MODULE 1 INNOVATIONS IN MINIMALIST PROGRAMME 1

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 ANDREPRESENTATIONS IN THE MINIMALIST PROGRAMME

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; and
- discuss how these operations affect the transformational processes.

HOW TO STUDY THE UNIT

a. Read this unit as diligently as possible.
b. Find meaning of unfamiliar words in the unit using your dictionary.
c. As you read, put major points down in a piece of paper or jotter.
d. Do not go to the next section until you have fully understood the section you are reading now.
e. Do all the Self-Assessment exercises in the unit as honestly as you can. In some areas where it is not feasible to provide answers to Self-Assessment exercises, go to the relevant sections of the unit to derive the answers.

3.0 MAIN CONTENT

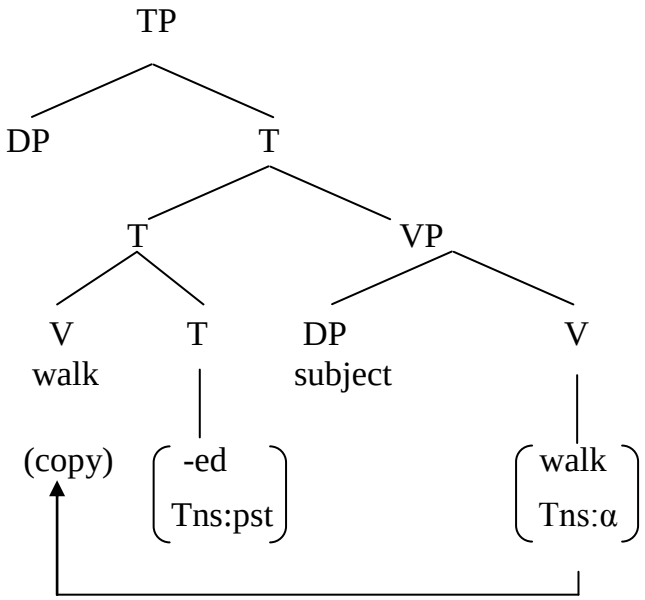
The minimalist framework provides a number of radical changes in the technical structure of the theory of syntax. Some of the most important ones are given below.

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.

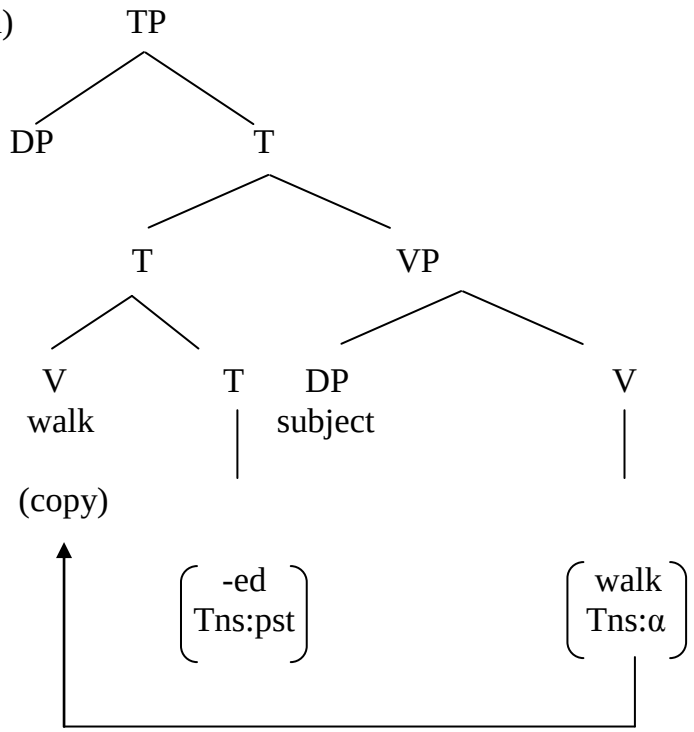
Another example of an interpretable feature is the plural inflection on regular English nouns. For instance, we can consider the word *balls*. This word denotes several balls. We can therefore see the relevance of the plural inflection. It makes the number feature of the ball *interpretable*.

3.2 Economy of Representation

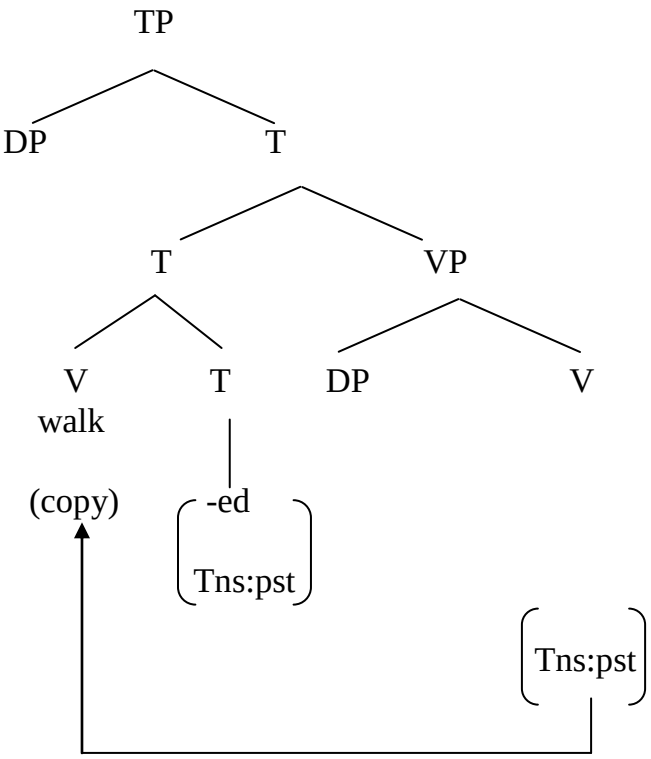
Economy of representation is the principle that grammatical structures must exist for a purpose, i.e. the structure of a sentence should not be more complex than what is required in satisfying constraints on grammaticality.

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)



2(b)



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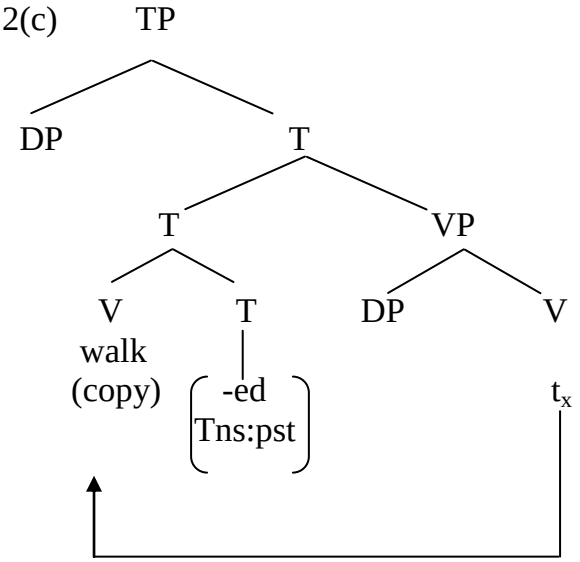
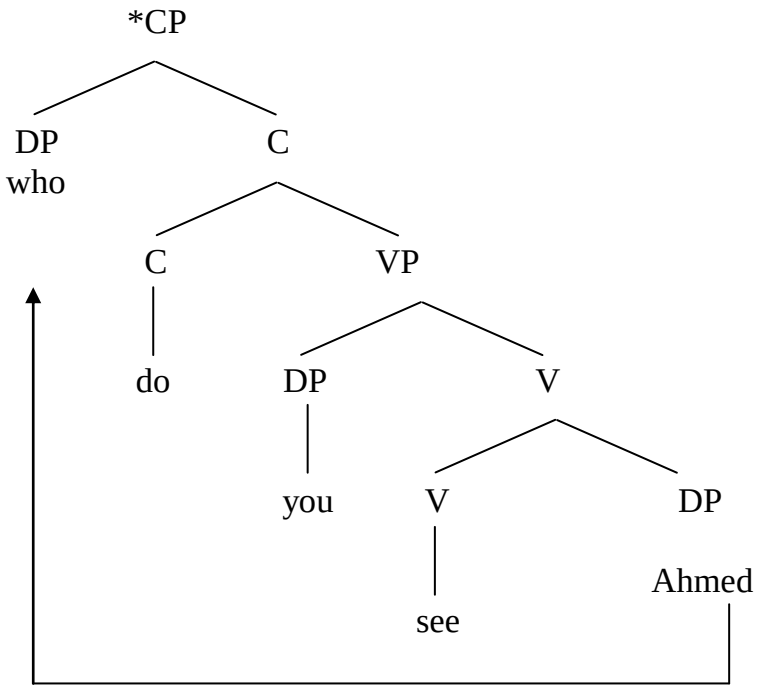
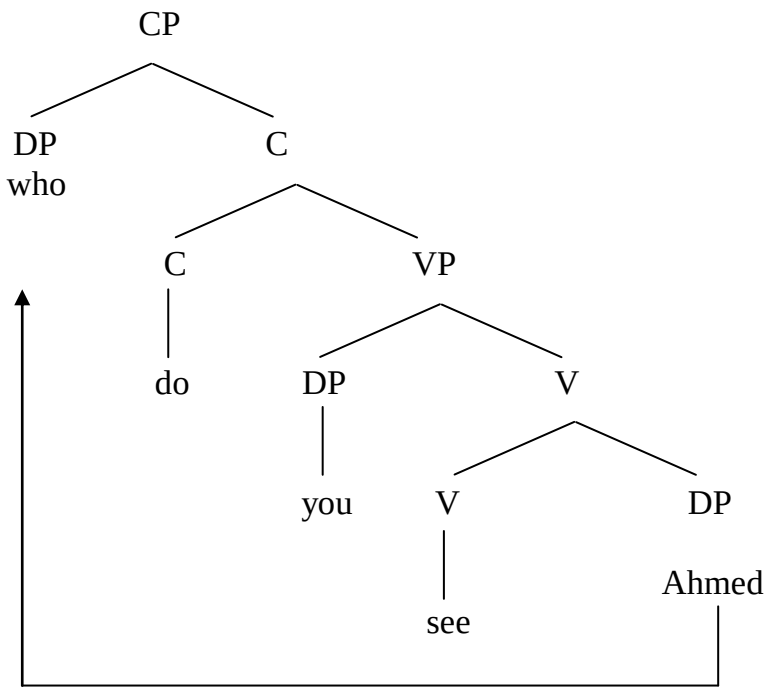


As a new user of this theory, you can easily observe the movement principle stated above in wh- constructions. An instance is given in (3) below.

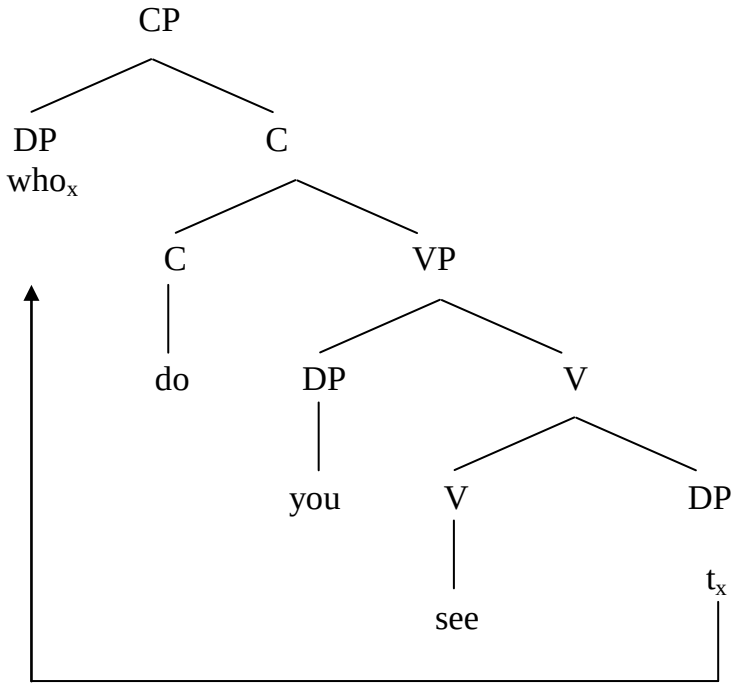
3(a)



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 EXERCISE1

What are the two major areas where structural economy is necessary in the MP?
Answer: Economy of Derivation and Economy of Representation.

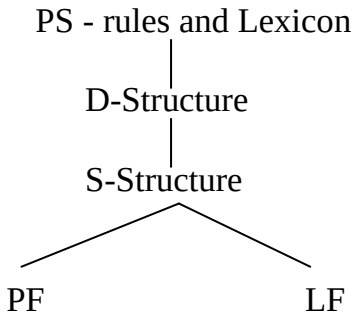
3.4 The simplification of X-bar Theory in favour of Bare Phrase Structure

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.

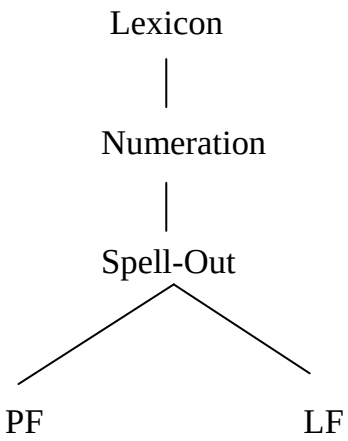
3.5 Removal of Levels of Representation

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 Eliminating 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 complementiser 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.
Answer: Read sub-sections 3.4-3.8 for the answers.

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 minimise 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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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 Linearisation of Chains in the Minimalist Program." University of Maryland at College Park. PhD dissertation, chapter 2.

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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; and
- discuss the transformational processes in terms of these operations.

HOW TO STUDY THE UNIT

a. Read this unit as diligently as possible.
b. Find meaning of unfamiliar words in the unit using your dictionary.
c. As you read, put major points down in a piece of paper or jotter.
d. Do not go to the next section until you have fully understood the section you are reading now.
e. Do all the Self-Assessment exercises in the unit as honestly as you can. In some areas where it is not feasible to provide answers

to Self-Assessment exercises, go to the relevant sections of the unit to derive the answers.

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.

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

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 lookfor 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

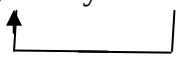
(8) You **can**can swim

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

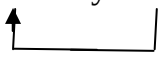


3.5 Operation Merge

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.

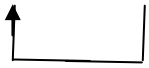
You can swim

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

11 (a) *Can you can swim

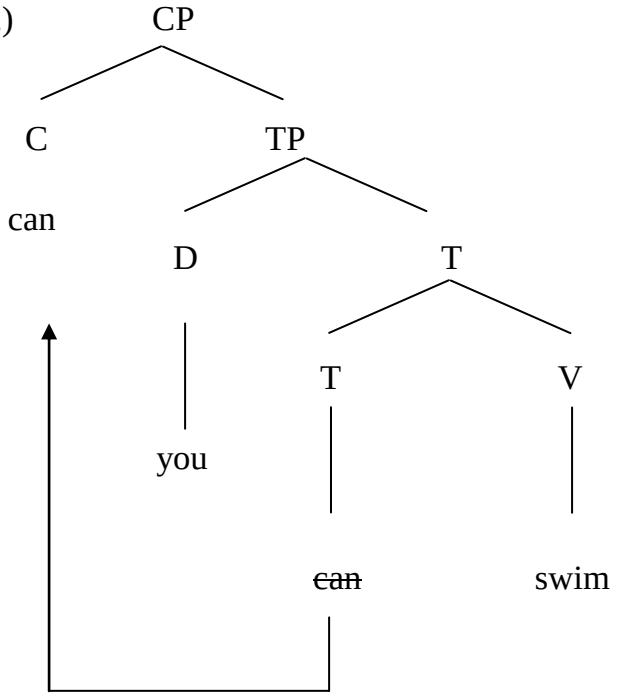
(b) Can you ~~can~~ swim

(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…..

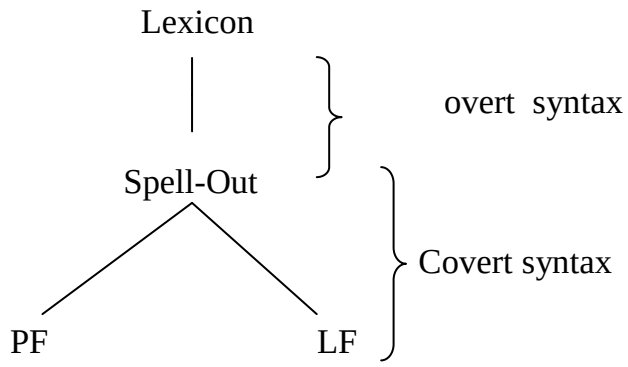
This stage is called the *spell out*. This term simply implies that henceforth phonological processes such as contraction, assimilation and deletion can no longer affect the meaning aspect of the derivation as it progresses further.

For instance, the contraction that reduces '*he will go*' [hi: wilgəʊ] to '*he'll go*' [hɪlgəʊ] 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

i. Go over the unit again and copy out what each of the following terms and conventions denotes in the Minimalist Program (as given in the text): (i) array, (ii) ∑, (iii) numeration, (iv) LI, (v) SO

ii. List all the operations discussed in this unit and show how they differ from the ones in the Standard Theory model (Chomsky 1965).

Answer: Read sub-sections 3.1-3.8 for the answers.

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

Bobaljik, Jonathan (1995). "In Terms of Merge: Copy and Head Movement", in *Papers on Minimalist Syntax*, MIT Working Papers in Linguistics 27. Cambridge, Mass.: MIT Department of Linguistics and Philosophy, 41-64.

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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; and
- discuss how it affects the PF and the LF processes.

HOW TO STUDY THE UNIT

a. Read this unit as diligently as possible.
b. Find meaning of unfamiliar words in the unit using your dictionary.
c. As you read, put major points down in a piece of paper or jotter.
d. Do not go to the next section until you have fully understood the section you are reading now.
e. Do all the Self-Assessment exercises in the unit as honestly as you can. In some areas where it is not feasible to provide answers to Self-Assessment exercises, go to the relevant sections of the unit to derive the answers.

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 realisation 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 [aɪkən ˈgəʊ]
(iv) I cannot go [aɪkən 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}**	[aɪkən ˈgəʊ] :{1sg, not, be able, to move}
v) I can't go	**DELETE [ɒ]:{}**	[aɪkən ˈnɒt ˈgəʊ]:{1sg, not, be able, to move}

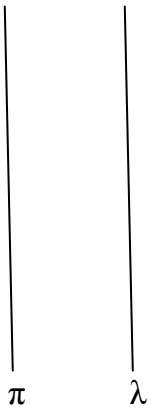
If you look through the derivational account above, you will notice that each lexical entry is represented in pairs. The derivation attempts to produce the sound and the meaning representation of each entry. These are the Phonetic Form (PF) and the Logical Form (LF) respectively. Can you tell the difference 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

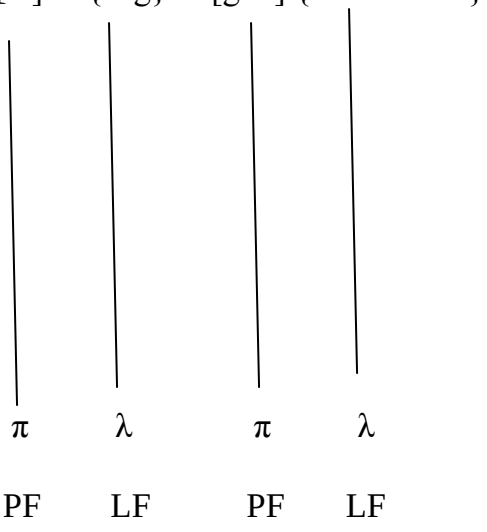
[gəʊ]: {TO MOVE}



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

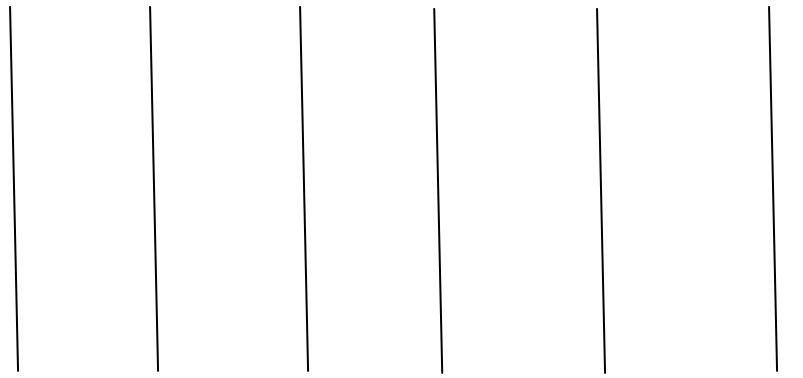
4 (a) I go

[aɪ] {1sg} [gəʊ] {TO MOVE}



(b) I can go

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

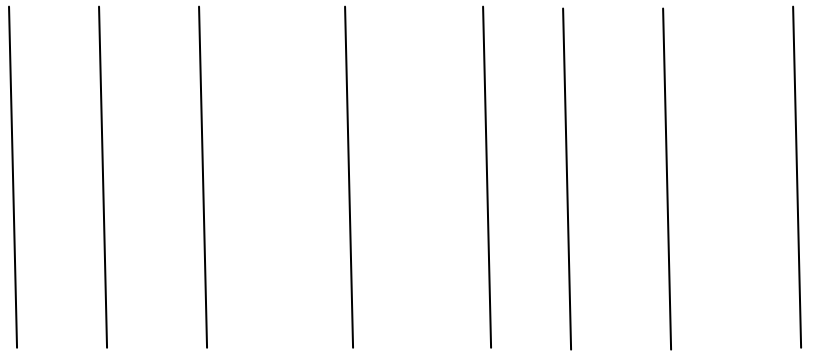


π λ π λ π λ

PF LF PF LF PF LF

(c) I can not go

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

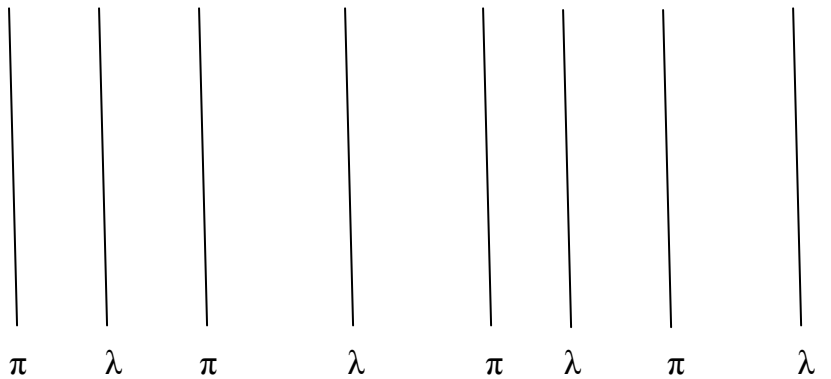


π λ π λ π λ π λ

PF LF PF LF PF LF PF LF

(d) I can't go

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



π λ π λ π λ π λ

PF LF PF LF PF LF PF LF

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

i. Describe the Spell-out to a colleague of yours?

Answer: Read 3.1 above for the answer.

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

Answer: Read sub-sections 3.2-3.3 for the answers.

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.

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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