

MODULE 4

Unit 1	La Phonologie Lexicale
Unit 2	La Syllable en Français
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UNIT 1 LA PHONOLOGIE LEXICALE

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1.0 INTRODUCTION

Traditionally, the lexicon has been regarded as nothing more than an appendix to the grammar which contains the idiosyncratic properties of lexical items and morphemes. But nowadays, lexicon is recognised as a central component of the grammar which contains not only idiosyncratic properties of words and morphemes, but also regular word-formation and phonological rules, hence the type of phonology termed lexical phonology.

In this unit, you will learn the definition of lexical phonology as well as the levels of operation of lexical phonology as it applies to a particular language.

2.0 OBJECTIVES

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

- mention what is called lexical phonology;
- define the different levels of lexical phonology;
- mention how lexical phonology functions in a given language; and
- mention the difference between lexical phonology and the other types of phonology.

3.0 MAIN CONTENT

3.1 What is Lexical Phonology?

Lexical phonology concerns the relation between phonology, morphology and lexicon. And as its name suggests, lexical phonology gives the lexicon a key role.

3.1 Levels of Lexical Phonology

One of the claims of lexical phonology is that both inflexional and derivational word-formation processes can be displayed on a series of linked levels, also called strata, as shown in the diagram below: basically, there are two levels of lexical phonology: level 1 and level 2.

3.2 Level 1 of Lexical Phonology

Level 1 contains what is called bound morphemes, that is morphemes which cannot occur independently but must always be attached to some other form. Examples:

Ac-cept-er
 Con-jug-uer
 Per-cev-oir
 Con-ten-ir

The above examples show one of the important characteristics of level 1 affixes which tend to be semantically opaque, that is their meaning is difficult to get.

3.3 Level 2 of Lexical Phonology

Level 2 contains affixes (usually suffixes) which do not have any effect on stress, whereby words are stressed the same way regardless of the presence or absence of these suffixes. Here you have morphemes that can occur independently. Examples:

Courag-eux Conscienc-ieux Respect-able Vol-eur Vol-euse Enchant-é-e

In these examples, each affixe is semantically transparent, with a meaning easy to get.

4.0 CONCLUSION

In this unit, you have acquired basic knowledge on lexical phonology. You have also learnt two fundamental levels as contained in lexical phonology. The more you understand and practice it, the better your understanding of French phonology in particular.

5.0 SUMMARY

In this unit, you have been taught lexical phonology as it applies to French language. You have learnt that there are two levels of analysis of morphemes: level 1 deals with what is called bound morphemes which cannot occur separately, and level 2 with morphemes that can occur independently and have meaning on their own, unlike level 1 morphemes. You must endeavour to understand this unit very well before you proceed to the next unit.

6.0 TUTOR-MARKED ASSIGNMENT

1. How do you define lexical phonology?
2. What are the levels characterising lexical phonology?
3. Consider the list of words below and determine their respective level in lexical phonology:
 - Accompanyer
 - Accusateur
 - Récréation
 - Calculateur.

7.0 REFERENCES/FURTHER READING

- Juilland, A. G. (1965). *Dictionnaire Inverse de la Langue Française*. La Haye: Mouton. (REF).
- Katamba, F. (1989). *An Introduction to Phonology*. London: New London; New York: Longman. (RES).
- Léon, P. (1993). *Précis de Phonostylistique*. Paris: Nathan (RES).
- Martin, P. (1983). *Eléments de Phonologie Fonctionnelle: Théorie et Exercices*. Chicoutimi, Quebec: G. Morin. (RES).

UNIT 2 LA SYLLABE

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 - 3.2 Représentation de la Structure de Syllabe
 - 3.3 La Syllabification
- 4.0 Conclusion
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1.0 INTRODUCTION

In this unit, you will learn another important aspect in the study of French language: the syllable (la syllabe). You should note that each language has its own pattern of syllable, hence the need for you to understand the one that is peculiar to your language of study - French. Make sure you understand and master this unit very well.

2.0 OBJECTIVES

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

- define what is syllable in French;
- explain the syllable pattern in French;
- explain the roles of syllable in French;
- place stress (accent) correctly on syllables; and
- divide words into syllables correctly.

3.0 MAIN CONTENT

3.1 La Syllabe Française

In French, a syllable is a group of sounds that are pronounced together at once. A syllable is made of either one (1) single vowel or one (1) vowel and one (1) or more consonants.

Examples:

- (i) A vowel as syllable: a-y-é-à, etc.
- (ii) 2 vowels or more as a syllable; au - ou-eau-eu, etc.

- (iii) A vowel plus a consonant or a consonant plus a vowel: il-ça-fi-si, etc.
- (iv) A vowel plus several consonants: autre-arc-outr-entre, etc

3.2 Représentation de la Structure Syllabique

You should note here that there are several structures of syllable in French. Taking the examples above, you have the following structures:

- (i) A vowel: V
- (ii) 2 vowels or more: vv-vvv
- (iii) A vowel + a consonant: vc
- (iv) A consonant + a vowel: cv
- (v) A vowel + several consonants: vcc

3.3 La Syllabification

Syllabification is the process of cutting words into syllables. In French, you have the following principles for cutting words into syllables:

- (a) In the case of a single vowel or many vowels pronounced as a sound, the word is the syllable: no cutting

Examples: a - eu - eau

- (b) In the case of word with one consonant, as in (iii) and (iv) above, the whole word is considered a syllable.

Examples: il - fi - si

- (c) In the case of a word with two similar consonants, you cut in between the two consonants

Examples: ef-fet; ar-rêt; ac-cord

- (d) In the case of a word with two different consonants, you separate the consonants, except if at the end of the word.

Examples: as-pect; ab-sen-ce.

- (e) In the case of a word with three consonants, you cut after the second consonant

Examples: cons-cien-ce; obs-ti-né; comp-ter, except in words where you have ‘ph’, ‘ch’, ‘th’, ‘gn’ as in: mar-cher, as-phy-xie or where you have r or l as the last letter of the word: ar-br, ap-plau-dir.

You should note the following rules:

- When you have a word where there is a group of letters that are pronounced as a single sound, you do not separate the group. Examples: é-chan-ger; é-le-phant; a-thée; mon-ta-gne.
- Also, when you have two or three vowels together in a word, you do not separate the vowels either. Examples: théa-tre; oa-sis; ré-gion; es-pion; bout; as-seoir; beau-té.

4.0 CONCLUSION

In this unit, you have learnt another aspect of phonology called syllable, particularly with regard to French language. You also learnt how to recognise syllables in given words, and the rules or principles governing their structure.

5.0 SUMMARY

In this unit, you learnt various aspects of syllable in the French language, its various structures and all possible cases of syllabification, with the rules and exceptions governing its process. Thus, you have the following syllable structures: a single vowel (V), a combination of two or more vowels (VV or VVV), a combination of vowel and consonant (VC or CV), etc. The rules governing syllabification must be mastered. It would be a good thing for you to do a lot of exercises on syllabification to enhance mastery.

6.0 TUTOR-MARKED ASSIGNMENT

1. How do you define a syllable?
2. Do you have the same types of syllable in French and English or in your mother tongue?
3. Give examples of the types of syllable you have in French, and their structures respectively!
4. How do you syllabify in French?
5. Give words of one, two, three and more syllables, and give their respective structures.

7.0 REFERENCES/FURTHER READING

Juilland, A. G. (1965). *Dictionnaire Inverse de la Langue Française*. La Haye: Mouton. (REF).

Katamba, F. (1989). *An Introduction to Phonology*. London: new London; New York: Longman. (RES).

Léon, P. (1993). *Précis de Phonostylistique*. Paris: Nathan (RES).

Martin, P. (1983). *Eléments de Phonologie Fonctionnelle: Théorie et Exercices*. Chicoutimi, Quebec: G. Morin. (RES).

UNIT 3 L'ASSIMILATION

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 - 3.4 L'assimilation Double
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- 7.0 References/Further Reading

1.0 INTRODUCTION

Assimilation is a typical sound change process by which the phonetics of a speech segment becomes more like that of another segment in a word (or at a word boundary), so that a change of phoneme occurs. You should remember that assimilation can occur, influencing a preceding segment (forward) or a following segment (backward).

2.0 OBJECTIVES

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

- discuss the concept of assimilation as it applies to French language;
- identify the different types of assimilation;
- explain satisfactorily each type of assimilation; and
- apply the different types of assimilation where necessary and correctly when speaking French.

3.0 MAIN CONTENT

3.1 L'assimilation

If sound changes with reference to a following segment, it is traditionally called “regressive assimilation”; changes with reference to a preceding segment are traditionally called “progressive”. These terms seem to be confusing, as they seem to mean the opposite of the intended meaning. Accordingly, a variety of alternative terms have arisen - not all of which avoid the problem of the traditional terms.

Regressive assimilation is also known as right-to-left or anticipatory assimilation. Progressive assimilation is also known as left-to-right or perseveratory or preservative or lag assimilation.

3.2 L'assimilation Régressive

It is important for you to note here that this type of assimilation is called regressive because the sound that is influenced (= assimilated) is placed before the sound influencing (= assimilating) it.

Examples:

- Cela va de soit

When you pronounce slowly the underlined words, you say: [dəswa], but when you pronounce rapidly, you say [tswa], because after elision of the sound ə, [d] becomes [t] by the process of its assimilation by the voiceless sound [s] which follows it.

- Nous avons pu observer

When you pronounce slowly the underlined word, you say: [əbsɛRvɛ], but when you pronounce rapidly, you say: sound [əpsɛRvɛ], because the voiced sound [b] has been affected through assimilation by the voiceless sound [s] following it.

- Mon médecin est très gentil

When you pronounce slowly the underlined word, you say [Pɛdɔsɛ], but when you pronounce rapidly the underlined word, you say: [Pɛtsɛ], because, after elision of the sound [ə], [d] becomes [t] under the influence of the voiceless sound [s] which follows it.

3.3 L'assimilation Progressive

You should note here that this type of assimilation is called progressive because the sound that is influenced (= assimilated) is placed after the sound influencing (= assimilating) it.

Examples:

- Mes cheveux sont touffus

When you pronounce rapidly the underlined word, you say: [ʃəvɛ], but when you pronounce rapidly the underlined word, you say: [ʃf], because after elision of [ə], the voiced sound [v] becomes [f].

through assimilation, being in direct contact with the voiceless sound [ʃ] which precedes, that is comes before it.

- Il n'a pas bien fait

When you pronounce slowly the underlined word, you say: [ilnapa], but when you pronounce rapidly the underlined word, you say: [ilnápD], because the oral vowel sound [a] becomes a nasal vowel sound [á] by assimilation, being in direct contact with the nasal consonant sound [ŋ] which comes before it.

3.4 L'assimilation Double

You should learn here that an assimilation double is an assimilation which is both regressive and progressive, that is the sound affected is assimilated by both the preceding and the following sounds.

Examples:

- Pendant les vacances, je voyagerai en Europe
- When you pronounce slowly the underlined words, you say: [pãdãlevakãs], but
- When you pronounce rapidly the underlined words, you say: [[pãñãlevakãs]], whereby [d] becomes [n] because of the influences of the preceding nasal vowel [ã] and the following nasal vowel [ã]. In other words, the oral stop sound [d] is nasalised, thus changing to the nasal constructive sound [n].

4.0 CONCLUSION

In this unit, you have learnt more about Assimilation, particularly with regard to French language. You have also learnt the different types of assimilation you can get in French, and how each one of them functions.

5.0 SUMMARY

In this unit, you learnt various types of assimilation in the French language, viz. regressive assimilation, progressive assimilation and double assimilation. In other words, you have learnt that a given sound can be influenced by either the preceding or the following sound or both sounds at the same time, and that those affected sounds change from their nature to the nature of the influencing sounds.

Thus under the said influence, a voiced sound becomes voiceless, and a voiceless becomes voiced, etc. It would be in your own interest to endeavour to master those assimilation principles.

6.0 TUTOR-MARKED ASSIGNMENT

1. How do you define assimilation?
2. How many types of assimilation do you have in French?
3. Give examples illustrating each type of assimilation.
4. Consider the following words:
 - absent
 - subtil
 - anecdote

Transcribe those words phonetically, applying the appropriate assimilation in each case.

7.0 REFERENCES/FURTHER READING

Juilland, A. G. (1965). *Dictionnaire Inverse de la Langue Française*. La Haye: Mouton. (REF).

Katamba, F. (1989). *An Introduction to Phonology*. London: new London; New York: Longman. (RES).

Léon, P. (1993). *Précis de Phonostylistique*. Paris: Nathan (RES).

Martin, P. (1983). *Eléments de Phonologie Fonctionnelle: Théorie et Exercices*. Chicoutimi, Quebec: G. Morin. (RES).

UNIT 4 LA PHONOLOGIE GENERATIVE

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 - 3.3 Levels of Representation
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- 6.0 Tutor-Marked Assignment
- 7.0 References/Further Reading

1.0 INTRODUCTION

In this unit, you will learn one of the basic schools of thought in phonology - the generative phonology, with all it entails as components. You will also learn what each of these components is.

2.0 OBJECTIVES

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

- define what generative phonology is;
- mention the concept of generative phonology;
- mention the components of generative phonology; and
- define each component.

3.0 MAIN CONTENT

3.1 Definition

Generative phonology is a component of generative grammar that assigns the correct phonetic representations to utterances in such a way as to reflect a native speaker's internalised grammar.

3.2 Components of Generative Phonology

Generally, there are five components of generative phonology, which are:

- (i) Levels of representation
- (ii) Phonological rules
- (iii) Derivations
- (iv) Distinctive features
- (v) Linearity

3.3 Levels of Representation

- Generative phonology posits two levels of phonological representation:
 - An underlying representation is the most basic form of a word before any phonological rules have been applied to it. Underlying representations show what a native speaker knows about the abstract underlying phonology of the language.
 - A phonetic representation is the form of a word that is spoken and heard.

3.4 Phonological Rule

Phonological rules map underlying representations onto phonological representations. They delete, insert, or change segments, or change the features of segments.

3.5 Derivations

A Phonological derivation is the set of stages used to generate the phonetic representation of a word from its underlying representation. Here is a diagram of the stages in a derivation. Phonological rules influence each stage of a derivation:

Examples

Here are some examples of the derivations of words having the negative prefix /In/:

3.6 Distinctive Features

Distinctive features make it possible to capture the generalities of phonological rules.

3.7 Linearity

A stream of speech is portrayed as a sequence of discrete sound segments. Each segment is composed of simultaneously occurring features.

4.0 CONCLUSION

In this unit, you have learnt the general concept of generative phonology. It is a theory on which the phonological description of any language is based. In other words, generative phonology is the basic theory for the phonological study of all languages, including French

5.0 SUMMARY

In this unit, you have learnt the basic concept about generative phonology.

You have also learnt the inherent components of generative phonology, which include the two levels of representation of a word in a particular language - the underlying and the phonetic, phonological rules and features; and the derivations and the linearity of features. You should take time to study this unit and make sure you understand it very well before you proceed to the last unit of this course.

6.0 TUTOR-MARKED ASSIGNMENT

1. Define generative phonology.
2. What are the main components of generative phonology?
3. Explain each component with concrete examples in French.
4. Consider two vowels and two consonants in French and give their respective distinctive features.
5. What do you know about liaison, elision and accent in French?

7.0 REFERENCES/FURTHER READING

Katamba, F. (1989). *An Introduction to Phonology*. New York: Longman (RES).

Kenstowicz, M. & Charles, K. (1979). *Generative Phonology*. San Diego: Academic.

Léon, P. (1993). *Précis de Phonostylistique*. Paris: Nathan (RES).

Martin, P. (1983). *Eléments de Phonologie Fonctionnelle: Théorie et Exercices*. Chicoutimi, Quebec: G. Morin (RES).

UNIT 5 LES TENDANCES GÉNÉRALES EN PHONOLOGIE

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 - 3.1 Trends in phonology
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1.0 INTRODUCTION

In this unit, you will learn various schools of thought in phonology - from traditional to generative, then to plurilinear phonology, and the names of great phonologists and their respective schools of thought.

2.0 OBJECTIVES

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

- have a general idea about phonology;
- mention the various schools of thought;
- mention the differences between the various schools; and
- identify each school of thought by its characteristics.

3.0 MAIN CONTENT

3.1 Trends in Phonology

In ancient India, the Sanskrit grammarian Panini (c. 520-460 BC), who is considered the founder of linguistics, in his text on Sanskrit phonology, the Shiva Sutras, discovers the concepts of the phoneme, the morpheme and the root. The Shiva Sutras describe a phonemic notational system in the fourteen initial lines of the Astādhyāyī. The notational system introduces different clusters of phonemes that serve special roles in the morphology of Sanskrit, and are referred to throughout the text. Panini's grammar of Sanskrit had a significant influence on Ferdinand de Saussure, the father of modern structuralism, who was a professor of Sanskrit.

The Polish scholar Jan Baudouin de Courtenay, (together with his former student Mikolaj Kruszewski) coined the word phoneme in

1876, and his work, though often unacknowledged, is considered to be the starting point of modern phonology. He worked not only on the theory of the phoneme but also on phonetic alternations (i.e. what is now called allophony and morphophonology). His influence on Ferdinand de Saussure was also significant. Prince Nikolai Turbetzkoy's posthumously published work, the *Principles of Phonology* (1939), is considered the foundation of the Prague School of Phonology. Directly influenced by Baudouin de Courtenay, Turbetzkoy is considered the founder of orphophonology, though morphophonology was first recognised by Baudouin de Courtenay. Trubetzkoy split phonology into phonemics and archiphonemics; the former has had more influence than the latter. Another important figure in the Prague School was Roman Jakobson, who was one of the most prominent linguists of the twentieth century.

In 1968 Noam Chomsky and Morris Halle published *The Sound Pattern of English* (SPE), the basis for Generative Phonology. In this view, Phonological representations are sequences of segments made up of distinctive features. The features were an expansion of earlier work by Roman Jakobson, Gunnar Fant, and Morris Halle. The features describe aspects of articulation and perception, are from a universally fixed set, and have the binary values + or -. There are at least two levels of representation: underlying representation and surface phonetic representation. Ordered phonological rules govern how underlying representation is transformed into the actual pronunciation (the so called surface form). An important consequence of the influence SPE had on phonological theory was the downplaying of the syllable and the emphasis on segments. Furthermore, the Generativists folded morphophonology into phonology, which both solved and created problems.

Natural Phonology was a theory based on the publications of its proponent David Stampe in 1969 and (more explicitly) in 1979. In this view, phonology is based on a set of universal phonological processes which interact with one another, which ones are active and which are suppressed are language-specific. Rather than acting on segments, phonological processes act on distinctive features within prosodic groups. Prosodic groups can be as small as a part of a syllable or as large as an entire utterance. Phonological processes are unordered with respect to each other and apply simultaneously (though the output of one process may be the input to another). The second-most prominent Natural Phonologist is Stampe's wife, Patricia Donegan; there are many Natural phonologists in Europe, though also a few others in the U.S., such as Geoffry Pullum. The principles of Natural phonology were extended to morphology by Wolfgang U. Dressler, who founded Natural Morphology.

In 1976 John Goldsmith introduced autosegmental phonology. Phonological phenomena are no longer seen as operating on one linear sequence of segments, called phonemes or feature combinations, but rather as involving some parallel sequences of features which reside on multiple tiers. Autosegmental phonology later evolved into Feature Geometry, which became the standard theory of representation for the theories of the organization of phonology as different as Lexical Phonology and Optimality Theory. Government Phonology, which originated in the early 1980s as an attempt to unify theoretical notions of syntactic and phonological structures, is based on the notion that all languages necessarily follow a small set of principles and vary according to their selection of certain binary parameters. That is, all languages' phonological structures are essentially the same, but there is restricted variation that accounts for differences in surface realizations. Principles are held to be inviolable, though parameters may sometimes come into conflict. Prominent figures include Jonathan Kaye (Linguist), Jean Lowenstamm, Jean-Roger Vergnaud, Monik Charette, John Harris, and many others.

In 1991, Alan Prince and Paul Smolensky developed Optimality Theory - an overall architecture for phonology according to which languages choose a pronunciation of a word that best satisfies a list of constraints which is ordered by importance: a lower-ranked constraint can be violated when the violation is necessary in order to obey a higher-ranked constraint. The approach was soon extended to morphology by John McCarthy and Alan Prince, and has become the dominant trend in phonology. Though this usually goes unacknowledged, Optimality Theory was strongly influenced by Natural Phonology; both view phonology in terms of constraints on speakers and their production, though these constraints are formalised in very different ways.

4.0 CONCLUSION

In this unit, you have learnt the different schools of thought in phonology, beginning from the foundation to the present-day phonology. You have also learnt the great names in phonology, from Panini to Trubetzkoy, then from Chomsky to Goldsmith, then to Saussure, etc.

5.0 SUMMARY

In this unit, you have learnt the whole history of phonology, right from its foundation by Panini till the present day, through the various schools of thought. You have also learnt the general evolution of phonology for many decades, with the names of the phonologists that made the evolution possible.

6.0 TUTOR-MARKED ASSIGNMENT

1. Trace briefly the history of phonology.
2. Who is Panini?
3. Who is Trubetzkoy?
4. Who is Chomsky?
5. Compare Generative theory to functionalist theory?
6. What do you know about auto-segmental theory?

7.0 REFERENCES/FURTHER READING

Anderson, J. M. & Ewen, C. J. (1987). *Principles of Dependency Phonology*. Cambridge: Cambridge University Press.

Bloch, B. (1941). Phonemic Overlapping. "American Speech", "16", 278-284.

Bloomfield, L. (1933). *Language*. New York: H. Holt and Company. (Revised version of Bloomfield's 1914. "An introduction to the study of language").

Chomsky, N. (1964). *Current Issues in Linguistic Theory*. In: J. A. Fodor & J.J. Katz (Eds), *The Structure of Language: Readings in the Philosophy Language*. (pp. 91-112). Englewood Cliffs, NJ: Prentice Hall.

Chomsky, N. & Halle, M. (1968). *The Sound Pattern of English*. New York: Harper & Row.