

1.0 INTRODUCTION

There are two types of phrasal categories in the Minimalist Program. These are the lexical and the functional categories. The lexical phrasal categories are verb phrases (VPs), noun phrases (NPs) and adjectival phrases (APs), adverbial phrases (ADPs) and prepositional phrases (PPs). The functional phrasal categories on the other hand include determiner phrases (DPs), the vp shell, Tense Phrases (TPs) and complementizer Phrases (CPs).

In the brief survey we need in this study, we just have to restrict ourselves to few of the common functional phrases. The Minimalist Program (MP) does not in any way make syntax to be more difficult. Rather it helps to simplify the principles in the earlier models of Transformational Generative Grammar (TGG).

2.0 OBJECTIVES

At the end of this unit, you should be able to:

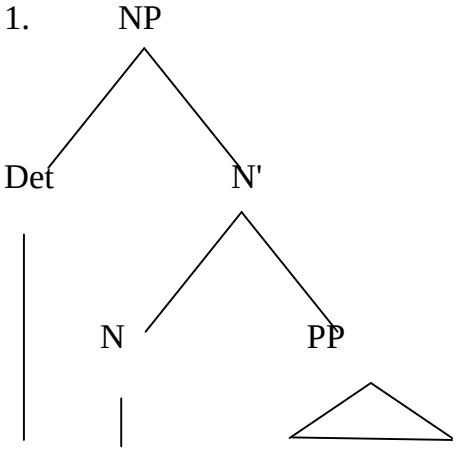
- describe how syntactic trees are formed in the MP
- distinguish between lexical and functional categories
- draw and label phrase markers (tree diagrams) in the MP.

3.0 MAIN CONTENT

3.1 The Determiner Phrase (DP)

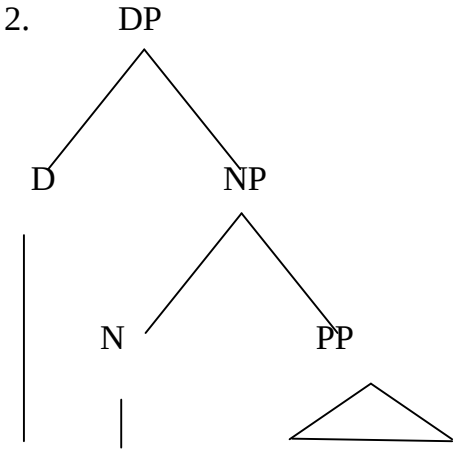
In the minimalist framework, what used to be called the noun phrase (NP) has been redefined. The determiner is a head which selects the nouns as its complement. The determiner, which used to be a Specifier in the NP, is now a functional head of the Determiner Phrase. The NP is a complement of the DP. So, we can say that the core of the nominal category is no longer the noun but the determiner. Abney (1987) is one of the important works that laid the foundation of the DP hypothesis. DP Hypothesis will be more adequately discussed in Module 4. It is mentioned here to briefly justify the use of DP for what could have been ordinarily labelled NP.

1.



The student of English

2.



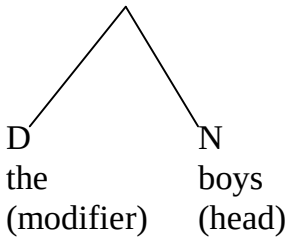
The student of English

Apart from the inclusion of the pronoun in the determiner group, the rest of the determiners are those traditionally labelled as determiners (i.e. a,

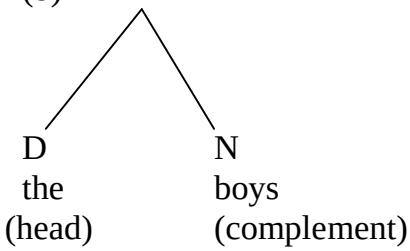
the, that, those, this, these, my, our and your). These are the traditional articles, demonstrative adjective, and possessive adjectives.

In a DP, the determiner is the head of the phrase. Hence, the DP phrase marker will replace 3(a) with 3(b) below.

3 (a) NP



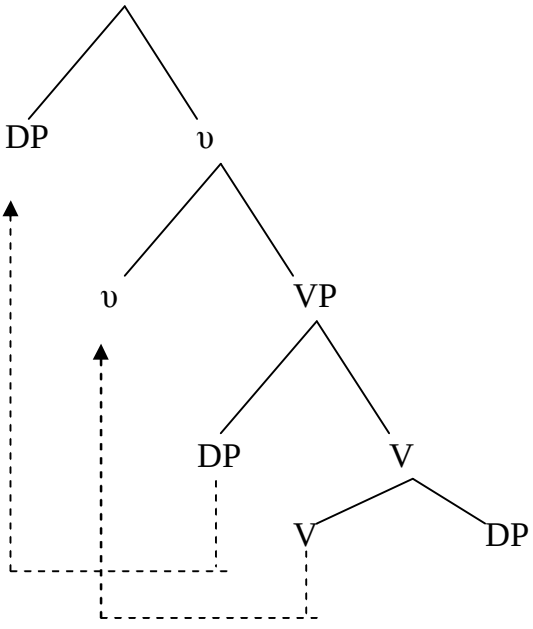
3 (b) DP



3.2 The VP Shell

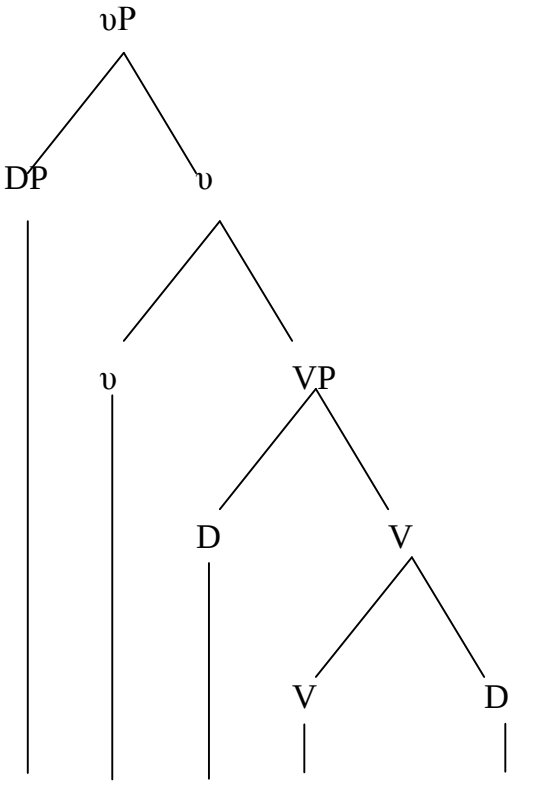
The verb phrase in the minimalist framework has a functional head written in a lower case ‘v’ label. This is called the light verb. Hence the functional vP differs from the lexical VP. This structure provides analytical basis for causative and double object constructions.

4. υP



Generally it is assumed that the verb has to be copied to the functional head position before it can be liable to tense marking as shown in (4) above. However where causative construction is used, the light verb will host the causative verb; therefore the main verb can no longer be raised into the functional position provided by light verb. The use of light verb makes possible the analysis of causative construction in (5) below.

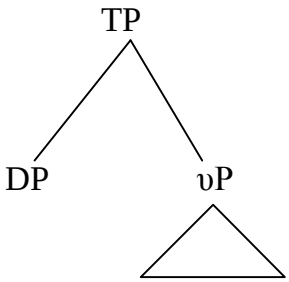
5.



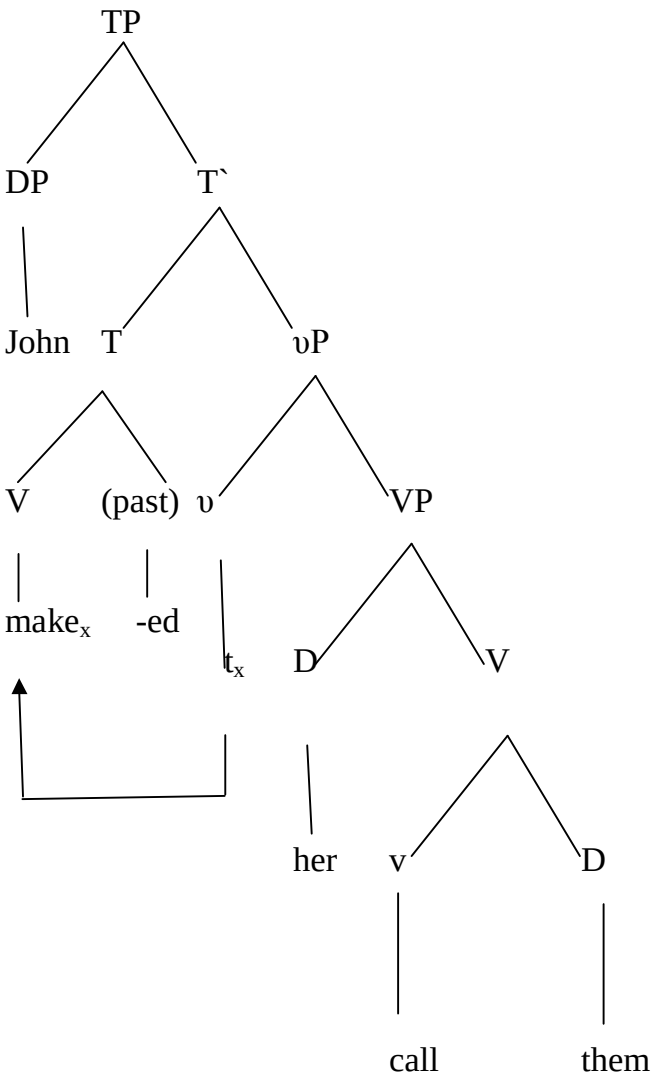
3.3 The Tense Phrase (TP)

The simple affirmative sentence is analysed as Tense Phrase (TP). So every υP need to become a TP in order to express tense marking.

6(a)



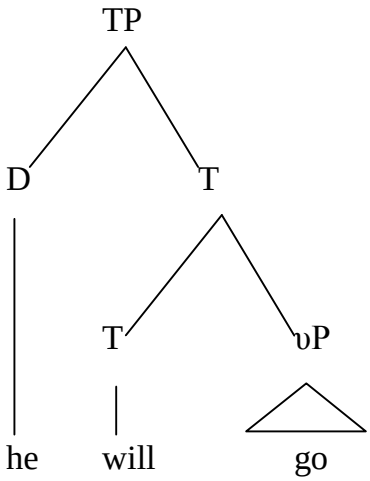
6(b)



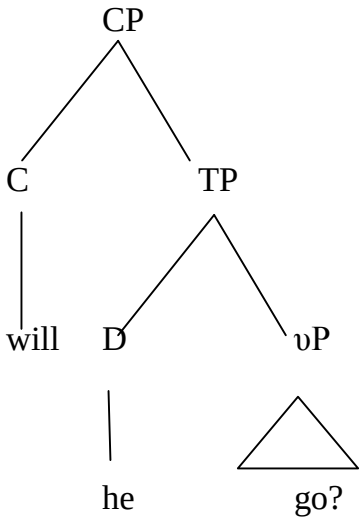
3.4 The Complementizer Phrase (CP)

Questions, inversions and sub-ordinate clauses are analysed with CP phrase marker. The inverted items are seen as being copied out of the TP (basic affirmative sentence) into a structural extension provided by the CP.

7(a)

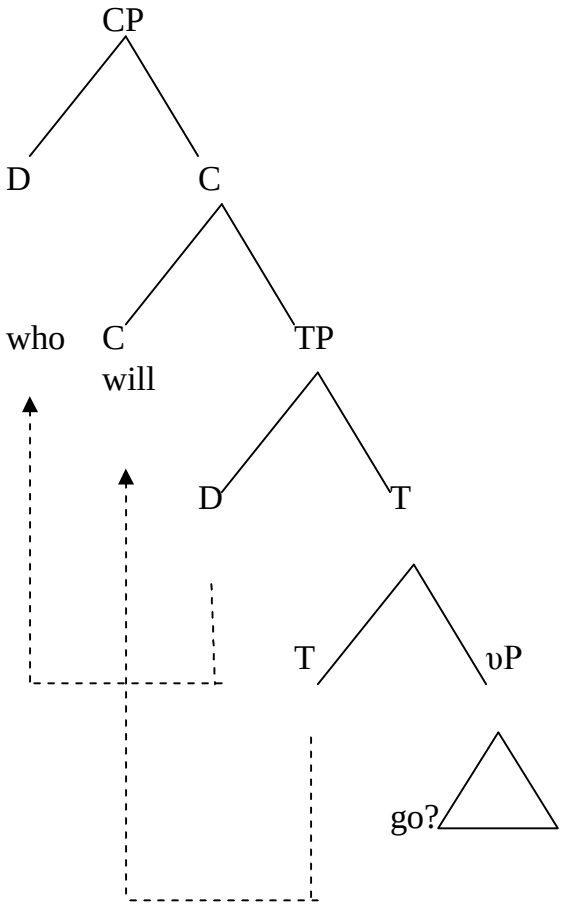


7(b)



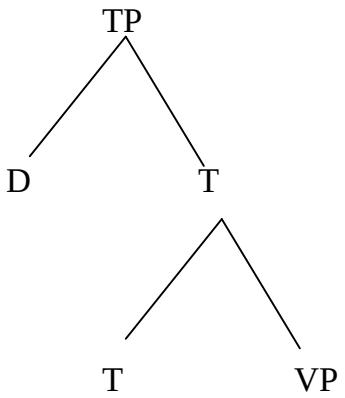
NB. Note that the modal auxiliary is usually placed under tense node here. This is because we are beginners and we can leave that there for now. The triangle under υP is a shorthand representation of the whole υP.

7(c)



The Minimalists Program is not a rigid framework. You may ignore the vP in your TP structure if it is not required to the analysis of your data. This is expected if you are not dealing with complex verbal structures such as causative and double object constructions. You can therefore have this.

8.



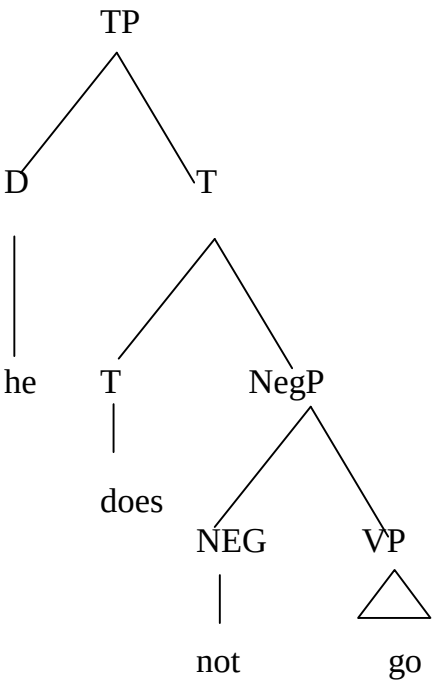
3.5 The Negation Phrase (NegP)

Negation is one of the functional categories one easily comes across in sentence analysis. This functional category has a wide spectrum which definitely our present knowledge of the model cannot cope with. Let us

just be content with how we can represent simple sentence negation. In this case, negation will form a Negation Phrase NegP. You can how the negative sentence in (9) is represented in (10). When we have a better grip on the theory we may want to look into constituent negation within the Minimalist framework.

9. He does not go.

10.



SELF-ASSESSMENT EXERCISE

1. Provide tree diagram analyses of the following in bare phrase structure.

(a) sit down
(b) come up
(c) new students
(d) at Lagos

2. Convert the tree diagrams in (1) above to category-based labelled trees.
3. Attempt a tree diagram analysis of the following using binary branching nodes with categorical labels.

(a) sit down there
(b) come up here

4.0 CONCLUSION

It is very important to understand the proper use of tree diagrams as phrase markers in the Minimalist Program. The mastery of the theory depends on one's ability in employing the phrase marker to reveal structural details that will make our analysis a dependable syntactic account.

5.0 SUMMARY

In this unit, we have seen how syntactic structures are formed through a unified generalized transformation. We have also peeped into two important Chomskyan concepts in Minimalist Program. These are bare phrase structure and binary branching nodes. We have also seen some of the common functional phrases: the DP, the TP and the CP. The Determiner Phrase (DP) has eventually replaced our earlier concept of Noun Phrase (NP). The pronoun has become a determiner which can function as the head of a Determiner Phrase (DP). The noun phrase (NP) is now a complement of the determiner. Going by this analysis, the noun will serve as a complement to the article or to the pronoun.

6.0 TUTOR-MARKED ASSIGNMENT

Analyse the following on labelled tree diagrams

i. the men
ii. our people
iii. He knows the boy
iv. we, the people
v. What did you say?
vi. Did you say that?

7.0 REFERENCES/FURTHER READING

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UNIT 3 FEATURE CHECKING THEORY

CONTENTS

1.0 INTRODUCTION

We learnt earlier (in section 3.1of Unit 1, Module 2) that the move-alpha rule that normally moves items in the Government and Binding model has been laid aside in the Minimalist Program. Do you now ask yourself how items are still being moved in Minimalist Program? This unit will introduce you to the factors initiating movement in the framework.

2.0 OBJECTIVES

At the end of the unit, you should be able to:

- name the various features that are involved in syntactic computation; and
- describe the effects of morphosyntactic features.

3.0 MAIN CONTENT

3.1 Feature-Driven Movement

Movements are licensed in the minimalist program through the feature checking mechanism. We have already seen some things on the operation of greed as an economy principle. The claim that items moved because they have in them the potential to move is the basic thing we need to revisit now. What actually makes an item to move is the presence of un-interpretable features they possess. The demand that those un-interpretable features be interpreted before the derivation can converge (that is to be considered correct) will make the item having non-interpretable features to look for another item which can have those un-interpretable features valued. The item that can help to provide interpretable features is called a *probe*. The item that receives help

before it can interpret its un-interpretable features is called a *goal*. The process through which a probe accesses a goal is called *probing.*

3.2 Types of Features

There are at least three types of features relevant to our current analysis. These are phonological features, semantic features and the morphosyntactic features. (See Module 1, Unit 1)

Phonological Features

The phonological features are the properties of the PF realisations. Natural languages cannot do without having speech forms. This speech form is a systematic combination of sounds for communication purposes. Theoretically, we may be talking of features like [+obstruent], [-coronal] and [-ATR] which are usually dealt with in Generative Phonology. In the present course, we may not really go beyond the fact that these features combine to derive the PF which is an important interface level in Syntax.

Semantic Features

These are the features through which semantic information is coded. They involve such features as {+male}, {+married}, {+young}. The value of these kinds of features is usually rooted in the context based on the understanding of the users of the code in question. This constitutes the sum of the LF interpretation.

Morphosyntactic Features

These are called formal features. They are the major features needed for syntactic operations. Morphosyntactic features comprise the followings: person, gender, number, and case. These are often called phi features.

3.3 Feature-Based Computations

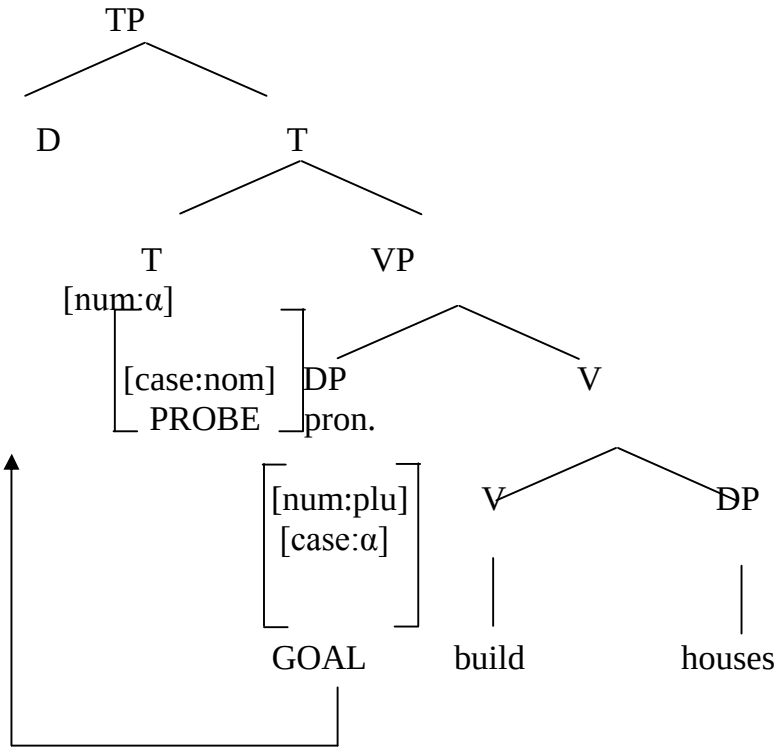
Let us go into the discussion as we consider why nouns have to move. Until a noun is used in a sentence, it is assumed that its case feature is un-interpretable. For this feature to be properly valued, the said noun must locate a verb that can help to interpret the un-interpretable Case feature. This noun (as a probe) has to probe for that verb (which acts as a goal).

We will as well assume that our selection of words is initially done without a specific order. Then we can start with the keyword which is likely going to be a verb. We may decide to have the numeration as follows.

1. Σ:{build, houses, 3plu.}

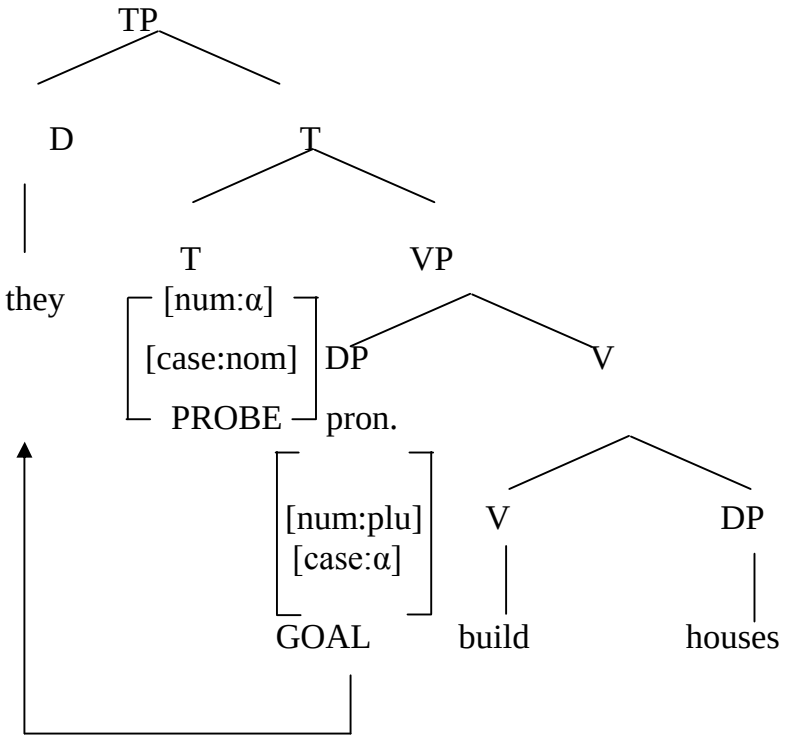
In the (1), the subject of the verb has the following features: [3plu]. Through this means we identify it as third person plural. It happens to be a pronoun; then it will be a third-person plural pronoun.

2.



We then assume that the pronoun needs nominative case. This case can be interpreted via the tense head. (It should be noted that two views exist on how nominative Case can be valued. Some scholars think it must be with the tense head; others feel it should be with the verb. We are learners; therefore, we will adopt the first view. This does not mean that the second view is wrong. We just need to know that our knowledge of the subject matter is too low to really go into detailed theoretical argument now.)

3.



In the diagram above, we can see how the pronoun was represented at the initial stage. There it takes a non-phonetic form. At that point, it could be pronounced either as *them* or *they*. We eventually choose to call it *they* when we have moved it to the Specifier position of the TP. That is where it is merged with T which has interpretable case feature.

SELF-ASSESSMENT EXERCISE

In a simple way, describe what you understand by the term feature-driven computation

4.0 CONCLUSION

Minimalist Program is considered as feature-driven syntax due to the place of morphosyntactic features in syntactic derivations. Major syntactic operations are triggered when items seeks to check their un-interpretable features making structural links with another item where those features are interpretable.

5.0 SUMMARY

In this unit, we have considered the relevance of features to syntactic movements. We have also been introduced to the following types of features: phonological, semantic and morphosyntactic mentioned. The morphosyntactic features are very dwelt upon because they are needed in syntactic derivations.

6.0 TUTOR-MARKED ASSIGNMENT

1. Define the following terms:

(a) Goal
(b) Probe
(c) Probing
(d) Un-interpretable features.

2. Explain with examples from English how un-interpretable feature can cause syntactic movements.

7.0 REFERENCES/FURTHER READING

Chomsky, Noam (1995). *The Minimalist Program*. Cambridge, Mass.: MIT Press, 3.2 (176-180), 4.2.2 (230-241), 4.5.1 (276-278), 4.5 (276-312)

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UNIT 4 THE COPY THEORY OF MOVEMENT

In the last unit, we discussed syntactic movements. In this unit, we shall proceed to see the actual movement rule by comparing the trace theory with the copy theory.

CONTENTS

1.0 INTRODUCTION

In the GB, when an item is moved, it is believed that the entire item is moved while its shadow remains at the source of the movement. However, in MP, a word item creates another copy of itself, and this copy is moved. The original copy is subsequently deleted.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- distinguish between the movement in GB and the copy theory in the MP
- explain the copy theory of movement with examples from English.

3.0 MAIN CONTENT

3.1 The Trace Theory in the Government and Binding Framework

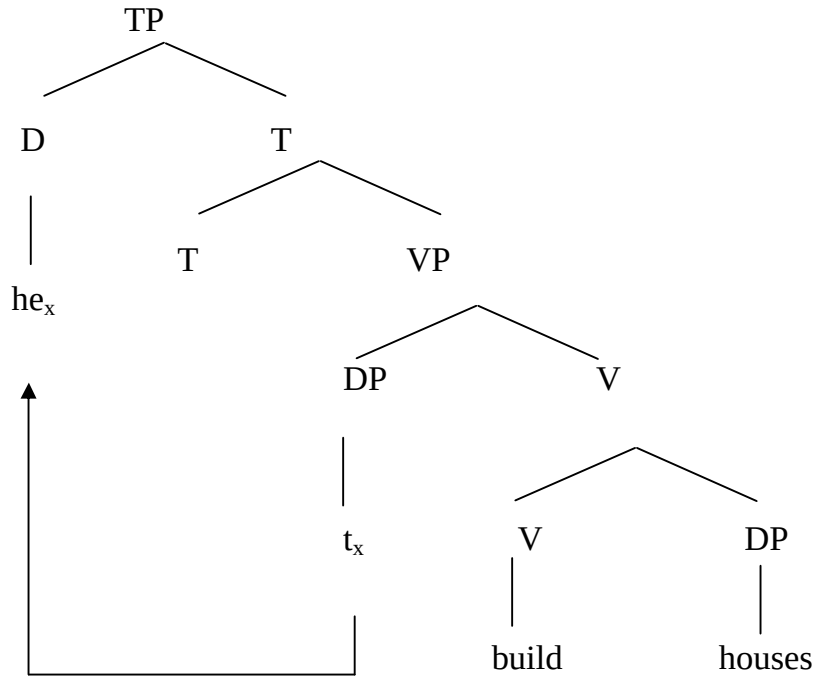
The trace theory holds that if an item is moved, it will leave behind a copy of itself. This copy is called trace. In GB, the position occupied by a trace is not vacant as a landing position for any other item moved into

it. The way the binding theory perceives NP trace and the way subjacency condition respects trace occupied positions are good instances on the importance of trace in the theory.

See below how the original positions of the moved items are represented with *t* (trace). Take note of the how this trace is co-indexed to the moved item with an *x* subscript.

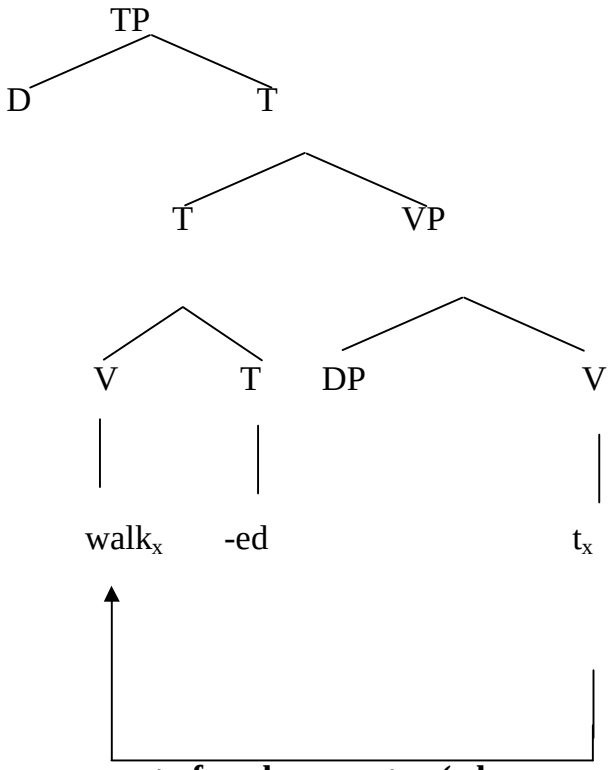
The trace theory will show the movement of the subject to the TP for nominative case as follows.

1.



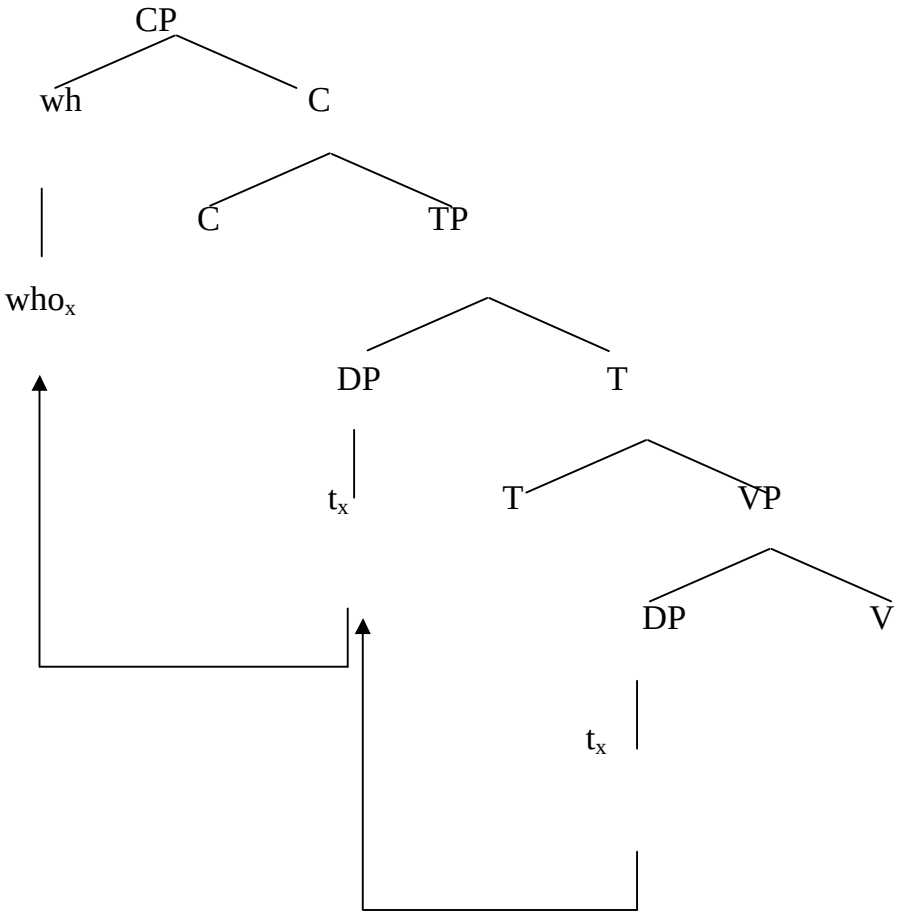
Verb movement can also be represented below as the movement of the verb to adjoin to T. This is called head to head movement implying that V the head of VP moves to T the head of TP.

2.



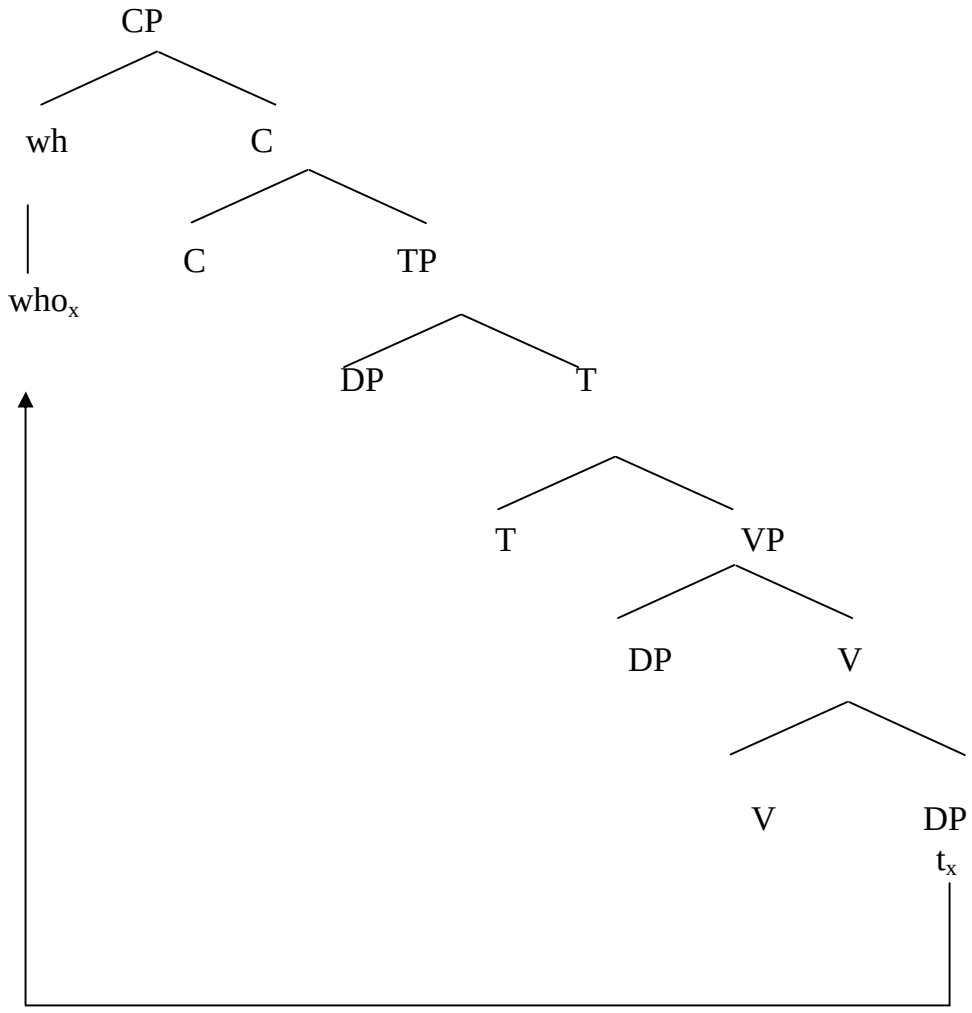
The movement of a wh- operator (wh-movement)

3.



wh-movement can apply to the subject and the object. In each case, the trace is left at the extraction point of the moved item.

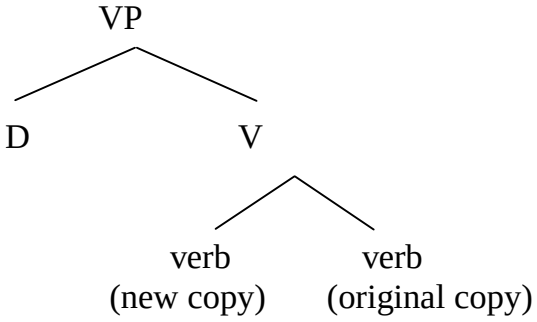
4.



3.2 The copy theory of movement for checking the tense feature of a verb and the nominative case feature of a subject

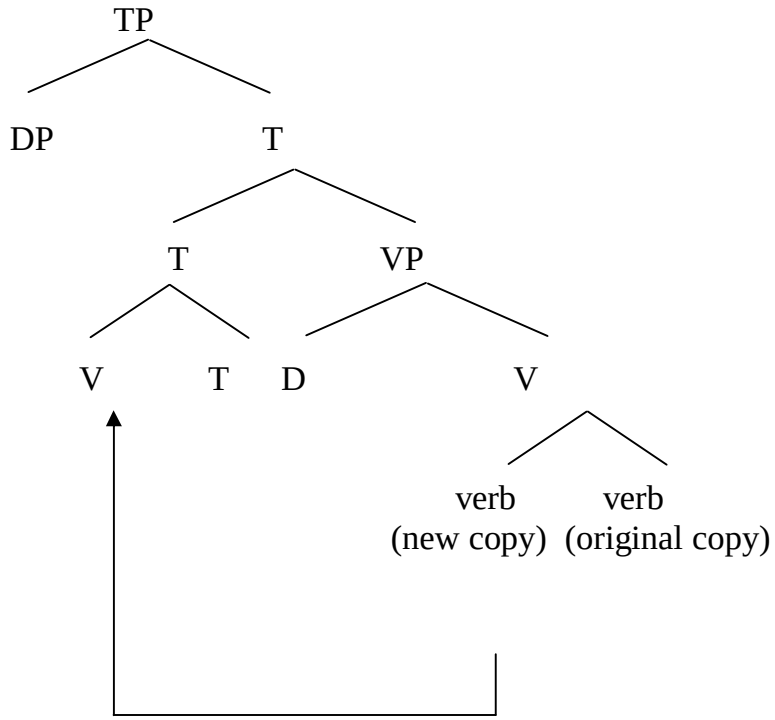
You first create a copy for the verb to be moved. See (5) below.

5.



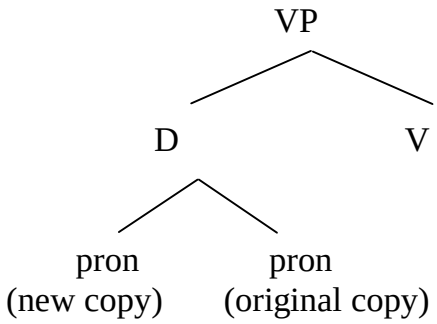
The VP will be merged with T to form a TP, and the new copy of the verb will be merged with the T head of the TP as shown below.

6



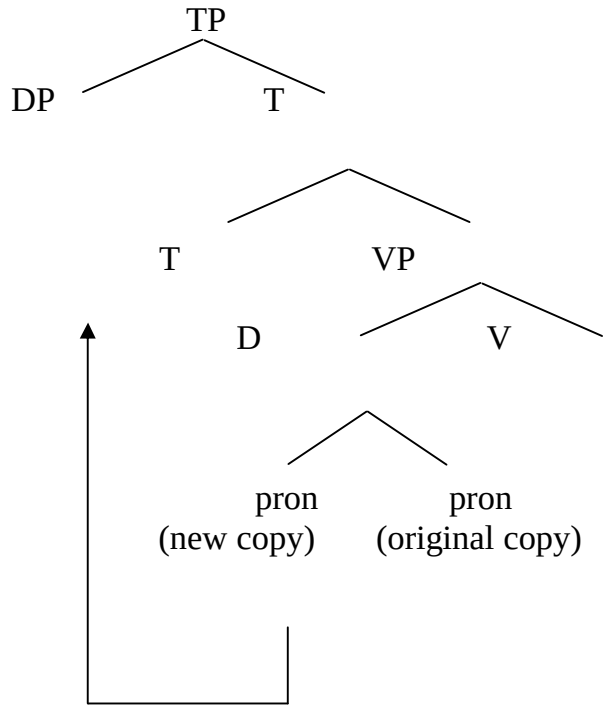
To check the nominative case of the subject, you need to create a copy for the subject to be moved.

7.



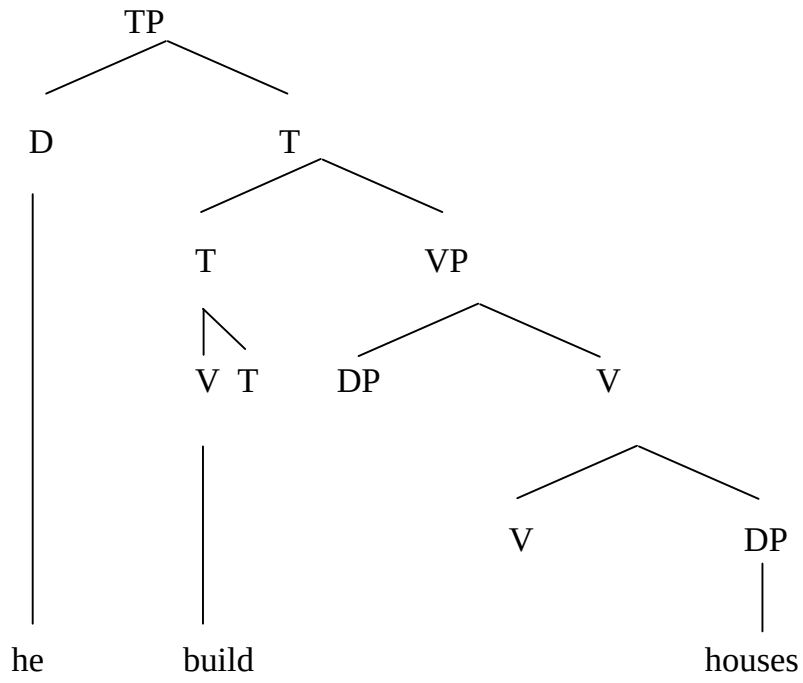
As the VP is merged with T to form a TP, the new copy of the subject will be moved into the TP as shown below.

8.



Before the spell-out stage, the derivation will delete all the copies of the moved item except the most recent copy of each movement. This deletion will include the original copy of the moved item as we can see in (9) below. You will note that the trace of the movements is not marked in this final version. This is a very important feature in the copy theory of movement, the earlier copies of the moved items are deleted on the PF, and the change represented in the final structure is mainly showing the PF. However, we keep using trace in our analysis so that students can find it easier to account for each derivation.

9.

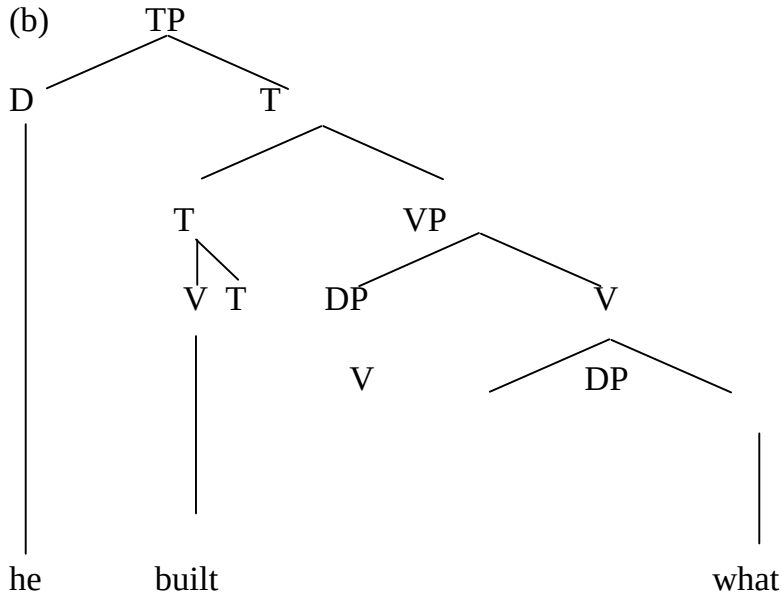


3.4 The Copy Theory of Movement on wh-movement

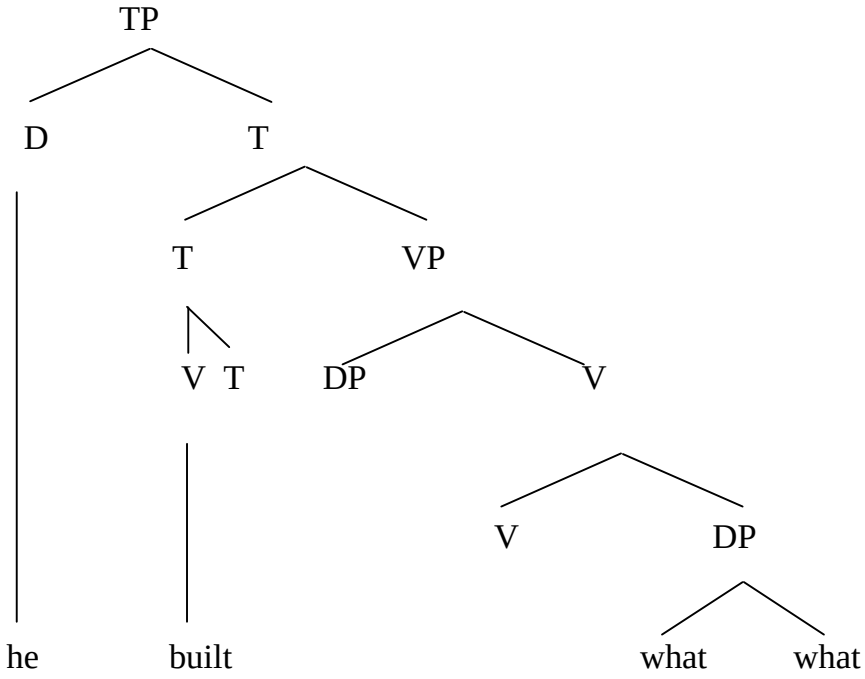
We may assume that we already have a TP in the process of the derivation. However, the derivation that develops a wh movement must have the moved item as *unknown*. In other word, the moved item is a wh-word. See a typical illustration in (10) below.

10 (a) He built what

10 (b)

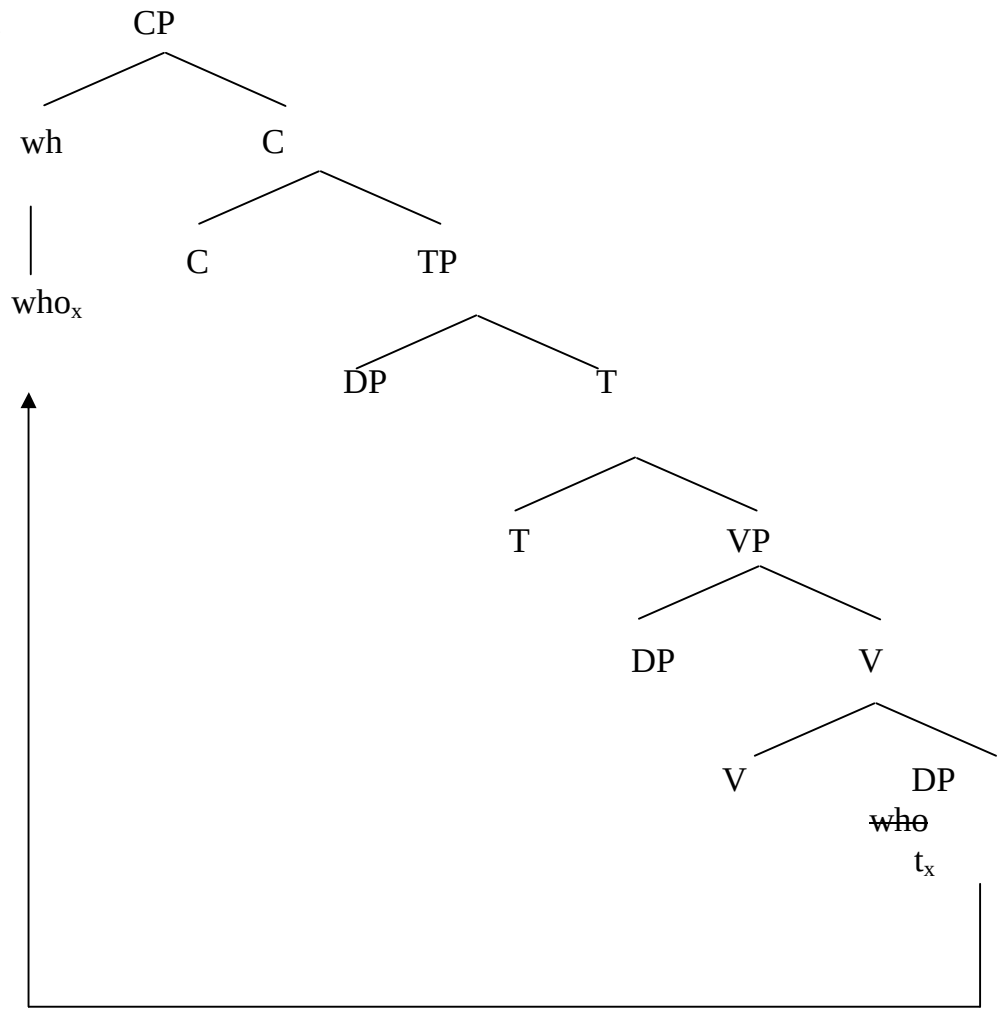


11.



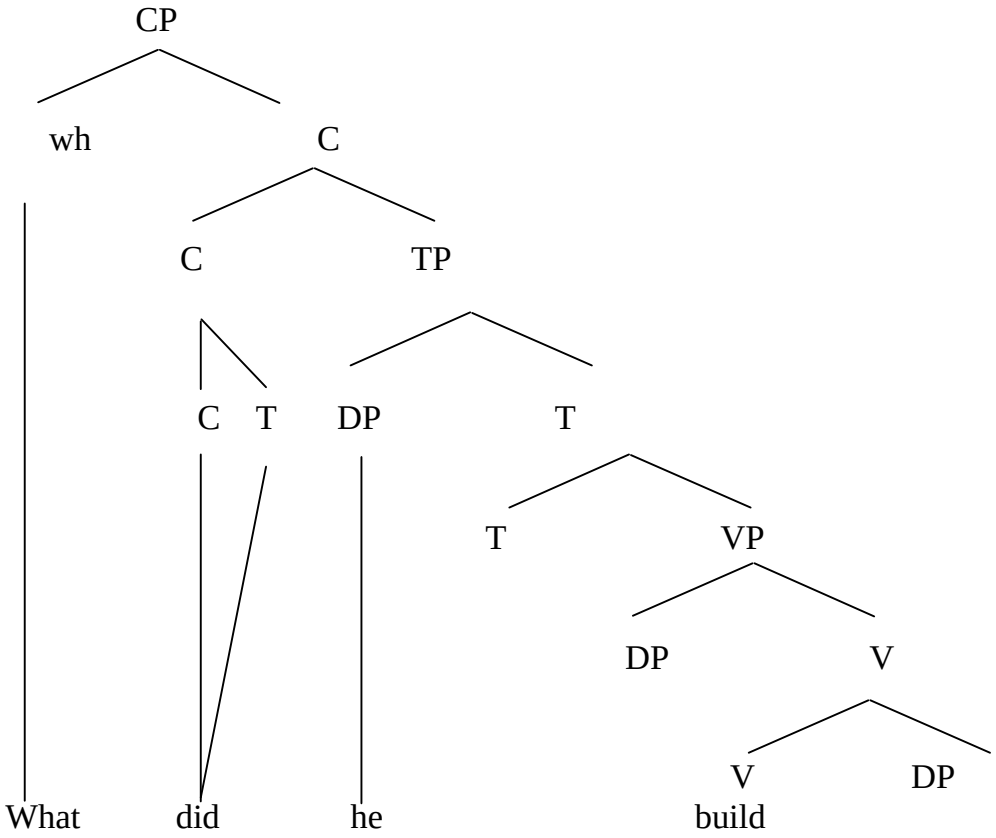
The TP will be merged to C (Complementizer); then the new copy of the wh –word will be moved to the CP. We try to represent all this in (12) below.

12.



Any copy that is not needed in the PF must have been deleted before the spell-out stage.

13.



In (13) above, you can see that the wh-word is not represented with any trace at the extraction point. You can also take note of the *do-insertion* strategy which we place under C node. The change from *do* to *did* is a proof that the tense feature at T is checked on *do* at C which result in *did*. The way we collapse C and T nodes to be represented by a single lexical item *did* is merely a graphical way of showing that the tense morpheme cannot be realised as a suffix. Hence we could have had something like *do + ed* .

SELF-ASSESSMENT EXERCISE

Explain to a colleague the major differences you think exist between the copy theory of movement and the GB Trace theory?

4.0 CONCLUSION

The copy theory of movement reveals that what we normally refer to as a trace is actually an authentic copy of the moved item. The original copy of what we move is not really the final copy that is usually retained in the speech, but the initial copy will always be tagged *t* (trace) in the GB framework.

5.0 SUMMARY

We have seen the concept of the trace theory within the GB framework. We have also seen the concept of movement in the Minimalist Copy theory of movement. Instances cited here illustrate the NP movement, verb movement and wh-movement.

6.0 TUTOR-MARKED ASSIGNMENT

1. Distinguish between the trace theory and the copy theory.
2. Analyse the following with copy theory:

(a) Verb movement
(b) Wh-movement

7.0 REFERENCES/FURTHER READING

Chomsky, Noam (1995). *The Minimalist Program*. Cambridge, Mass.: MIT Press, 4.5 (276-312).

Lasnik, Howard (1999). *Minimalist Analysis*. Oxford: Blackwell Publishers.

Nunes, Jairo (1995). "The Copy Theory of Movement and Linearization of Chains in the Minimalist Program". University of Maryland at College Park PhD dissertation.

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MODULE 4 SYNTACTIC PROCESSES

In this module, we shall discuss some important syntactic processes. These are passivisation, pronominalisation, reflexivisation and topicalisation, all of which are well-known processes in Syntax. The approach you will be exposed with in this unit will intimate you with some novel ways of analysing them.

Hm! I can hear you sigh. Do not mind my grand terms. They will not do you any harm. They are just the special ways of naming some simple concepts in language. If you turn to the topic of this unit, those two words look big. If you look them up in a common dictionary, you will not find them there. However, you just need to know that they are simple things. Do you ask me why we have to use grand terms for them? I think you also know the answer. Medical practitioners have their professional terms for common ailments, so do we, language experts, for these common linguistic processes.

A trip down memory lane may bring you to the classroom events of a teacher asking you to give an example of a passive sentence. This still remains how to test our knowledge of grammar today.

Grammar is a very interesting aspect of language study and I want to assure you that you will never regret taking with us the next step to the store house of syntax as we consider some transformational processes.

UNIT 1 DP MOVEMENTS: PASSIVISATION AND ERGATIVITY

CONTENTS

1.0 INTRODUCTION

Now, let's start our ride as we consider passivisation and ergativity. 'Look before you leap', says a popular adage. You need to know that we are going to use a different plate to serve our usual meal. In the past you had treated these processes with the traditional grammar model. Perhaps you have once used standard theory model of the Transformational Generative Grammar. Today, we are still going to tread the same syntactic processes path but with a new tool which is called the Minimalist Program. You should not mind the term if it sounds unfamiliar. It only looks like a simple tools box having a Greek label. Mind you, this is not even as complex as *shokolokobangoshay*!

2.0 OBJECTIVES

At the end of this unit, you should be able to do the following:

- identify the syntactic (structural) operations that bring about each of the two processes (passivisation and ergativity)
- relate each of the processes to your colleague using the appropriate terms used in the unit.

3.0 MAIN CONTENT

3.1 Passive Sentences in Traditional Grammar

In simple terms, passivisation is the process of forming a passive construction. However in minimalist terms, as it affects English, we can say passivisation is a syntactic process that involves an auxiliary and a transitive verb which lacks external argument (the subject) So it has to raise its logical object to the empty subject position. The construction may still accommodate a logical subject through the use of the preposition 'by'. This results in what may be called 'by phrase' in passive sentences.

Let us begin with what we all know of passive sentences. Based on traditional grammar, we assume that passive sentences are derived from their active counterparts. This is also the view held in Standard Theory (ST).

(1) John broke the ruler
(2) The ruler was broken by John

Going back to our definition of passivisation above, will take note of the verbal system of (2) above. While the active sentence has only one verbal item: the main verb 'break', the passive one has two verbal items: the auxiliary verb *be* (which becomes *was*) and the main verb *break* which now takes the past participle form (*broken*).

Going by our definition, we say the verb that will be used in passive construction must be transitive. By this we mean the verb must have a logical object; hence, it must have something to be moved to the subject position.

Another thing to note in that definition is the expression: 'empty subject position'. What do we mean by this? We know that the passive sentence does not have any logical subject so the subject position is syntactically empty, which makes it possible for the object to be moved in there.

3.2 Passive Transformation in the Chomskian Standard Theory (ST)

Standard Theory (ST) assumes that passive sentences are derived from their active counterparts. Hence, a set of transformational rules is brought together to explain passive transformation.

a. the active sentence is taken as the kernel sentence. Let this be: John breaks the ladder.
b. subject post-posing: The rule moves the subject to the end of the clause (i.e. pres. break the ladder John).
c. object preposing: this rule moves the logical object to the subject position. (the ladder pres. break John)
d. be passive insertion: this rule inserts the passive auxiliary marker 'been' (i.e. the ladder pres. been break John)
e. by-insertion rule: this insert the preposition 'by' before the postposed logical subject (i.e. the ladder pres. been break by John)
f. affix hopping rule: this takes care of agreement, tense and participle – formation of the main verb. (The ladder was broken by John)

Contrary to the belief that transformation must be meaning preserving, it is discovered that some active sentences largely differ in meaning from their passive counterparts. Hence the passive structure is not just a shift of emphasis from the actor to the action as it ordinarily implies.

3.3 Passive Derivation in the Minimalist Program

In this section, we shall explain how passive sentences are formed in the minimalist framework.

One, syntactic operations in the MP culminate in derivations. When they are grammatical, we say the derivations converge. When they have an ungrammatical outcome, we say the derivations crash. So, the formation of a passive sentence is a derivation. Operations used in MP derivations are: select, merge, copy and delete.

Two, a derivation fuses a number of operations, starting from the lexicon (word dictionary in the mind) and continues until the logical form (LF or the meaning aspect) and the phonological form (PF or the speech form of the utterance) are formed. The point at which these two components (PF and LF) are formed is called spell-out. At that point, changes in pronunciation no longer occur after the meaning of the derivation. It is assumed that a passive sentence also goes through these stages in its derivation.

Each lexical item has some formal or morphosyntactic features, some of which are interpretable while others are not. These morphosyntactic features have a way of regulating the kind of operations the word can permit. Two words are merged when an un-interpretable feature of one becomes interpretable in the other. For instance, the number feature is not interpreted in 'sheep'. We can only determine the number when we merge this word with some determiners. See this illustrated in (3) below.

(3) (a) a sheep

(b) some sheep

(c) these sheep

So we can say that each of the words in our passive sentence has these formal features.

Passivisation begins when we select (through Operation Select) the following array from our mind.

(4) (John, break, passive-be, ruler, the)

We assume this does not come to mind the way they eventually appear in the sentence, but may be outlined in the order most relevant to the context of discourse.

The next operation is Operation Merge; we assume that a systematic merging of items continues until we have the structure in (5) below.

(5) ø be break the ruler by John.

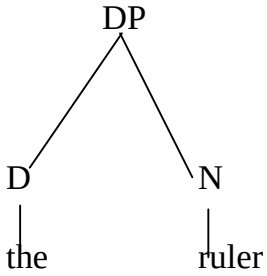
And thereafter Operations Copy, Operation Move and Operation Merge apply to the object in order to derive (6) below.

(6) the ruler be break t by john

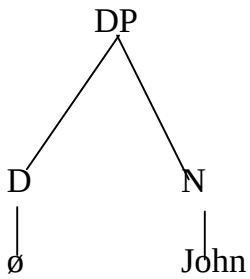
At this point, Operation Agree occurs. There are some morphophonemic realisations of agreement and conjugations. The main verb takes passive marking and becomes a past participle while the passive auxiliary *be* assumes past tense form and at the same time agrees with the structural subject 'the ruler' and thereby becomes 'was'.

As we progress, another thing we need to know is that the term determiner as used in the Min#imalist Program (MP) goes beyond the traditional determiners such as articles, demonstratives and possessive adjectives, it includes pronouns. In fact, the determiner is considered the head of the nominal group. Noun Phrase (NP) is therefore a constituent of the Determiner Phrase (DP). We shall therefore henceforth refer to *the ruler* as a DP, *John* also is a DP. You can see this below.

(7) (a)



(b)

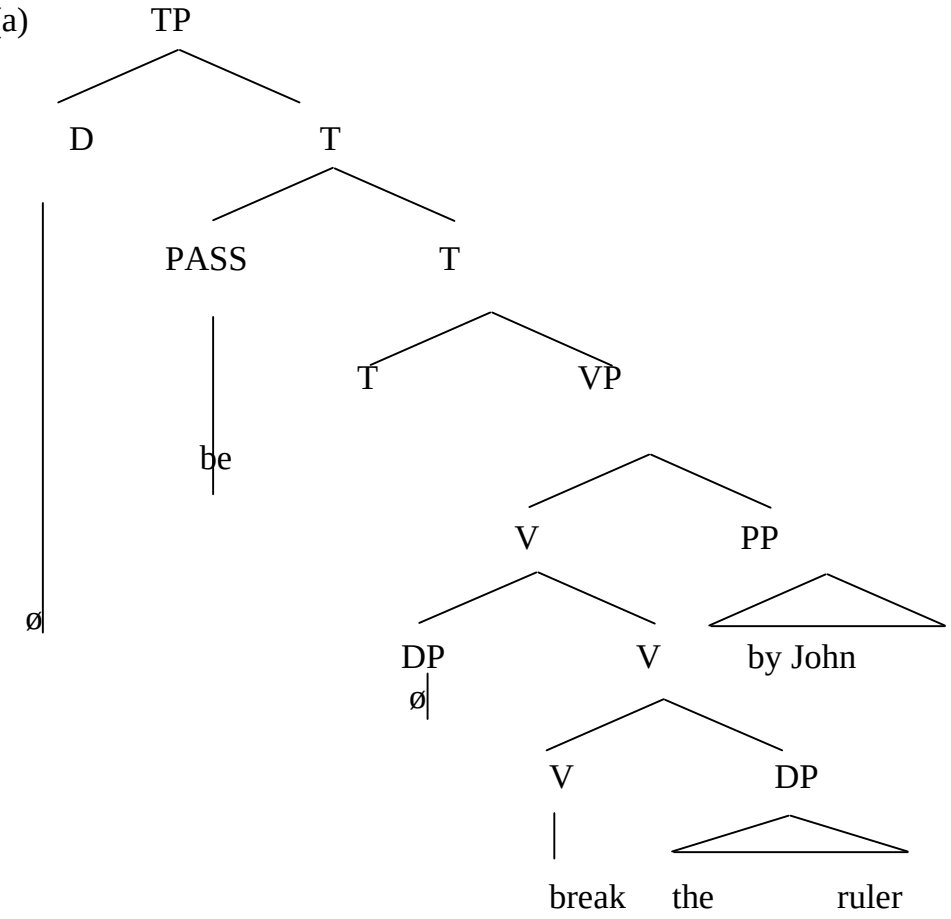


Secondly, we should know that the MP does not label a sentence as S but in a different way. In advanced work, you are likely going to see different labels for what we know as a sentence. But we can take a

central position here, where we will take a sentence as a Tense Phrase (TP), and we shall take the subordinate clause as a Complementizer Phrase (CP). These terms are very common in the latter version of Government Binding (GB) Theory of Transformational Generative Grammar.

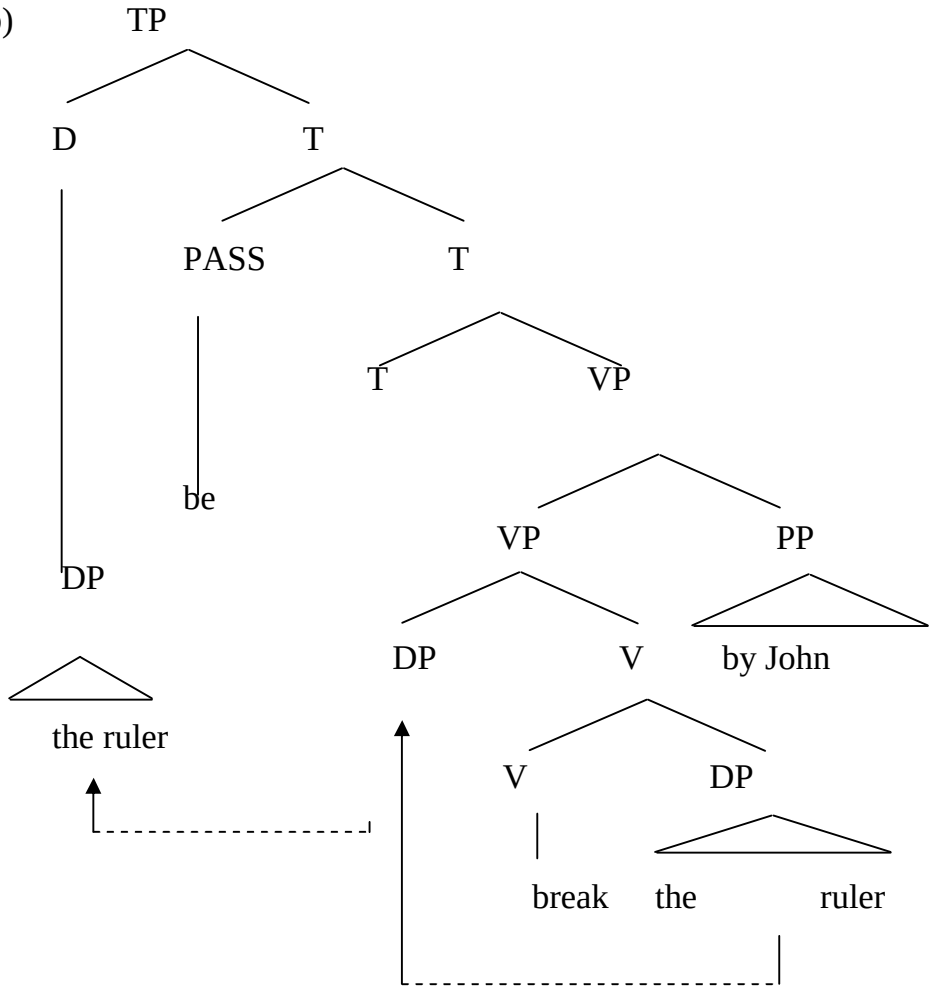
With these terms, we can provide the tree diagram of our data in (5) above as (8) below.

8(a)



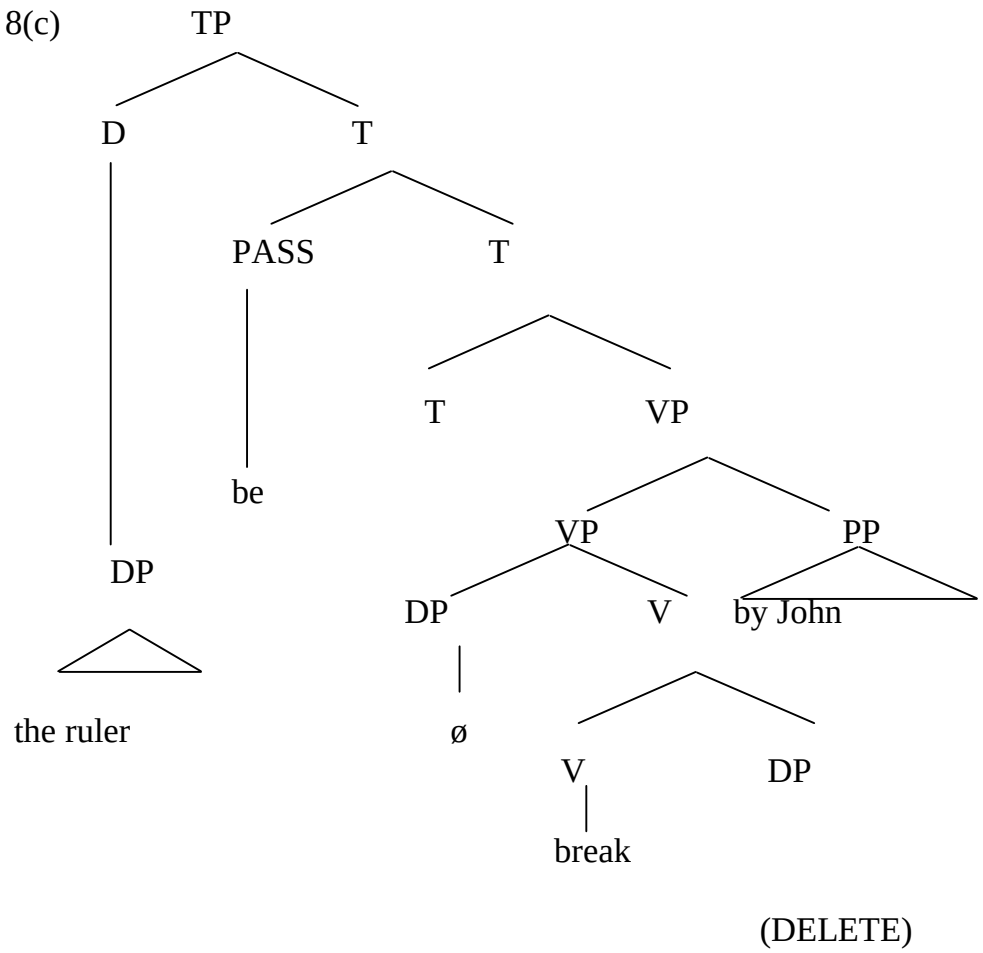
In 8(a) above, D [the] and N [ladder] merged into a DP. This DP merges with the V [break] to form a VP. The VP merges with PASSIVE [be] to form a larger verbal unit. This later merges with T [past tense] to form a TP [tense Phrase]. This TP has no subject so the subject position is represented with a null element ø. This diagram shows how operation merge arranges the item which Operation Select has collected from the lexicon of an English speaker.

8(b)



(COPY, MOVE, MERGE)

In 8(b) above, the formal features of a passive verb cannot help to interpret the un-interpretable case feature of its object. Hence, this object must be copied and moved to merge with T (tense) which can provide it with the nominative case.



In 8(c), the original copy of the object DP is deleted from the pronunciation. And the spell-out stage is reached. At this stage, phonological processes like contraction and deletion will not affect the meaning. In the other way round, semantic shift will not affect the pronunciation. After the spell-out, the transformations that apply in the PF will not affect the LF derivation, and the post spell-out transformations that affect LF derivation will no longer apply to the PF derivation.

3.4 Ergative Derivation in the MP

Ergativity is similar to passivisation. However, it differs in some respects. First, it does not require any auxiliary. So its main verb does not change its form to the past participle. Second, the logical object that is raised to the empty subject position must be an experience of the action. So that after it has assumed the structural subject position it will become an affected subject (semantically speaking). Third, there is no room for introducing any agentive logical subject. The so-called 'by-phrase' which can be used in passive construction is not permitted in ergative construction.

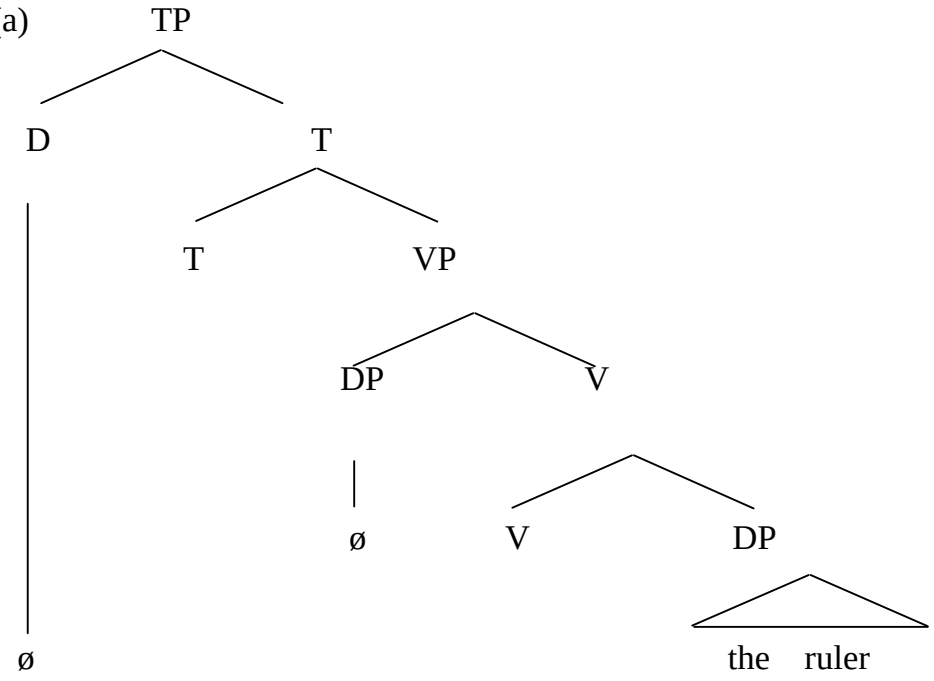
Despite these differences noted above, the ergative sentence has an empty subject position just like its passive counterpart. It also has to raise its logical object to the vacant structural subject position. See this in (9) below

(9) _____ break the ruler

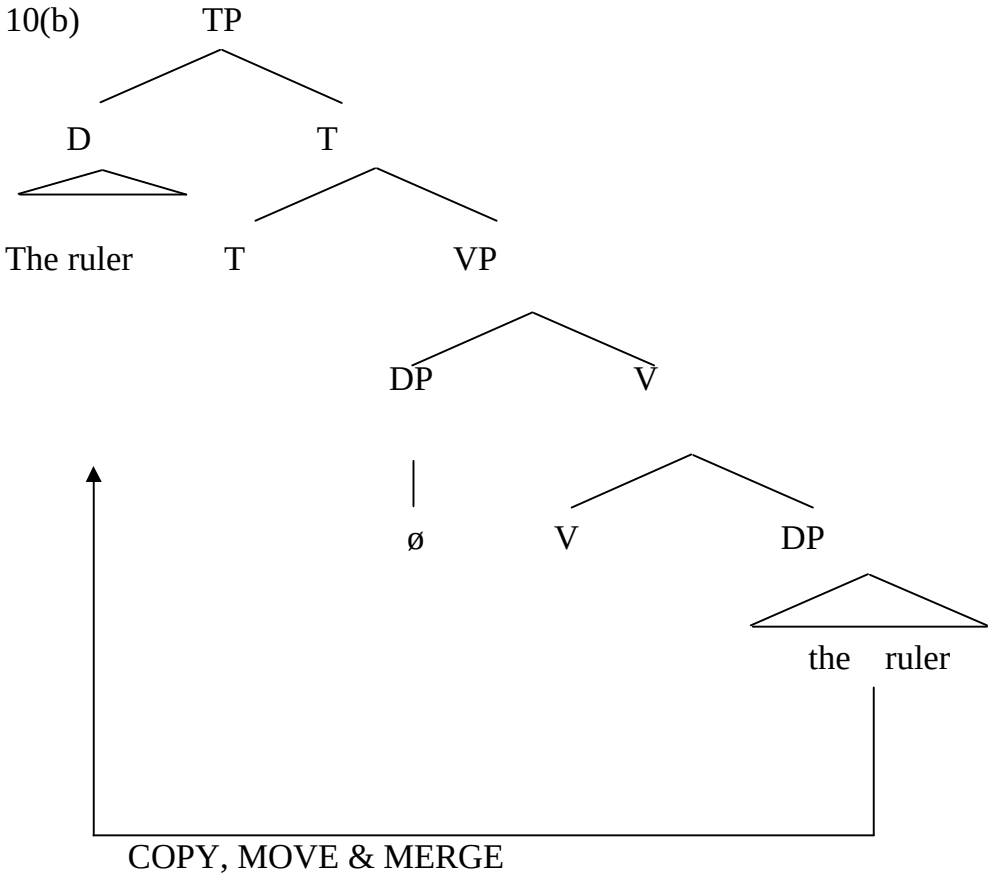
(b) the ruler break

(c) the ruler broke

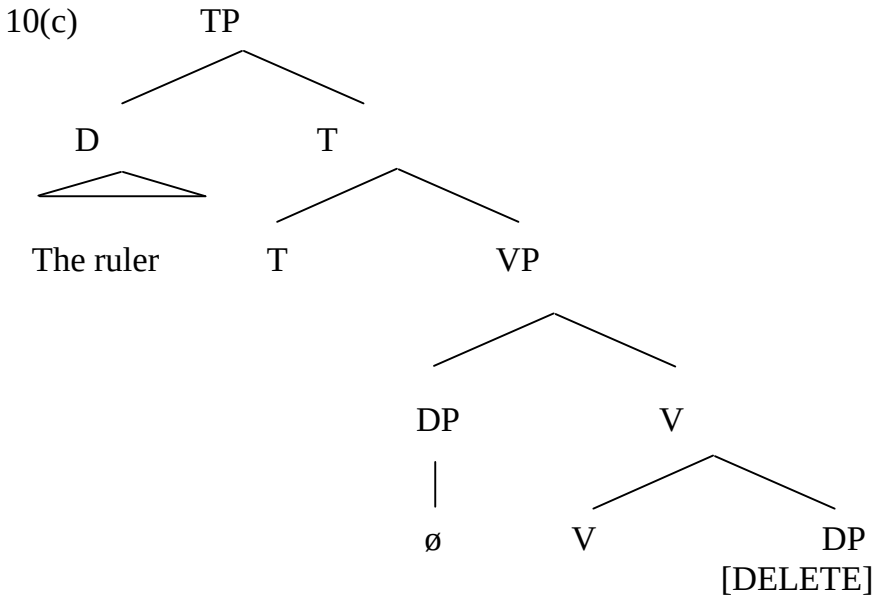
10(a)



10(b)



10(c)



SELF-ASSESSMENT EXERCISE

1. Discuss with a colleague the differences and the similarities between passive and ergative sentences.
2. Tabulate the following sentences into passive and ergative constructions.

(a) He can be seen
(b) We are told
(c) The stone rolled down
(e) The door can open
(f) The file were torn
(g) The file burns

4.0 CONCLUSION

The unit reveals the fact that passivisation is similar in structure to ergative construction on the fact that they both involve DP movement into the subject position. However, ergative construction is not as complex as passive construction due to the passive auxiliary and the by phrase PP that occur in passivisation.

5.0 SUMMARY

In this unit, we have surveyed three different views on passive construction: the traditional view, the early Chomskian's view and the Minimalist view. We have also discovered that ergative construction and passive construction are closely related.

6.0 TUTOR-MARKED ASSIGNMENT

Study the sentences below, and answer the questions that follow:

(a) The window opens
(b) The window is opened

i. Name the major transformation process involved in each of the sentences above.
ii. In minimalist terms, describe their derivations stating the syntactic operations involved right from the lexicon to the spell-out stage.
iii. Using tree diagrams, describe the major stages in their derivations.

7.0 REFERENCES/FURTHER READING

Chomsky, Noam (1995). *The Minimalist Program*. Cambridge, Mass.: MIT Press.

Lasnik, Howard (1999). *Minimalist Analysis*. Oxford: Blackwell Publishers.

Radford, Andrew. (1997). *Syntactic Theory and the Structure of English: A Minimalist Approach*. Cambridge: Cambridge University Press.

UNIT 2 DETERMINER PHRASE

CONTENTS

1.0 INTRODUCTION

In this unit, we shall discuss the DP in a greater detail and show how it affects our previous knowledge of pronominalisation and reflexivisation. You will be expecting us to talk on pronominalisation or reflexivisation. We are going to discuss them now. But you should not be surprised if we tell you that they are not treated in the same way with passivisation.

2.0 OBJECTIVES

At the end of the unit, you should be able to:

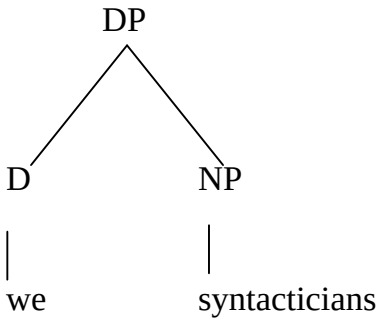
- give reasons for not classifying pronominalisation and reflexivisation as syntactic processes of transformation
- analyse nominals in DP phrase structure.

3.0 MAIN CONTENT

3.1 Determiner Phrase (DP)

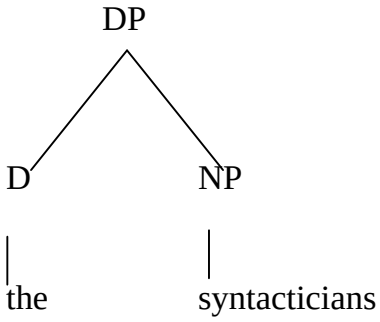
This is the functional phrase to which all nominals belong. The noun phrase (NP) itself is taken as a complement of a determiner head. A very important thing to note here is that pronouns are not considered as an NP element but rather a determiner. Hence a pronoun can serve as a head which can take a noun phrase (NP) as its complement.

1.

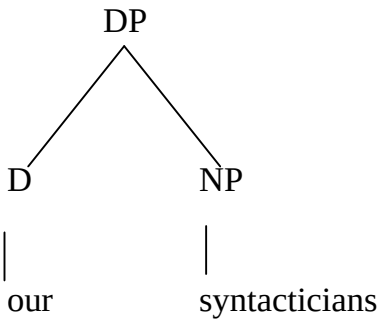


Apart from the inclusion of the pronoun in the determiner group, the rest of the determiners are those traditionally labelled as determiners (i.e. a, the, that, those, this, these, my, our and your). These are the traditional articles, demonstrative adjective, and possessive adjectives.

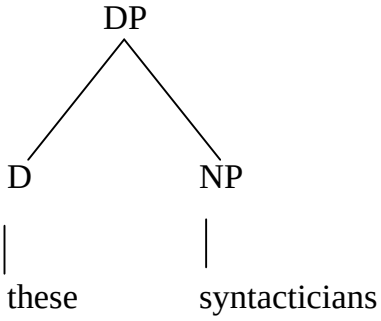
2.



3.

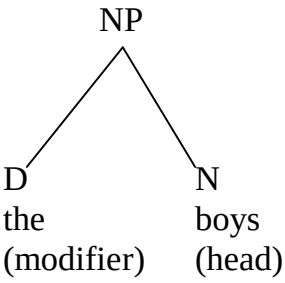


4.

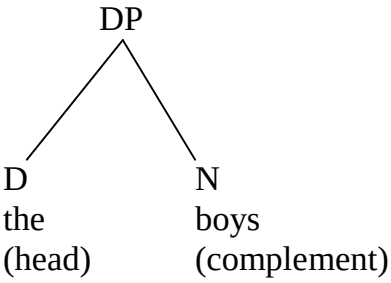


In a DP, the determiner is the head of the phrase. Hence, the DP phrase marker will replace (a) with (b) below.

5(a)



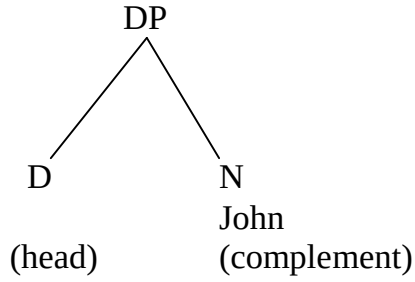
5(b)



3.2 The DP Structure of Bare Nouns

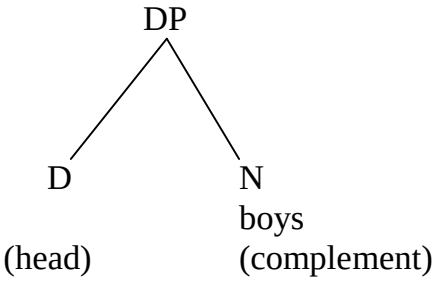
A bare noun occurs without an article. This is the case of proper nouns such as John, Aminu, Simbi, Margaret, Akin, Emeka and Akpabio. The head of this is an empty D.

6.



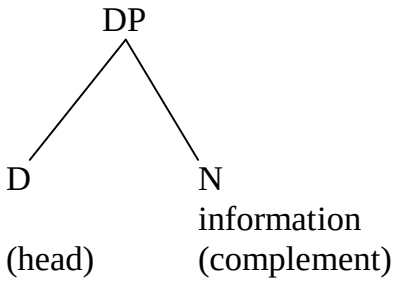
A plural noun can also have bare representation as seen in () below.

7.



Non-count nouns usually take this DP structure when used without any article or quantifier. See this in (8) below.

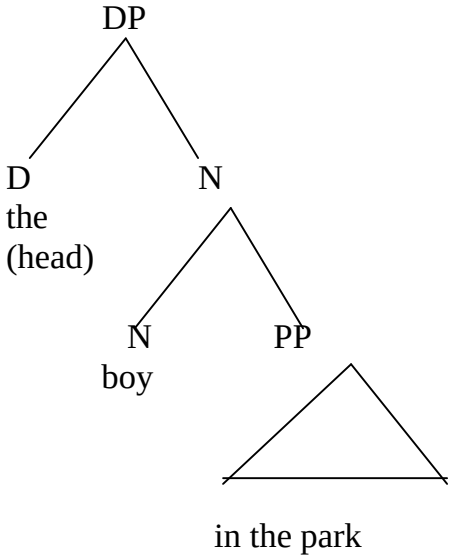
8.



3.3 Complex DPs

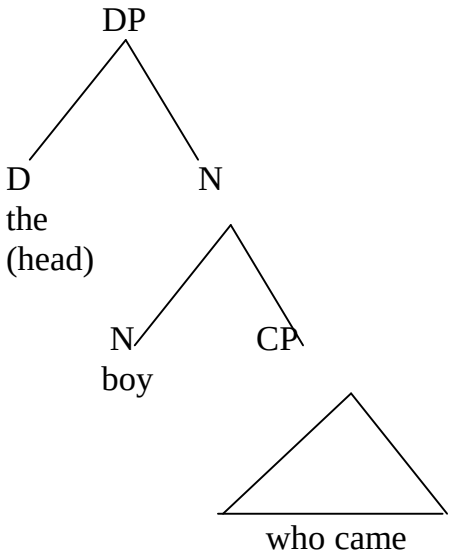
A DP may be structurally complex.
The DP may embed a PP as shown in (9) below.

9.



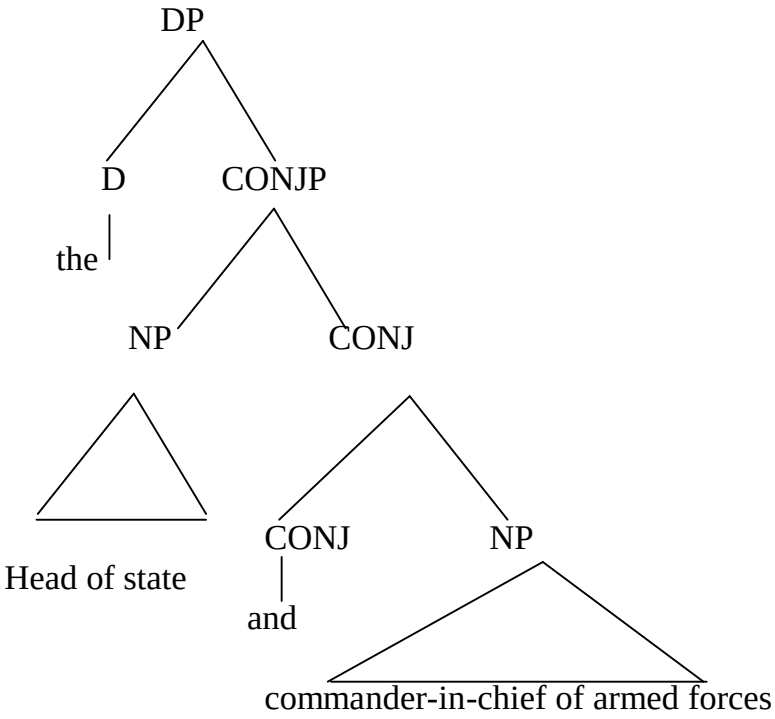
The DP may also embed a clause. Hence we can have a DP having a CP complement.

10.

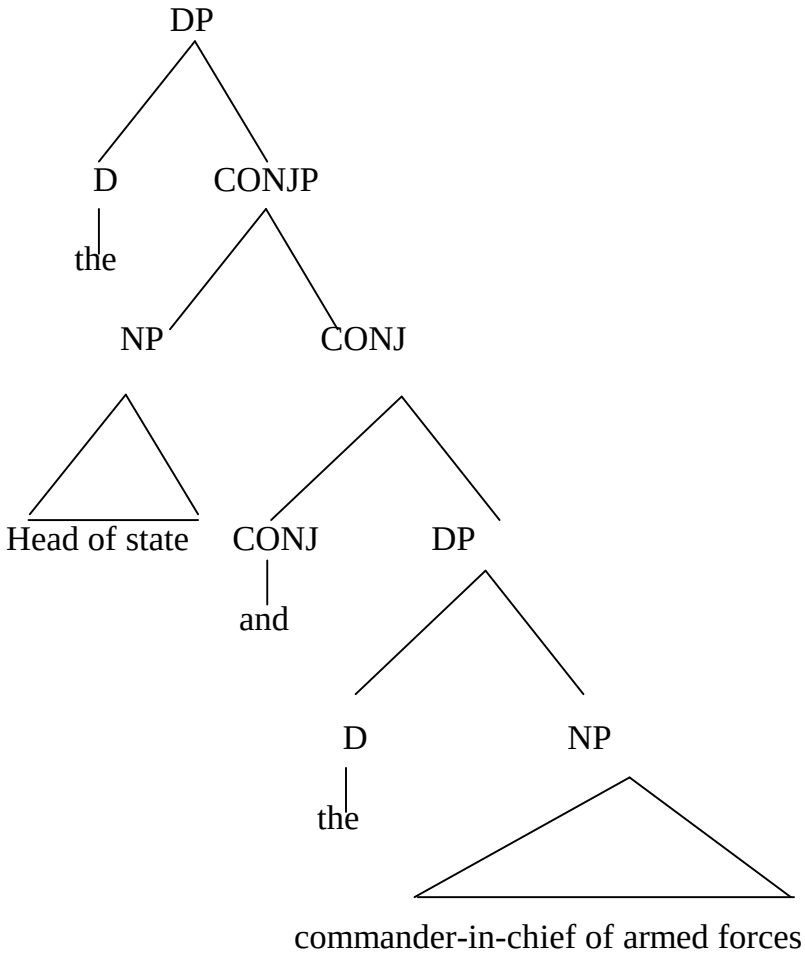


The complexity may involve co-ordination of two NPs or DPs.

11.


DP
D
CONJP
the
NP
CONJ
Head of state
CONJ
NP
and
commander-in-chief of armed forces

12.


DP
D
CONJP
the
NP
CONJ
Head of state
CONJ
DP
and
D
NP
the
commander-in-chief of armed forces

SELF-ASSESSMENT EXERCISE

Reproduce the argument stated in favour of DP analysis of nominal in this unit.

4.0 CONCLUSION

The DP structure is crucial to the Minimalist analysis of nominals in English. Abney (1987) the first major research work that proposed the hypothesis was carried out in English. Although this unit cannot go into the hot argument that trail the concept thereafter (especially on whether DP analysis is actually better than the earlier NP analysis), it has introduced the student to some basic facts on the DP structure.

5.0 SUMMARY

We have seen the following:

1. The pronoun is a determiner
2. The pronoun is not an NP element.
3. The pronoun is a head which selects the NP as a complement.

6.0 TUTOR-MARKED ASSESSMENT

Analyse the following using DP phrase markers (tree diagrams).

(1) the people
(2) my study
(3) the man of the people
(4) these sheep

7.0 REFERENCES/FURTHER READING

Abney, S. (1987). The English Noun Phrase in its Sentential Aspect. PhD dissertation, MIT.

Bhatt, C.; Löbel, E. and Schmidt, C. Eds. (1989). *Syntactic Phrase Structure Phenomena.* Armsterdam/Philadelphia: John Benjamins

Radford, Andrew (1997). *Syntactic Theory and the Structure of English: A Minimalist Approach*. Cambridge: Cambridge University Press.

UNIT 3 PRONOMINALISATION AND REFLEXIVISATION

CONTENTS

1.0 INTRODUCTION

In this unit, we shall discuss the DP in a greater detail and show how it affects our previous knowledge of pronominalisation and reflexivisation. You will be expecting us to talk on pronominalisation or reflexivisation. We are going to discuss them now. But you should not be surprised if we tell you that they are treated in the same way with passivisation.

2.0 OBJECTIVES

At the end of the unit, you should be able to:

- give reasons for not classifying pronominalisation and reflexivisation as syntactic processes of transformation, and
- account for the use of pronouns to replace nominals.

3.0 MAIN CONTENT

3.1 The Pronoun and its Antecedent

The idea that a pronoun should have an antecedent is a universal concept that is conceivable without an elaborate theoretical framework like this. The Government and Binding theory has a lot to say about this. The Binding theory has three major principles that show the distribution of the pronoun. These are Principle A, Principle B and Principle C of the Binding Theory in the GB framework. In the Minimalist Program, the pronoun is a determiner. It occurs in the lexicon the way other determiners do. It is not a mere sub-unit of the noun as could be conceived in some other syntactic theory.

First, the noun cannot be used with the first person grammatical properties, but the pronoun can. Second, the noun is not usually used with the second person grammatical reference, but the pronoun is.

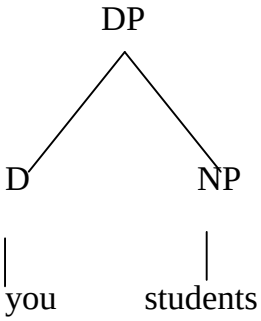
3.2 Pronominalisation

From our knowledge of earlier models of TGG, it is assumed that pronouns are further transformations of nouns. So we can have the following.

Aliyu saw Aminat → he saw her

Aminat helped Aliyu → she helped him

The transformational process in the expressions above is called pronominalisation. The Determiner Phrase (DP) has eventually replaced our earlier concept of Noun Phrase (NP). The pronoun has also become a determiner which can function as the head of a Determiner Phrase (DP). The noun phrase (NP) is now a complement of the determiner. Going by this analysis, the noun will serve as a complement to the article or to the pronoun. This implies that the pronoun is no longer considered as a constituent of the noun phrase.



Although a pronoun needs an antecedent in the discourse, it should be noted that the same pronoun is already present in the lexicon. This model has it that the pronoun does not evolve from a transformation that applies to the noun serving as its antecedent. Rather it is the feature (characteristic) of a pronoun to have an antecedent. The grammar only helps to relate the pronoun to its proper antecedent instead of claiming that a noun transforms itself into that pronoun. So *Aminat* is not transformed to '*her*' neither is *Aliyu* transformed to '*he*' as shown above. The tenable claim here is that those pronouns have corresponding semantic reference with *Aliyu* and *Aminat* in the lexicon during this particular discourse.

3.3 Reflexivisation

The following transformation is also very common.

1 Aliyu saw Aliyu → Aliyu saw himself

2 Aminat helped Aminat → Aminat helped herself

In the expression above, the process that derives *himself* from *Aliyu* is called reflexivisation. This transformational process has also been revised in the minimalist approach.

The reflexive pronouns above are also present in the lexicon. They are not really transformed from the nouns in question. These pronouns are different phonological materials which, in this discourse, have semantic correspondence with the concerned nouns in their LF representations. It is true that the pronouns replace the nouns, but that is not done as a process of movement or transformation. A reflexive replaces a noun the way a common noun, say *boy,* will replace *John*. When we replace *John* with *boy* in a sentence, we do not claim that *John* transforms into *boy*. We all know that the proper noun *John* and the common noun *boy* have different representations in the lexicon. However, we are also aware that, in that particular context, *John* and *boy* have common semantic reference.

SELF-ASSESSMENT EXERCISE

In what can you us the association between *John* and *a boy* having the same reference to prove that nouns are not really structurally transformed to pronouns?

4.0 CONCLUSION

In this unit, we have come to discover that pronominalisation and reflexivisation are not part of the generalized transformation in the minimalist framework.

5.0 SUMMARY

We have seen the following:

- Pronouns are selected from the lexicon like other items, they are not products of movement transformations.
- Pronominalisation and reflexivisation are products of Operation Select. They are not structural processes.

6.0 TUTOR-MARKED ASSIGNMENT

Explain why pronominalisation and reflexivisation are not taken as syntactic processes the way we take passivisation.

7.0 REFERENCES/FURTHER READING

Abney, S. (1987). The English Noun Phrase in its Sentential Aspect. PhD Dissertation, MIT.

Bhatt, C.; Löbel, E. and Schmidt, C. (Eds.). (1989). *Syntactic Phrase Structure Phenomena.* Armsterdam/Philadelphia: John Benjamins

UNIT 4 MAJOR CP DERIVATIONS

CONTENTS

1.0 INTRODUCTION

The Standard Theory model of TGG has these transformational processes: relativisation, inversion and complementation. In this unit we shall see how CP (Complementizer Phrase) derivation can account for these processes.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

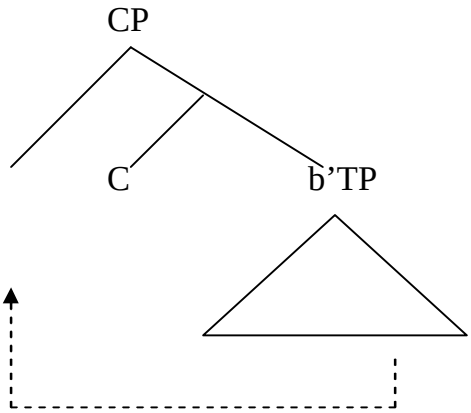
- provide systematic steps on how to account for relativisation, complementation, and inversion in minimalist program
- draw and label tree diagrams of constructions representing these processes.

3.0 MAIN CONTENT

3.1 Wh-Movement

This is a syntactic process that involves copying an item out of the TP and moving and merging it to a slot of another tree headed by a functional category element called complementizer. See this in (1) below.

1.



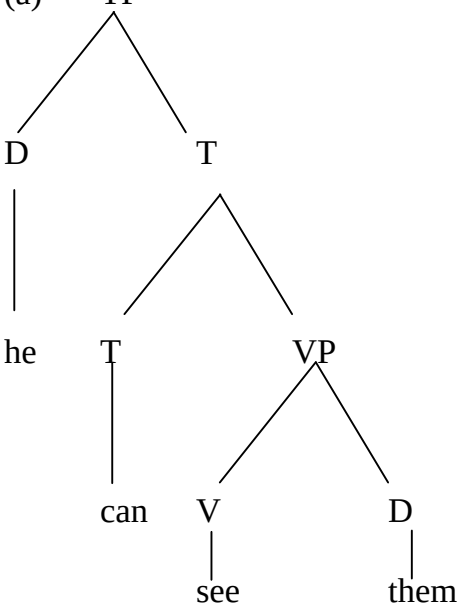
COPY, MOVE & MERGE

The phrase derived by this movement is usually called Complementizer Phrase (CP). A typical wh-movement is exemplified below.

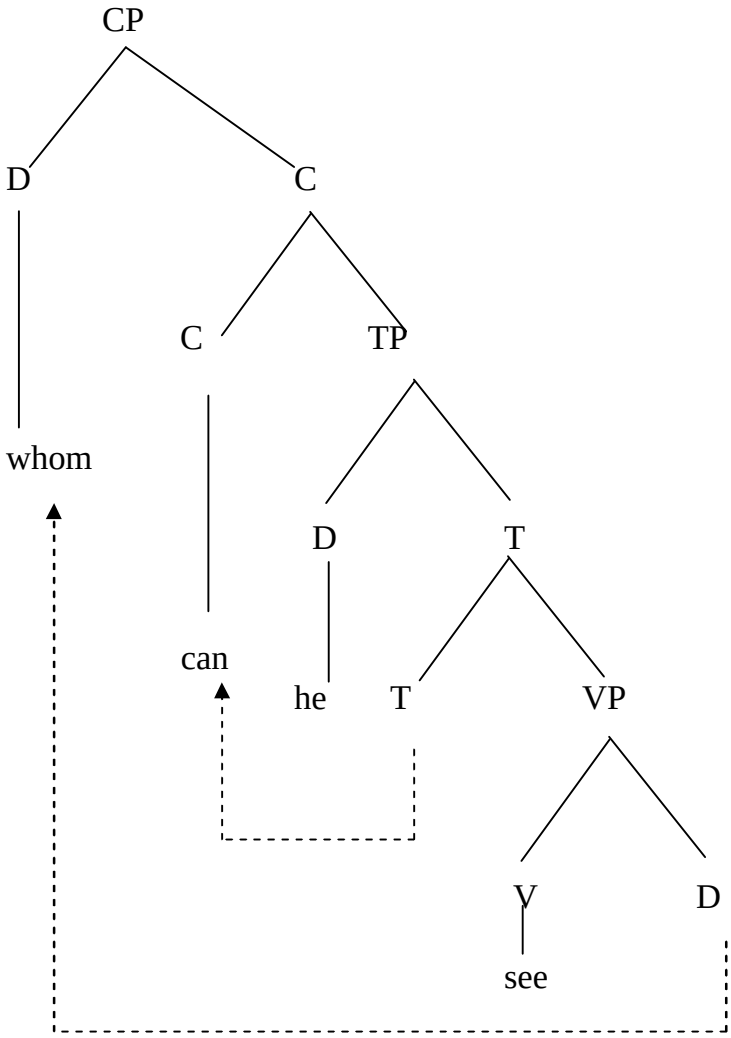
2. (a) He can see them

(b) Whom can he see?

3. (a)



4.



The movement of ‘can’ from T to C is popularly known in TGG as head to head movement because each node is a head position. T is the head of TP, and C is the head of the CP. The wh-movement on the other hand, usually moves items into the wh-position where we place ‘whom’ in the diagram above.

Wh-movement is usually used in the formation of wh-questions such as shown below.

5 (a) what can you see?
(b) what do you see?
(c) who are you?
(d) why did you sing?

3.2 Relativisation

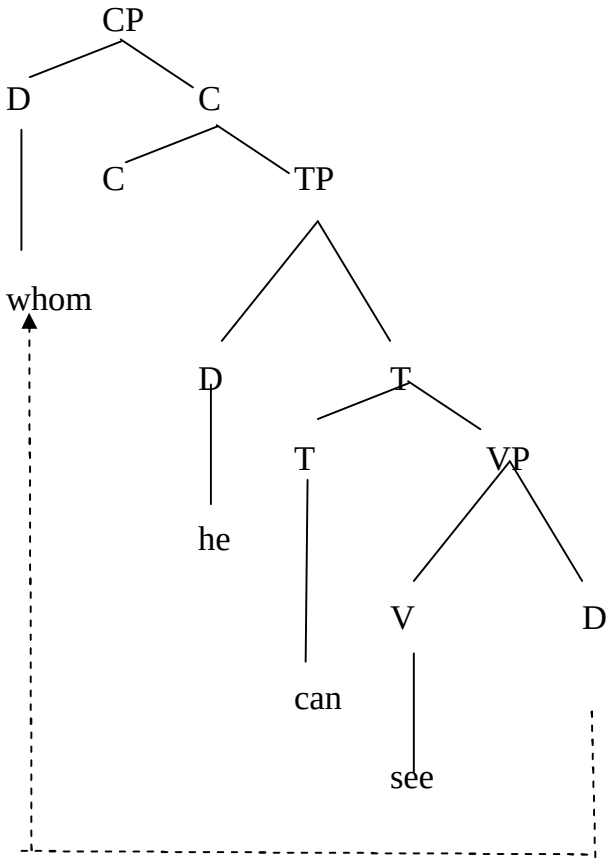
This is a wh-movement that produces a relative clause. The process differs from that of wh-questions in the following ways: First, the CP (complementizer phrase) is further used in the syntax as a clausal adjective to modify a noun.

Second, the CP does not involve head to head movement.

6 (a) He can see them

(b) the people [whom he can see]

7.



If you compare this CP in (7) with that of wh-question in (4) above, you will discover that while 'can' was copied from T to C in a wh-question, it is left in T in a relative construction.

3.3 Complementation

This process is the merging of a CP with a noun. In this case, the CP is serving as a complement clause to the noun.

8. The fact <u>that he can swim</u> is clear

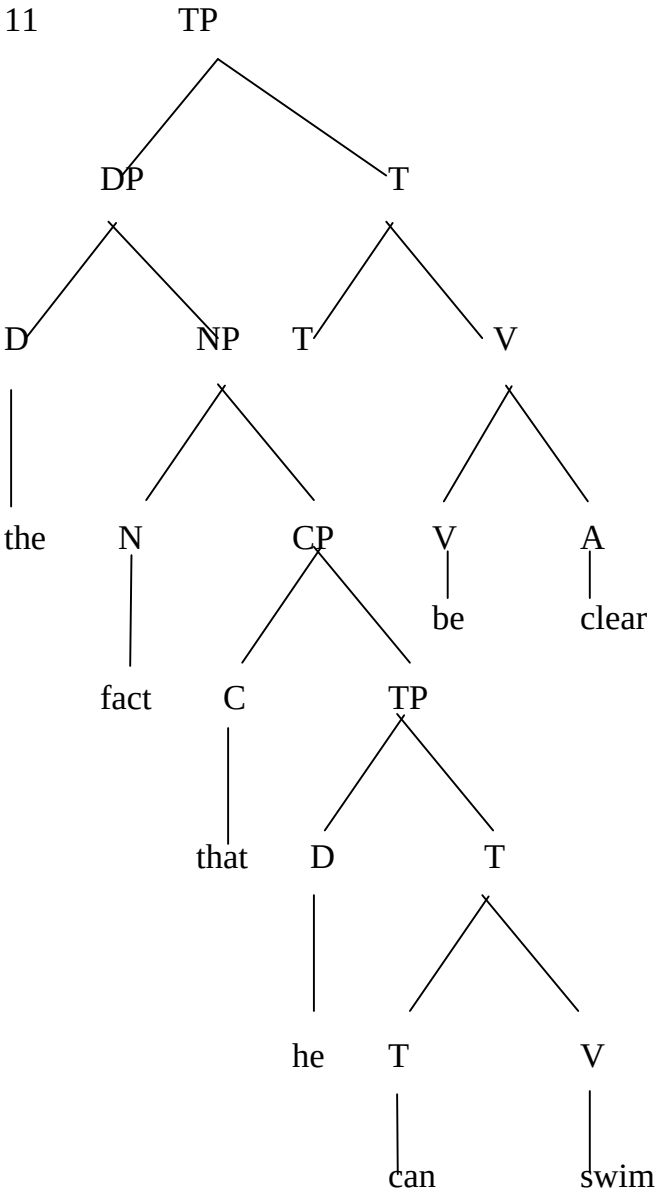
The underlined clause above is a complement clause because it is in apposition to the subject 'the fact'. Note that we can have any of the following as the subject in the sentence in (8) above.

9. The fact is clear

10. That he can swim is clear.

Since the clause: '*that he can swim*' actually complements '*fact*', we can conclude that this clause is merged directly with '*fact*' to form a complex noun phrase (NP). Complementation differs from wh-questions construction and relativisation in one respect. The complement clause is not derived by any movement rule. It does not involve any wh-movement.

11



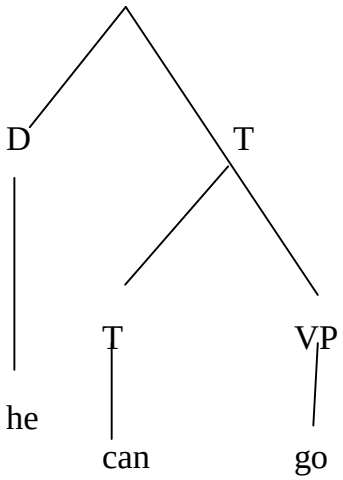
3.4 Auxiliary Inversion in the CP

This inversion moves the auxiliary out of the TP and merged it with the C head to derive a CP. This has been discussed above as head to head movement.

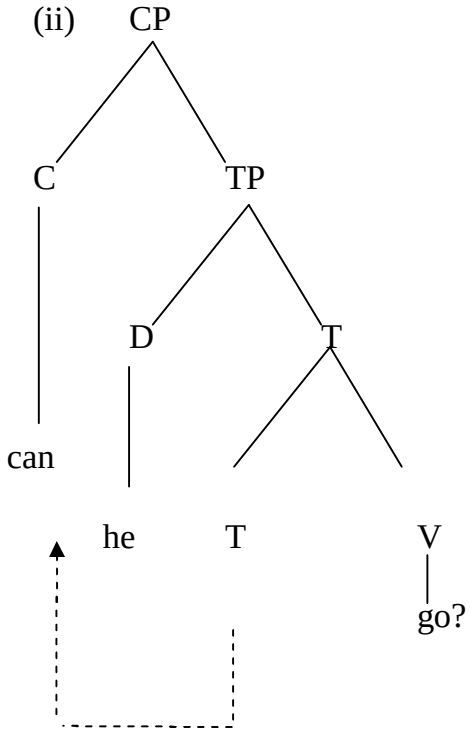
12(a) (i) He can go

(ii) can he go?

12(b) (i)



(ii)



SELF-ASSESSMENT EXERCISE

Tell a colleague why you may support the claim that wh-movement and relativisation are better considered CP derivations.

4.0 CONCLUSION

In this unit, we have seen that wh-movement, relativisation, complementation and inversion are processes that involve CP derivations.

5.0 SUMMARY

We have mentioned these CP derivations:

- wh-movement
- relativisation
- complementation
- inversion

6.0 TUTOR-MARKED ASSESSMENT

1. Illustrate the following with data from English

(a) wh-movement
(b) relativisation
(c) complementation
(d) inversion

Provide tree diagrams for your data

7.0 REFERENCES/FURTHER READING

Marantz, Alec (1995). "The Minimalist Program", in Webelhuth, Gert (ed.). *Government and Binding Theory and the Minimalist Program: Principles and Parameters in Syntactic Theory*. Oxford: Blackwell Publishers, 349-382.

Nunes, Jairo (1995). "The Copy Theory of Movement and the Linearization of Chains in the Minimalist Program". University of Maryland, at College Park, PhD dissertation.

Radford, Andrew (1997). *Syntactic Theory and the Structure of English: A Minimalist Approach*. Cambridge: Cambridge University Press.

UNIT 5 TOPICALISATION IN ENGLISH

CONTENTS

1.0 INTRODUCTION

Topicalisation basically means the emphasis that is placed on the topic of a sentence by positioning it at the beginning of the sentence. In this unit, you will be intimidated with the formal account of topicalisation in the current syntactic theory. Each instance of topicalisation is headed by a functional head called Topic (TOP).

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- provide systematic steps on how to account for topicalisation in the Minimalist Program
- distinguish between topicalisation and similar syntactic operations
- draw and label tree diagrams on topicalisation.

3.0 MAIN CONTENT

3.1 Topicalisation

This is a process where an item is placed in the topic position which usually comes before the subject position.

For instance, see (1) below

(1) (a) I know Nigerians.
    (b) Nigerians, I know them.

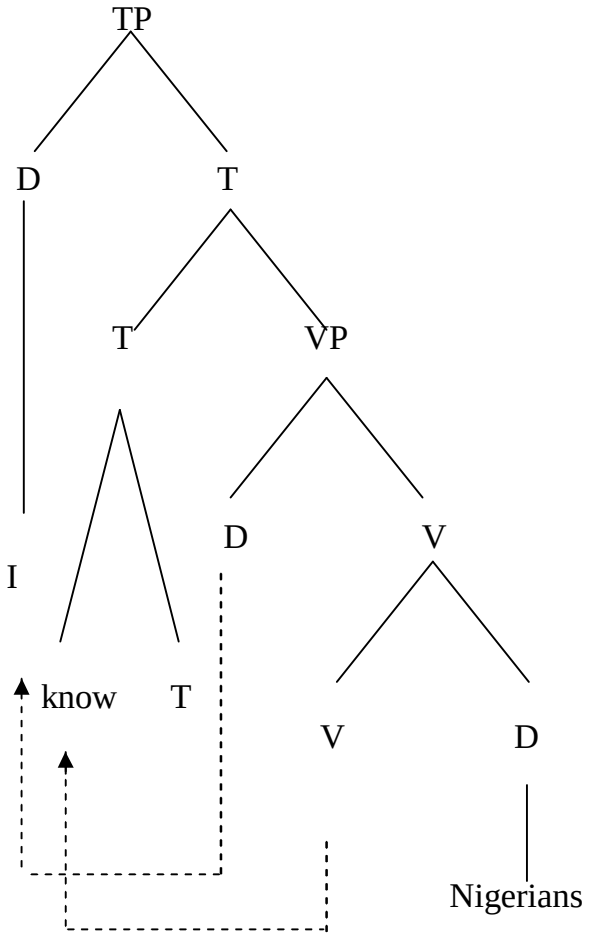
In the (1b) above, *Nigerians* and *them* have common reference. However, while *them* is the object of *know*, its antecedent is occupying a position before the subject of the TP. This position is usually labelled Topic and abbreviated as Top. Hence the structure formed is called Topic Phrase (TopP).

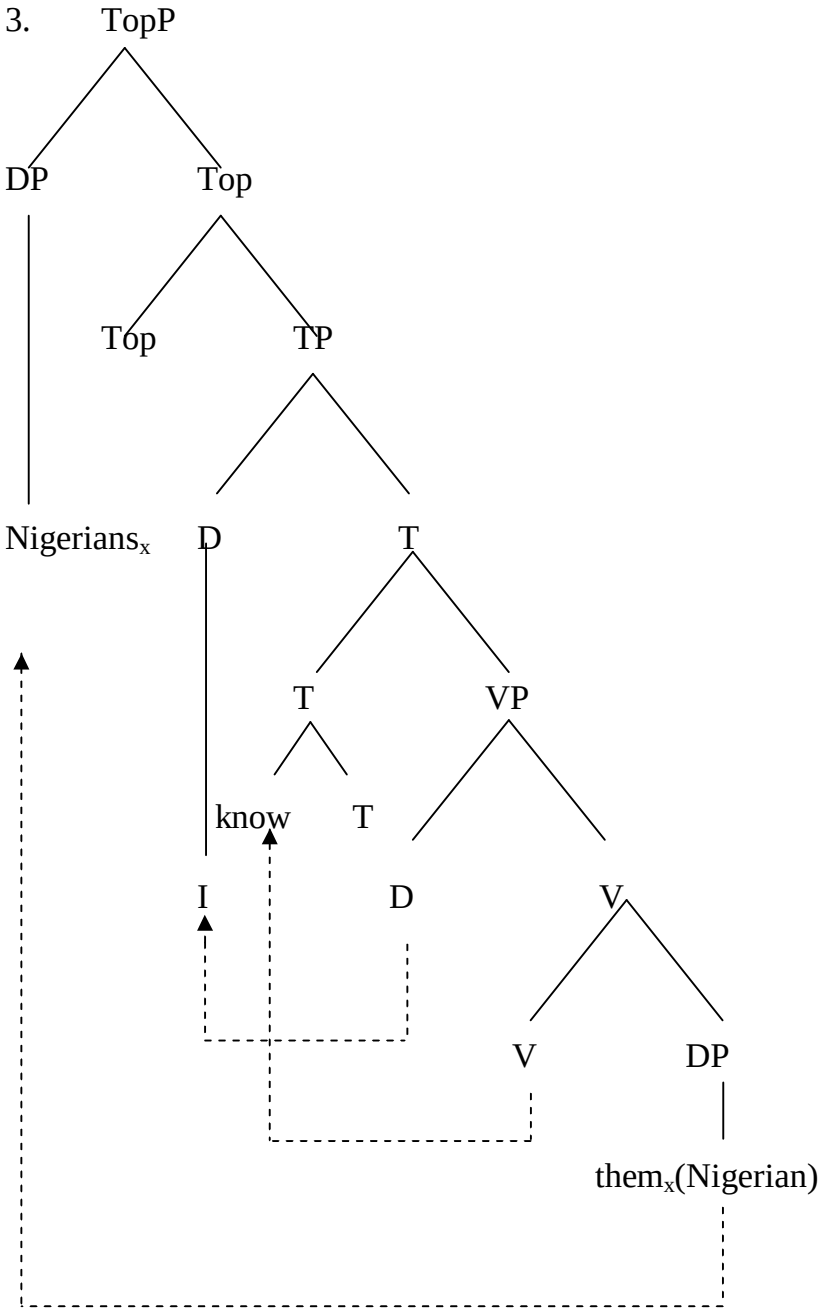
3.2 Deriving the TopP

There are stages in the derivation of the TopP. The first question to ask is- what is the morphosyntactic motivation for this derivation? The derivation of Topic Phrase is actually discourse-driven. This means it is a discourse phenomenon which requires that an item is made prominent in the discourse. However, our concern here is more on the syntactic effect that it has on the structure of English. The instance given in (1) above reveals a syntactic movement of the topicalised item.

Going by our earlier view that pronouns exist in the lexicon, we would be contradicting that position here if we are still claiming that *Nigerians* is transformed to *them*. Rather, we know that the pronoun (*them*) being a grammatical item can be selected from the lexicon along with other items in the derivation since this pronoun has identical semantic feature with the noun (*Nigerians*) which it represents.

2.





N.B. the same subscript ($_x$) placed on *Nigerian* and *them* shows that the two words are co-indexed (They have the same semantic reference).

3.3 Distinguishing Topicalisation from WH-Movement

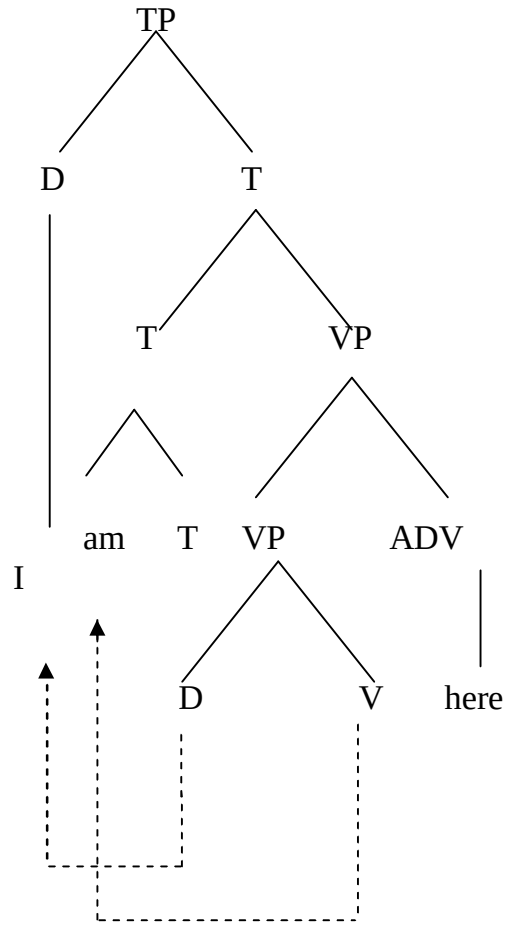
Topicalisation differs from typical wh-movement in some respects. The moved item does not become a wh-word. This item will still be represented as it was before the movement occurred. Another thing is that the initial position of the moved item must be deleted in the PF. This implies that while the topicalised item will appear in the topic position as well as in its initial position (although usually being replaced with a pronoun), the item moved with wh-movement can only appear in

the *wh* position. It must not be pronounced again in its initial position. You can compare diagram 3 in this unit with diagram 4 in unit 4 (in this module).

3.4 Distinguishing Topicalisation from Adjunct Raising

It is different from free adverb inversion

4. I am here
5. Here I am
6.



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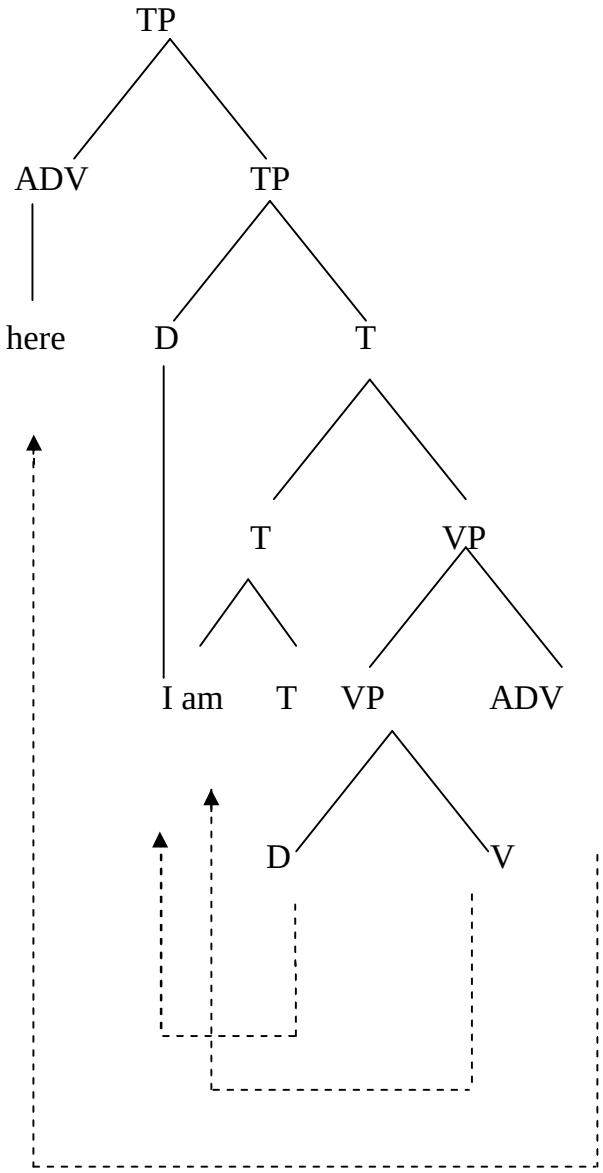

8. Here I am

9. There you are

Note that this is fixed expression that should not necessarily be derived from *you are there.*

3.5 Distinguishing Topicalisation from Ergativity

It is also possible to misconstrue ergativity as topicalisation. Both involve movement, but the moved item of ergative construction targets the subject position within the TP while topicalised item moves out of the TP into the Specifier position of the TopP.

Let us consider the following pair of sentences.

10. the door opened.
11. the stick broke.

Going by what you have studied under ergativity, you will remember that empty subject position is a feature of an ergative sentence.
We can account for this as follows:

12. Audu opened the door.
13. Ngozi broke the stick.

Since we have established the fact that the subject position is actually vacant, we can propose the following structure for the derivation.

13. Ø opened the door.
14. Ø broke the stick.

We can then go ahead to conclude that *the door* and *the stick* are raised into the vacant subject positions rather than being raised into a topic position. This is what is expected in such ergative construction in English.

4.0 CONCLUSION

Topicalisation derives a Topic Phrase. It involves movement out of the TP, but it differs from the typical wh-movement because the lexicon provides an appropriate pronoun for the initial copy of the moved item.

5.0 SUMMARY

In this unit, we have briefly discussed topicalisation as a derivation of Topic Phrase (TopP). We have also taken the time to distinguish topicalisation from other syntactic processes that may look like it.

SELF-ASSESSMENT EXERCISE

How can you reconcile the claim made under pronominalisation with way the moved item is replaced with a pronoun during topicalisation?

6.0 TUTOR-MARKED ASSIGNMENT

Using labelled tree diagram, distinguish between topicalisation and

1. ergativity
2. wh-movement
3. adjunct raising
4. Provide tree diagrams for your data (using TopP).

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UNIT 6 CLEFTS AND PSEUDO-CLEFTS IN ENGLISH

CONTENTS

1.0 INTRODUCTION

Clefting and pseudo-clefting as transformational processes are considered to be CPs in the earlier version of the Principles and Parameters model. In Minimalist Program, these processes are also treated as Focus Phrase (FocP) a functional phrase. In this unit, we shall see how to account for them.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- provide systematic steps on how to account for clefting and pseudo-clefting in minimalist program
- draw and label tree diagrams of clefting and pseudoclefting structures.

3.0 MAIN CONTENT

3.1 Focus Constructions

Focus Phrase is one of the possible functional phrases in the Minimalist Program. There is a movement to a focus position. We can cite an example of such constructions from Yoruba.

Non-focused

1. Adé jẹ ẹja
   Ade eat fish
   Ade ate fish

We can decide to focus on the subject, the object or even the verb as follows.

Subject focus

2. Adé ni ó jẹ ẹja
   Ade Foc SUB eat fish
   it was ade that ate the fish

Object focus

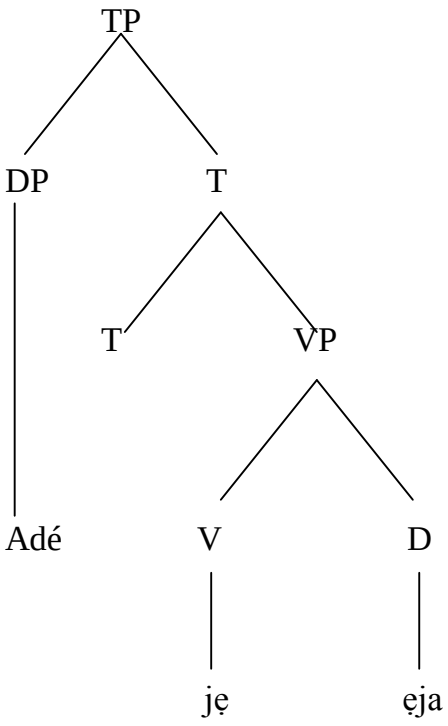
3. Eja ni Ade je
   fish Foc Ade eat
   It was fish that Ade ate

Verbal focus

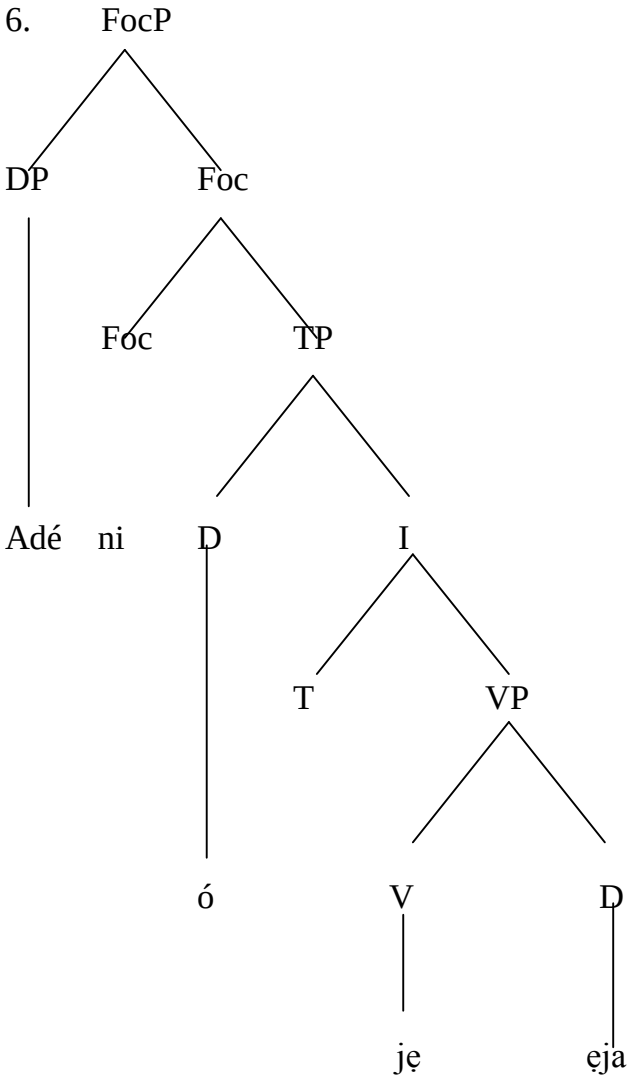
4. Jíjẹ ni Adé jẹ ẹja
   eating Foc Ade eat fish
   Ade actually ate the fish

The data in (2) - (4) above shows that the focused items are moved out of the TP to merge with the TP as Specifiers of the phrase. We produce the tree diagrams below. The non-focused structure in (1) is reproduced in (5) below, while those of (2), (3) and (4) are represented in (6),(7) and (8) respectively.

5.



6.



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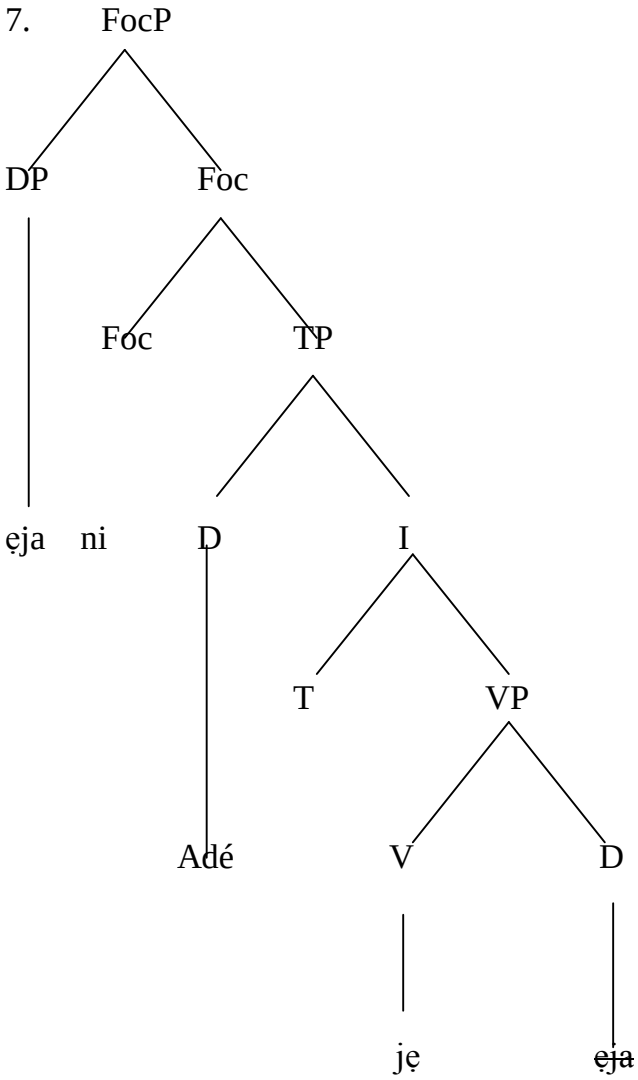

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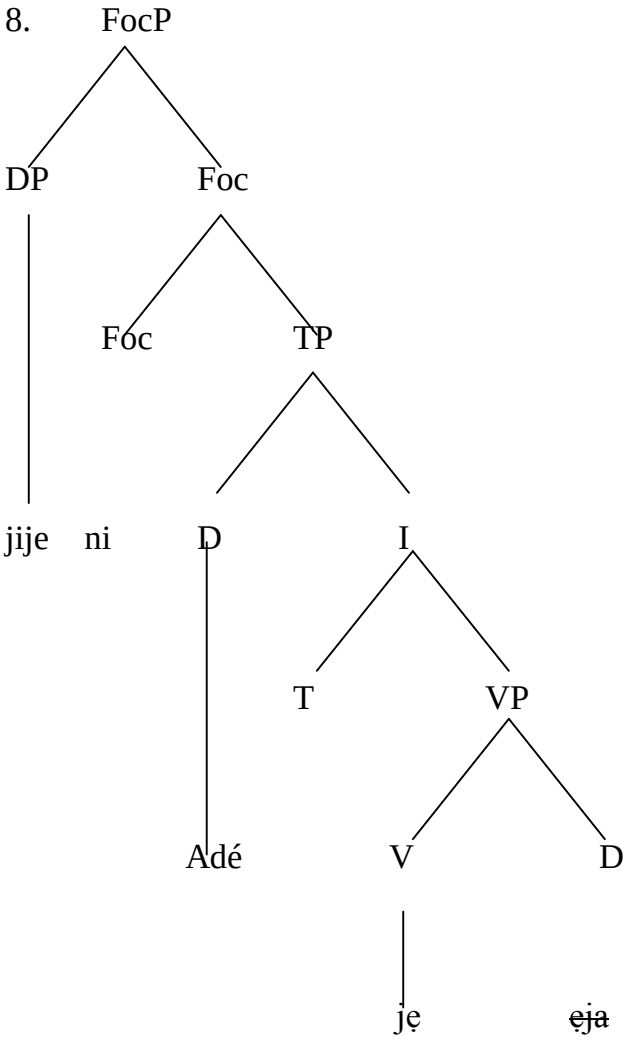


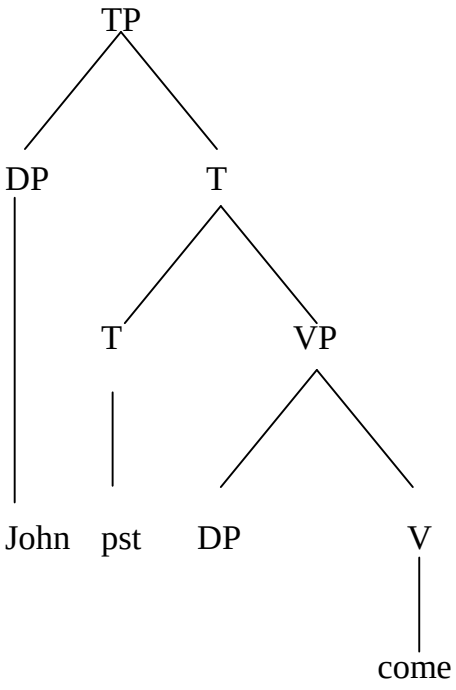
3.2 Clefting as Focus Construction

This is a focusing strategy in English, which involves the copying of an item into a focus position where that item is preceded by the focus construction ‘it is or it was’

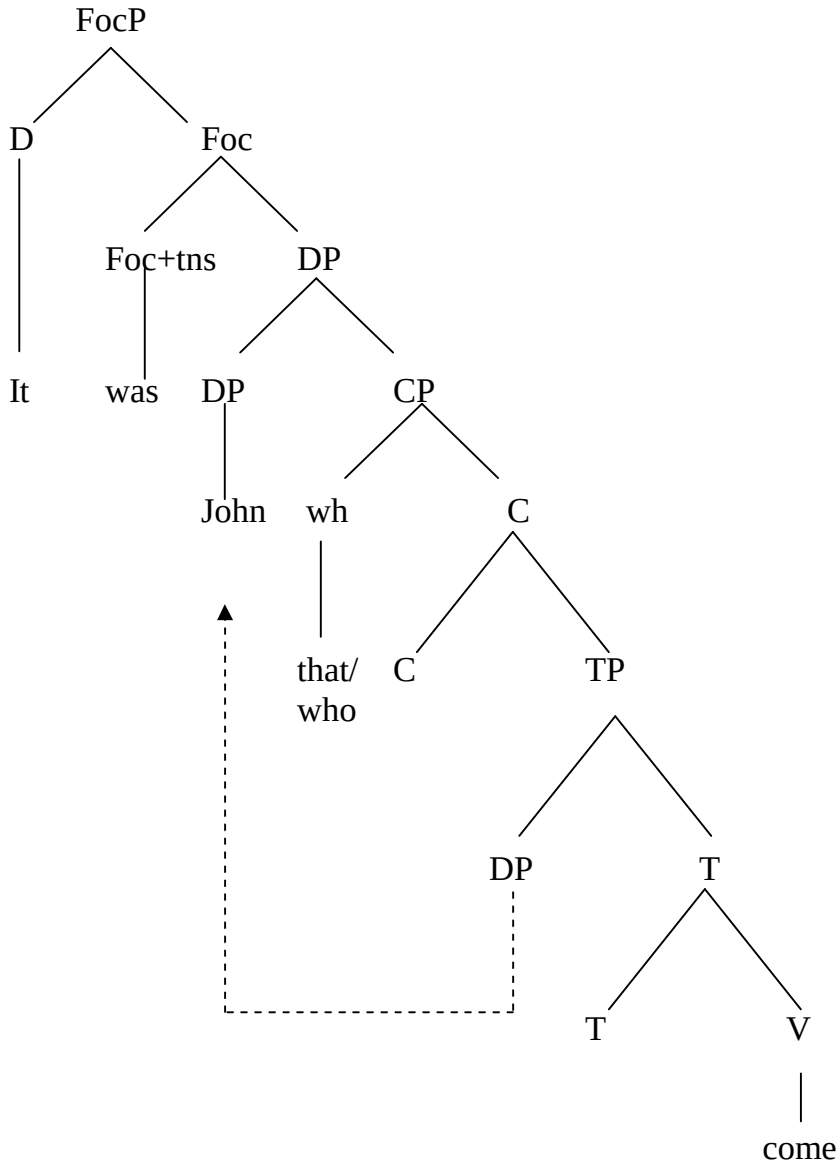
9 (a) John came

(b) It was john that came

10(a)


TP
DP
T
T
VP
John
pst
DP
V
come

10(b)


FocP
D
Foc
Foc+tns
DP
It
was
DP
CP
John
wh
C
that/
who
C
TP
DP
T
T
V
come

N.B

What is called Focus Phrase (Foc P) here is also regarded as a sentence in English. Hence, an analysis that is not interested in the transformation may still analyse it as a TP claiming that 'was' is the predicator of John.

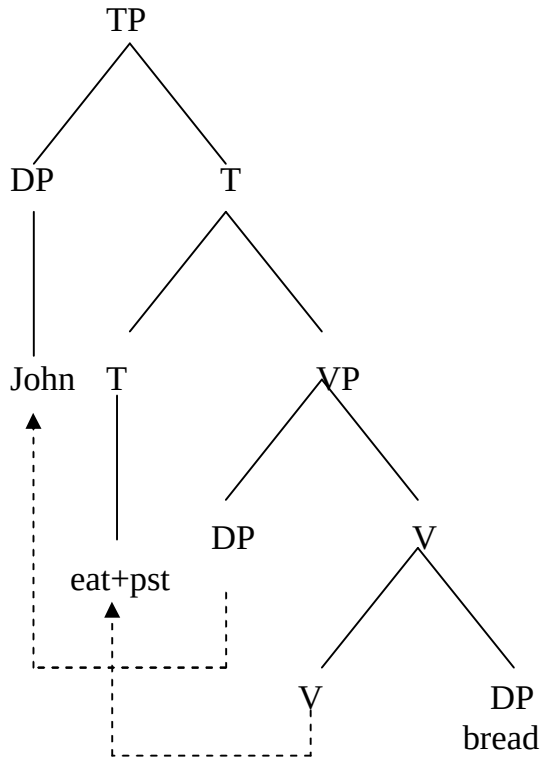
3.3 Pseudo-Cleft

Have you come across a sentence like those in (5) below? They are rare, but they are possible constructions. These are what we call pseudo-clefted sentences. See (11) below:

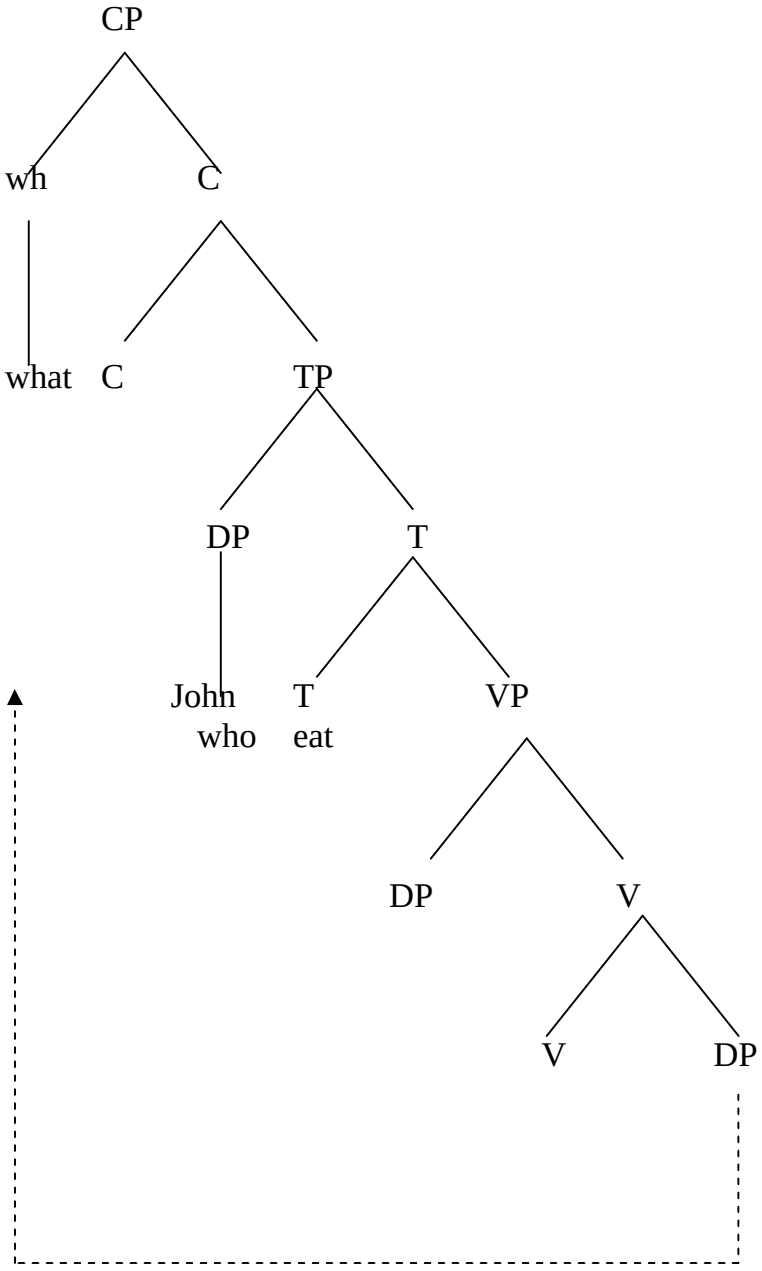
11. Who came here was John

Before an item is focused in pseudo-clefts, that particular item has to be queried by putting it in a clausal form. For instance, to use pseudo clefting focus on *bread* in the this sentence *'John ate bread'*, while simple clefting focus will simply render it as *it was bread that John ate*, pseudo-clefting will first of all query *bread* as *'what John ate'* before it come up with: *what John ate was bread*.

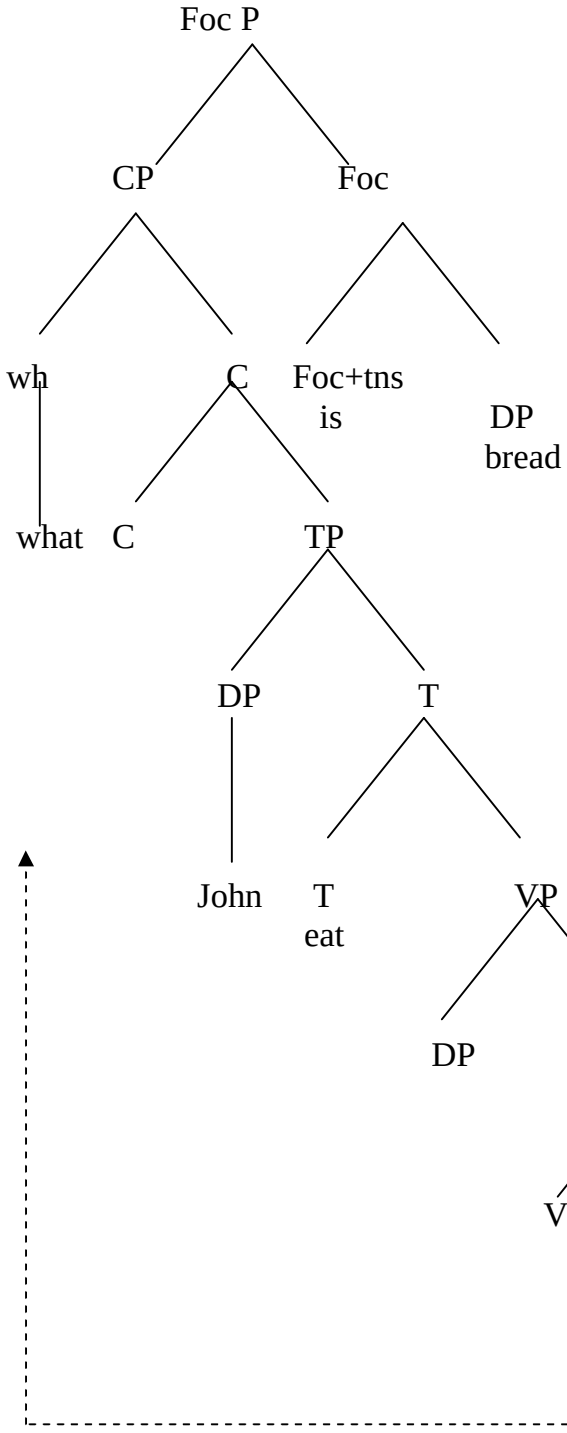
In conformity with the derivation principle in the Minimalist Program, it is clear that a derivation that involves pseudo-clefting will also involve the selection of a CP that can query the item that undergoes pseudoclefts focus.
This derivation first selects a TP *John ate bread.*



The TP *John ate bread* is later transformed into the CP *what John ate.*



The CP later merges with the focus head to derive *what John eat was bread*.



Take note of what is called Focus Phrase (Foc P) here. It can also be regarded as a sentence. Hence in the derivation of *what John did was to come*, the selection operation will include *come* as well as *what John did / John did what* despite the fact that the verb has common semantic reference with the clause.

SELF-ASSESSMENT EXERCISE

In what way do you think that focus construction in Yoruba differs from the English clefts and pseudo-cleft?

4.0 CONCLUSION

In this unit, we have shown that clefting and pseudo-clefting processes are focus constructions in English. FocP is therefore used for them.

5.0 SUMMARY

We have mentioned these derivations:

- The construction of the focus phrase
- The extension of the FocP analysis to clefts and pseudo-clefts

6.0 TUTOR-MARKED ASSIGNMENT

1. Explain the following with data from English

(a) clefting
(b) pseudo-clefting

2. Provide tree diagrams for your data (using FocP).

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