# Ministry of Education and Science of Ukraine Sumy State University 

Tatsenko N. V.

# A COMPANION TO LANGUAGE AND LINGUISTICS 

Study guide

Recommended by the Academic Council of Sumy State University


Sumy
Sumy State University
2023

UDC 811.111(075.8)
T 23

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Recommended for publication by the Academic Council of Sumy State University<br>as study guide<br>(minutes № 3 of 19.10.2023)

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T 23 A Companion to Language and Linguistics : study guide / N. V. Tatsenko. - Sumy : Sumy State University, 2023. - 173 p. ISBN 978-966-657-956-3

The study guide contains educational material on the main topics of the course of theoretical linguistics: the nature of language and the central branches and approaches of language study; the phonetic, morphological, syntactic, semantic, pragmatic, and sociolinguistic aspects of English; theories of language acquisition; writing system types and historical linguistics. Questions and practical tasks for each unit provide an opportunity for self-study of educational material.

Meant for students, graduate students, teachers, and all interested in language and linguistics.

UDC 811.111(075.8)
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ISBN 978-966-657-956-3
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## CONTENT

P.
UNIT 1. WHAT IS LINGUISTICS? ..... 5
1.1. The Nature of Language ..... 5
1.2. The Central Branches of Language Study. ..... 9
1.3. Founders of Linguistics ..... 12
1.4. Approaches to Language Learning ..... 17
UNIT 2. THE SOUNDS OF LANGUAGE: PHONETICS AND PHONOLOGY ..... 22
2.1. Phonetics and Phonology ..... 22
2.2. The Phonetic System of English ..... 25
2.3. General Characteristics of Phonemes ..... 28
2.4. Vowels and Consonants ..... 31
2.4.1. English consonants ..... 33
2.4.2. English vowels ..... 35
UNIT 3. MORPHOLOGY: WORDS AND THEIR PARTS ..... 41
3.1. What Are Words? ..... 41
3.2. Morphological Operation Types ..... 45
UNIT 4. SYNTAX: THE STRUCTURE OF SENTENCES ..... 61
4.1. Putting Words Together ..... 61
4.1.1. Categories ..... 61
4.1.2. Constituents ..... 66
4.1.3. Clauses ..... 71
4.2. Why Do We Study Syntax? ..... 74
UNIT 5. MEANING: SEMANTICS ..... 80
5.1. Types of Meaning ..... 80
5.2. Fundamental Semantic Concepts and Compositionality ..... 84
5.3. Thematic roles ..... 89
5.4. Modality, Tense, and Aspect ..... 90
UNIT 6. MEANING AND CONTEXT: PRAGMATICS ..... 96
6.1. Social and Affective Meaning ..... 96
6.2. Presupposition, Implicature, and Cooperative Principle ..... 98
UNIT 7. SOCIOLINGUISTICS ..... 108
7.1. The Multiplicity of Dialects ..... 108
7.2. Pidgin, Creole, and Situational Dialects ..... 112
7.3. Gender and Language ..... 117
7.4. Nationalism and Language ..... 119
UNIT 8. LANGUAGE ACQUISITION ..... 124
8.1. The Brain and Language Acquisition ..... 124
8.2. Theories Concerning Bilingualism ..... 129
8.3. Second-Language Learning ..... 132
8.3.1. Phonology ..... 133
8.3.2. Morphology and Syntax ..... 133
UNIT 9. WRITING SYSTEMS ..... 139
9.1. Writing is Secondary to Speech ..... 139
9.2. Writing System Types ..... 140
9.3. Logographic Writing ..... 142
9.4. The Rebus Principle ..... 144
9.5. Syllabic Writing ..... 146
9.6. Alphabetic Writing ..... 148
9.7. Spelling and Speech ..... 149
UNIT 10. HISTORICAL LINGUISTICS ..... 155
10.1. The Relationships Among Languages ..... 155
10.2. The Family Tree Model ..... 157
10.3. The Wave Model ..... 165
10.4. Types of Language Change ..... 167

## UNIT 1

## WHAT IS LINGUISTICS?

Many people, who are interested in linguistics, will ask a question, "What is linguistics, after all?" Generally, it is the study of language. But, in fact, it is so much more.

Linguistics is the study of the human ability to produce and interpret language in speaking, writing and signing (for the deaf). All languages and all varieties of every language constitute potential data for linguistic research, as do the relationships between them and the relations and structures of their components. A linguist is someone who studies and describes the structure and composition of language and/or languages in a methodical and rigorous manner (Allan, 2018, p. 1). Linguists seek to answer, among others, some fundamental questions:

- what is the exact nature of language?
- what are the central branches of language study?
- how do linguists collect data in order to support their research?


### 1.1. The Nature of Language

Linguistics examines the properties of the human body and mind which enable us to produce and interpret language. Language enables us to express our thoughts, ideas, and feelings to others and to understand theirs. Children unarguably have an inborn ability to learn language as a means of social communication. Probably, it is the motivation to communicate with other members of our world that explains the development of language. Therefore, linguists study language as an expression of and means of social communication. They also study the history of human language.

The human ability for self-observation and abstract thinking is facilitated by language, even dependent on it. The capacity to convey complex information, ideas, to discuss the meaning of events and possible results of alternative actions, to share feelings - all this is impossible without language. Let us analyze some definitions of language. According to Edward Sapir (1921, p. 8), "Language is a purely human and noninstinctive method of communicating ideas, emotions, and desires by means of voluntarily produced symbols". In their "Otline of Linguistic Analysis" Bloch and Trager wrote (1942, p. 5): "A language is a system of arbitrary vocal symbols by means of which a social group co-operates". In his Essay on Language, Hall (1968, p. 158), tells us: "Language is the institution whereby humans communicate and interact with each other by means of habitually-used oral-auditory arbitrary symbols".

This definition has a number of keywords allowing us to approach a topic in a detailed way. Let's look at these keywords more closely. The keyword № 1 is humans. Thus, language is confined to humans. No existant non-human being has a communication system similar to human language. Some animals learn to respond to and even reproduce some fragments of human language, but they never accomplish what a human is able of. The animal language used within some animal communities can have some identifiable meaningful structures, but animal language lacks the depth and extensiveness of human language. All animal communication systems lack the ability to communicate about something beyond here and now and they do not allow new messages to be produced and understood. The next keywords are communicate and interact. The communication systems human use are much more complex than those of animals. The keyword № 3 is habitually-used. People use language every day, usually with little cognitive strain. Words and sentences usually flow out of the mouth in a
subconscious, almost automatic way. We do not normally think before uttering them. The keyword № 4 is oral-auditory. The oral-auditory channel, that is communication via the mouth and the ear, is the most important mode of human communication. It is referred to as speech. Finally, language makes use of arbitrary symbols. There is no obvious relationship between the linguistic sign (the word or its sound shape) and the object in the real world. For this reason different languages can use different signs to refer to one and the same thing e.g. a flower in English is a Blume in German or a fleur in French. Arbitrariness also enables languages to evolve, both in the sense that existing signs can come to mean new things (e.g. pen which used to refer to a quill), but also that new signs can be introduced for existing things. Animal languages, in contrast, are more likely to have fixed reference i.e. a certain sign has a specific and fixed meaning.

There is controversy over when language first became possible among human beings, but archaeological records claim that language communication emerged around 200,000 years ago. The ability for a human being to model the world for him/herself and to communicate with the help of language was undoubtedly the most advantageous evolutionary life adaptation of people.

Human language is the most elaborate and complex means of communication among earthbound life forms. It is based on interaction with our environment and is intentionally communicative. Inorganic matter interacts with its environment without intention, e.g. moving water cuts stone. Plants interact with their environment as individuals, e.g. many plants turn towards a light source and some insectivorous plants actively trap their prey, but this interaction does not result from intention. Non-human creatures often do intentionally communicate with each other, for instance when mating or seeking food, but only in very limited ways. Humans interact with their environment in many ways, of which human communication using language is
the most sophisticated and results from intentional behaviour (Allan, 2018, p. 2).

Language is a type of communication that is restricted to only humans because humans are the only species with vocal tracts. What does it mean? Over thousands of years of evolution, the human beings developed a vocal tract flexible enough to make a wide range of distinguishable sounds and the ability to perceive differences among those sounds (see fig. 1.1).

But more important is the fact, the human species developed the ability to use these sounds in systems which could convey meaning. We do not know how this happened. Perhaps mental capacities that had evolved from a variety of other adaptive purposes were "re-purposed" to support a complex symbolic and communicative system. Perhaps some mental capacities are exclusively dedicated to language and evolved more gradually along with the increasing complexity of human communication. Or perhaps once they reached a certain level of neurological and cognitive complexity, some parts of the brain "reorganized" themselves, making the development of language possible (Fasold \& Connor-Linton, 2013, p. 1).


Figure 1.1 - The Vocal Tract

Though languages vary significantly, all of them are processed by the brain in mainly the same ways, and, not unexpectedly, all of them have certain fundamental structural characteristics that enable them to work the same way. For instance, in spite of the fact that different languages use different sets of sounds, their sounds are combined and organized according to just several principles. If there were no universal features of language, we would expect the language sounds and their combinations to differ randomly. However, language sounds and their combinations are rather systematic and limited. Furthermore, all languages have common constraints on how they assemble words into sentences and phrases. The fundamental job of the linguist is to understand and explain the properties that are universal to all languages, together with those which differ across languages.

### 1.2. The Central Branches of Language Study

Language has its physical forms. You can hear speech, see writing and signing, and feel Braille (a form of written language for blind people). These forms may be decomposed into their structured components: sentences, phrases, words, letters, and sounds. These language components are expressed and combined in conventional and mostly rule-governed ways. Linguists claim that language is a modular system. It means that people make and interpret language using a set of component modules (or levels): phonetics, phonology, morphology, syntax, and semantics, to name but a few.

Phonetics deals with production and interpretation of speech sounds. Phonology is concerned with the range and function of sounds within a given language and across languages to give form to spoken language. Larger linguistic units are the domain of morphology which deals with the systematic correspondence between the phonological form and meaning in
subword constructions called 'morphemes'. It also concerns with the creation of new word forms through inflections, new lexical items by derivational processes such as affixation, compounding (chairwoman), truncation (math(s) from mathematics), and stress change (imPORT [verb] vs IMport [noun]). Syntax is the study of the structure of sentences. It studies the manner in which morphemes and lexical items combine into larger taxonomic structures such as phrases, sentences, and longer texts. Interacting with these modules is the lexicon, the repository of linguistic elements with their meanings and structural properties. Linguists have developed the formal study of semantics (the detailed analysis of literal meaning), and incorporated semantics as another module of language. Semantics investigates the meanings of sentences and their constituents and, also, the meaning relationships among language expressions.

Recently, discourse (organization of language above and beyond the sentence, language immersed in life) has been recognized as another important subsystem of language. It is closely connected with pragmatics - the branch of linguistics that studies the use of language and its effects. Pragmatics is concerned with the meanings of utterances with attention to the context in which the utterances are made (an utterance is a sentence or sentence fragment used by a particular speaker on some particular occasion).

Let us now briefly repeat how linguists study language. Basically, the field of linguistics is subdivided into three central branches (see fig. 1.2): the branch that deals with sound (phonetics, phonology), the branch that deals with structure (morphology, syntax), and the branch that deals with meaning (semantics, pragmatics).


Figure 1.2 - The Branches of Linguistics
Every language comes with a lexicon. A lexicon is thought of as the mental counterpart to and original model for a dictionary such as Merriam-Webster Dictionary. Lexical items are stored as combinations of form and meaning, together with morphological and syntactic information about the grammatical properties of the item and links to encyclopaedic information about the item - its history and information about things it may be used to refer to. Typically, a lexical item cannot be further analysed into meaningful chunks whose combination permits its meaning to be computed. For example, the lexical items $a$, the, cat, dog, go and morphemes like -s (PLURAL), -ed (PAST) can combine together under certain conditions, but none of them is subject to morphosyntactic analysis into smaller constituents. The lexicon of a language combines meaning with form in universal chunks that speakers combine into phrases, sentences,
and longer texts whose meanings are computable from their constituents. The lexical items and morphemes can combine into the sentence, the meaning of which is composed from not only the words and morphemes but also the syntactic relations between them. Let us analyse several examples.
(1) A woman kissed flowers.
(2) Flowers were kissed by a woman.
(3) Flowers kissed a woman.

Look at the sentences. They consist of the same words: woman, flower, kiss. However, their meaning is composed from not only the words and morphemes but also the syntactic relations between them. (1) has much the same meaning as (2) and a very different meaning from (3). In (1) and (2) the women do the kissing, whereas in (3) the flower does the kissing. Notice that the meanings of flowers and kissed can be computed from their component morphemes: FLOWER+PLURAL and KISS+PAST.

If you find (1) and (2) more believable than (3), that is because you are applying your
knowledge of the world to what is said. These judgements arise from pragmatic assessments of the semantics of (1), (2) and (3). Nevertheless, sentence (3) is also possible when we use language metaphorically.

### 1.3. Founders of Linguistics

Ferdinand de Saussure (26 November 1857 22 February 1913) was Swiss linguist, semiotician, and philosopher. He is considered one of the founders of 20thcentury linguistics and semiotics (the study of signs and signusing behaviour). He believed that semiotics is concerned with everything that can be taken as a sign, and he called this science semiology. His ideas have undergone extension and critique with time, but they continue to inform contemporary linguists about
the phenomenon of language. Saussure also founded the field of structural linguistics - schools or theories in which language is understood as a self-contained, self-regulating semiotic system whose elements are defined by their relationship to other elements within the system.

The most influential Saussure's work, Course in General Linguistics, was published posthumously in 1916 based on notes taken from Saussure's lectures in Geneva (Saussure, 1916). Its central notion was that language could be analyzed as a formal system of differential elements, apart from the real-time production and comprehension. He claimed the sign to be bilateral (two-sided), which consists of "the signifier" (a linguistic form) and "the signified" (the meaning of the form). Saussure agreed with the idea of the arbitrariness of the sign though he did not deny the fact that words could also be onomatopoeic. In the book, he stated that a linguist could diachronically analyse a text or theory of language but should learn just as much or more about the language or text as it exists now, at the time being, or synchronically.

Saussure divided meaning (significance) and value. He claimed that concepts gained value by being contrasted to related concepts, creating a conceptual system, which could be described as a semantic network. Phonemes and morphemes also gain value by contrasting with related phonemes and morphemes, the same with parts of speech. Saussure created his own theory using binary oppositions: sign - signified, meaning - value, language - speech, synchronic - diachronic, internal linguistics -external linguistics, and so on. The related term markedness denoted the assessment of value between binary oppositions.

The most famous of Saussure's ideas is the distinction between language and speech (Fr. langue et parole), with speech being referred to the individual occurrences of language use. They constitute two parts of three of Saussure's "speech circuit".

The third part is the brain - the mind of the individual member of the linguistic community. Saussure holds the view that language is a "social fact"- a conventionalised set of rules that relate to speech. When two people take part in conversation, there appears a communicative circuit between the speakers' minds, and language as a social system is situated neither in speech nor in the mind. It only exists between the two within the circuit. It is located in and is the product of the collective mind of the language group. A person should learn the normative rules of language and can never control them.

Avram Noam Chomsky (born December 7, 1928) is an American linguist, cognitive scientist, historical essayist, and political activist. He is often called "the father of modern linguistics". He is a Laureate Professor of Linguistics at the University of Arizona and an Institute Professor Emeritus at the Massachusetts Institute of Technology, the author of more than 150 books on such topics as linguistics, politics, mass media, and war.

While working in the Harvard Society of Fellows, Chomsky developed the theory of transformational grammar for which he earned his doctorate degree in 1955. In 1957, he became a significant figure in linguistics with his landmark work Syntactic Structures, which played a major role in remodeling the study of language. He created the universal grammar theory and the generative grammar theory. One of the most cited scholars alive, Chomsky contributed to the development of a new cognitivistic framework for the study of language and the mind. He continued to publish his linguistic ideas throughout the decade, including Aspects of the Theory of Syntax (1965), Topics in the Theory of Generative Grammar (1966), and Cartesian Linguistics: A Chapter in the History of Rationalist Thought (1966). Despite his growing academic status, intellectual arguments between Chomsky and some of his early colleagues and doctoral students
(including famous cognitive linguists such as George Lakoff) started a series of academic debates known as the "Linguistics Wars".

Chomsky's linguistic theory is based on biolinguistics, the linguistic school which claims that the principles underpinning the structure of language are biologically present in the human mind and genetically inherited. He holds that all humans have the same underlying linguistic structure, notwithstanding sociocultural differences. In holding this position Chomsky rejects the behaviorist psychology of B. F. Skinner, who viewed behavior (including talking and thinking) as a completely learned product of the interactions between organisms and their environments. Chomsky asserts that language is a unique evolutionary development of the human species and distinguished from modes of communication used by any other animal species. This view of language is consistent with the philosophical school of "rationalism" and contrasts with the anti-nativist, externalist view of language consistent with the philosophical school of "empiricism", which claims that all knowledge, including language, comes from external stimuli.

Chomsky claimed that syntactic knowledge is partially inborn, implying that children should only learn certain language-specific features of their native languages. Although children are exposed to only a very small and finite subset of the syntactic variants within their first language, they somehow acquire the highly organized and systematic ability to understand and produce an infinite number of sentences, including ones that have never before been uttered in that language. Chomsky reasoned that the primary linguistic data must be supplemented by an innate linguistic capacity. Moreover, if a human baby and a kitten are exposed to exactly the same linguistic data, the baby will always acquire the ability to understand and produce language, while the kitten will never
acquire this ability (Chomsky, 1965). Chomsky referred to this difference in capacity as the language acquisition device, and suggested that linguists needed to determine both what that device is and what constraints it imposes on the range of possible human languages. The universal features that result from these constraints would constitute "universal grammar". Many scholars have challenged universal grammar on the grounds of the evolutionary infeasibility of its genetic basis for language, the lack of universal characteristics between languages, and the unproven link between innate universal structures and the structures of specific languages. Michael Tomasello has challenged Chomsky's theory of innate syntactic knowledge as based on theory and not behavioral observation. Although it was influential from 1960s through 1990s, Chomsky's theory was ultimately rejected by the mainstream child language acquisition research community bacause of its inconsistency with research evidence.

One more broad theory created by Chomsky is called "Transformational-generative grammar" and it is used to encode, model, and deduce native speakers' linguistic capabilities. These models, which are called "formal grammars", display the abstract structures of a specific language as they can relate to structures in other languages. Chomsky developed this theory in the mid-1950s, whereon it became the prevailing syntactic theory in linguistics for several decades. Chomsky's transformational theory claims that language consists of both surface structures and deep structures: outward-facing surface structures relate phonetic rules into sound, while inward-facing deep structures relate words and conceptual meaning. Mathematical notation is used to express the rules that explain the connection between sound and meaning (surface and deep structures, correspondingly). According to this theory, linguistic principles can mathematically generate potential sentence structures in a language.

Later, trying to simplify language into a system that relates sound and meaning with the help of minimum possible faculties, Chomsky refuses from such concepts as "surface structure" and "deep structure" and talks about the plasticity of the brain's neural circuits, with which come numerous concepts, or "logical forms". Exposed to linguistic data, a human brain associates sound and meaning, and the rules of grammar are actually only the consequences of the way language works. Therefore, while much of Chomsky's prior research was focused on the language rules, now he focuses on the mechanisms the human brain uses for generating these rules and regulating speech (Chomsky, 2013).

### 1.4. Approaches to Language Learning

There are two approaches as to how languages can be examined. One is referred to as the introspective approach data collection by means of introspection. The other one concentrates on the observation of real facts - the observational approach.

The introspective approach concentrates on the study of competence. The main argument is that language realized in actual spoken or written form may undergo slips of the tongue, false starts, hesitation. It can involve incorrect structure and so on. For this reason, many linguists make use of a principle, which the famous linguist Ferdinand de Saussure called the "conventional simplification of data". For example: He has not got any time; This is my book; John saw Mary in the garden. We do not utter sentences like this but we use them for research. These are idealized examples, which are regularized, decontextualized, and standardized. Much linguistics is based on introspection, especially Noam Chomsky's school of generative grammar. It uses invented sentences and often a very small
number of sentences as the basis of development of hypotheses and eventually theories.

Since the establishment of linguistics as a scientific discipline from Ferdinand de Saussure onwards there have been linguists who developed models of language based on observing actual language use. They recorded data, inspected data, used written data, etc. Therefore, they observed actual language use, which is often described as parole or performance in Saussurian term. For example: Uhm, he ain't got no time; You know, this is me book; John, you know, sss.saw mary in the garden, right? They contain hesitation (uhm), discourse elements (you know, right), strange dialectal features (this is me book), false starts (sss.saw), etc.

Fallowing a long period of structural linguistics dominated by introspective and intuition based approaches, more recently, observation based linguistics has become more popular. Especially, when Joseph Greenberg's school of language typology used the data of as many as possible languages to develop the theory of central approaches towards what language is. Today, due to much material on the web, from simple data to data that is organized within specific corpora, the observational approach can be regarded as a general reorientation in linguistics. No serious linguist will work without corpus data these days.

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## QUESTIONS

1. What is linguistics and what does it study?
2. How do linguists collect data to support their research?
3. What is the nature of language and why is it essential for human communication?
4. Provide different definitions of language and explain their key components.
5. Why is language restricted to humans and not found in non-human beings?
6. Describe the development of language in human evolution.
7. How does the human vocal tract enable the production of language sounds?
8. What are the universal features of language that are common to all languages?
9. Explain the central branches of language study in linguistics.
10. Define phonetics, phonology, morphology, syntax, semantics, pragmatics, and discourse.
11. How do these language components interact with each other?
12. What is the role of the lexicon in language and how does it relate to meaning and form?
13. Provide examples of how syntactic relations can change the meaning of sentences.
14. Who are Ferdinand de Saussure and Noam Chomsky, and what contributions did they make to linguistics?
15. Explain Saussure's distinction between language and speech and their relationship within the "speech circuit".

## PRACTICAL TASK

1. Read the following sentences carefully:
(1) The cat chased the mouse.
(2) The mouse was chased by the cat.
(3) The mouse chased the cat.
2. Analyze the structures of these sentences by identifying their components. Pay attention to the words, phrases, and their relationships within the sentence.
3. Identify the following linguistic elements in each sentence:
a. Parts of speech (e.g., nouns, verbs, adjectives).
b. Syntactic relations between words (e.g., subject, object, verb).
c. Morphological features (e.g., tense, plural, past participle).
4. Determine the meanings conveyed by each sentence. Consider the role of syntax, semantics, and pragmatics in understanding the intended message.
5. Write a brief explanation for each sentence, discussing its structure, meaning, and any significant differences between them.
6. Reflect on the universality of language structures and the ways in which different languages may express similar meanings using distinct components.

Note: Feel free to consult the lecture content and any additional resources you may find helpful to complete the task.

## UNIT 2

## THE SOUNDS OF LANGUAGE: PHONETICS AND PHONOLOGY

This unit is about the speech sounds. Communication can take place without sound - it can be a wave or a nod, a drawing or a photograph. There is language without sound: those who cannot hear use languages based on manual signs instead. However, for most people, most of the time, communication involves encoding information in sounds. Even while writing, we use symbols that are based on speech.

### 2.1. Phonetics and Phonology

The study of the sounds of speech is divided into the disciplines of phonetics and phonology. It is important to understand the difference between them. Phonetics is the study of actual sounds of human languages, their production and their perception (Kracht, 2012, p. 12). It studies speech sounds as physical objects and is relevant to linguistics for the simple reason that the sounds are the primary physical manifestation of language. Therefore, phonetics can be put in the class of natural sciences. Phoneticians solve issues such as:

- how speech sounds are made;
- how many different sounds languages use;
- how sound travels through the air;
- how it is registered by the ears;
- how we can measure speech.

Phonology studies how languages organize sounds into different patterns. It is the study of sound systems. Phonology looks at and tries to establish a system of sound distinctions relevant to a particular language. It then seeks to determine how the elements of this abstract system behave in actual speech.

Phonology actually delineates the functioning of sounds in particular contexts (Iyabode, 2011, p. 1). Phonologists solve issues such as:

- how languages organize sounds to distinguish different words;
- how languages restrict sequences of sounds;
- what sorts of changes sounds undergo;
- how sounds are organized into larger constituents (syllables, words, phrases).

We begin with phonetics, the study of how speech sounds are made and perceived, and then discuss phonology, the study of how a language organizes those speech sounds into a meaningful system (Zsiga, 2013, p. 13). There are countless different sounds we can make, but only some count as sounds of a language, say English. Moreover, as far as English is concerned, many perceptibly distinct sounds are not considered 'different'. The letter /p/, for example, can be pronounced in many different ways, with more emphasis, with more loudness, with different voice onset time, and so on. From a phonetic point of view, these are all different sounds; from a phonological point of view there is only one (English) sound, or phoneme: [p] (Kracht, 2012, p. 12).

From the above mentioned definitions, the difference is obvious. Phonetics describes the physical realisation of sounds and the physiological processes involved in sound production. On the other hand, phonology studies the behavioural patterns of sounds in actual speech, their realisations in different environments, whatever they may be. The relationship between phonetics and phonology can be clearly illustrated in the quotation "Phonetics gathers the raw material. Phonemics cooks it" (Pike, 1944, p. 5).

However, there is no doubt that they are inseparably linked, and a central question for phonetic research concerns the nature of the phonetics/phonology intersection: how are the
discrete, static, context-free mental targets (phonemes) translated by the speaker into a continuous, dynamic, contextsensitive stream of sound and how does the listener retrieve those same mental targets from the continuous stream? Traditional descriptive phonetics relies on the fact that human beings are capable of doing this, and that literate speakers of languages with alphabetic writing systems in particular become aware of phonemes at an early age. The objects of our description are thus chunks of the speech stream which we perceive as corresponding to phonemes. The fact that this is not as straightforward as it seems becomes apparent if one attempts to discover such chunks in a language one does not speak (Butcher, 2018, p. 62).

The two basic tasks of phonetics and phonology are the transcription and the classification of sounds. The usefulness of a transcription system is especially important in English language, where spelling and pronounciation often differ substantially.

Phonetics began to be developed as a science in the 19th century. The factors that stimulated its development were as follows:

- a more thorough acquaintance with the functioning of the human speaking apparatus;
- investigations of many linguists who studied languages that had no alphabets;
- compiling alphabets for such languages (Tatsenko, 2020, p. 6).

Phonology was originated in the 30s of the 20th century by a group of linguists belonging to the Prague school of linguistics - Vilem Matesius, Nickolai Trubetskoy, Roman Jakobson. The theoretical background of phonology is the phoneme theory whose foundations were first laid down by I. O. Baudouin de Courtenay (1845-1929) in the last quarter of the 19th century (between the years of 1868-1881) (Vrabel,

2009, p. 5). The theory was developed by his pupils, such as L. V. Sherba, M. S. Grushevskiy and some others.

The most important work in phonology is "The groundwork of phonology" (1939) by Nickolai Trubetskoy. He claimed that phonology should be separated from phonetics as it studies the functional aspect of phonic components of language. According to him, phonetics is a biological science which is concerned with physical and physiological characteristics of speech sounds, while phonology is a linguistic science and it is concerned with the social function of phonetic phenomena. Nevertheless, contemporary phoneticians hold the view that form and function cannot be separated and treat phonology as a linguistic branch of phonetics (Паращук 2009, p. 18). Only by studying phonology as an inseparable part of phonetics it is possible to acquire a full understanding of the use of sounds in English speech.

### 2.2. The Phonetic System of English

Phonetics is itself divided into two major components: segmental phonetics, which is concerned with individual sounds (i.e. "segments" of speech) and suprasegmental phonetics (supra - something above) whose domain is the larger units of connected speech: syllables, words, rhythmic units, phrases, intonation groups, and texts. Suprasegmental system always exists with the segmental system (see fig. 2.1).


Figure 2.1 - Phonetic System
The sound substance is a medium in which the whole system of the language is embodied. Segmental and prosodic units serve to form and differentiate units of other subsystems of language: lexical and grammatical. The modification of words and their combination into utterances are first of all sound phenomena. The grammatical form of a word can be changed only by changing the sounds, which compose it (e.g. cat - cats). By changing the prosodic structure, one can change the meaning of the utterance (e.g. 'well /done? 'Well \done!') (Tatsenko, 2020, p. 7).

Investigations show that there are 4 aspects of a speech sound:

- articulatory aspect;
- auditory aspect;
- acoustic aspect;
- functional aspect (linguistic, social).

From the point of view of the aspects of speech, four traditional branches of theoretical phonetics are generally recognized:

Articulatory phonetics is the study of the way speech sounds are made ('articulated') by the vocal organs, i.e. it studies the way in which the air is set in motion, the movements of the speech organs and the coordination of these movements in the production of single sounds and trains of sounds. These refer to the human vocal tract (or to the speech organs) and are used to describe and classify sounds. This branch of phonetics refers to speech production, giving the basic understanding of speech anatomy. Articulatory phonetics employs experimental methods.

Auditory phonetics studies the perceptual response to speech sounds, as mediated by ear, auditory nerve and brain, i.e. its interests lie more in the sensation of hearing, which is brain activity, than in the psychological working of the ear or the nervous activity between the ear and the brain. The means by which we discriminate sounds - quality, sensations of pitch, loudness, length, are relevant here. This branch of phonetics refers to speech perception. Auditory phonetics also employs experimental methods.

Articulatory and auditory phonetics are sometimes combined into one branch called physiological phonetics. The reason lies in the fact that sound production and sound perception are physiological processes.

Acoustic phonetics studies the physical properties of speech sound, as transmitted between the speaker's mouth and the listener's ear with the help of spectrograms (quality, length, intensity, pitch, and others). This branch of phonetics refers to speech physics, it is interdisciplinary. It also employs experimental methods.

Functional phonetics is concerned with the range and function of sounds in specific languages. It is a purely linguistic
branch, typically referred to as phonology. The human vocal apparatus can produce a wide range of sounds; but only a small number of them are used in a language to construct all of its words and utterances. Phonology is the study of those segmental (speech sound types) and prosodic (intonation) features which have a differential value in the language. This branch of phonetics studies the units serving people for communicative purposes. It studies the way in which speakers systematically use a selection of units - phonemes or intonemes - in order to express meaning. It investigates the phonetic phenomena from the point of view of their use (Tatsenko, 2020, p. 11-12).

All the branches of phonetics are closely connected with each other as well as with some other branches of linguistics such as lexicology, grammar, and stylistics.

### 2.3. General Characteristics of Phonemes

When we talk about the sounds of a language, the term "sound" can be interpreted in two rather different ways. A linguist uses two separate terms: "phoneme" is used to mean "sound" in its contrastive sense, e.g.: tie - die, seat - seed and "allophone" is used for sounds which are variants of a phoneme (Vrabel, 2009, p. 25). It means that there is more than one way to pronounce a phoneme, and these different pronunciations are called allophones. They are not phonemes, because they do not change the meaning of the word.

The phoneme (from Ancient Greek $\varphi$ ஸ́v $\quad \mu \alpha$ phōnēma, "sound made, utterance, thing spoken, speech, language") is a minimal abstract linguistic unit realized in speech in the form of speech sounds opposable to other phonemes of the same language to distinguish the meaning of morphemes and words (Авраменко, 2019, p. 17). The physical view of the phoneme was originated by prof. Daniel Jones (1881-1967), the founder
of London phonetic school. He defined the phoneme as a family of sounds, i.e. a sum of its actual realizations. But as the concept 'house' can not be defined as the sum total to all the houses existing in the world, so the phoneme can not be defined as the sum total of all its realizations (Паращук, 2009, p. 132).

Thus, a phoneme is a single "unit" of sound that has meaning in any language. There are 44 phonemes in English (in the standard British model), each one representing a different sound a person can make. Since there are only 26 letters in the alphabet, sometimes letter combinations need to be used to make a phoneme. A letter can also represent different phonemes. Here is a good example:

- chef $=/ \mathrm{ef} /$;
- choir $=/$ kwaıə/;
- cheese $=/ \mathrm{t}$ §i:z/.

The term "allophone" was coined by Benjamin Lee Whorf in the 1940s. In doing so, he placed a cornerstone in consolidating early phoneme theory. The difference between a phoneme and an allophone is described in figure 2.2:


Figure 2.2 - A Phoneme and an Allophone

The phoneme is a functional unit. Function is usually understood to mean discriminatory function, that is, the role of the various components of the phonetic system of the language in distinguishing one morpheme from another, one word from another or also one utterance from another.

The opposition of phonemes in the same phonetic environment differentiates the meaning of morphemes and words, e.g. said - says, sleeper - sleepy, bath - path, light - like. Sometimes the opposition of phonemes serves to distinguish the meaning of the whole phrases, e.g. He was heard badly - He was hurt badly. Thus we may say that the phoneme can fulfil the distinctive function.

Let us consider the English phoneme [d], which when not affected by the articulation of the preceding or following sounds is a plosive, fore-lingual apical, alveolar, lenis stop. This is how it sounds in isolation or in such words as door, darn, down, etc., when it retains its typical articulatory characteristics. In this case the consonant [d] is called the principal allophone. Principal or typical allophones do not undergo any distinguishable changes in the chain of speech.

At the same time there are quite predictable changes in the articulation of allophones that occur under the influence of the neighbouring sounds in different phonetic situations. Such allophones are called subsidiary. For example:
[d] is slightly palatalized before front vowels and the sonorant [j], e.g. deal, day, did, did you.
[d] is pronounced without any plosion before another stop, e.g. bedtime, bad pain, good dog; it is pronounced with the nasal plosion before the nasal sonorants [n] and [m], e.g. sudden, admit, could not, could meet; the plosion is lateral before the lateral sonorant [l], e.g. middle, badly, bad light.

Followed by [r] the consonant [d] becomes post-alveolar, e.g. dry, dream; followed by the interdental [ $\theta$ ], [ $\varnothing]$ it becomes dental, e.g. breadth, lead the way, good thing.

When [d] is followed by the labial [w] it becomes labialized, e.g. dweller.

If an allophone of some phoneme is replaced by an allophone of a different phoneme the mistake is called phonological, because the meaning of the word is inevitably affected, e.g.: beat - bit.

If an allophone of the phoneme is replaced by another allophone of the same phoneme the mistake is called phonetic. It happens when the invariant of the phoneme is not modified and consequently the meaning of the word is not affected [Vrabel 2009, p. 27].

Allophones often show up when people have different accents. One good example is the word "butter". Some native speakers will say [bıгə]. Others will say [b $\Delta t ə]$. You can see here that $[\mathrm{t}]$ and $[\mathrm{r}]$ are allophones of the same phoneme. Whatever way you say it, the meaning of the word does not change. It's still the yellow stuff made from milk that you put on bread.

Thus, allophones are the linguistically non-significant variants of each phoneme. In other words, a phoneme may be realised by more than one speech sound and the selection of each variant is usually conditioned by the phonetic environment of the phoneme. Occasionally allophone selection is not conditioned but may vary from person to person and occasion to occasion (ie. free variation).

### 2.4. Vowels and Consonants

If speech sounds are studied from the point of view of their production by man's organs of speech, it is the differences and similarities of their articulation that are in the focus of attention. A speech sound is produced as a result of definite coordinated movements and positions of speech organs, so the articulation of a sound consists of a set of articulatory features.

The words 'vowel' and 'consonant' are very familiar ones, but when we study the sounds of speech scientifically, we find that it is not easy to define exactly what they mean. In general, a vowel is a speech sound produced by comparatively open configuration of the vocal tract, with the vibration of the vocal cords but without audible friction. A consonant is a basic speech sound in which the breath is at least partly obstructed.

Basically, there are 1) articulatory, 2) acoustic, and 3) functional differences between vowels ( V ) and consonants (C).

1. The most substantial articulatory difference between vowels and consonants is that in the articulation of V the air passes freely through the mouth cavity, while in making C an obstruction is formed in the mouth cavity and the airflow exhaled from the lungs meets a narrowing or a complete obstruction formed by the speech organs.

Another difference between consonants and vowels is that vowels are generally voiced, i.e. the vocal cords are set vibrating by the outgoing airflow. Consonants, by contrast, can be voiced or voiceless: The vocal cords are either far apart and do not vibrate, as in fan, or they are relatively closed and vibrate as in van.

The particular quality of Vs depends on the volume and shape of the mouth resonator, as well as on the shape and the size of the resonator opening. The mouth resonator is changed by the movements of the tongue and the lips. The particular quality of Cs depends on the kind of noise that results when the tongue or the lips obstruct the air passage. The kind of noise produced depends in its turn on the type of obstruction, on the shape and the type of the narrowing. The vocal cords also determine the quality of consonants.
2. From the acoustic point of view, vowels are called the sounds of voice, they have high acoustic energy, consonants are the sounds of noise, which have low acoustic energy.
3. Functional differences between Vs and Cs are defined by their role in syllable formation: Vs are syllable-forming elements, Cs are units which function at the margins of syllables, either singly or in clusters.

These differences make it logical to consider each class of sounds independently. Figure 2.3 illustrates the system of English sounds:


Figure 2.3 - The system of English Sounds
2.4.1. English consonants. Factors relevant for the classification of consonants include the manner of articulation, the place of articulation, and voicing.

With regard to the manner of articulation, English consonants can be classified into plosives, fricatives, affricates, nasals, and approximants (liquids and semi-vowels).

Plosives are consonants that are made up by completely blocking the airflow. The production of plosives involves three stages: 1) a direct contact between the active and the passive articulator forming a complete obstruction to the airflow; 2) the compression of air behind the obstruction; and 3) the release of
the compressed air in the form of an "explosion" (hence the term plosive). There are six plosives in English: bilabial [p] and [b], alveolar [ t$]$ and [ d$]$, and velar [ k$]$ and $[\mathrm{g}]$.

Fricatives are consonants that are produced by impeding, but not completely blocking the airflow, i.e., there is a narrow gap between the active and the passive articulator along which the airflow can leave the oral cavity. There are nine fricatives in English: labio-dental [f] and [v], interdental [ $\theta$ ] and [ð], alveolar [s] and [z], palate-alveolar [J] and [3], and glottal [h].

Affricates are sounds that are similar to both plosives and fricatives: The tip of the tongue touches the back part of the teeth ridge, the front part of the tongue is raised towards the hard palate. The air is trapped for a short time because of a complete obstruction between the tip of the tongue and the teeth ridge, then the obstruction is released slowly and the friction is heard. The voiceless affricate is [ $\mathrm{t} \int$ ] as in chain, whereas [d3], as in jelly, is voiced.

Nasals are consonants which, like plosives, are produced by completely blocking the airstream. But there is an important difference: The airflow escapes through the nasal cavity (hence the term nasals). There are three nasal consonants in English: bilabial [m], alveolar [n], and velar [ y ].

Liquids include alveolar [l] and post-alveolar [r]. The former is a consonant in which the passage of air through the mouth does not go in the usual way along the centre of the tongue; instead, there is complete closure between the centre of the tongue and the part of the roof of the mouth where contact is to be made. Pronouncing the latter, the tip of the tongue is held in a position near to but not touching the back part of the alveolar ridge. The soft palate is raised and the air flows quietly between the tip of the tongue and the hard palate. The front part of the tongue is low and the back is rather high so that the tongue has a curved shape.

Semi-vowels or glides include bilabial [w] and palatal [j]: [w], as in why, starts out with the lips firmly rounded, these articulators then moving away (= gliding) from the narrowing in the mouth. When articulating [ j$]$, as in you, the front part of the tongue is first raised towards the hard palate, then the soft palate is raised and the air goes along the central part of the tongue. The vocal cords are kept together and are vibrating. The reason why these sounds are called semi-vowels is thus their manner of articulation: Like true vowels, semi-vowels are produced without a major obstruction, i.e., there is a wide gap between the active and the passive articulator, so that the airflow can escape relatively freely from the mouth. However, unlike true vowels, semi-vowels never form the nucleus of a syllable (e.g., week, yellow) and are therefore usually considered consonants (Dorgeloh, 2009).
2.4.2. English vowels. Depending on the height of the tongue, vowels can be classified into high, low, and mid vowels:

- When the front or the back of the tongue is raised towards the roof of the mouth, the vowel is called high, this is the case, e.g., in pill, meet, look, or soon.
- When the front or the back of the tongue is as low as possible, the vowel is called low, as, e.g., in land, star, or dog.
- When the tongue occupies the position intermediate between the high and the low one, the vowel is called mid, e.g. in get, or the unstressed [ə] in about.

Depending on the part of the tongue that is raised most vowels are classified into front, back, and central vowels:

- When the front part of the tongue is raised towards the hard palate, the vowel is called front, e.g. in meet, get, or land.
- When the back part of the tongue is raised towards the soft palate, the vowel is called back, as in star, dog, law, or soon.
- When the front part of the tongue is raised towards the back part of the hard palate, the vowel is called central, e.g. in about, much, or nurse.

These high-low and front-back dimensions of vowel articulation are also referred to as vowel quality.

Some vowels do not only differ qualitatively, but also quantitatively. Long as opposed to short vowels also differ by being tense as opposed to lax. Tense vowels are produced with a deliberate, accurate, maximally distinct gesture that involves considerable muscular effort. Tense vowels are either long vowels (e.g. [i:] in meet) or diphthongs (e.g. [eI] in say). Lax vowels are produced rapidly and are therefore short (e.g. [I] in pill).

The vowels described so far have all been monophthongs, in contrast to the diphthongs (or gliding vowels), where the tongue moves from one position to another. A diphthong may be falling - when the nucleus is stronger than the glide, and rising - when the glide is stronger than the nucleus. When two elements are equal such diphthong is called level. English diphthongs are falling.

There are two categories of diphthongs in English which differ according to the direction of the vowel movement centering diphthongs and closing diphthongs. The vowels [i:] and [u:] are diphthongized in modern English and the tendency of diphthongization is becoming gradually stronger - some phoneticians call them diphthongoids.

The total number of diphthongs is eight (though [və] is increasingly rare). The easiest way to remember them is in terms of three groups divided as in figure 2.4:


Figure 2.4 - Diphthongs
The centring diphthongs glide towards the [ə] (schwa) vowel. The closing diphthongs have the characteristic that they all end with a glide towards a closer vowel.

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## QUESTIONS

1. What are the two disciplines that study the sounds of speech?
2. What does phonetics study in relation to speech sounds?
3. What are some of the issues that phonetics addresses?
4. What does phonology study in relation to speech sounds?
5. What are some of the issues that phonology addresses?
6. How are phonetics and phonology related to each other?
7. What is the difference between phonetics and phonology in terms of their focus?
8. What is the primary physical manifestation of language according to phonetics?
9. How are the concepts of phonetics and phonology illustrated in the quotation "Phonetics gathers the raw material. Phonemics cooks it"?
10. What are the two basic tasks of phonetics and phonology?
11. How did phonetics begin to develop as a science?
12. Who originated phonology and what was their theoretical background?
13. How did Nickolai Trubetskoy differentiate between phonetics and phonology?
14. What are the four traditional branches of theoretical phonetics?
15. What is the difference between a phoneme and an allophone?

## PRACTICAL TASK

Read the following words and sentences carefully. Identify the phonetic and phonological aspects of the sounds mentioned. Determine whether the given examples demonstrate phonetic features (related to the physical production and perception of sounds) or phonological features (related to the organization and function of sounds within a language). Write your answers in the space provided.

Word: cat
Phonetic Aspect:
Phonological Aspect:
Word: teacher
Phonetic Aspect:
Phonological Aspect:
Word: books
Phonetic Aspect:

Phonological Aspect:
Sentence: She sells seashells by the seashore
Phonetic Aspect:
Phonological Aspect:
Sentence: The cat sat on the mat
Phonetic Aspect:
Phonological Aspect:
Word: pot
Phonetic Aspect:
Phonological Aspect:
Word: tops
Phonetic Aspect:
Phonological Aspect:
Sentence: The big red ball rolled down the hill
Phonetic Aspect:
Phonological Aspect:
Word: pin
Phonetic Aspect:
Phonological Aspect:
Word: thin
Phonetic Aspect:
Phonological Aspect:
Sentence: The dog barked loudly
Phonetic Aspect:
Phonological Aspect:
Sentence: He has three pens
Phonetic Aspect:
Phonological Aspect:
Once you have completed the task, you can review your answers with the lecture to check your understanding of the concepts of phonetics and phonology and their application in analyzing sounds within a language.

## UNIT 3

## MORPHOLOGY: WORDS AND THEIR PARTS

This unit is devoted to the subject of morphology, the study of the structure of words and their meaningful parts. Morphological processes have two main purposes: to create new words in a language and to modify the existing ones. People associate a word with some basic idea, event or image, but modifying a word form can contribute important information, such as when or how an event occurred, who is participating in it, or something about the speaker's attitude towards it. The more complex the word, the more information of this kind it is likely to give. By manipulating different parts of a word, we can intensify, shade, even negate its basic meaning, or change its grammatical role within a sentence. Different languages have different ways of doing this.

### 3.1. What Are Words?

If a person were in an environment where everyone around him/her was speaking a language s/he would never heard before, s/he couldn't understand a single word of what they were saying. That typical phrase - "couldn't understand a single word" - underscores our intuition that words are the fundamental building blocks of language. The foremost task of any language learner, including young children acquiring their native language, is to figure out how to segment and analyze the wall of talking-noise around them into meaningful units namely, words and their meaningful parts (Lardiere, 2013, p. 55).

Words are basic building blocks of sentences. Most words are a pairing of sound and meaning, and the meaning of a sentence is computed on the basis of the meanings of the
constituent words, and the way in which they are combined (Booij, 2018, p. 104). Merriam-Webster (URL) defines a 'word' as "a speech sound or series of speech sounds that symbolizes and communicates a meaning usually without being divisible into smaller units capable of independent use". Words usually enter into such grammatical constructions as phrases or sentences. For instance, the word coffee can be used in different positions in a phrase or sentence according to its grammatical role:
(1) Coffe is delicious.
(2) She doesn't like coffe.
(3) There are many antioxidants in coffe.

Coffe is the subject of the sentence in (1), the direct object in (2), and the prepositional object in (3).

A word is a term in everyday use but one which linguists cannot easily define. Is it, for example, one word or two? And how about father-in-law? It denotes one concept but is formed out of three recognisable 'words': father, in, and law. Therefore, linguists prefer other terms, referring to morphs, morphemes, and lexemes when talking about words (Dostert, 2009, p. 18).

The relation between sound and meaning may be arbitrary. The meaning of the verb sing, for instance, cannot be read off its sound form, and the relation between sound and meaning in this word is therefore arbitrary. However, the relation between sound and meaning of a word may be (partially or completely) non-arbitrary, or motivated. This is the case for complex words, words with an internal structure. For instance, the English word singer can be divided into two constituents, sing and -er. Both constituents contribute to the meaning of the word as a whole. These constituents are referred to as morphemes, usually defined as 'the minimal meaning-bearing units of a language.' The word singer is therefore a complex word, as opposed to the word sing, which has no internal morphological structure and is therefore a simplex word. The
morpheme sing is classified as a lexical morpheme, as it can occur as a word of its own, whereas the morpheme -er, which serves to evoke the meaning 'agent of the action' when combined with verbs, is a bound morpheme (Booij, 2018, p. 104).

The lexical morphemes are also generally referred to as lexemes, and the bound ones as affixes. Affixes which come in front of a lexical morpheme are prefixes, and those which come after are suffixes. Lexemes can be simple consisting of just one free morpheme or complex consisting of two or more morphemes of which at least one is lexical. For example, in the word 'flowers' flower is a lexical morpheme as it can stand on its own and has a lexical meaning; $-s$, on the other hand, is simply a letter (technical term: graph) which turns the lexeme flower into a plural. It is a separate morpheme as it contributes grammatical meaning to the whole: flowers. The -s cannot stand on its own and, therefore, is a bound morpheme (a suffix).

| Type of <br> inflection | Grammatical <br> category | Function / <br> Meaning | Word class | Example |
| :--- | :--- | :--- | :--- | :--- |
| Declension | Number | Plural | Nouns | tree-s |
| Declension | Case | Possessive <br> (genitive) | Nouns | John-'s |
| Conjugation | Number, Person, <br> Tense | $3^{\text {rd }}$. pers. sg. | Verbs | look-s |
| Conjugation | Tense | (Regular) simple <br> past | Verbs | look-ed |
| Conjugation | (Regular) past | Verbs | look-ed |  |
| Conjugation | Comparison | Comparative | Adjectives | smart-er |
| Comparison | Comparison | Superlative | Adjectives | smart-est |
| Comparison | Compariple | Verbs | look-ing |  |

Figure 3.1 - Inflectional Affixes

Bound morphemes which carry grammatical meaning are called inflectional affixes and their function is to create new forms of existing lexemes. In English, these are always suffixes as there are no inflectional prefixes in English. It is generally claimed that there are only eight such inflectional affixes left in English. Figure 3.1 illustrates these affixes.

The words of a language make up its lexicon. The latter is a kind of mental dictionary where words are kept. Our knowledge of the words, like in a dictionary, includes several types of information. Let us consider, for example, the word go. We know about:

- how it is pronounced: /gəoठ/;
- what it means - informally, to move or to travel. Your knowledge of the meaning of $g o$ also includes the information that only animate objects - like people, animals (but not ideas or trees) - can go;
- the grammatical contexts in which the word can be used. Go is an intransitive verb (it doesn't take a direct object), as in the sentence Mary goes slowly. But it can also be a noun as in To be on the go. It can be found in compound words such as merry-go-round and in idioms such as to go down the drain;
- that it is an irregular verb for past-tense marking in English, requiring that we memorize its irregular past forms went, gone instead of simply adding the regular past marker to produce goed.

When you stop to consider for a moment all the (tens of thousands of ) words that are in your lexicon and everything you already know about each of them, you can begin to appreciate the magnitude of the accomplishment of this impressive feat. Moreover, new items are continually being added, just as dictionaries are continually revised and updated (e.g. beer goggles). The meanings of the listed words might also change over time, or acquire (or lose) different shades of meaning (e.g. dude, gay) (Lardiere, 2013, p. 58).

Nonetheless, the study of word formation is not as much about the study of existing, listed dictionary words as it is the study of possible words in the language and the mental rules for understanding and constructing them. Not all of the words you can pronounce and interpret exist in the lexicon, because the number of possible words is limitless. Every language has its own rules for creating new words, which are understood in their contexts even if they are never written in a dictionary. The word forms may be simple or very complex and our knowledge of mental rules that enable us to produce them makes up the subject of morphology.

### 3.2. Morphological Operation Types

Morphology comes from a Greek word meaning 'shape' or 'form' and is used in linguistics to denote the study of words, both with regard to their internal structure and their combination or formation to form new or larger units (Dostert 2009, p. 18). Morphologists describe the constituent parts of words, what they mean, and how they may (and may not) be combined in the world's languages (Lardiere 2013, p. 60).

Words are formed from simpler words, using various processes. This makes it possible to create very large words. Those words or parts that are not composed and are drawn from the lexicon are called roots. Roots are 'main' words, those that carry meaning. Affixes are not roots. Inflectional endings are also not roots. An example of a root is a dog, which is a form identical with the singular. In English, we can come up with reasonably complex words:
(4) You are among those who will be unEuropeanizable.

The English word unEuropeanizable (not able to be caused to become like Europeans) consists of the root Europe plus the morphemes un-, -(i)an, -ize, and -able. Each of these
morphemes contributes to the overall meaning of the entire word.

Let us identify all the morphemes the sentence:
(5) The musicians reconsidered their director's unusual proposal.

Let's go word by word:

- the: a grammatical morpheme indicating that the referent of the following noun is definite (not just any musicians) and known to both the hearer and the speaker;
- musicians: the root lexeme music + the morpheme -ian indicates a person who works in some capacity connected to the meaning of the root + the plural marker $-s$, meaning "more than one";
- reconsidered: the root lexeme consider + the morpheme re-, meaning "again" + the past-tense marker -ed;
- their: a grammatical morpheme indicating possession of the following noun by some plural third persons;
- director's: the root lexeme direct + the morpheme -or, denoting someone who performs the action of the verb + the morpheme $-s$, indicating possession of something by the noun to which it is attached;
- unusual: the root lexeme usual + the morpheme un-, meaning "not";
- proposal: the root lexeme propose + the morpheme -al, turning the root verb into a noun.

Languages differ widely in the amount and functions of morphology. For instance, all languages need a way to signal such grammatical roles as subject and direct object (who did what to whom). English quite strictly depends on the order of words in a sentence to do this. The meaning of (6) is very different from that of (7):
(6) A Russian soldier killed a Ukrainian soldier.
(7) A Ukrainian soldier killed a Russian soldier.

Ukrainian, however, marks grammatical roles morphologically, and word order is consequently much freer; both Ukrainian sentences below mean "A Russian soldier killed a Ukrainian soldier'":
(8) Російський солдат вбив українського солдата.
(9) Українського солдата вбив російський солдат.

In Ukrainian, the addition of $-a$ to the noun солдат and different ending of the adjective українського indicates that Ukrainian soldier is the direct object, or the one who got killed.

Here, the morphological form of a noun, rather than its position in the sentence, signals its grammatical function. That is why Ukranian is called a synthetic language in which syntactic relations within sentences are expressed by inflection or bound morphemes (the change in the form of a word that indicates distinctions of person, tense, gender, mood, number, case, and voice). Synthetic languages are numerous, the most common being Indo-European languages such as Czech, French, German, Greek, Italian, Lithuanian, Polish, Romanian, and Spanish. Unlike Ukrainian, English is an analytic language that indicates grammatical information through unbound morphemes or syntactical constructions. One of the most important functions of morphology is to distinguish the roles played by the various participants in an event; we could not interpret language without this information.

There are several well defined ways in which words are formed, besides, languages differ seriously in the extent to which they employ them. The most important ones are compounding, derivation, and inflection.

The most common form of word formation is compounding, the combination of two or more lexemes into a complex word, such as the English word lowcost composed of an adjective low and a noun cost. Compounding begins with two words that do not have anything in common (fig. 3.2).


Figure 3.2 - Compounding
As long as compounding always results in the creation of a new lexeme, it is a good example of a derivational process. In English, compounding is highly productive and a primary source of new vocabulary. For example: greenhouse, moonlight, songbook, coast guard, long shot, soy sauce, brown-eyed, longrange, man-made.

As we can see, English compounds are sometimes written as a single word, or as words separated by a space or a hyphen; nonetheless, they are all considered by linguists to be compounds. The characteristic pronunciation for English compounds is for the stress to fall on the first lexeme in a twolexeme compound (although there are exceptions). Remember the difference in pronunciation between the compounded word 'greenhouse (a place to grow plants) vs. the phrase green 'house (a house that is green).

Notice that the compound simply is one word, so the adjective has lost its status as adjective through compounding, which explains the new stress pattern.

The identifying element is called the head; its meaning and part-of-speech category determine that of the entire compound overall. English compounds are typically rightheaded. Thus, chocolate milk is a kind of milk but milk chocolate
is a kind of chocolate. Both compounds are nouns, because both milk and chocolate are nouns. The examples below demonstrate right-headedness in compounds involving various word categories in addition to the type of noun-noun compounding:
\($$
\begin{array}{ccr}\text { (10) Noun } & \begin{array}{c}\text { Adjective } \\
\text { compounds }\end{array} & \begin{array}{c}\text { compounds }\end{array}
$$ <br>
\mathrm{N}+\mathrm{N} chocolate milk <br>

toenail\end{array} \mathrm{N}+\mathrm{A}\) headstrong $\left.\begin{array}{c}\text { compounds }\end{array}\right]$| $\mathrm{N}+\mathrm{V}$ handpick |
| :---: |

On the other hand, there are many compounds in English in which the overall category and meaning are not determined by the rightmost element. For example:
(11) over ${ }^{\mathbf{P}}+$ weight $^{\mathbf{N}} \rightarrow$ overweight $^{\mathbf{A}}$
make $^{\mathbf{V}}+$ shift $^{\mathbf{v}} \rightarrow$ makeshift $\mathbf{A}^{\mathbf{A}}$
lack $^{\mathbf{V}}+$ luster $^{\mathbf{N}} \rightarrow$ lackluster $^{\mathbf{A}}$
make $^{\mathbf{V}}+$ believe $^{\mathbf{V}} \rightarrow$ make-believe ${ }^{\mathbf{A} / \mathbf{N}}$
speak $^{\mathbf{v}}+$ easy $^{\mathbf{A}} \rightarrow$ speakeasy $^{\mathbf{N}}$
up $^{\text {Adv }}+$ keep $^{\mathbf{V}} \rightarrow$ upkeep $^{\mathbf{N}}$
What is more, there is a quite productive class of compounding in English in which certain types of verb phrases (verbs + adverbs, prepositions or verb particles) are compounded into nouns. In this case, the right-head generalization does not hold at all:

| (12) kickback | screw-up | payoff | buyout |
| :--- | :--- | :--- | :--- |
| sing-along | breakdown | pullover | sit-up |
| breakthrough | giveaway | workout | getaway |
| drawback | get-together | drive-in | heads-up |

In these cases, the morphological process of zeroderivation has applied in addition to compounding, turning verbal phrases (like break 'down) into compound nouns ('breakdown). Since neither lexeme in the compound determines its overall grammatical category or meaning, these compounds are generally considered unheaded (Lardiere, 2013, p. 79).

Derivation is the type of word formation when only one of the parts is a word; the other is only found in combination, and it acts by changing the word class of the host (Kracht, 2012, p. 82). These kinds of words are very common and have been useful in creating ways of speaking and being understood. You begin with a root word like 'lock' (see fig. 3.3). By adding a prefix or a suffix a new word can be created. This is especially helpful in understanding if something can or cannot be done, in this case, locked.


Figure 3.3 - Derivation
It allows new words to appear in a language, even if sometimes only temporarily in a particular conversation or e-mail message or magazine text. Derivation is also extremely
useful for expressing phrases more compactly. It is much more efficient, for instance, to refer to someone working in the field of science, politics, or banking as a scientist, politician, or banker than to have to repeatedly use more bulky phrases such as "someone who works in the field of ...". Derivation is a kind of shorthand system that allows us to economize - by packing more information into shorter utterances.

Derivational affixation is the most common way among the world's languages o derive one lexeme from another. Derivation often changes the lexical category of a word, or its meaning, or both. Consider the following words:

$$
\begin{aligned}
& \text { (13) sing-er appli-cant } \\
& \text { violin-ist prank-ster } \\
& \text { magic-ian cook }
\end{aligned}
$$

In each word, a noun has been derived that bears an obvious agentive relation to the root: a singer sings, a violinist plays the violin, a magician performs magic, an applicant applies for something, a prankster commits pranks, and a cook cooks. The agentive meaning in these examples is expressed by five different suffixes or, as in the case of cook, by nothing at all. This process is called zero derivation or conversion.

Nevertheless, not all the affixes can attach freely to any root. The suffix -er, for example, can only attach to verbs (worker, smoker), while the suffix -ist attaches only to nouns or adjectives (violinist, cartoonist), and -ian attaches only to nouns, especially those of Greek origin (mathematician, politician). Some of the many derivational affixes of English are shown below.

|  | Category <br> selected | Category <br> derived <br> PREFIXES |  |
| :--- | :---: | :---: | :--- |
| de- | V | V | Examples |
| dis- | V | V | disentanglize, decompress |
| mis- | V | V | mismatch, mismanage |
| pre- | V | V | preview, predigest |
| re- | V | V | reappear, repossess |
| un- | A | A | unhappy, unproductive |
| un- | V | V | unwrap, unzip |

Some derivational affixes are very productive: they can apply almost without exception to a certain kind of base. For example, the affix -able freely attaches to transitive verbs, deriving a new adjective with the meaning 'able to be V-ed' (as in washable, faxable, analyzable). On the contrary, some derivational affixes occur in only a small number of words and
aren't productive, such as -dom (kingdom, wisdom, boredom) and -th (warmth, truth, width). Derivational affixes that are very productive at some point in the history of a language may become less productive over time. The feminizing suffix -ess used to be more productive than it is today. Although there are still some words in common usage such as actress, princess, and goddess, the words such as ambassadress, authoress, editress, governess, huntress, janitress, manageress, mayoress, poetess, proprietoress were once more widely used in English.

This decline in the productivity of -ess affixation isen fueled by social factors that favor terms that de-emphasize or are completely neutral with regard to sex, such as flight attendant (instead of stewardess) and server (instead of waitress).

Inflection is the type of word formation when one part is an independent word, the other is not. It does however not change the category, it adds some detail to the category (inflection of verbs by person, number, tense) (Kracht, 2012, p. 82).

To fit a word into a syntactic construction, it may have to undergo some changes. In English, the verb has to get an 's' suffix if the subject is third person singular. The addition of the ' $s$ ' does not change the category of the verb but makes it more specific. Likewise, the addition of past tense. Adding inflection thus makes the word more specific in category, narrowing down the contexts in which it can occur. Inflection is not optional: you must choose an inflectional ending.

Inflectional morphology adds grammatical information to a lexeme, in accordance with the particular syntactic requirements of a language. Consider the following English sentence:
(14) He plans to contact her in a few weeks.

The particular (suppletive) forms of the pronouns he and her are required by the syntactic roles they play in the sentence as subject and object, respectively; furthermore, the verb plan
must be affixed with $-s$ to agree with its third-person, singular subject, and the noun week must also be affixed with plural $-s$ as required by the quantifier phrase $a \mathrm{few}$. Thus, in this example, the morphological mechanisms of suppletion and affixation were both used for inflectional purposes - to convey grammatical information. Consider how ungrammatical the result would be if these particular syntactic requirements were not met; that is, if the wrong suppletive forms of the pronouns were used or if the required affixes were not added:
(15) Him plan to contact she in a few week.

Both derivation and inflection often co-occur within the same word, although in English there is typically only one inflectional operation per word. (There may be several derivational ones.) Consider the complex English word dehumidifiers. Creating this word requires three derivational operations and one inflectional operation, each subsequent step building on the base of the previous one:

- humid - an adjective, the lexical root;
- humidify - step 1: a transitive verb is derived by suffixing -ify, meaning eo "cause something to become humid";
- dehumidify - step 2: a transitive verb is derived from the base humidify by prefixing $d e$-, meaning "to remove, reverse or perform the opposite action";
- dehumidifier - step 3: a noun is derived from the base dehumidify by adding the suffix -er, meaning "something which performs the action of";
- dehumidifiers - step 4: the noun is made grammatically plural (inflected) by adding the regular plural suffix - $s$ (in its allomorphic formи [-z]).

Typically, if a morphological operation causes a wordcategory change (such as from adjective to verb, as in humidhumidify), the process is considered derivational, since a new major-category lexeme has been created from an existing one.

However, not all derivational operations cause a category change; for example, the prefix $d e$ - above attaches to a verb and derives another verb with a different meaning. Inflection, on the other hand, does not usually produce a category change. Adding a plural affix to a noun, for example, only grammatically augments that noun; it does not change its category. Similarly, adding an agreement marker to a verb results in the same verb, but one with an added formal feature.

There are also not so popular ways to grow the lexicon as the abovementioned, but certainly no less creative. They are blending, clipping, and acronymy.

Blending is the type of word formation which links two or more words together in such a way that there is no transparent analysis into morphs. They are formed by removing parts from one or both of the original words and composing to a new word which is called blend. This example blends breakfast and lunch, which are words for meals, into brunch (see fig. 3.4)


Figure 3.4 - Blending
Some of English blends are shown below:
(17) ability + skill $=$ askillity
alcohol + holiday $=$ alcoholiday
American + Indian $=$ Amerind

$$
\begin{aligned}
& \text { boat }+ \text { hotel }=\text { boatel } \\
& \text { car }+ \text { barbecue }=\text { carbecue } \\
& \text { departure }+ \text { start }=\text { destarture } \\
& \text { modulator }+ \text { demodulator }=\text { modem } \\
& \text { smoke }+ \text { fog }=\text { smog } \\
& \text { Spanish }+ \text { English }=\text { Spanglish }
\end{aligned}
$$

Clipping as a way to add to the lexicon is closely tied to ease of articulation, in that it shortens a longer word to make it easier to say. It's the simple process of forming a new word by clipping off part of an existing word. Youth often clip words and they become mainstream. Very much the way telephone becomes phone (see fig. 3.5).


Figure 3.5 - Clipping
One more example is the word exam, which comes from the longer word examination. A new word shares the definition and context of the older one. Clipping is a reductive process that shortens words and thus shortens the effort involved in speech and writing. This process can slowly reduce the time spent expressing thoughts, making shorter and shorter words. Thus, language has sped up and become much faster and more clipped over the centuries. Clipping also reduces formality. Examination is a word that would be used by a
teacher or in official language on a school's policy page, while exam is the word all the students would use.

Acronymy is a word-formation process resulting in acronyms - new words formed from the initial letters of a set of words. They are pronounced like new single words as in NASA (see fig. 3.6).


Figure 3.6 - Acronymy
Other examples of acronyms in English include:

- ASAP - as soon as possible;
- AWOL - absent without leave;
- laser - light amplification by stimulated emission of radiation;
- NASA - National Aeronautics and Space Administration;
- NASDAQ - National Association of Securities Dealers Automated Quotations;
- PIN - personal identification number;
- radar - radio detection and ranging;
- scuba - self-contained underwater breathing apparatus;
- TESOL - Teachers of English to Speakers of Other Languages;
- WASP - White Anglo-Saxon Protestant.


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## QUESTIONS

1. What is the primary purpose of morphological processes in language?
2. How do people typically associate meaning with words?
3. What is the difference between a complex word and a simplex word?
4. How can the meaning of a word be non-arbitrary or motivated?
5. What are lexical morphemes and bound morphemes?
6. What are the different types of affixes?
7. What are inflectional affixes and what is their function?
8. What is a lexicon and what type of information does it include?
9. What is the difference between an analytic language and a synthetic language?
10. What is the role of morphology in distinguishing the roles of participants in an event?
11. What are the three main types of word formation mentioned in the lecture?
12. Explain the process of compounding and give examples.
13. How does compounding contribute to the creation of new vocabulary?
14. What is the difference between right-headed and non-right-headed compounds?
15. Can you provide examples of compounds involving different word categories?

## PRACTICAL TASK

- Read the passage provided in the lecture on morphology.
- Analyze the given passage and identify the different types of words, morphemes, and morphological processes used.
- Classify the words based on their grammatical roles and word formation processes.

Answer the following questions based on your analysis.

## Questions:

- Define the term "morphology" and explain its significance in language study.
- What is the relationship between sound and meaning in words? Provide examples to support your answer.
- Differentiate between a lexical morpheme and a bound morpheme. Provide examples of each.
- Identify the morphemes in the word "unEuropeanizable" and explain how they contribute to the overall meaning of the word.
- Explain the concept of inflectional affixes and provide examples of inflectional affixes in English.
- What is the lexicon, and what types of information does it contain about words?
- Distinguish between synthetic languages and analytic languages, providing examples of each.
- Discuss the role of word order and morphology in indicating grammatical functions in sentences.
- Explain the process of compounding in word formation and provide examples of English compounds.
- Describe the concept of right-headedness in compound words and give examples to illustrate this concept.
- Identify the word formation process used in the creation of the words "overweight", "makeshift", and "lackluster".
- Give examples of verb phrases that are compounded into nouns and explain how this word formation process works.


## UNIT 4

## SYNTAX: THE STRUCTURE OF SENTENCES

To understand the nuances of sentence structure, it is necessary to apprehend how phrases are made from the words they consist of, and how phrases are blended into larger phrases and sentences. Besides, it is necessary to realise what can happen to phrases and sentences after they are built - specifically, parts of them can be moved and deleted. Deletion and movement take place with some restrictions, and people apprehend these restrictions, supposedly without this knowledge being taught to them. All languages have these fundamental structural properties, but the principles that determine them are extensive enough to allow great differences among languages and their syntax. Syntax is the part of linguistics that analyses structure, that is how words and phrases are put together. In this unit, we will look at categories - the smallest building blocks of syntax and how they are combined to form constituents, and at the functions that they can have.

### 4.1. Putting Words Together

4.1.1. Categories. In syntax, the smallest unit of analysis is the word. In written language, it is quite easy to constitute where a word begins and where it ends. Phrases are constructed 'bottom-up': words are drawn from a lexicon - a mental dictionary stored in people's brains rather than in a book - and merged into structures one by one.

Words are divided into classes or syntactic categories on the basis of their behaviour. The main division is made between lexical and grammatical (or functional) categories. The common parts of speech - nouns, verbs, adjectives, adverbs, and prepositions - are lexical categories. To the grammatical
categories belong the classes of determiners, pronouns, and conjunctions. Articles are a subset of determiners, a functional category.

People come up with new lexical words quite frequently which means that words constitute a rather open set. Lexical categories have a large membership, the words that belong to them have lexical content and are semantically rich. They contribute primarily to the meaning of the sentence. On the contrary, functional words usually form a closed system and are semantically weak. Functional categories are closed in the sense that there is a limited membership and their members serve a grammatical function and have a less full meaning. Besides, they tend not to accept modification. However, prepositions form a relatively small closed class with little lexical meaning and little opportunity for modification. A good example is of, which alternates with the grammatical marker 's in pairs such as the oldest woman's bag/the bag of the oldest woman. Though prepositions are generally considered a lexical category, they share some characteristics with grammatical categories and in some descriptions are classed as such.

Words are classified into different lexical categories according to three criteria: meaning, morphological form, and syntactic function. Let us check what each of these criteria means, and how reliable each one is. At first, it seems that words could be classified according to their meaning. For instance, we can have the following semantic criteria for verb (V), noun (N), adjective (A), and adverb (Adv): 1) $V$ : referring to an action; 2) $N$ : referring to an individual or entity; 3) A: referring to a property; 4) Adv: referring to the manner, location, time or frequency of an action.

Although these semantic bases can be used for many words, these definitions leave many words unaccounted for. For instance, such words as genuineness, delight, and agony do not simply denote any entity or individual. Absence and accident are
even harder cases. Also, there are many words whose semantic properties do not match the lexical category that they belong to. For example, words like assassination and construction may refer to an action rather than an individual, but they are always nouns. Words like remain, bother, appear, and exist are verbs, but do not involve any action.

A better approach is to characterize words in terms of their forms and functions. The 'form-based' criteria look at the morphological form of the word in question. In English, nouns can combine with the to form a full phrase, many nouns can also take a plural marker, generally $-s$, and combine with $a(n)$. In other languages the criteria may be different, there may for instance not be a word similar to the or there may be things like case markers that can attach only to nouns. Verbs can take a third person singular $-s$ in English - and can occur in past tense. Adjectives modify nouns and can occur with a comparative form -er (or more) and a superlative form -est (or most). Adverbs are the words which modify verbs, adjectives or other adverbs and they frequently end in -ly. Prepositions are the most difficult to define structurally, largely because they do not take any inflection. They can be recognised structurally because they combine with a noun phrase to form a full phrase (Börjars, 2018, p. 119).

There are exceptions for nearly all the above-mentioned criteria. Not all things that could normally be classified as nouns can take a plural form - they are uncountable nouns. Not all adjectives can occur in a comparative or superlative form - they are not gradable. When we meet words that do not have the established characteristics for the categories, we can use similarity in distribution to define category membership. For example, let us take an adjective dead. It does not have any of the formal adjective properties: deader/deadest, or more dead/most dead sound distinctly strange. We can build a sentence with another adjective such as happy
(happier/happiest) and test whether dead could replace happy in it. If it can, we can take this as evidence that it is an adjective, using distributional criteria to establish category membership. With this approach, we can define that dead is an adjective (1):
(1) The mother said that it was a happy/dead cat.

The most reliable criterion in judging the lexical category of a word is based on its syntactic function or distributional possibilities. Let us try to determine what kind of lexical categories can occur in the following environments:
(2) a. They have no $\qquad$ .
b. They can $\qquad$ .
c. They read the __book.
d. He treats John very $\qquad$ .
e. He walked right __the wall.

The categories that can go in the blanks are $\mathrm{N}, \mathrm{V}, \mathrm{A}, \mathrm{Adv}$, and $P$ (preposition). As you can see in the data in (3-6), roughly only one lexical category can appear in each position:
(3) a. They have no TV/car/information/friend.
b. They have no *went/*in/*old/*very/*and.
(4) a. They can sing/run/smile/stay/cry.
b. They can *happy/*down/*door/*very.
(5) a. They read the big/new/interesting/scientific book.
b. They read the *sing/*under/*very book.
(6) a. He treats John very nicely/badly/kindly.
b. He treats John very *kind/*shame/*under.
(7) a. He walked right into/on the wall.
b. He walked right *very/*happy/*the wall.

As you can see, only a restricted set of lexical categories can occur in each position; we can then assign a specific lexical category to these elements:
(8) a. N: TV, car, information, friend, . . .
b. V: sing, run, smile, stay, cry, . . .
c. A: big, new, interesting, scientific, . . .
d. Adv: nicely, badly, kindly, . . .
e. P: in, into, on, under, over, . . .

In addition to these basic lexical categories, does English have other lexical categories? There are a few more. Consider the following syntactic environments:
(9) a. $\qquad$ student hits the ball.
b. John sang a song, __ Mary played the piano.
c. John thinks $\qquad$ Bill is honest.
The only words that can occur in the open slot in (9a) are words like the, a, this, that, and so forth, which are determiner (Det). (9b) provides a frame for conjunctions (Conj) such as and, but, so, for, or, yet. In (9c), we can have the category we call "complementizer", here the word that.

Can we find any supporting evidence for such lexical categorizations? It is not so difficult to construct environments in which only these lexical elements appear. Consider the following:
(10) We found out that __ very lucrative jobs were in jeopardy.

Here we see that only words like the, my, his, some, these, those, and so forth can occur here. These articles, possessives, quantifiers, and demonstratives all "determine" the referential properties of jobs here, and for this reason, they are called determiners. One clear piece of evidence for grouping these elements as the same category comes from the fact that they cannot occupy the same position at the same time:
(11) a. *[My these jobs] are in jeopardy.
b. *[Some my jobs] are in jeopardy.
c. *[The his jobs] are in jeopardy.

Words like my and these or some and my cannot occur together, indicating that they compete with each other for just one structural position.

Now consider the following examples:
(12) a. I think __ learning English is not easy at all.
b. I doubt __ you can help me in understanding this.
c. I am anxious __ you to study English grammar hard.

Once again, the possible words that can occur in the specific slot in (13) are strictly limited.
(13) a. I think that [learning English is not all that easy].
b. I doubt if [you can help me in understanding this].

## c. I am anxious for [you to study English grammar

 hard]. (Kim \& Sells, 2007, p. 15).To build phrases and sentences, we start with words, which then project phrases of the same category. You can think of a word as a kind of seed and its projection as a stalk that it sends out (Lightfoot \& Fasold, 2013, p. 100). Let us give an example with the sentence (2):
(14) This man wants a car.

The grammar starts by selecting the nouns man and car from the lexicon and letting them project phrases of the same category - noun phrases. In this sentence, these noun phrases have no further structure in them, so the grammar can move on to other categories. Want is a transitive verb - a verb that isn't complete without a direct object. So, if the grammar is projecting a phrase from a transitive verb, it creates a stalk that branches. Thus, want projects a phrasal node of its own category and also branches out to another node for the category of its complement, the phrase it needs to be complete. In a transitive verb phrase, the verb is considered the head of the phrase. As soon as the complement node of the transitive verb is projected, it has to be combined with a phrase of the type it needs. To do that, the grammar has a mechanism that combines phrases. This is done by merging one phrase with another.
4.1.2. Constituents. The merging works in the following way: words combine together to form bigger units, called constituents (or phrases). These constituents in turn combine to form bigger constituents, to give a hierarchical structure. In
the analysis, they are represented by brackets or in tree diagrams (see fig. 4.1) (Dorgeloh, 2009, p. 24), because, as they become more detailed, they begin to look like upside-down trees:


Figure 4.1 - A Tree Diagram

So far the grammar has created the three phrases in figure 4.1 by merger. A new functional category is needed to put them together. This functional category, called inflection, is responsible for the tense of the sentence (together with other duties). An inflection phrase is projected from abstract elements, such as present and past tense, as well as articles $a$ or the. Its role in the structure of sentences is somewhat different from the role of the phrases we have projected so far. Inflection phrases provide the central "scaffolding" for a sentence, a structure to which the more meaningful lexical category phrases will be attached. In our sentence, the head of the inflection is not a word you can hear, but the abstract element past tense.

To establish the constituent structure of a language, tests can be applied which can show the extent to which a group of words behaves like a unit. Four commonly assumed constituency tests are:

- substitution: if a string of words can be replaced by one word, this can generally be taken as evidence that it forms a constituent;
- coordination: if a string can be coordinated with another string, it is likely to form a constituent;
- sentence fragment: if a string can stand on its own it is likely to be a constituent;
- movement: if a string can be moved as a whole to a different position within the sentence then it is usually a constituent (Börjars, 2018, p. 120).

Let's apply the four tests to the two examples to test whether drinking the tea is a constituent. The asterisk indicates that the example is ungrammatical and the hash symbol indicates that the example does not have the required meaning or is odd.
(15) Rose was drinking the tea.

Substitution: Rose was yawning.
Coordination: Rose was [drinking the tea] and [eating the bread].

Sentence fragment: - What was Rose doing?

- Drinking the tea.

Movement: $\quad$ Drinking the tea is what Rose was doing.
(16) While Rose was drinking the tea fell off the table.

Substitution: * While Rose was yawning fell off the table.

Coordination: *While Rose was [drinking the tea] and [eating the food] fell off the table.

Sentence fragment: - \#What was Rose doing when fell off the table? / \#What fell off the table when Rose was?

- \#Drinking the tea.

Movement: *Drinking the tea is what Rose was doing fell off the table.

Generally, when two constituents form a new larger constituent, one of the component constituents is more central
than the other. This constituent is called the head, and its category will be used also for the larger constituent. To establish what the phrasal category of a constituent is, we need to know which element is the head. For instance, in a phrase like sweet juice, juice is the head because a sweet juice is a kind of juice. Similarly, the head can be defined as the element that can represent the whole and that is obligatory, though nonheads can also be obligatory. The head is also where crucial features of the phrase are marked.

Thus, different types of phrases are defined by different types of lexical heads, so each phrase type has its central, obligatory element: there are noun phrases, verb phrases, adjective phrases, adverb phrases, and prepositional phrases. For example:
(17) [The boy] $=\mathbf{N P}$ [left the room] $=\mathbf{V P}$.
(18) [In the evening] = PP [the boy] = NP [left the room] $=\mathbf{V P}$.
(19) [The [incredibly stupid] = AdjP] boy] = NP [left the room $=\mathbf{V P}$.
(20) [The boy] $=\mathbf{N P}$ [left the room] $=\mathbf{V P}$ [incredibly
slowly] = AdvP.
As you can see from these examples, phrases are 'packaged' inside other phrases in phrase structure, giving sentences their internal hierarchical structure. The productivity of syntax that results from the unlimited coordination and embedding of phrases within other phrases has been described as the recursiveness of grammar.

No matter where we were brought up and whether we grew up in English-speaking community or in Ukrainianspeaking community, people have recursive devices - means by which the same grammatical processes can be applied more than once - in their grammars that make it possible for them to produce sentences of indefinite length. We can insert words of the same kind repeatedly without limit by repeated adjunction.

You can easily say: He fell in love with this beautiful girl. This is accomplished by adding the adjective beautiful to the noun phrase girl. But it would be possible to go beyond that and you can say: He fell in love with this really intelligent, beautiful, romantic, thoughtful, adorable girl simply by adding more adjectives.

A more complex recursive device allows any sentence to be placed in the larger frame of another sentence. Start with what you think is the longest sentence you can imagine; you can make it longer simply by putting He said that . . . in front of it. If your original sentence was The woman in New York's dress was black, it would be lengthened to He said that the woman in New York's dress was black. You could lengthen that sentence by using the same structure again. Even if you have already added He said that, you could add something similar: She said that he said that the woman in New York's dress was black. You could keep reframing your developing sentence indefinitely: Bill knew that Jill thought that Tom said that. . . . You might get tired, but your grammar would never limit the length of your sentence (Lightfoot \& Fasold, 2013, p. 112).

One more kind of embedding involves the use of relative clauses. Remember the song for children 'The House that Jack Built' (20). If you have the patience, you can add relative clauses together indefinitely:
(21) This is the house that Jack built.

This is the cheese that lay in the house that Jack built.
This is the mouse that nibbled the cheese that lay in the house that Jack built.

This is the cow that kicked the dog that chased the cat that killed the rat that caught the mouse that nibbled the cheese that lay in the house that Jack built.

One more recursive device in all languages is coordination. The latter links two or more words, phrases, sentences together on equal terms, using coordinating
conjunctions like or, and, but: You can smile or you can cry. Sentences can be coordinated indefinitely: Lora went to the cinema, and Ann went to the restaurant, and Bill watched a movie, but John worked and Rose read a book . . .

Since grammars have recursive devices which let expressions be indefinitely long, they can produce an immeasurable variety of sentences. Because recursion is an integral part of the grammar, no one can learn a language by memorizing all its sentences. We just learn how the language functions.
4.1.3. Clauses. While words and morphemes have meaning, it is only phrases that can have reference. A clause, then, consists of a referring expression and a predication, which is why only clauses carry information about something The referring expression is always a noun phrase (NP), while the predication is a verb phrase (VP). Accordingly, a complete English sentence, such as the following example sentence, will always contain these components.
(22) [The boy] = NP [left the room] = VP.

While the constituents of a sentence are its formal components, syntactic roles or grammatical relations define the functional relationship within the clause, in particular the relation of all the other constituents (the arguments) to the verb. In a clause, there is always a noun phrase that fills the role of subject in relation to the main verb, other roles are assigned depending on the transitivity of the verb: intransitive verbs do not permit an object, monotransitive require a direct object (22), while ditransitives have so-called double object constructions, i.e. an indirect object before the direct one.
(23) [The boy] $\mathrm{NP}=$ subject left [the room] $\mathrm{NP}=$ direct object.

A syntactic role associated in turn with subjects and objects, is that of subject or object complements. They are
usually required with so-called copula or linking verbs, in relation to which they can be described as predicative complements (24).
(24) [The boy] $\mathrm{NP}=$ subject is $[$ a fool] $\mathrm{NP}=$ complement.

In contrast to complements, adverbials are less close in their relation to the verb, they can be described as predicating either the verb or the entire clause, but are usually not obligatory and can be moved in the sentence rather freely.
(25) a. [Last month] NP = adverbial [the duck] [left the pool].
b. [The duck] [left the pool [last month] $\mathrm{NP}=$ adverbial $].$

In terms of the meaning carried by a sentence, different grammatical relations are prototypically linked to different semantic roles. So the subject typically contains the element which carries out an action (i.e. the agent), while the direct object is often the entity affected by an action (or the patient). Other semantic roles are recipient, time, place, source, goal, and instrument. Although it is generally the verb that determines which semantic roles are present, category boundaries may be fuzzy.
(26) a. The boy left [the girl]. = patient.
b. The boy left [the room]. = place.

Clause and sentence can be used synonymously when dealing with simple sentences, i.e. a simple sentence contains a single independent clause. By contrast, compound sentences contain multiple clauses that are linked by way of coordinating conjunctions or parataxis. Complex sentences consist of a main clause and at least one subordinate clause.
(27) a. The boy left the room. $=$ simple sentence.
b. The boy left the room, but the girl stayed behind. $=$ compound sentence.
c. The boy left the room although the girl stayed behind. = complex sentence.

Dependent clauses can be finite or non-finite: In a finite clause the verb is inflected and marked for agreement with the subject, while non-finite verbs are non-tensed and possible only in subordinate clauses. English has three basic varieties of noninflected verb forms: participles, gerunds and infinitives.
(28) The boy left the room = finite main clause, the girl staying behind $=$ non-finite subordinate clause.

The basic form of the English declarative sentence follows the canonical word order of subject - verb (- object); this applies to main as well as to subordinate clauses. That is, in contrast to many other languages (such as German, Latin, or Persian, for example), the ordering of sentence elements in English is fixed and often makes up for case marking (in signalling syntactic roles). This property of English, together with its low number of inflectional morphemes, leads to the classification of English as an analytic, or isolating, language. There are, however, exceptions such as the fronting of certain sentence elements or special constructions (such as the passive or clefting), which are usually motivated by the discourse context, i.e. used and acceptable for pragmatic reasons.
(29) a. The room the boy left, and not the pond. $=$ fronting of direct object.
b. The girl was left behind by the boy. = passive.
c. It was the room the boy left. = clefting.

It should be noted that especially the fronting of the direct object is only marginally grammatical and, since it will usually require a lot of context, tends to occur in speaking rather than in writing.

### 4.2. Why Do We Study Syntax?

There are many reasons for studying syntax, from general humanistic or behavioral motivations to much more specific goals such as those in the following:

- To help us to illustrate the patterns of English more effectively and clearly.
- To enable us to analyze the structure of English sentences in a systematic and explicit way.

For example, let us consider how we could use the syntactic notion of head, which refers to the essential element within a phrase. In English, the main verb agrees with the head element of the subject. This informal rule can pinpoint what is wrong with the following two examples:
(30) a. *The recent strike by pilots have cost the country a great deal of money from tourism and so on.
b. *The average age at which people begin to need eyeglasses vary considerably.

Once we have structural knowledge of such sentences, it is easy to see that the essential element of the subject in (30a) is not pilots but strike. This is why the main verb should be has but not have to observe the basic agreement rule. Meanwhile, in (30b), the head is the noun age, and thus the main verb vary needs to agree with this singular noun. It would not do to simply talk about "the noun" in the subject in the examples in (30), as there is more than one. We need to be able to talk about the one which gives its character to the phrase, and this is the head. If the head is singular, so is the whole phrase, and similarly for plural. The head of the subject and the verb (in the incorrect form) are indicated in (31):
(31) a. *[The recent strike by pilots] have cost the country a great deal of money from tourism and so on.
b. *[The average age at which people begin to need eyeglasses] vary considerably.

Either example can be made into a grammatical version by pluralizing the head noun of the subject.

Now let us look at some slightly different cases. Can you explain why the following examples are unacceptable?
(32) a. *Despite of his limited educational opportunities, Abraham Lincoln became one of the greatest intellectuals in the world.
b. *A pastor was executed, notwithstanding on many applications in favor of him.

To understand these examples, we first need to recognize that the words despite and notwithstanding are prepositions, and further that canonical English prepositions combine only with noun phrases. In (32), these prepositions combine with prepositional phrases again (headed by of and on respectively), violating this rule.

A more subtle instance can be found in the following:
(33) a. Visiting relatives can be boring.
b. I saw that gas can explode.

These examples each have more than one interpretation. The first one can mean either that the event of seeing our relatives is a boring activity, or that the relatives visiting us are themselves boring. The second example can either mean that a specific can containing gas exploded, which I saw, or it can mean that I observed that gas has a possibility of exploding. If one knows English syntax, that is, if one understands the syntactic structure of these English sentences, it is easy to identify these different meanings.

Here is another example which requires certain syntactic knowledge:
(34) He said that that 'that' that that man used was wrong.

This is the kind of sentence one can play with when starting to learn English grammar. Can you analyze it? What are the differences among these five thats? Structural (or syntactic)
knowledge can be used to diagnose the differences. Part of our study of syntax involves making clear exactly how each word is categorized, and how it contributes to a whole sentence.

When it comes to understanding a rather complex sentence, knowledge of English syntax can be a great help. Syntactic or structural knowledge helps us to understand simple as well as complex English sentences in a systematic way. There is no difference in principle between the kinds of examples we have presented above and (35):
(35) The government's plan, which was elaborated in a document released by the Treasury yesterday, is the formal outcome of the Government commitment at the Madrid summit last year to put forward its ideas about integration.

Apart from having more words than the examples we have introduced above, nothing in this example is particularly complex.

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## QUESTIONS

1. What is syntax, and what does it analyze?
2. What is the difference between lexical and grammatical categories?
3. Give examples of lexical categories and grammatical categories.
4. How are words classified into different lexical categories?
5. What are the three criteria used to classify words into different lexical categories?
6. Why is classifying words based on meaning alone not always reliable?
7. How can similarity in distribution be used to determine the lexical category of a word?
8. What is the most reliable criterion for determining the lexical category of a word?
9. What are the basic lexical categories in English and their examples?
10. Are there other lexical categories in English besides the basic ones? Give examples.
11. What is a constituent in syntax?
12. How are constituents formed in syntax?
13. What are some tests used to determine if a group of words forms a constituent?
14. Apply the substitution, coordination, sentence fragment, and movement tests to the phrase "drinking the tea" in the sentence "Rose was drinking the tea" to determine if it is a constituent.
15. What is the head of a constituent, and how does it determine the phrasal category?

## PRACTICAL TASK

1. Categorizing Words:
a. Read the provided lecture on syntax and familiarize yourself with the concepts of lexical and grammatical categories.
b. Create a list of 15 words, including a mix of nouns, verbs, adjectives, adverbs, prepositions, determiners, pronouns, and conjunctions.
c. Categorize each word based on its syntactic category (lexical or grammatical) and its specific category within that classification (e.g., noun, verb, etc.).
2. Analyzing Constituents:
a. Study the lecture section on constituents and their formation.
b. Analyze the following sentences and identify the constituents within them. Use square brackets to represent the constituents.
I. The cat is sleeping on the mat.
II. I saw a beautiful bird in the garden.
III. John and Mary went to the park.
IV. He quickly ran away from danger.

V . In the morning, she always drinks coffee.
c. Apply the four constituency tests (substitution, coordination, sentence fragment, movement) to confirm the constituents you identified in step 2b. Note any evidence supporting the constituency.

Reflection:
a. Reflect on the process of categorizing words and analyzing constituents.
b. In a short paragraph, explain the importance of understanding syntax and the structure of sentences in language comprehension and production.

Submission: Submit your categorized word list, analyzed sentences with identified constituents, and the reflection paragraph.

Note: This task aims to assess your understanding of syntax, word categorization, and the formation of constituents within sentences. Make sure to refer to the lecture material and use the provided concepts and examples to complete the task accurately.

## UNIT 5

## MEANING: SEMANTICS

Semantics is dedicated to exploring the meaning conveyed through language, specifically how grammatical structures combine simple meanings to form more complex ones. This field of study holds significant importance across various academic disciplines, including anthropology, computer science, linguistics, philosophy, and psychology, among others. In this unit, we will delve into fundamental philosophical questions that pertain to the concept of meaning. Additionally, we will explore different theoretical viewpoints on meaning that are widely embraced within the field of linguistics in contemporary times.

### 5.1. Types of Meaning

All of us know that language is used to express meaning, but it is quite difficult to define meaning. The problem is that there are several dimensions of meaning. Imagine that someone asks you, "Can you give me a tomato?" while looking at a plate of tomatoes on the table beside you. What is literally asked is whether you have the ability to give a tomato; this is the semantic meaning of what is said. Sometimes people can make an irritating joke by responding only to the semantic meaning of such a question; they just answer, "Yes, I can." But in this case, you are wanted to give one of the tomatoes next to you, and the person expects you to know that this is what $s / h e$ wants. This speaker's meaning goes beyond the literal, semantic meaning of what is said.

To understand the semantic meaning, we should connect three main components: the meanings of the words in the
sentence, the context in which a sentence is used, and its morphological and syntactic structure. For example:
(1) My cat chased a mouse under the house.

Because (1) contains the pronoun my, part of its meaning depends on the fact that you uttered it. Since you uttered it, my refers to you. So to some extent the semantic meaning of a sentence depends on the context of use - the situation in which the sentence was uttered, by a particular speaker, to a particular addressee, at a particular time, and so forth. The semantic meaning of (1) also depends on the meanings of the individual words cat, chased, a, mouse, etc. Hence, semantic meaning depends on the lexicon of English. In addition, the morphological and syntactic structure of sentence (1) is vital to its meaning. If the words were rearranged to $A$ mouse under the house chased my cat, it would mean something different. Therefore, semantic meaning depends on the grammatical structure of the sentence.

Now let us describe the speaker's meaning of (1). Suppose you know that I've lost my cat and you can say (1) to me. In this case, it would be likely that your speaker's meaning is to inform me that my cat may be under the house, and to suggest that I go there to look for it. To understand where this meaning comes from, we need to bring together two components. First, the semantic meaning is certainly part of the picture; there is some kind of connection between your saying that your cat chased a mouse under the house and your suggesting that I look for my lost cat under the house. But in order for me to understand your speaker's meaning, I have to assume that we both know my cat is missing, that you know I want to find it, and that you want to see that my cat is safely back home. These are additional aspects of the context of use which help to determine your speaker's meaning (Portner, 2013, p. 139).

Meaning as a concept is initially more difficult to define than you might think. The verb mean itself serves as an example for the different meanings a single word can take on:
(2) Sorry, I didn't mean to offend you.
(3) Great - this means we'll have to spend another hour in the car.
(4) Dog means "hund" in German.

In the first example, the meaning of mean is roughly equivalent to "intend", in the second it means "it is the consequence of something" and in the third, it is equivalent of "dog translates into hund". The examples show that an extremely common word like mean can easily be used to describe very different things.

Not only can words be used with different meanings in different contexts, but the entire description of what something means depends greatly on the type of expression we are talking about. Compare the following examples:
(5) Beagle is a breed of dogs.
(6) Hello Peter, how are you?
(7) Linguistics is really cool!

Sentence (5) differs from (6) and (7) because it makes a statement about the world that can be verified or falsified. By contrast, if someone states that s/he likes or dislikes something (7) this is a subjective and unverifiable statement. Such an expression still contains important information, but it has affective meaning. Similarly, a question such as the one provided in (6) has social meaning, as do words we use to address people (Mister, Miss, Sir, Your Honor), ways of greeting and saying goodbye (Hi, Hello, Cheers, Regards) and many other parts of language which are essential in our everyday interactions with others. Semantics is also concerned with the conventional meaning of words and sentences. Conventional (or sometimes conceptual) meaning can be applied to sentences that we can often evaluate in terms of their truth value. Beagle
is a breed of dogs is such as example: it can be described as being either true or false (Puschmann, 2009, p. 28).

Referential meaning is one of the most basic ways of thinking about meaning. The referent of an expression is essentially 'the thing in the world that it points to'. Thus, Volodymyr Zelenskyi, Washington, Peter's dog are linguistic expressions that have definite referents, although they might not be entirely clear without knowing the context (more than one person can be called Peter, he could have more than one dog).

Multiple expressions can point to the same thing in the world, as the list below demonstrates:
(8) Angelina Jolie.
(9) A famous American actress.
(10) The former wife of Brad Pitt.
(11) Jon Voight's daughter.

All of these expressions apply to the same referent. Expressions and referents have a dynamic relationship - it can change as circumstances change. On the contrary, the expressions below never point to anything in the world, regardless of the context they are used in - they are not referential:
(12) Many people came.
(13) She is buying a new bag.
(14) Nobody called.
(15) Tigers are native to Africa.

All of these examples have in common the fact that no definite referent exists for them, yet they certainly mean something.

It is necessary to capture meaning beyond reference. Some expressions do not have a definite referent, while others cannot be described as referential because they point to something fictional. For example, Santa Claus, Cinderella have meaning, but they don't have a referent in the real world. The term sense is generally used to describe the conventional
semantic meaning of an expression that is separate (or "goes beyond") its reference. Sense is also used to describe the semantic content of expressions that describe activities, states, qualities, attributes, relations etc. Reference essentially only applies to nouns. Still an adjective like beautiful or a preposition like over has a conventional meaning and can be defined in terms of their relation to other terms (for example, we could describe beautiful as the opposite of ugly and over as the opposite to under). An expression is not limited to just one sense, but can easily take on multiple senses.

### 5.2. Fundamental Semantic Concepts and Compositionality

The most fundamental semantic concepts describe how words, phrases, and sentences relate to each other and to the world.

Denotation and connotation. These terms are useful to separate the literal, value-neutral and restricted sense of an expression from its figural, cultural or associative meanings. For example, the word pig simply denotes a specific animal, but the connotation of the term is often negative and it can be used in a figurative way, for example, to describe a person. The connotation of a term depends on the community's values and beliefs, whereas denotation does not (Puschmann, 2009, p. 30).

Synonymy. Two words, phrases, or sentences are synonyms if they have similar semantic meaning. If you replace one word with its synonym, the meaning of the sentence won't change. For example, in English, the words end, finish, stop, and terminate are all synonyms of one another. The standard test for synonymy is substitution: one form can be replaced by another in a sentence without changing its meaning $(16,17)$.
(16) The weather is dreadful.
(17) The weather is awful.

In (16) we use dreadful to describe the weather and in (17) we use awful. Though both sentences use different words, they have the same meaning: the weather is bad.

There are two types of synonyms: absolute synonyms (the words meaning and function are exactly the same, like dreadful and awful), and partial synonyms (the words meaning and function are partially the same). This can depend on the regional variety of the words, collocation, register etc. For example, the words mature, ripe, and adult have the common general meaning "fully developed", but each of them has also additional meanings. Ripe also means "ready for use", especially in relation to fruits.

Antonymy. Two words are antonyms if they are opposed in semantic meaning. Tall and short are antonyms. There are binary opposition pairs such as happy - unhappy, young - old, war - peace, etc. Their decisive quality is that the meaning of one term automatically excludes the other - someone who is tall is not short and someone who is unhappy is not happy.

There are three types of antonyms which are categorized by the relationship between the opposing words: gradable, complementary, and relational. Gradable antonyms are at the opposite ends of a spectrum with some gradation between two extremes. For example, high - low with medium between them, hot - cold (gradation: warm), young - old (gradation: teenager), full - empty (gradations: half full and half empty). Complementary antonyms explain an either-or relationship between the opposite word pairs. For example, dead - alive. There are only two options, either dead or alive, no half-dead or half-alive. Other examples are true - false, yes - no, etc. Therefore, each complementary antonym can exist independently of the other and is usually its absolute opposite. Relational antonyms have a dependent relationship between opposites. A word from the pair cannot exist without the other. For example, open - close. People must first open the
door before they can close it. Some other examples are: doctor - patient, front - back, husband - wife.

Homonymy. Homonyms are terms that are superficially identical (in speech and/or writing) but etymologically unrelated. For example, match as a thing that you light a cigarette with and match as a thing that a soccer team loses. Therefore, homonyms are characterized by the fact that they look the same superficially, but are actually unrelated. According to meaning, sound-form, and spelling homonyms are classified into homonyms proper, which are identical both in writing and sound-form, but different in meaning (for example, bank as a shore and bank as a financial institution), homophones, which are identical in sound but different in writing and meaning (for example, weather - whether, cite sight, course - coarse, sea - see), and homographs, which are identical in writing but different in sound and meaning (for example, lead [e] as metal and lead [i:] as conduct, guide).

Polisemy. Unlike homonymy, which describes separate words with different meanings that only happen to look similar, polysemy describes individual word with multiple and distinct related senses (polysemes). The term way, for example, can denote either "a road, track, or path for travelling along" or "a method, style, or manner of doing something". Both meanings are associated with the same word, making way polysemous. In differentiating if a given set of meanings represent polysemy or homonymy, it is often necessary to look at the word's etymology to see whether the two meanings are historically related. Dictionaries often list polysemes (words or phrases with different but related meanings) in the same entry (under the same headword) and enter homonyms as separate headwords (with a numbering convention such as bank ${ }^{1}$ and $b a n k^{2}$ ).

Hyponymy and Hypernymy. A word is a hyponym of another word if its semantic meaning is more specific than the other's. For example, dog is a hyponym of animal. Hyponomy
describes hierarchical relations between terms. If we can say that $X$ is a kind of $Y$, a hyponymous relationship exists between X and Y. A word is a hypernym of another if its semantic meaning is more general than the other's. Animal is a hypernym of dog. In other words, a hyponym is in a 'type-of relationship' with its hypernym. For example, falcon, crow, owl, and parrot are all hyponyms of a bird, their hypernym; which itself is a hyponym of animal, its hypernym.

Tautology is an expression or phrase that says the same thing twice, just in a different way. Therefore, tautology is undesirable, since it can make you sound wordier than you should be and make you appear thoughtless (18), (19).
(18) I love reading Pam's autobiography of her own life.
(19) In winter, there is much frozen ice on the road.
(20) Our nation must come together to unite (George W. Bush).
(21) To be or not to be, that is the question (Hamlet, William Shakespeare).
(22) I want to live while I am alive (Bon Jovi).

Sometimes, tautology helps to add clarity, emphasis or intentional ambiguity (20). Although, usually it is better to choose only one way to state your meaning and remove the extra verbosity. In literature or poetry, tautologies can be more than just needless repetition adding beauty or causing the reader to think more deeply about something. They may be used for dramatic or comedic effect (21), (22).

The Principle of Compositionality. In order to explain how an infinite number of pieces of language can be meaningful, and how we, as language users, can figure out the meanings of new words every day, semanticists apply the Principle of Compositionality which means that the semantic meaning of any unit of language is determined by the semantic meanings of its parts along with the way they are put together (23).
(23) Mary liked you.

According to the Principle of Compositionality, the meaning of (23) is determined by (a) the meanings of the individual morphemes that make it up (Mary, like, you, 'past') and (b) the morphological and syntactic structures of the sentence. The Principle of Compositionality doesn't just apply to sentences. It also implies that the meaning of the verb phrase 'liked you' is determined by the meanings of its parts and the grammatical structure of the verb phrase, and that the meaning of the word liked is determined by the meanings of the two morphemes that make it up (like and (e)d). The subfield of semantics known as compositional semantics (or formal semantics) is especially concerned with how the Principle of Compositionality applies, and consequently formal semanticists study the variety of grammatical patterns which occur in individual languages and across the languages of the world (Portner, 2013, p. 141).

Idioms. There are some phrases which are exceptions to compositionality. An idiom is a phrase whose meaning is not what you'd expect given the meanings of the words making it up. In other words, idioms are not compositional: keep an eye on $X$, hit the sack, get a handle on $X$, and kick the bucket do not get their meaning exclusively from the meanings of their parts and the way they are put together. Idioms often get their meanings from metaphorical interpretations, often lost in the mists of history, but the case of get a handle on $X$ is fairly clear; one might put a handle on a physical object to make it easier to carry, and to understand something is, metaphorically, to be able to carry it around in one's mind. If you already know what this idiom means, the choice of handle makes sense, but it can be very difficult to understand an idiom the first time you hear it. We typically need help to understand a new idiom, and once we do understand it, we remember its meaning as a complete pattern.

### 5.3. Thematic roles

A thematic role is a part of a word's meaning which indicates the role that some individual plays in the action which that word describes. Verbs and other heads of phrases may be associated with such thematic roles as agent, patient, theme, location, source, and goal. These roles are assigned to the subject and any arguments of the head. For example, the verb hit is associated with the roles agent (the doer of the action) and patient (the undergoer of the action).
(24) Peter hit the ball.

In (24), the thematic role of agent is assigned to Peter, the subject, indicating that Peter, was the 'doer' of the action of hitting, while the thematic role of 'patient' is assigned to the ball, indicating that the ball was acted on as part of the action of hitting. Other thematic roles are:

Theme: something which moves, literally or metaphorically, as part of an action (25).
(25) Sue fell down.

Source: the location/individual from which movement occurs (26).
(26) She drove from New-York.

Goal: the location/individual to which movement occurs (27).
(27) She drove to New-York

Location: the location at which something happens (28). (28) They met in Berlin.

Experiencer: someone who experiences something (29). (29) Peter felt happy.

Instrument: something an agent uses to make something happen (30).
(30) He opened the door with the key.

Cause: something that causes something to happen (31). (31) The war made him leave the country.

Stimulus: something that causes an experience (32). (32) The war made him feel unhappy.

The concept of event also can clarify the meanings of thematic roles. For example, Susan is the agent in Susan threw the ball. What is it to be the agent here? Susan is the agent because she is responsible for the event taking place. Without her, there would be no throwing. The ball is the patient of the sentence, and this is due to its role in the event as well. The ball is the patient because it is acted upon, and moves, as part of this event (Portner, 2013, p. 149).

Linguists who are interested in the meanings of words, and the relations among words' meanings, study lexical semantics. Thematic roles provide one very popular framework for investigating lexical semantics, in particular the lexical semantics of verbs, but not the only one. While analysis of the semantic content of an utterance is possible using differently sized chunks of language (phrases, sentences, entire texts), it is common to start on the word level and to examine words that intuitively seem to 'go together'. Drawing up a map of sense relations is possible only after developing terms to describe these relations. Are two terms neighbors? Opposites? Do they have a part-whole relationship? Lexical semantics has the goal of answering such questions (Puschmann, 2009, p. 33).

### 5.4. Modality, Tense, and Aspect

Modality refers to aspects of meaning which cause sentences to be about the nonactual - about alternative possibilities for how things could be. For example, (33) says that Helen is kind to people in actuality, but (34) does not. (34) is about the mere possibility that Helen is kind to people. It says that this possibility is better than the alternative, not being kind to people.
(33) Helen is kind to people.
(34) Helen should be kind to people.

Modality could be expressed by many grammatical categories: modal auxiliary verbs (can, must, should, would), nouns (necessity, possibility, probability, requirement), adjectives (necessary, possible, probable), as well as other means. Here are some other modal sentences:
(35) a. I must have left my bag in the bus.
b. If I had left my bag on my way home, it would be in the bus № 7.
c. It is a requirement of our country that every civil servant speaks Ukrainian.
d. Since the bag isn't in the car, it is probable that it is at home.

All these sentences is about alternative possibilities for how things can be. For example, (35b) asks us to consider the possibility that I left my bag on the way home. Semanticists often make the meanings of modal words explicit in terms of the notion of possible world. Possible worlds help to explain the semantics of modals because they provide a straightforward way of talking about alternative possibilities for how things could be. For every different way things could be, we assume a possible world like that. In terms of the concept of possible worlds, (35b) tells us to consider possible worlds in which I left my bag on the way home. In those worlds, according to the sentence, the car is in the bus №7. Similarly, (35c) says that only possible worlds in which every civil servant speaks Ukrainian are acceptable as far as the country's rules go. Many semanticists believe that possible worlds are needed to understand modality, and since every language can express modality, this suggests that the ability to imagine alternative ways that the world could be alternative possible worlds - is an essential part of the human capacity to use language.

Tense and aspect are semantic categories that have to do with time. Tense and aspect may lead to a sentence being about
the past or future, not only the present, and so they have intensional meaning. Tense refers to features of language which locate the situation being described in time. English has a past tense, illustrated in (36), and a present tense, illustrated in (37):
(36) Peter knew Ukrainian.
(37) Peter knows Ukrainian.

Classical grammar teachers say that English also has a future tense, indicated by will, but many semanticists doubt this. Will is grammatically very like a modal auxiliary verb, along with must, can, and the like; in addition, the so-called present tense can be used to describe the future:
(38) Peter starts his new job next week.

These semanticists say that will is actually a modal word, not a tense word. Whether or not this is so for English, there are quite a few languages (like Japanese, for example) which have only two tenses, past and nonpast. There are also many languages with no grammatical tense at all (for example, Chinese) (Portner, 2013, p. 154).

Aspect refers to features of language which describe how events unfold in time, like the English progressive (the $b e+$ VERBing verb form in (39a)) and perfect (the have + VERBen form in (39b)):
(39) a. Mary is painting a picture of a city.
b. John has fallen down.

The sentence (39a) describes the event of Mary's painting a picture of a city as ongoing at the present time and leaves open whether she will ever complete the picture, while (39b) describes the event of John falling down as past and completed. Across languages, aspectual meanings differ in both subtle and dramatic ways. For example, in English, it is impossible to use a past adverb like yesterday with sentences in the present tense plus perfect aspect, but in many languages (like Italian) these kinds of combinations are acceptable.

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## QUESTIONS

1. What disciplines are concerned with the study of meaning through language?
2. What are the three main components to understand the semantic meaning of a sentence?
3. How does semantic meaning depend on the context of use?
4. Provide an example of a sentence where the rearrangement of words changes its meaning.
5. What is the difference between semantic meaning and speaker's meaning?
6. Give an example of how the word "mean" can have different meanings in different contexts.
7. What is the difference between referential meaning and affective meaning?
8. Explain the concept of referential meaning and provide examples.
9. Give an example of expressions that do not have a definite referent but still have meaning.
10. What is the term used to describe the conventional semantic meaning of an expression separate from its reference?
11. Define denotation and connotation and explain their relationship.
12. Provide an example of synonyms and explain how they can be identified using substitution.
13. What are the three types of antonyms? Provide examples for each type.
14. Differentiate between homonyms and polysemes, providing examples of each.
15. Explain the principles of hyponymy and hypernymy with examples.

## PRACTICAL TASK

## Task: Analyzing Meaning in Context <br> Instructions:

- Read the following sentences carefully and analyze the different dimensions of meaning present in each sentence.
- Identify the types of meaning discussed in the lecture that are applicable to each sentence.
- Explain the components that contribute to the overall meaning in each sentence.
- Answer the questions based on your analysis. Sentences:

1. The cat climbed up the tall tree.
2. John bought a new car from the dealership.
3. The novel was captivating, keeping readers engaged till the end.
4. She whispered the secret to her best friend.
5. The dog barked loudly, alarming the neighbors. Questions:
6. What is the semantic meaning of the word cat in sentence 1 ?
7. Identify the referential meaning in sentence 2 and explain the context that contributes to it.
8. In sentence 3, what type of meaning is conveyed by the word captivating?
9. Explain the speaker's meaning in sentence 4 and discuss the additional aspects of context that help determine it.
10. Identify the affective meaning in sentence 5 and explain why it is subjective and unverifiable.
11. Is there any conventional meaning in sentence 1 ? If yes, provide an example.
12. Are there any antonyms present in sentence 3 ? If so, categorize them based on the types of antonyms mentioned in the lecture.
13. Is there any homonymy or polysemy in sentence 4 ? Explain.
14. Identify the hypernym and hyponym relationship in sentence 2.
15. Explain whether sentence 5 contains any tautology. If yes, suggest a more concise alternative.
16. Apply the Principle of Compositionality to analyze the meaning of the verb phrase climbed up in sentence 1.
17. Can you identify any synonym for the word loudly in sentence 5 ? If so, provide an example.

Feel free to use the lecture content and your understanding of semantics to answer the questions.

## UNIT 6

## MEANING AND CONTEXT: PRAGMATICS

Pragmatics encompasses the interplay between sentence meaning and the context in which it is used, as well as the interplay between sentence meaning, context, and the speaker's intended meaning. This unit will specifically delve into the aspects of pragmatics that pertain to how the context of use contributes to the semantic meaning. In other words, we will explore how language is employed by individuals within real-life situations. While semantics focuses on the meaning of words, phrases, and sentences, pragmatics analyzes the utterances made within specific communicative contexts. Pragmatics seeks to elucidate how factors such as time, place, and the social relationship between the speaker and the listener influence the various functions performed by language.

### 6.1. Social and Affective Meaning

Social meaning is the information in an utterance about the social identity of the speaker. In fact, it tells us more information about the speaker than about the referent. Consider the following sentences:
(1) Y'all come back now, hear?
(2) I ain't gonna do nothin'.
(3) Like, for sure, that's totally awesome!
(4) Let's take this offline.

While these sentences primarily convey referential meaning, they also possess social meaning as they provide insights into the speaker's regional background, social status, or level of education. The first sentence indicates that the speaker originates from the American South. The second
sentence suggests a lack of education, while the third represents the speech pattern of a teenage "Valley girl" from the 1980s. The fourth sentence exemplifies what is commonly referred to as "Geek Speak", referring to discussing something at a later time and indicating the speaker's interest in computer technology.

People often consciously and deliberately consider the social meaning of their speech when they change from one manner of speaking to another, according to their circumstances, in order to give an appropriate impression. This is called code switching. Many African Americans often use the Standard American variety of English when conducting business outside of the African American community, but switch to African American English to show solidarity when speaking within the African American community. Americans wishing to sound more elegant or educated may use a British-sounding dialect. On the other hand, when educated people in a position of authority have to deny a request, they may use the working-class phrase "Ain't gonna happen" to show that they are regular, down-toearth folks (Rowe, Levine, 2016).

The affective meaning of an utterance reflects the emotional stance of the speaker. Through the selection of synonyms, the speaker describes an event while expressing their emotional response to it. In the following set of sentences, although they convey a similar referential meaning, each sentence carries a distinct affective meaning.
(5) The movie we saw was 125 minutes long.
(6) We sat through a movie that was more than two hours long.
(7) The movie seemed to be over in a flash even though it was actually more than two hours long.

The fifth sentence is a statement that emphasizes the length of the movie in a neutral way. The sixth sentence suggests that the speaker was bored, tired, or in some way unhappy about
the length of the movie. The seventh sentence implies that the viewer enjoyed the movie. Consider the following sentences:
(8) Person A killed person B.
(9) The vicious murderer aimed the gun and shot the innocent victim.
(10) The hero triumphed over the villain.

In this set of sentences, a statement of fact is modified to give more information, but also to express the attitude of the speaker about the incident. Mass media, particularly the tabloids, use sentences like the second and third ones to affect the reader's attitude about the story.

### 6.2. Presupposition, Implicature, and Cooperative Principle

How do we go from a message to its intended meaning? We derive the "total meaning" of an utterance by considering all the available information at the moment we hear it. This encompasses our past experiences, knowledge about the person we're communicating with, the situation at hand, previous statements, cultural norms, and numerous other factors. In everyday communication, speakers often make assumptions about the listener's understanding of the world, known as presuppositions. Presuppositions are essential for giving an utterance meaning and they reflect the speaker's expectations regarding the listener's knowledge or circumstances. They shape the way an utterance is expressed and influence the choice of words, highlighting the role of context within the discourse.

When someone addresses you and says "Did you know that John and Mary split up?" the speaker has the presupposition that you know John and Mary and were aware of the fact that they were previously a couple. Our presuppositions lead us to formulate utterances whose meaning we assume can be inferred by listeners - in other words, that can be deduced by those we
communicate with. After all, we all want to be understood (Puschmann, 2009, p. 37).

Here are some examples of sentences followed by their presuppositions (in parentheses):
(11) Each of the boys in the room is nice. (There are some boys in the room.)
(12) That pig is fat. (That is a pig.)
(13) John is crying again. (John has cried before.)
(14) It is Bob who stole the chocolate. (Somebody stole the chocolate.)

Presuppositions are not just anything which a speaker happens to take for granted. Presupposition occurs when a speaker's choice of words shows that s/he is taking something for granted. For example, part of the meaning of the word again is that someone who uses it indicates that s/he is taking for granted that whatever is being talked about happened before. For this reason, we say that (13) presupposes that John has cried before. The speaker of (13) might take other things for granted, such as that you should comfort people who are crying, but you can't determine this just by looking at (13) itself. Therefore, we wouldn't say that (13) presupposes, in the linguist's sense, that one should comfort crying people.

Sometimes presuppositions are implied, as in the question "Have you stopped smoking?" The presupposition is that the person referred to by the word you smoked in the past and the speaker of the sentence knew it. Furthermore, the question presupposes that the speaker does not know if the person referred to by the word you has continued to smoke. On the other hand, the question "Have you tried smoking?" presupposes that the speaker does not believe that the person he is talking to is a regular smoker and he does not know if that person has ever tried it.

Presuppositions are often understood in terms of the notion of common ground. The common ground is the set of
propositions which the participants in a conversation mutually assume. They don't have to actually believe these propositions, but they at least act as if they do. In any normal conversation, many things are implicitly in the common ground - that the sun comes up every morning, that the speaker and the hearer are alive, that things fall down when you release them in the air, and so forth. Other propositions may get into the common ground because they are explicitly stated. For example, if I say to you "I'm hungry" (and you think I'm being sincere), henceforth the proposition that I'm hungry will be part of the common ground; that is, we will both assume it to be true (until something changes - for example, I eat something). The common ground is a major part of the context of use, and helps us make explicit the role of presupposition in the use of sentences (Portner, 2013, p. 159).

Semantics views meaning from the compositional perspective: the meaning of a sentence is built up from the meanings of its parts. The smallest parts get their meanings from the lexicon, and then these meanings get put together according to rules which pay attention to the grammatical structure of the sentence. However, not all aspects of meaning can be explained by this compositional 'bottom-up' approach, and a complementary 'topdown' view of meaning has focused on the intentions of language users. More precisely, when A says something to B , A intends for B to be affected in a certain way. If A says "It's raining," for example, A may intend for B to believe that it's raining (and perhaps to open an umbrella or come inside). This perspective helps us understand many aspects of speaker's meaning.

The idea that meaning is based in the intentions of speakers is most clearly revealed in H. P. Grice's theory of conversational implicature (Grice, 1957, 1975). Very often, when someone says something, s/he doesn't mean exactly what the words literally mean. That is, the (speaker's) meaning differs from the (semantic) meaning. For example, the semantic
meaning of "There's a bear sneaking up behind you!" doesn't involve the concept of warning; it just reports a fact. However, it's quite likely that a warning is part of what the speaker means. This 'extra meaning' which goes beyond what the words literally say is an implicature of the sentence.

In other words, implicature is the process through which speakers include meaning beyond the literal message in an utterance. For example:
(15) Bob: Are you coming to the party?

Jane: You know, I'm really busy.
Jane's response pragmatically implicates her intention (that she won't come to the party), which Bob can infer via his past experience from countless other conversations. Pragmatic implicatures are characterized by the fact that usually several alternative interpretations are possible. For example, the dialogue above could also go like this:
(16) Bob: Are you coming to the party?

Jane: You know, I'm really busy, but I'll come.
With the remark but I'll come Jane effectively cancels the implicature that she won't come to the party.

Grice explained how speaker's meaning can be determined in such cases by positing a Cooperative Principle that all speakers and hearers assume when speaking to each other. Cooperative Principle says: speaker's meaning can be calculated on the basis of semantic meaning and the assumption that speakers are behaving rationally and cooperatively. Grice broke this general principle into four conversational maxims to explain what rationality and cooperativeness are:

1) The maxim of Quality: make your contribution one that is true rather than false.
2) The maxim of Quantity: provide the information that is required for the purposes of the conversation, but no more.

## 3) The maxim of Relevance: make your contributions

 relevant.
## 4) The maxim of Manner: be clear and orderly in your talk.

These maxims are not rules to be followed in the sense that traffic laws are. Rather, they are assumptions which we use to try to make sense of what people say. That is, we assume that people follow the four maxims when they talk, and this helps us figure out what they mean. Consider (17), for example:
(17) There are three students in the class: Mary, Bob, and Jill.

A: Which students passed the exam?
B: Mary and Bob.
In this conversation, in addition to concluding that Mary and Bob passed the exam, A is likely to infer that Jill didn't. However, B never said that Jill didn't pass the exam, so why would A infer this? By assuming that B is following the four maxims, A can figure that B gave as much true information as was required and relevant (maxims of quality, quantity, and relevance). Since it would be relevant to say that Jill passed if she actually had passed, A can infer that B didn't include Jill in the list of people who passed because B doesn't think that Jill passed (so long as other assumptions hold, such as that B knows Jill is in the class). Moreover, B knows that A would figure this way, and so said "Mary and Bob" with the understanding that A would conclude that Jill didn't pass. In this way, the idea that Jill didn't pass becomes part of the speaker's meaning of B's utterance. That is, B uses the Cooperative Principle and maxims to implicate that Jill didn't pass. Another example of implicature was hinted at earlier in example (18):
(18) Elvis Presley made a peanut butter sandwich and sat down beside the pool.

This sentence seems to mean that Elvis made the peanut butter sandwich before going to the pool. This 'before' meaning
is not part of the semantic meaning of and (as given by truth conditions); it is an implicature. According to Grice's maxim of Manner, we should present information in an orderly way, and in most cases that includes mentioning events in the order in which they occurred. Therefore, a hearer can conclude that the speaker means to say that Elvis made the sandwich before sitting down by the pool.

Because the Gricean maxims are not rigid rules, like rules of law, but are rather flexible assumptions about how speakers behave, they can be broken, or flouted, to implicate further meanings. Flouting a maxim occurs when a speaker uses language in a way which appears, in an obvious way, to violate a maxim. For example, if you ask me whether I think your new shirt is attractive, and I say "It was probably inexpensive," my reply seems to violate the maxim of relevance - I didn't answer your question. However, because you assume that, despite appearances, I am conforming to relevance, you try to figure out how what I said could be relevant. Since my utterance avoided answering your question by mentioning a reason why you might have bought an unattractive shirt, you will infer that I don't like the shirt. This inference can become an implicature of the sentence, that is, part of my speaker's meaning.

Cultural assumptions can be crucial in determining speaker's meaning. For example, if two Chinese people are looking at the dessert display in a French restaurant, and one says to the other, "That tart is not too sweet," she almost certainly intends this comment as praise of the tart. She might intend to implicate that her dinner partner should order a tart, as opposed to the йclair or mousse. This speaker's meaning arises, in part, from the fact that it is common knowledge among Chinese people that most of them find western desserts too sweet. Among some other groups, the same comment ("That tart is not too sweet") could be interpreted as a criticism, rather than a compliment. Notice that the cultural specificity of the
speaker's meaning in this example is not a fact about the Chinese language. The implicature could arise whether or not the two people are speaking Chinese; they might happen to be speaking French or English. What's crucial is the common assumption that people like them don't enjoy sweet desserts.

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## QUESTIONS

1. What is the focus of pragmatics in relation to language use?
2. How does pragmatics differ from semantics in terms of the unit of analysis?
3. Define social meaning and provide examples from the lecture.
4. Explain the concept of code switching and provide an example.
5. What is affective meaning in relation to an utterance? Give an example to illustrate this concept.
6. How can the same referential meaning be conveyed differently with different affective meanings? Provide an example.
7. Define presupposition and its role in making an utterance meaningful.
8. Give examples of sentences and their associated presuppositions.
9. Explain the notion of common ground and its relationship to presuppositions.
10. What is conversational implicature and how does it relate to speaker's meaning?
11. Provide an example of conversational implicature from the lecture.
12. What is the Cooperative Principle and what are the four conversational maxims associated with it?
13. How can the violation of a maxim lead to implicatures? Provide an example.
14. How can cultural assumptions influence speaker's meaning? Explain with an example.
15. How does pragmatics complement the compositional view of meaning?

## PRACTICAL TASK

Analyzing Pragmatic Meaning in Conversations Instructions:

1. Read the provided conversations carefully and identify the pragmatic meanings conveyed by the speakers. Consider social meaning, affective meaning, presuppositions, implicatures, and the Cooperative Principle.
2. For each conversation, answer the questions related to the pragmatic meaning.
3. Write your responses in a clear and concise manner.
4. Once you have completed the task, review your answers and compare them with the suggested solutions.

## Conversations:

1. Alex: "I'm really sorry, but I won't be able to make it to the party tonight".

Lisa: "Oh, that's fine. Don't worry about it".
Questions:
a. What social meaning can be inferred from Lisa's response?
b. Does Lisa's response convey any affective meaning?
c. Does this conversation involve any implicatures? If yes, explain.
2. Sarah: "Can you pass me the salt, please?"

Tom: passes the salt without saying anything
Questions:
a. What pragmatic meaning can be inferred from Tom's silent action?
b. Does this conversation involve any presuppositions? If yes, explain.
3. John: "I heard you got a promotion! Congratulations!"

Mary: "Well, it's been a long time coming".
Questions:
a. What affective meaning can be inferred from Mary's response?
b. Does Mary's response involve any implicatures? If yes, explain.
4. Kate: "Do you want me to pick up some groceries on my way home?"

Mark: "If you don't mind, could you get some milk?"

## Questions:

a. Does Mark's response adhere to the Cooperative Principle? Explain.
b. What pragmatic meaning can be inferred from Mark's response?

## Suggested Solutions:

1. a. Lisa's response implies that she is not upset or disappointed by Alex's absence, suggesting a friendly and understanding social relationship.
b. Lisa's response does not convey any specific affective meaning.
c. No implicatures are present in this conversation.
2. a. Tom's silent action pragmatically conveys that he understood Sarah's request and complied with it.
b. This conversation does not involve any presuppositions as Tom's action does not assume any prior knowledge or circumstances.
3. a. Mary's response suggests that she has been waiting for the promotion for a long time and might feel relieved or satisfied about it finally happening.
b. Mary's response does not involve any implicatures.
4. a. Mark's response adheres to the Cooperative Principle as he provides the relevant information asked for by Kate without going into unnecessary details.
b. Mark's response pragmatically conveys that he would like Kate to get some milk if it's not inconvenient for her.

Note: The solutions provided above are just examples, and there may be alternative interpretations or additional insights that can be derived from the conversations.

## UNIT 7

## SOCIOLINGUISTICS

As soon as someone starts speaking, various details about their position within the social structure become apparent. Sociolinguistics investigates the relationship between language and social factors like ethnicity, social class, age, gender, and educational background. This unit will delve into significant topics within sociolinguistics and explore how language impacts broader aspects of culture, society, thought, and experiences. Each individual possesses a distinct way of speaking shaped by physical, social, and cultural influences, including their tone of voice, frequently used words, and characteristic idioms and phrases. This is why comedians can imitate famous individuals' speech patterns, and the audience can identify who they are mimicking. This unique and personal way of speaking is referred to as an idiolect. However, individuals also need to be able to communicate effectively with others. Therefore, the idiolects of individuals living and working together cannot differ to such an extent that they become unintelligible to one another.

### 7.1. The Multiplicity of Dialects

A language community refers to a collective of individuals who reside, collaborate, socialize, and engage in communication with each other. The distinct features and shared qualities of their speech form what is known as a dialect. Every individual belongs to a language community and utilizes a specific dialect. In various domains like business, education, and media, Standard American English (SAE) is considered the esteemed dialect. In the past, the
prestigious dialect in Great Britain was closely linked to the British Broadcasting Corporation (BBC) and was occasionally referred to as BBC English. However, nowadays, the BBC encourages its news readers (announcers) to embrace regional dialects.

English speakers generally acknowledge the existence of English dialects associated with specific countries, such as British and American English. Moreover, within a country, there are further variations in English dialects. In the United States, for instance, people recognize that English is spoken differently in the Southern states, Northeastern states, Midwestern states, Southwestern states, and so on. Similarly, distinctions can be observed between different regions in the United Kingdom, such as London, Manchester, Liverpool, Yorkshire, and others. This raises the question: how many dialects of English exist worldwide? The answer varies as linguists debate the number of dialects based on factors like intelligibility scores and subjective criteria. The University of Edinburgh in Scotland maintains a website that compares words (through sound recordings) from fifty English dialects worldwide (http://www.soundcomparisons.com/). It should be noted that this list is not claimed to be exhaustive, and other sources identify a greater number of English dialects beyond fifty.

There are distinct lexical differences between American and British dialects. For instance, in the United States, individuals may swipe extra sweetener packets at a restaurant, whereas in Britain, they nick them. Americans refer to cookies, while the British use the term biscuits. An early evening light meal is known as supper in the United States, but in Britain, it's called tea. Additionally, the word rubber in Britain means an eraser, while in the United States, it refers to a small rain boot that goes over a shoe. In Britain, a jumper is a sweater vest worn by men over a shirt, while in
the United States, it is a sleeveless dress worn by women over a blouse. Conversely, there are instances where the same word carries different meanings across regions. In the northern and western United States, a camper is a vehicle attachment placed on a pickup truck bed for recreational purposes. However, in the southern regions, it refers to a camping trailer towed behind a car or truck.

Phonological variation exists among different regions in the United States, contributing to regional accents. These variations in pronunciation can be attributed to the diverse regional English spoken by early colonists who hailed from different parts of England and had distinct ways of speaking the language.

Do you /pak yo ka/ or /park yor kar/? The deleted /r/ is characteristic of the Boston area.

Is your mother's sister your /ant/ or /ænt/? Do you pronounce eye as the monophthong /a/ or the diphthong /ay/? Southerners use the first pronunciation; northerners use the second.

Do you say /dis/ instead of /ठis/, /tiŋk/ instead of / $\theta \mathrm{mjk} /$ ? The substitution of $/ \mathrm{d} /$ for $/ \mathrm{\delta} /$ and $/ \mathrm{t} /$ for $/ \theta /$ is characteristic of speech in the Bronx, New York.

Do you say /təmeto/ or /təmato/? Do you say /nuz/ or /nyuz/? Americans use the first pronunciation; British use the second.

In the United States, southerners distinguish between you (singular) and y'all (plural). People in other parts of the country use you for both singular and plural. So a southerner greeting several people at once would say:
(1) It's nice to see y'all. How are y'all doing?

But people in other parts of the country would say:
(2) It's nice to see you. How are you doing?

In certain regions of the American South, northern England, and southern Wales, the inflectional bound
morpheme "-s" used for the third person singular in present tense is also applied to the first and second person singular and plural. Consequently, sentences like the following can be heard:
(3) I likes to swim.
(4) We likes to dance.
(5) You eats at noon.

Certain dialects in northern England have completely substituted the past tense singular form of the verb to be, was, with the past tense plural form, were. This linguistic feature is exemplified in the following instance:
(6) Her face were white like a sheet when she came in church, but afore she got to th' altar she were all one flush.

Americans use the singular verb for a noun that is singular even though it refers to a group of people, places, or objects. These are sometimes referred to as the collective nouns or group nouns. So in the United States, we can say:
(7) The faculty is meeting this afternoon.
(8) The band is playing on Saturday night.
(9) Congress is in session.
(10) Manchester United is the champion British soccer team.

But the British use the plural verb for this singular subject. So they say:
(11) The USA Division are now hosting their own website.
(12) The band are playing in the lounge.
(13) The American Congress are in session.
(14) Manchester United are the champion British football team.

### 7.2. Pidgin, Creole, and Situational Dialects

When individuals who speak diverse languages interact, they must establish a means of communication. In regions where a shared second language exists, it serves as a lingua franca, a common secondary language utilized for business and other forms of communication among individuals who have different native languages. In numerous parts of East Africa, Swahili has become the lingua franca since it is spoken by everyone to some extent. Among Eastern European Jews from various countries, Yiddish, a Germanic dialect, served as the lingua franca. Presently, English has become the universal lingua franca across various domains of life.

But where there was no common language to rely on, simplified languages developed for use in specific interactions, such as business, service, and trade. These languages are referred to as pidgin languages, possibly from the word for business in the Chinese-English pidgin of the Far East. Tok Pisin was a pidgin language based on English and the languages of New Guinea. Tây Bôi is based on French and Vietnamese. Chinook jargon is based on the Native American languages of the Northwest Coast. Among the wide variety of pidgin languages are those based on African/ English, African/French, and Portuguese/Malaysian. Therefore, pidgin languages are simplified languages developed for use in specific interactions, such as business, service, and trade. They developed when people who had no common language came into contact (Rowe, Levine, 2016, p. 201).

Irrespective of the languages on which pidgins are based, they often share certain characteristics. Firstly, a significant portion of their vocabulary is derived from the dominant or superstrate language. The dominant language contributes a considerable amount of the vocabulary in a
pidgin language. However, many of the syntactic features of pidgins are influenced by the subordinate or substrate language. For example, in pidgins that emerged due to European colonization of other regions, the European language supplies most of the lexicon, while the grammar largely originates from the indigenous language. One possible explanation for this is that pidgins develop rapidly out of necessity, causing speakers of the substrate language to primarily acquire the vocabulary of the superstrate language and incorporate it into the grammatical structure of their own language.

Pidgin languages have limited vocabularies, perhaps as few as 800 to 1500 words (Hickerson, 2000, p. 198). Hence, they resort to vivid explanations to convey ideas that lack specific terms. Pidgin languages employ imaginative expressions, exemplified by phrases like cow pig (sow), dog baby (puppy), and lamp belong Jesus (sun). The term grass encompasses various instances of abundant growth on a surface, such as grass belong head (hair) and grass belong face (whiskers). Pidgins heavily rely on word order as they do not employ affixes, and verb tense and aspect are indicated through auxiliary verbs. To simplify pronunciation, consonant clusters are often reduced, resulting in most syllables consisting of just a consonant and a vowel.

When a pidgin language is acquired as the primary language by a community and passed on to subsequent generations, it undergoes a transformation and is referred to as a creole language. The African individuals who were forcibly enslaved and transported to the Americas were intentionally isolated from fellow speakers of their native African languages to thwart any possibility of organizing a rebellion. As a means of communication amongst themselves and with their enslaved descendants, they developed a pidgin language that incorporated elements from the language
spoken by overseers. Over time, this community formed their own distinct language community, and the pidgin language became the primary means of communication. This process, known as nativization, occurs when a new language, previously unfamiliar to any native speakers, becomes the native language for a generation of individuals. Throughout this process, vocabulary is enriched to encompass a broader range of human experiences and expressions.

People employ various speech styles or registers depending on the specific context in which they find themselves. It is common for individuals to switch between different registers that are deemed suitable for the situation, level of formality, and the intended audience. When interacting with our family and friends, our manner of speech differs from when we engage with a store clerk. Likewise, our speech patterns vary when conversing with a young child compared to a government official. Furthermore, when communicating with individuals who possess the same technical expertise as ourselves, our speech takes on a distinct character compared to interactions with those outside our field of knowledge. The use of appropriate situational dialects or registers serves to indicate our willingness to connect with others, display courtesy towards their emotions, and establish professional credibility or camaraderie.

The use of slang is another way that speakers indicate the informal register and their social identity. Slang words are newly formed words or those that have never been completely accepted in formal speech. Many slang words are taboo words. Some of these are for bodily functions and body parts. Small children are taught to say pee-pee or wee-wee instead of the more formal urinate. Very often families make up their own slang words for penis, vagina, breasts, and buttocks. Adults may use variations of these slang words or other, more adult slang, in informal settings. However, they would use the formal words
when discussing the bodily function or the body part with a doctor. Other taboo words are expletives such as son of a bitch, motherfucker, and god damn. Their main function is to express affective meaning, that is, the feelings of the speaker. Racial epithets are also slang taboo words, such as wop for Italians who immigrated without papers, wetback for Mexicans who illegally crossed the border by swimming across the Rio Grande, and slant eyes for Asians, who have an epicanthic fold in the eyelid. Expletives and racial epithets are not used in the formal register (Rowe, Levine, 2016, p. 208).

Jargon encompasses the specialized terminology and expressions used within a particular profession, sport, hobby, or field of expertise. Individuals employ jargon, which consists of technical terms specific to their profession, as a convenient and concise means of communication when interacting with others in the same domain. For instance, a computer programmer finds it more efficient to use the term ROM rather than providing a detailed explanation of readonly memory. Within a field, the appropriate usage of jargon is regarded as a sign of knowledge and expertise, earning the respect of fellow professionals. For a doctor, employing the term contact dermatitis to describe a rash reflects an understanding that rashes can have various causes, such as viruses, allergies, or nerves, but in this instance, it is attributed to contact with an irritating substance. However, at times, jargon may also be utilized outside of the field to command respect by elevating the importance of a simple concept. This often serves as a comedic element in sketches, where an automobile mechanic employs jargon to explain the inner workings of a car to a customer. The mechanic may use terms like rotary attenuator to describe a dashboard knob or even fabricate lengthy words solely intended to impress.

Doublespeak refers to the deliberate use of language that aims to confuse and deceive rather than facilitate clear
communication. One form of doublespeak is the utilization of jargon outside of its intended language community, knowing that the recipient will not comprehend it. For example, doctors may refer to aspirin as an NSAID (/Ensed/) (nonsteroidal anti-inflammatory drug), chemists may call glass fused silicate, and linguists may use the term bound morphemes to refer to affixes. When these terms are employed among individuals expected to be familiar with the jargon, it does not qualify as doublespeak. However, when used in contexts such as advertising, insurance policies, corporate reports, or any material intended for the general public, it becomes doublespeak.

Euphemisms and inflated language are additional forms of doublespeak. Euphemisms are words or phrases employed to make something appear less offensive or unpleasant than it actually is. Their use to spare someone's feelings, such as using passed away instead of died, is not considered doublespeak. However, when euphemisms are used for political purposes, like the U.S. State Department replacing killing with unlawful or arbitrary deprivation of life in its human rights reports, it falls into the realm of doublespeak.

Inflated language involves the use of terminology to elevate the significance of ordinary objects or concepts. For instance, inflated language transforms used cars into preowned or experienced vehicles. A fan with the ability to blow air in both directions is referred to as manually reversible. The job title of a school employee has evolved from janitor to custodian and is currently known as a plant manager. Similarly, teachers who once taught cooking and sewing are now identified as instructors of home economics or family and consumer studies.

### 7.3. Gender and Language

People exhibit variations in language usage based on their gender. While sex pertains to the biological classification of being male or female, gender refers to the acquired set of masculine or feminine behaviors influenced by cultural norms. As individuals learn societal expectations of behavior during their development as boys and girls, and later as men and women, they also acquire the appropriate language usage patterns. Certain languages possess specific guidelines for each gender concerning pronoun usage, verb conjugations, word pronunciation, and levels of formality.

In English, the vocabulary and grammar are shared by both men and women. They utilize the same formal and informal speech styles, as well as polite and indirect communication. However, there are variations in the use of formal and informal speech between males and females, as well as differences in frequency. They exhibit discrepancies in employing certain forms of politeness or indirect speech. Additionally, they have distinct norms regarding conversation turn-taking and interruptions, as well as differing interpretations of word meanings. Informal speech, characterized by features like substituting $/ \mathrm{n} /$ for $/ \mathrm{y} /$ at the end of words and the frequent use of contractions, slang, or taboo words, tends to be more prevalent among males than females.

While individuals employ indirect language in different situations, it is commonly believed that women use indirect language more frequently than men. Indirect language involves making statements rather than giving commands and providing hints and suggestions instead of issuing direct orders. For instance, a female manager may inquire of her secretary:
(15) Would you please get the central office on the phone for me?

A polite man would say:
(16) Call the central office for me, please.

Women making indirect commands use polite questions: Would you mind . . . ? Can you do . . . ? Would you like to . . . ?

Tag questions are the short questions such as isn'tit? and don't you? that are added to the end of declarative statements. Once again, although all people use tag questions occasionally, women, more often than men, are thought to use affective tag questions that have the effect of making a direct statement or command seem more polite or that engage the listener in the conversation (Rowe, Levine, 2016, p. 214).
(17) I think we should contact the central office, don't you?
(18) I think it's great, isn't it?
(19) You're ready to turn off the television and eat, aren't you?

Deborah Tannen (1990) is a linguist who has written several best-selling books on the differences in the way men and women use English. Her research shows that in conversations between men and women, men interrupt other speakers more often than women do. When women interrupt, it is more often to affirm what the speaker has said or to support it with an example. But when men interrupt, it is often to change the subject or redirect the conversation. This power to control the conversation is particularly notable when it happens in the workplace and involves men and women of differing status. In conversations in the workplace, even when the woman is the supervisor and the man a subordinate, the man was observed to successfully interrupt 50 percent more often than his female supervisor (Tannen, 1990, p. 232-233).

Tannen (ibid.) also explains that there is a difference in the way men and women understand the meaning of the
expression I'm sorry. A man who says it is accepting blame for what happened. By apologizing, he is also accepting the inferior position of one who has done something wrong or made a mistake. In the male subculture, this is something to be avoided as much as possible; therefore, it is done sparingly. Women, on the other hand, appear to be apologizing incessantly and without much serious thought behind it. But a woman who says I'm sorry often means I regret that this happened, but I neither accept nor assign blame for it. In fact, for women the apology is not an acceptance of blame; it is the beginning of a soothing ritual in which each person is expected to contribute a part. When a woman says I'm sorry, she expects the response to be Oh, no. It was my fault. I'm sorry. Therefore, a woman feels blamed and misunderstood when she says I'm sorry and the man responds Apology accepted (ibid.).

### 7.4. Nationalism and Language

While the term nation can carry various connotations in everyday language, within the realm of social science, it refers to a collective of individuals who share a common history, culture, and language. Many countries encompass diverse nationalities, with the term nationality often used interchangeably with ethnic group. For instance, in Great Britain, there are four primary nationalities or ethnic groups that have a longstanding presence: the English, Irish, Scots, and Welsh. In Nigeria, there are approximately three hundred ethnic groups. Almost all modern nations are comprised of multiple nationalities, and the language one speaks serves as a significant symbol of group identity.

Armed conflicts, such as civil wars, have occurred partly due to disputes over the designation of an official language for a nation. India serves as one example among many. Following India's independence from British rule in

1947, tensions escalated among ethnic groups as they contended for their preferred official language. The language chosen would grant educational, economic, and social advantages to the ethnic group associated with it. Eventually, English was retained as the lingua franca in India for business and political purposes. However, in order to quell nationalist violence, fifteen indigenous languages of India were recognized as official languages. Furthermore, presently, most of India's primary language-based ethnic groups have their own respective states.

The right of peoples to speak the language of their choice (heritage) has been a standard goal - a positive cultural value of anthropologists and people interested in indigenous rights. In fact, language has become a stand-in for culture. So, language rights are equated with cultural rights. However, what should be more important is the right of individuals to speak the language that they choose rather than the academic objective of preserving the ancestor language (Whiteley, 2003).

The use of the metaphors of living things such as "death" and "extinction" as applied to languages may be adding an emotional bias to the issue as they make language revitalization a "matter of life and death." Some researchers have used languages as a kind of "place-making" strategy in substantiating land rights for indigenous people, or they have idealized the languages as preserving the great diversity of human thought. But it may be more productive for linguists to be objective in recording and analyzing the languages of marginal communities in order to clearly document them without regard to the politics of the situation (Errington, 2003).

Therefore, language holds a great significance in shaping the national identity of various ethnic groups. When a language is lost, it represents the erosion of a vital component of a culture. In certain cases, conflicts have
arisen, at least in part, due to disputes over the choice of a country's official language.

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## QUESTIONS

1. What is a language community?
2. How many dialects of English are there in the world?
3. Define lingua franca.
4. Explain the concept of pidgin languages and provide examples.
5. What is creole language? Give an example to illustrate this concept.
6. Explain the concept of nativization.
7. Define slang, taboo words, and expletives.
8. What is jargon, and how is it used within a specific profession or field of expertise?
9. Explain the concept of doublespeak and provide examples of its use in different contexts.
10. What are euphemisms, and how can they be considered doublespeak? Provide examples.
11. Define inflated language and give examples of how it is used to make everyday things seem more important.
12. How does language usage differ based on gender? Provide examples of differences in speech patterns between males and females.
13. According to Deborah Tannen's research, how do men and women differ in terms of interrupting others in conversations?
14. Why is language significant for national identity, and how has it been a factor in civil wars or conflicts? Provide examples.

## PRACTICAL TASK

Sociolinguistic Exploration
In this task, you are required to conduct a sociolinguistic exploration to investigate the relationship between language and social factors. Your objective is to analyze how language varies based on factors such as ethnicity, social class, age, gender, and educational level, and how it influences culture, society, thought, and experiences.

1. Choose a sociolinguistic variable: select one of the following variables to focus on in your exploration:

- Ethnicity: Analyze how language varies among different ethnic groups.
- Social class: Investigate the linguistic differences related to social classes.
- Age: Examine how language changes across different age groups.
- Gender: Explore the linguistic variations between males and females.
- Educational level: Investigate how language usage differs based on educational backgrounds.

2. Conduct research: Gather information and data related to your chosen sociolinguistic variable. This may involve studying academic literature, conducting surveys, interviewing individuals, or collecting language samples.
3. Analyze language patterns: Analyze the collected data to identify and understand the language patterns associated with your chosen sociolinguistic variable. Look for patterns in vocabulary, pronunciation, grammar, sentence structure, and speech styles.
4. Explore cultural and societal influences: Investigate how language influences various aspects of culture and society related to your chosen sociolinguistic variable. Consider how language usage reflects and shapes cultural norms, social interactions, and identity formation.
5. Reflect on language and thought: Reflect on how language influences thought processes and cognitive experiences. Analyze how different linguistic features may shape perception, conceptualization, and communication of ideas within your chosen sociolinguistic variable.
6. Present findings: Summarize your findings and observations in a comprehensive report or presentation. Include examples, data, and relevant references to support your analysis. Highlight the significance of your findings in understanding the complex relationship between language and social factors.

Note: This task requires critical thinking, research skills, data analysis, and the ability to communicate findings effectively. Ensure to maintain ethical standards in data collection and respect the privacy and confidentiality of participants if conducting interviews or surveys.

## UNIT 8

## LANGUAGE ACQUISITION

Acquiring fluency in a foreign language is an arduous intellectual achievement for adults, while children seem to effortlessly grasp language without any formal instruction or significant input. This innate ability unfolds at a specific age and follows a predictable sequence, reflecting the outcome of two million years of human evolution. Language acquisition, a distinctive adaptation of Homo sapiens to social living, is intricately linked to the development of the human brain.

### 8.1. The Brain and Language Acquisition

The human brain, derived from ancestral creatures with simpler brains, is a highly intricate organ. At its core lies the R-complex, also known as the reptilian brain, which shares similarities with the brains of reptiles and birds. This ancient part of the brain houses our fundamental drives and instincts. Surrounding it is the limbic system, or the mammalian brain, which influences vocalizations in mammals. In humans, it is responsible for screaming and crying. The neocortex, the largest portion of the human brain, is where our language skills reside. Within this region, we find Broca's area and Wernicke's area. Broca's area primarily handles speech production, and damage to it results in a condition called Broca's aphasia, characterized by difficulties in speech production and a partial loss of grammatical comprehension. Wernicke's area, on the other hand, is involved in speech comprehension and word selection. Damage to Wernicke's area leads to a condition known as Wernicke's aphasia, where speech includes errors
in word choice and nonsensical words. The speech of individuals with aphasia lacks coherent meaning or syntax.

Within the neocortex, several structures play crucial roles in brain function. One such structure is the corpus callosum, which enables communication between the brain's hemispheres. Additionally, there is the aruate faciculus, responsible for connecting Broca's and Wernicke's areas. The angular gyrus, another component, is associated with intricate linguistic functions like reading and writing. Lastly, Geschwind's Territory, located in the neocortex, is linked to the ability to use tools effectively.

Prominent linguists like Noam Chomsky (see Unit 1) and Eric Lenneberg (1921-1975) hold a view that humans possess an inherent capacity for language, suggesting that children are born with brains preprogrammed for language acquisition. This concept is commonly referred to as the innateness hypothesis. Lenneberg draws parallels between language acquisition and other instinctive biological behaviors observed in the natural world. These behaviors share certain distinctive features:

- The behavior appears before it is necessary for survival.
- It does not appear in response to the environment.
- It is not the result of a conscious decision.
- It is not the result of formal education or training. In fact, formal instruction has very little effect.
- The behavior appears in a predictable sequence, at a certain stage of development.
- The behavior appears at a critical period; after that period it will be difficult or impossible to learn the behavior (Lenneberg, 1967).

Eating, sucking, grasping objects, talking, and walking - all these actions performed by humans display the traits of biologically driven behaviors. They naturally emerge
in human children without the need for explicit teaching. However, activities such as sewing, cooking, bike riding, carpentry, reading, and writing necessitate training and instruction as they are not inherently ingrained in our biology.

The innateness hypothesis suggests that children possess an inherent ability to comprehend grammar, with a predisposition towards a universal grammar (UG) that encompasses phonemic distinctions, word order, and phrase recognition. This innate capacity to learn language is often referred to as a language acquisition device (LAD), reflecting the hardwiring in children's brains. However, recent critiques of this term arise from the understanding that language acquisition involves multiple brain regions rather than a singular center. Lenneberg also proposed the critical period hypothesis, which asserts that beyond puberty (around twelve to fifteen years), the language acquisition device ceases to function, leading to a significant decline in the ability to acquire native-level fluency.

More recent evidence for the critical period in language acquisition is found in immigrant families. The children who immigrated before the age of seven speak the language of their new country with native fluency. Their performance on grammar and semantics tests was equivalent to that of nativeborn children of the same age. Those who immigrated between the ages of eight and fifteen performed more poorly than their native-speaking counterparts on the test of grammar, but performed equally well as their counterparts on semantic tests. Those children who immigrated after the age of sixteen did no better than adults on tests of English grammar and semantics (Johnson, Newport, 1989). Older children and adults, through dedicated study and diligent effort, can acquire the language, yet attaining native-like fluency is uncommon, and they typically retain an accent when speaking.

How do children use their inherent inclination to acquire language? On the one hand, children acquire language by mimicking the people in their surroundings. It is widely recognized that children learn the language(s) they are exposed to through listening or observing sign language. This perspective is referred to as the imitation hypothesis of language acquisition. However, it is important to note that imitation alone cannot explain all facets of children's language development. Children say goed instead of went or mouses instead of mice. They say sentences such as:
(1) Mama ball instead of Mama, throw the ball to me.
(2) I have a sud on my hand instead of I have some suds on my hand.

These are utterances that they have certainly never heard from an adult and cannot be imitating. Imitation also does not account for children's ability to learn all of the structures of the language when there is poverty of the stimulus.

For example, the child hears:
(3) He is going.
(4) He's going.
and concludes that he is can be pronounced he's. But the child also hears:
(5) Is he going? Yes, he is.

But in examining many transcripts of developing children's speech (Rowe, Levine, 2016), there is no instance in which the child generalizes the contraction rule, making the mistake of saying:
(6) Yes, he's.

Since there is no stimulus in the environment to give children a clue to these structures (there are no examples of what not to do), Chomsky concludes that this is evidence of innate knowledge of the grammar or "a priori structure dependant constraints" on grammar (Berwick, Pietroski, Yankama, Chomsky, 2011). Moreover, imitation alone cannot
adequately explain the remarkable linguistic productivity exhibited by children during the first five years of their lives. Like all humans, they generate and comprehend sentences that they have never been exposed to before. The reinforcement hypothesis proposes that children acquire language through positive reinforcement when they produce grammatically correct utterances and through correction when they make errors. However, studies on children's language development and anecdotal evidence suggest that parents and caregivers often respond to the content of a child's statement rather than focusing solely on its grammatical accuracy. So when a three-year-old child asks:
(7) Doggie go outside?

The parents' response will be either yes or no, depending on whether or not the dog is outside. They will not correct the grammar of the statement. When parents do try to correct the child's grammar, they often meet with frustration, as in this humorous exchange between a parent and a five-year-old:
(8) Child: Nobody won't play with me!
(9) Parent: No, "Nobody will play with me."
(10) Child: Nobody won't play with you, too.

The interactionist hypothesis, also known as constructivism, suggests that children utilize their inherent language skills to acquire the language rules from their surroundings and construct the phonology, semantics, and syntax of their native language. Essentially, their innate language ability involves identifying language patterns, formulating rules based on those patterns, and subsequently applying them to new speech. Throughout the examples provided in this module, the children who produced them have shown their understanding of English sentence structure, such as subject-verb (S-V) or subject-verb-object (S-V-O) order. They have also demonstrated knowledge of verb tense, recognizing that suffixes like /d, /t/, or /əd/
indicate past tense, and suffixes like /s/, /z/, or /əz/ indicate noun plurality. Furthermore, they have grasped the concept of negation, using not with the auxiliary verb do to negate a verb, and have even learned to use the contraction don't. While these rules are accurate, the incorrect utterances arise from incorrect or incomplete application of these rules. Through interaction, observation, and trial and error, children dedicate their initial five to ten years to acquiring the language(s) spoken around them.

In the past few years, advocates of cognitivefunctional linguistics have raised concerns about the language acquisition device and the notion that language development and usage differ significantly from other intellectual human activities. They posit that language is intimately connected to a specific context and deeply rooted in the human environment and growth. Instead of perceiving language acquisition as a distinct phase in a child's development, they strive to integrate all of the child's experiences into a unified whole. They view language learning as an outcome of overall cognitive and intellectual progress.

### 8.2. Theories Concerning Bilingualism

A significant portion of the global population acquires multiple languages. Simultaneous bilingualism refers to the scenario in which a child learns two or more languages from birth. This situation arises when multiple languages are spoken within the household. In Quebec, Canada, it is not uncommon for children to grow up in a home where one parent is a Francophone (French speaker) and the other is an Anglophone (English speaker). In sub-Saharan Africa, children are raised in households where two or three indigenous languages are spoken. In the United States, a child
may be brought up in an English-speaking household with a foreign-speaking nanny, or within an immigrant family, the grandparents might use the ancestral language with the child while the parents and older siblings primarily communicate in English.

Sequential bilingualism refers to the situation in which a child learns a second language after already beginning the acquisition of their first language. In the United States, older children in immigrant families may exclusively speak their ancestral language until they start attending school, where they then acquire English. In India, where English serves as a common language unifying a diverse nation, children may only begin acquiring it as part of their formal education. In certain regions of southern China, Cantonese is acquired at home, while Mandarin, the official language, is learned in school. Regardless of whether children acquire multiple languages simultaneously or sequentially, achieving native fluency is more likely if it occurs during the critical period before reaching puberty.

Attitudes towards bilingualism reflect the perspectives of the broader cultural community. Within the Armenian culture, there exists a belief that individuals who possess proficiency in multiple languages are considered to be more educated and well-rounded. Armenians take pride in their ability to speak four, five, or even six languages. They instill in their children the importance of being fluent in languages such as Syrian, Armenian, Arabic, and Greek, among others. Switzerland, being a small country surrounded by more influential European neighbors, exhibits a sense of national pride in being trilingual. Many Swiss individuals fluently speak German, French, and Italian. In Luxembourg, another compact European nation, it is common to hear people seamlessly switching between English, German, French, Flemish, and Dutch.

There are two primary hypotheses regarding how children acquire and process multiple languages, each with its supporters and critics. The first hypothesis is known as the unitary system hypothesis, while the second is called the separate systems hypothesis.

Advocates of the unitary system hypothesis propose that infants exposed to multiple languages initially construct a single lexicon and a unified set of semantic rules that encompass both languages. Subsequently, they divide the words into separate lexicons for each language while continuing to use a single set of rules. It is around the age of three when children develop distinct sets of semantic rules. An example often cited in support of the unitary system hypothesis is that of a two-year-old child who speaks both French and English, asking an English-speaking babysitter for beurre (butter) on bread. The use of language mixing in this context is seen as evidence for the unitary system hypothesis.

Researchers who endorse the separate systems hypothesis assert that infants distinguish between languages right from the start, constructing distinct phonological systems, lexicons, and semantic systems for each language. According to these researchers, the aforementioned instance of language mixing by the two-year-old child who speaks both French and English would be interpreted as a form of code switching. This is comparable to Spanish speakers incorporating English words like $O K$ and bye into their conversations. Alternatively, these examples could be seen as the child's attempt to utilize the most appropriate word given their limited vocabulary. When an English word is not available, they resort to using the French equivalent.

Several studies of bilingual children have shown that their vocabulary in each language is somewhat smaller than the vocabulary of monolingual children of the same age. However,
when their vocabulary in both languages is considered, it is larger than the vocabulary of monolingual children. One study of Spanish/English preschool children in south Florida showed that there was as little as a 30 percent overlap in the vocabularies. In other words, only 30 percent of the child's words were translation equivalents, such as dog/perro, sister/hermana, milk/leche. Fully 70 percent of the words in these children's vocabularies had no equivalent words in their other language. This study has been cited as evidence for the unitary system hypothesis because most of the words have no duplicate in the other language. However, proponents of the separate systems hypothesis maintain that this is only evidence that the child is learning the different languages in different settings. The parents speak Spanish at mealtimes; therefore, the child has no English words for rice, beans, bread, and butter. English is spoken at the preschool; therefore the child has no Spanish words for puzzle, finger paints, and animals such as octopus, antelope, and kangaroo (Hoff, 2014, p. 372). The vocabularies coincide in areas where the child's experiences intersect, resulting in the child having a word in each language for those shared aspects.

### 8.3. Second-Language Learning

Learning a language after the age of puberty, either as a result of immigration to a new country, as an academic requirement for a diploma, or as an educational goal for selfimprovement, is a somewhat different process than firstlanguage acquisition. Whether it takes place in a classroom or in contact with speakers of the second language, it is more of an intellectual process than first-language acquisition. It may involve pronunciation practice, grammar exercises, and vocabulary memorization. Or it may be less formal and simply involve listening carefully to native speakers, asking about the
meaning of words, or analyzing and imitating utterances. In any case, lexical and grammatical knowledge of the new language is stored in a different part of the brain than the first language. Second (and subsequent) languages seem to exist on a different plane than the primary language; they are stored in a separate part of the brain than the first language. In a foreign environment, people trying to make themselves understood may reach into their second-language plane and come up with the wrong language. This is especially common when the person is under stress, is not thinking clearly, or is more fluent in one foreign language than another (Rowe, Levine, 2016, p. 255).
8.3.1. Phonology. During the initial stages of acquiring their first language, infants acquire the phonemic sounds specific to that language. However, after reaching puberty, the phonological system of their first language often poses challenges when learning a second language. Consider the difficulties faced by non-native speakers in pronouncing English accurately or the challenges English speakers encounter when attempting to pronounce African clicks or the Germanic velar fricative. Sounds that are absent from the phonetic repertoire of the first language need to be learned through demonstrations and pronunciation exercises in the second language classroom. Additionally, second-language learners must be instructed on which sounds are phonemic and which ones are not. Through focused classroom exercises, English-speaking students studying Ukrainian, for example, learn to differentiate between /t/ and /tj/. Similarly, Japanese students learning English must learn to discern the distinction between $/ \mathrm{l} /$ and $/ \mathrm{r} /$.
8.3.2. Morphology and Syntax. When learning English as a foreign language, individuals whose first language differs from English may make errors due to
differences in the rules for forming verbs and plurals. For example, in Spanish, the subject can often be omitted in sentences because the verb conjugation implies the subject. As a result, Spanish-speaking learners of English may produce sentences with similar structures, leading to constructions such as:
(11) Is not here.
(12) Are in school.
(13) Use the car.

Instead of the English sentences:
(14) He is not here.
(15) They are in school.
(16) I use the car.

Conversely, English speakers who are learning Spanish will consistently include the pronoun (which is mandatory in English), resulting in sentences like:
(17) Él tiene un lápiz. (He has a pencil).
(18) Yo hablo el español. (I speak Spanish).
(19) Ellos estudian en la escuela. (They study at school).

While these sentences are technically accurate, the inclusion of subjects (él, yo, ellos) sounds unnatural and does not align with idiomatic Spanish usage. Ukrainian speakers may encounter challenges with English articles since their native language lacks them. As a result, they might either omit articles entirely or use them incorrectly. For instance, a Japanese student, who was married to an American, introduced himself in an English as a Second Language class by stating:
(20) I am the musician; my wife is the teacher.

While these clauses are not grammatically incorrect in English, they were employed inaccurately in his statement. To rectify this, they would need to be preceded by an introductory statement such as:
(21) In my family there is a musician and a teacher.

Without this introductory statement, he should have said: (22) I am a musician; my wife is a teacher.

Individuals who speak languages where the adjective comes after the noun are likely to follow the same pattern in English, resulting in phrases like class small, house red, or chair rocking, instead of the correct order in English, which is small class, red house, or rocking chair.

Second-language learners tend to transfer the word order structure from their first language (S-V-O, S-O-V, V-$\mathrm{S}-\mathrm{O}$ ) to the second language they are learning. This can facilitate language acquisition when the word order is similar between the two languages. For instance, the Roman languages such as Italian, Spanish, and Portuguese share the same word order as English, making it easier for learners to grasp. However, German poses a greater challenge for English speakers since it has a mixture of S-V-O and S-O-V sentence structures.

Second-language learners whose first languages are analytical or isolating languages, lacking inflections, often overlook inflectional affixes. Vietnamese or Cambodian speakers, for example, may omit or disregard plural markers and past tense markers in English. The foreign accent observed in second-language speakers results from the fossilization of characteristics from their first language, including phonological system, morphology, and syntax, which leads to pronunciation and grammatical errors in the second language. As these "errors" stem from the rules of the first language, second-language learners with similar firstlanguage backgrounds tend to exhibit similar accents and encounter comparable difficulties in the new language.

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## QUESTIONS

1. What is the difference between language acquisition in children and adults?
2. Describe the different parts of the human brain involved in language acquisition.
3. What are Broca's area and Wernicke's area, and what functions are associated with them?
4. Explain the innateness hypothesis of language acquisition and the critical period hypothesis.
5. What evidence supports the critical period hypothesis in language acquisition?
6. How do children acquire language through imitation, and what are its limitations?
7. Discuss the interactionist hypothesis of language acquisition and how children use their innate language abilities.
8. What is the role of positive reinforcement and correction in language acquisition, according to the reinforcement hypothesis?
9. How do proponents of cognitive-functional linguistics view language acquisition?
10. Define simultaneous bilingualism and sequential bilingualism, and provide examples of each.
11. What are the attitudes toward bilingualism in different cultures?
12. Explain the unitary system hypothesis and the separate systems hypothesis in bilingual language acquisition.
13. What does research say about the vocabulary of bilingual children compared to monolingual children?
14. How does second-language learning differ from first-language acquisition?
15. What challenges can arise in second-language learning due to the influence of the first language's phonological system?

## PRACTICAL TASK

## Language Acquisition Case Study

Instructions:

1. Choose a specific aspect of language acquisition discussed in the lecture, such as the critical period hypothesis, the innateness hypothesis, or bilingualism.
2. Conduct research to gather more information on your chosen aspect of language acquisition.
3. Write a case study that explores and analyzes real-life examples or scenarios related to your chosen aspect of language acquisition. Consider including the following elements:
a. Introduction: Provide a brief overview of the chosen aspect and its significance in language acquisition.
b. Case Description: Present a real-life scenario or example related to the aspect of language acquisition you have chosen. This could involve a child's language development, a bilingual individual's language acquisition process, or any other relevant situation.
c. Analysis and Discussion: Analyze the case study, discussing how it relates to the chosen aspect of language acquisition. Consider factors such as age, environment, cultural influences, and any challenges or advantages observed.
d. Conclusion: Summarize the key findings from your case study and provide concluding remarks on the implications of your chosen aspect of language acquisition.
4. Present your case study in a clear and organized manner, using appropriate language and referencing any external sources used for research.

Note: You can choose to work individually or in small groups to complete this task. Make sure to use proper citations and references for any sources used in your research.

This task will allow students to delve deeper into a specific aspect of language acquisition discussed in the lecture and apply their knowledge to real-life examples. It encourages critical thinking, research skills, and the ability to analyze language acquisition processes in different contexts.

## UNIT 9

## WRITING SYSTEMS

Writing is a visual representation of speech units such as morphemes, syllables, and phonemes. Initially, writing was limited to a small number of scribes. However, in the 1400s, the invention of movable type enabled mass production of documents. Today, with the advent of the Internet, anyone can share information online. The widespread dissemination of information, including misinformation, through these channels will likely have significant cultural consequences in the future. This accessibility to information has transformed the way knowledge and discoveries are communicated, no longer dependent on the physical presence or lifespan of communicators. Unlike speech or sign language, written messages have a lasting quality and do not quickly fade away. This shift marked a new era in human cultural development, expanding the reach and durability of information.

### 9.1. Writing is Secondary to Speech

Writing is considered secondary to other language delivery systems such as speech and signing for several reasons. Writing systems are derived from speech or sign language, but the opposite is never true. Speech or sign language does not originate from writing. Although there have been some attempts to develop writing systems based on sign language, these have had limited success. Therefore, our focus will be on discussing writing systems that are primarily based on speech.

Writing is also secondary to speech in that humans have been speaking for a lot longer than they have been writing.

Although there is no agreement on an exact date, most people who study the origin of language believe that the beginnings of the evolution of the areas of the brain that specifically process speech can be seen in the endocranial casts (a cast of the inside of the brain case) of ancient hominins as much as two million years old. Natural selection favored the evolution of speech capabilities, and by perhaps two hundred thousand years ago people were speaking in ways similar to today. The first true writing is about fifty-two hundred years old. Not only is it much more recent than speech, but it also is perhaps not long enough for natural selection to have worked to select for highly specific innate writing or reading skills (Rowe, Levine, 2016, p. 283).

The extensive speech evolution, which may have been preceded by signing, has resulted in a natural ability to acquire language. On the other hand, writing requires formal instruction from caregivers or in an educational setting. Moreover, speech takes precedence over writing because everyone naturally and swiftly acquires speech, following the same stages of development, unless they experience complete social isolation or have a medical condition that hinders speech acquisition. This is not the case with writing. Many children encounter challenges when learning to read and write, requiring more time and employing different approaches compared to their peers. Additionally, numerous spoken languages lack a writing system altogether. In societies where a writing system exists but universal education is lacking, illiteracy rates tend to be high.

### 9.2. Writing System Types

Paintings found in caves or on city walls can convey a narrative to those who possess the knowledge to interpret the depicted images. However, it is important to note that picture writing does not constitute true writing. Picture
writing represents objects and events, while genuine writing visually represents some aspect of speech. Different writing systems demonstrate speech or linguistic principles in diverse ways. There are three primary categories of writing, distinguished by how they represent speech. The first category is logographic writing, also known as wordwriting, where symbols represent entire words or morphemes. The second system is called syllabic writing, where each symbol represents a single syllable. The third type of writing is alphabetic writing, where each symbol ideally corresponds to a specific phoneme. Each writing system predominantly utilizes one of these principles, but in practice, they often incorporate a combination of these forms to varying extents.

While English primarily employs an alphabetic writing system, it incorporates all three types of symbols. Take the letter P as an example, which serves as an alphabetic symbol representing the phonemic sounds /p/ (including various allophones such as [p] and [ph]). However, certain symbols used in English writing are logographic in nature. For instance, the symbols found on a typewriter or computer keyboard, particularly on one of the rows, are logograms. These keys include Arabic numerals like 1, 2, 3, and so on. For instance, the numeral 3 represents the entire word three in English, but it holds the same concept in the writing systems of other languages such as German, French, Italian, Ukrainian, Japanese, and many more. Although different languages would assign distinct-sounding words to convey the concept of 3 , the symbol 3 itself does not possess a specific phonetic value or pronunciation. Similarly, other symbols such as @, \#, \$, \%, ?, \&, * are all logographic, as are more specialized symbols such as $\uparrow$ (female) and $\widehat{\delta}$ (male). Each of these symbols has the ability to evoke a common underlying concept in the minds of individuals who speak
different languages. However, each person would employ a word from their respective language to assign a label to that concept.

English also has some syllabic symbols. For instance, some people spell barbecue in the abbreviated form bar-b-q. In this form, the second $b$ stands for the syllable /ba/ (sometimes pronounced $/ \mathrm{bi} /$ ), and $q$ for the syllable $/ \mathrm{kyu} /$. Can you see how the symbols that usually represent individual consonants represent syllables in such forms as OK (okay) and PJs (pajamas), and in initialisms such as FBI, CPA, and NASA?

In English, there are also instances of using syllabic symbols. For example, the abbreviated form of barbecue as bar-b-q demonstrates this. In this form, the second "b" represents the syllable /bo/ (sometimes pronounced /bi/), and "q" represents the syllable $/ \mathrm{kyu} /$. It can be observed that symbols typically used for individual consonants are representing syllables in forms like $O K$ (okay) and $P J s$ (pajamas), as well as in initialisms like FBI, CPA, and NASA.

### 9.3. Logographic Writing

In a visual representation, such as a picture (refer to fig. 9.1), a narrative can be conveyed through the depicted images. For instance, an image depicting a man hurling a spear towards a deer can be interpreted as "The man kills the deer". However, the picture does not encompass linguistic components like words, syllables, or phonemes. Instead, it functions as a medium to convey meaning through the entirety of its visual content.


Figure 9.1 - A Picture
However, if we had conventionalized symbols for man, kill, and deer (let's say $\Omega, \Theta, \xi$, respectively), then we would not have to draw a picture. Instead, we could string the symbols together to form a sentence made up of the three word symbols (logograms). $\Omega \Theta \xi$ would mean:
(1) (The) man kill(s) (the) deer.

When a logogram bears a resemblance to the object or concept it represents, it is occasionally referred to as a pictogram or pictograph. Consequently, there are three primary distinctions between a picture found on a cave wall or canvas and logographic writing:

- Writing employs standardized symbols that may not necessarily resemble the objects they represent.
- These symbols represent linguistic elements such as words or individual morphemes.
- The arrangement of logographic symbols corresponds to the word order observed in spoken language.

A complete logographic writing system would require tens or even hundreds of thousands of symbols or combinations of symbols to represent every word in the language. Learning such a system would present immense challenges. As far as we know, a fully logographic system has never existed because it would be highly impractical. Instead, all known logographic systems, whether ancient or
modern, incorporate syllabic or alphabetic symbols. Therefore, it is more accurate to describe predominantly logographic writing systems as logophonetic writing systems. Most logophonetic systems combine logograms with syllabic representations, leading them to be referred to as logo-syllabic. Egyptian writing, for instance, combined logographic symbols with symbols representing consonants (but not vowels).

### 9.4. The Rebus Principle

The primary breakthrough in the development of writing was the invention of symbols that held conventional meanings. Another significant milestone was when some of these symbols began to represent sounds rather than entire words. Once this phonetization process took place, the symbols could be utilized in all words containing the represented sound. For example, the numeral 4 stands for four. The original meaning of a logogram may have been bee. Therefore, if 4 came to represent the syllable /for/ and to represent the syllable /bi/, then the combination could mean bee four or before (see fig. 9.2). It is important to note that in the word before, the symbols have transcended their original logographic meaning and are functioning as syllabic symbols.

Using the graphic symbol that has now become associated with the sound [bi] and other graphic symbols that have become associated with a specific sound, a person could make a number of words which might include:


Figure 9.2 - The Rebus Principle

The rebus principle involves the transformation of symbols that originally represented complete one-syllable words into symbols for the individual syllables they represent, rather than the words themselves. This principle worked alongside the logographic principle and played a crucial role in the evolution of comprehensive writing systems. Even after the introduction of the alphabetic principle, logograms continued to be widely used. While it might seem that the rebus principle entirely replaced
logograms, utilizing syllabic writing without the support of logograms is generally inefficient for most languages.

### 9.5. Syllabic Writing

Syllabic writing is sometimes employed in modern English writing, which differs from logographic systems. In a syllabic writing system, each symbol represents a specific phonemic value, unlike logographic systems. For instance, in the term bar-b-q, the second "b" would have the phonemic value /bi/. In a predominantly syllabic English system, the symbol "b" could be utilized throughout to represent /bi/. Unlike logographic symbols, syllabic symbols indicate pronunciation. Syllabic writing requires fewer symbols compared to logographic writing because languages have a smaller number of syllables than words or morphemes.

Japanese serves as a contemporary illustration of a language that employs syllabic writing. It is a mixed system that employs logographic, syllabic, and alphabetic symbols. However, while the Chinese system is primarily logographic, the Japanese system leans more towards syllabic writing.

Japanese adopted Chinese characters known as kanji, but they discovered that these characters didn't always align well with their language. Chinese is a noninflecting language, lacking grammatical markers for verb and noun modifications. Conversely, Japanese is a highly inflected language that utilizes tense markers, among other things. To compensate for the absence of such markers in Chinese, the Japanese employ two syllabic scripts: hiragana and katakana. Each script consists of forty-six basic symbols that represent Japanese syllables. The goal is to be able to write any Japanese word using these symbols. However, in addition to these syllabic scripts, the Japanese also utilize approximately 1,850 logographic symbols. These symbols
are employed for certain root morphemes and to disambiguate homophones, which are words that sound the same but have different meanings (similar to the English words to, two, and too). Modern Japanese writing also incorporates Romanji, which comprises alphabetic symbols derived from the Roman alphabet.

Japanese is highly suited for syllabic writing due to its structure. In Japanese, most words consist of syllables arranged in the form CV , where a single consonant is followed by a single vowel. There are a few exceptions, such as words that can end with a single vowel or the sound $/ \mathrm{n} /$, as seen in the word Pokemon [pokiman]. In contrast, English exhibits various types of syllables. For example, words like crash, thought, and string are one-syllable words in English but have syllabic patterns of CCVC, CVC, and CCCVC, respectively. Each of these patterns, along with the numerous other possibilities in English, would require distinct syllabic symbols. Consequently, English would necessitate a large number of syllabic symbols compared to the limited set used in Japanese. Syllabic writing is most suitable for languages like Japanese that have minimal consonant clusters. With the predominance of CV syllable sequences in Japanese, syllabic writing is more concise than alphabetic writing and less cumbersome than logographic writing:


SEKAI
the world, the universe


HIJOO emergency, unusual exceedingly

Figure 9.3 - Examples of Japanese Writing

### 9.6. Alphabetic Writing

English utilizes a set of twenty-six graphemes, or alphabet letters. In an ideal scenario, each grapheme represents a specific phoneme. However, there is no practical need to alphabetically represent every oral sound. In the case of English, it wouldn't serve any purpose to have distinct graphemes for sounds like $[\mathrm{p}]$ and $\left[\mathrm{p}{ }^{\mathrm{h}}\right.$. This is because all English speakers possess an unconscious understanding of how the different variations (allophones) of the phoneme /p/ are distributed. Having a separate letter for $p$ in words like $\operatorname{pin}\left[\mathrm{p}^{\mathrm{h}} 1 \mathrm{n}\right]$ and $\operatorname{spin}[\mathrm{spm}]$ would be inefficient. The speaker's linguistic competence guides them to appropriately aspirate the sound based on the context.

English comes close to achieving the ideal of using one grapheme for each phoneme with letters like $f, r, v$, and $m$. These graphemes typically represent a single phoneme. However, many letters in English can actually represent multiple phonemes. For example, the letter $s$ can represent the phonemes $/ \mathrm{s} /, / \mathrm{z} /$, /̌̌/, or $/ \mathrm{z} / /$ in words like sat, physics, sure, and vision respectively. On the other hand, there are numerous letters and combinations of letters that can represent multiple phonemes. The phoneme $/ \mathrm{k} / \mathrm{can}$ be spelled as $k, c h, c, x$, que, or $c k$, as seen in words like kit, chlorine, cap, exceed, clique, and tack respectively.

Certain writing systems, like Finnish and Turkish, come closer to adhering to the ideal alphabetic principle compared to English due to historical factors. In many countries, extensive writing reforms have been implemented. As an example, in 1922, the Turkish government transitioned from using the Arabic alphabet to adopting a Roman-based alphabet. Linguists devised this new alphabet to align with the ideal alphabetic principle. However, over time, changes in Turkish speech patterns have emerged, introducing new
inconsistencies within the desired system of one grapheme representing one phoneme.

### 9.7. Spelling and Speech

It's not surprising that spoken language undergoes changes more rapidly than alphabetic writing. The way people in the past pronounced their words holds little importance since we cannot communicate with them directly. However, it is crucial that the writing of our ancestors resembles our own. If spelling constantly adapted to reflect evolving speech patterns, the written language of the past would soon become incomprehensible to all but those specifically trained to decipher it. The inconsistency in the one grapheme-one phoneme principle is partially attributed to the differing rates of change between spoken language and written language. Most of the current English spellings have remained relatively unchanged for approximately four hundred years, whereas speech patterns have undergone significant transformations within that same period, likely dating back less than a hundred years.

When scholars have endeavored to rectify the impact of time on the relationship between spelling and speech, the outcome has occasionally resulted in increased inconsistencies. In the fifteenth and sixteenth centuries, early reformers of the English language successfully modified numerous Middle English spellings. Instead of aiming to align the spelling of a word with its pronunciation, they sought to make the spelling conform to the language from which the word originated. If an English word could be traced back to Latin, the English spelling would be adjusted to correspond with the Latin spelling. For example, the Middle English word dette was changed to debt (derived from the

Latin debitum), even though the letter $b$ is not pronounced in English.

Subsequent reformers attempted to undo some of the changes implemented during the Renaissance period by aligning the spelling more closely with the phonemes of the English language. A notable example is Theodore Roosevelt (1858-1919), who attempted to enact legislation to eliminate certain silent letters and letter combinations, such as the $g h$ in light and night. In Old English and Middle English, this combination represented a velar voiceless fricative sound, symbolized phonetically as / x /, but it has been silent since the fifteenth century. President Roosevelt aimed to remove the silent letters and spell the words as lite and nite respectively. However, due to Congress's overwhelmingly negative response, the president's proposal was abandoned instead of the silent letters. Congress may have been concerned about the difficulties in translating written works from the past if future generations spelled words differently, or they may have had other reasons for their resistance. The written tradition of a culture is typically intertwined with the overall culture itself, so modifying the writing system is often seen as tampering with the culture as a whole.

When the ideal alphabetic principle is upheld, writing tends to have a conservative influence on pronunciation. With a one-to-one correspondence between phonemes and graphemes, one might expect that reading a word would lead to a standardized pronunciation. However, written words can actually modify the traditional pronunciation of a word. For instance, the $t$ in often was historically silent and not pronounced, similar to the silent $g$ in sign. Yet nowadays, many people pronounce the word as /ofton/ due to the presence of the $t$ in the written form. This phenomenon is referred to as spelling pronunciation. Spelling pronunciation frequently occurs when foreign words are adopted into a
language. For example, the final syllable in the German word Neanderthal is pronounced as /tal/ in German. In the absence of exposure to native German speakers pronouncing the word, English speakers commonly pronounce the final syllable as $/ \theta a l /$. This pronunciation aligns with one of the two typical pronunciations of English words spelled with $t h$, while the other is / $\delta /$. As a result of spelling reforms in Germany, the silent $h$ has been removed from their writing system, and the word is now spelled Neandertal in Germany. Despite some American and English writers adopting the new spelling, the majority of American and English speakers still pronounce the final syllable as $/ \theta \mathrm{al} /$.

Writing and speech are interconnected yet distinct systems. While writing represents the spoken language, it doesn't always indicate individual morphemes. Syllabic and alphabetic writing systems aim to capture the sounds of spoken language, although not necessarily with a one-to-one correspondence between sounds and symbols. Punctuation and capitalization in writing serve to mark syntactic structures, but these can differ from the syntactic structure of the spoken utterance. Consequently, the criteria for a "good" speaking style and a "good" writing style are determined by separate sets of prescriptive rules. Linguists generally consider writing as secondary to speech, as speech has a much longer historical existence compared to writing.

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## QUESTIONS

1. What is the primary purpose of writing systems?
2. How did the invention of movable type in the 1400s impact the mass production of documents?
3. What are the cultural consequences of the mass dissemination of information on the Internet?
4. How does writing differ from speech and sign language in terms of acquisition?
5. Explain why writing is considered secondary to speech.
6. How long has speech been in existence compared to writing?
7. Why is writing not a natural and universal acquisition like speech?
8. What are the three main types of writing systems based on how they represent speech?
9. Give an example of a logographic writing system.
10. Explain the difference between logographic writing and picture writing.
11. What is the rebus principle in writing systems?
12. How does syllabic writing differ from logographic writing?
13. Provide an example of a language that uses syllabic writing.
14. How does alphabetic writing represent phonemes?
15. Why is there a discrepancy between spelling and speech in alphabetic writing?

## PRACTICAL TASK

## Analyzing Writing Systems <br> Instructions:

- Read the lecture on Writing Systems provided above carefully.
- Based on the lecture content, answer the following questions.
- Write your answers in complete sentences or short paragraphs.
- Feel free to conduct additional research if needed to support your answers.
- Submit your responses for evaluation.

Questions:

- How is writing different from speech and sign language? Discuss the secondary nature of writing to speech.
- Why is writing considered secondary to speech in terms of human evolution and natural acquisition?
- What is logographic writing, and how does it differ from true writing? Provide an example.
- Explain the concept of the rebus principle in the development of writing systems. How does it supplement the logographic principle?
- How does syllabic writing work? Provide an example of a language that uses syllabic writing predominantly.
- Describe alphabetic writing and its characteristics. Discuss the challenges associated with alphabetic writing in representing all phonemes.
- Why does speech change faster than alphabetic writing? Discuss the implications of this difference in the spelling-speech relationship.
- Give an example of a language that underwent a significant writing reform. Explain the reasons behind the reform and any inconsistencies that may have arisen.
- How does the English writing system incorporate elements of all three types of writing discussed in the lecture? Provide examples.
- Discuss the cultural consequences of the mass dissemination of information through writing systems, particularly in the context of the Internet and the prevalence of misinformation.
- What challenges might arise when attempting to learn a fully logographic writing system? Why is it more practical to combine logographic symbols with syllabic or alphabetic representations?
- Why is syllabic writing more suitable for some languages, like Japanese, compared to languages with more complex syllable structures?
- Reflecting on the lecture, which type of writing system do you find most fascinating or effective? Justify your choice.
- In your opinion, how does the study of writing systems contribute to our understanding of human cultural development and communication?

Note: This practical task aims to assess your comprehension of the lecture content and your ability to articulate your thoughts and opinions based on the information provided.

## UNIT 10

## HISTORICAL LINGUISTICS

Over time, every aspect of culture undergoes change. This includes political systems, economic systems, religion, kinship, art, and language. Culture change can be attributed to various factors. The migration of people leads to the dissemination of new ideas, values, beliefs, behaviors, and language. Such movement may occur through peaceful trade and travel, as well as through invasion and warfare. As people relocate and carry their language with them, languages that originate in a specific region can become widespread. This unit explores the evolution of languages over time and examines the connections between different languages.

### 10.1. The Relationships Among Languages

Starting from the early seventeenth century, the English language expanded worldwide through the establishment of the British Empire. By the end of World War I, approximately a quarter of the global population was exposed to English. When a language spreads, it undergoes influence from the existing languages spoken in the respective regions. This is why English exhibits some variations in Nigeria, India, Hong Kong, Burma, Australia, New Zealand, the United States, and other parts of the world. A similar phenomenon occurred in ancient times when the Romans colonized a significant portion of Europe. In essence, modern French can be seen as Latin spoken in France, Spanish as Latin spoken in Spain and Central/South America, and Italian as Latin spoken in Italy. Moreover, as a language extends to different regions, the descendant languages may become increasingly isolated from one
another. Consequently, changes that occur in one language may not necessarily spread to other languages. With the accumulation of more changes, languages originating from a common ancestral language can diverge significantly due to isolation.

Culture can undergo change without people necessarily relocating. Cultural elements may adapt due to new knowledge or changes in the physical environment. For example, if certain resources vanish or become scarce, an economic system might need to be modified. Similarly, in the realm of language, new inventions and discoveries necessitate the creation of new terms. Additionally, specific subgroups within a society, like rappers in American culture, can introduce fresh expressions and even modify the grammar associated with them compared to standard usage. Although older members of a language community often perceive these changes as deviations, some alterations made by each new generation in the language eventually become integrated into everyday speech for them and future generations.

Historical linguistics, also known as comparative linguistics, examines the evolution of languages over time and the connections between different languages. Scholars in this field investigate the mechanisms of language change, the "genetic" relationships between languages, and effective methods for classifying languages into groups. The term "diachronic linguistics" is also used to describe historical linguistic studies, with "dia-" referring to the passage of time. In contrast, nonhistorical research is referred to as synchronic linguistics, denoted by "syn-" which signifies studying languages at a specific moment in time.

The number of languages spoken worldwide varies depending on how one distinguishes between languages and dialects. Nonetheless, according to Ethnologue, the most
extensive database on global languages, there are 7168 languages documented across 228 countries (www.ethnologue.com, 2023).

One aspect of historical linguistics is the varying degrees of relationship between languages, ranging from highly related to minimally related or entirely unrelated. When languages are highly related, it often indicates their shared ancestry from a common parental language, akin to genetic relatedness in biology. These groups of related languages are known as language families, with the individual languages referred to as daughter languages. For example, Portuguese, Spanish, Catalan (spoken in Spain), French, Italian, and Romanian are all daughter languages derived from Latin, which evolved through interactions with the native languages in each region. These languages, along with a few others, are classified as Latin languages or Romance languages, based on the Latin phrase romanica loqui, meaning "to speak in Roman fashion". Similarly, Icelandic, Norwegian, Swedish, Danish, English, Dutch, German, Yiddish, and several other languages belong to the Germanic language family. Linguists represent language relatedness using two main models: the family tree model and the wave model.

### 10.2. The Family Tree Model

August Schleicher (1822-1868) developed the family tree model of language relationships in 1861. According to this model, languages within a language family are considered to be genetically related, meaning they all originated from a common ancestor known as a protolanguage. A proto-language is a hypothetical parent language from which many ancestral and modern languages are believed to have evolved. The prefix "proto-" signifies
that it is a reconstructed and hypothetical language, rather than an observed language. The proto-language depicted in figure 10.1 is Proto-Indo-European, which serves as a representative example within the Indo-European Language Family. It is important to note that the Indo-European Language Family consists of a total of one hundred forty-four languages, and the languages shown in the figure are only a sample and not an exhaustive list.


Figure 10.1 - A Sample of Indo-European Languages
The term "Indo-European languages" refers to all languages that originated from Proto-Indo-European. Additionally, proto-languages have been reconstructed to varying extents for other language groups. Examples include Proto-Algonquian, which pertains to Native American languages like Blackfoot, Micmac, Cree, and Ojibwa; ProtoAthabaskan, associated with another Native American language family comprising Navajo, Apache, and

Chipewyan; Proto-Oto-Manguean, encompassing Mesoamerican languages such as Zapotec and Otomi; and Proto-Dravidian, which represents languages spoken in southern India. Alongside Latin and Germanic languages, Algonquian, Athabaskan, Oto-Manguean, and Dravidian form six of the world's language families. Additional language families can be found in table 10.1.

Table 10.1 - A Sample of the World's Language
Families

| Name of Language Family | Focal Location |
| :--- | :--- |
| Finno-Ugric | Parts of northern <br> Scandinavia, eastern Europe, <br> and northwestern Asia |
| Austro-Asiatic from |  |
| Austronesian | Widely distributed <br> eastern India to Vietnam |
| Australian | Madagascar, Indonesia, and <br> some of Oceania |
| Indo-Pacific (Papuan) | Australia |
| Afroasiatic | New Guinea |
| Niger-Congo | Northern Africa and Arabian <br> Peninsula |
| Nilo-Saharan | Central and southern Africa |
| Khosian | Central to north central <br> Africa |
| Sino-Tibetan | Southern Africa <br> Eskimo-Aleut <br> Mayan <br> China, Burma, Thailand, <br> Tibet, and other areas of Asia <br> and IndiaNorthern Alaska and northern <br> Canada |
|  | Southern Mexico and <br> Guatemala |

The Indo-European language family comprises multiple subgroups, encompassing approximately one hundred and forty-four languages. Figure 10.1 illustrates two of these subgroups, namely Germanic and Roman. Germanic, Roman, and other subgroups are considered daughter languages originating from the ancestral language known as Proto-Indo-European. In relation to one another, these subtypes within Indo-European are referred to as sister languages. According to the family tree model, as languages diverge from a proto-language, they undergo systematic changes over time, a concept known as the regularity hypothesis. Furthermore, this model assumes that the presence of numerous linguistic similarities among languages indicates their shared ancestry, which is referred to as the relatedness hypothesis. By comparing these similarities, linguists can reconstruct a proto-language.

Sir William Jones (1746-1794) holds the distinction of being the first individual to formally document the resemblances among various languages. Jones possessed remarkable linguistic abilities and, by the time of his untimely passing at the age of forty-eight, had acquired fluency in twenty-eight languages. In 1786, Jones, who served as a judge in the Supreme Court of India, published a book that presented comparative evidence establishing a connection between Sanskrit, Latin, and Greek. Sanskrit, an ancient language still in use in India and other Asian regions, caught Jones's attention. Furthermore, he speculated on potential relationships between Sanskrit, Latin, Greek, Gothic, Celtic, and Persian. His research provided the initial substantial indication of a proto-language, known as Proto-Indo-European, from which Sanskrit, Latin, Greek, Gothic, Celtic, Persian, and subsequently English, among other languages, are believed to have descended. Table 10.2
presents several English words alongside their corresponding counterparts in various Indo-European languages.

Table 10.2 - Word Comparisons in Five Indo-European Languages

| Sanskrit | Greek | Latin | Gothic | English |
| :--- | :--- | :--- | :--- | :--- |
| pitar | pater | pater | fadar | father |
| padam | poda | pedem | fotu | foot |
| bhratar | phrater | frater | brother | brother |
| bharami | phero | fero | baira | bear |
| sanah | henee | senex | sinista | senile |
| trayas | tris | tres | thri | three |
| dasha | deka | decem | taihun | ten |
| sata | he-katon | centum | hund(rath) | hundred |

Jones observed a significant number of phonetically similar words with equivalent meanings across these languages. These pairs or groups of words are referred to as cognates. Jones posited that these cognates shared similarities because they originated from a common ancestral language, forming the foundation of the relatedness hypothesis. This assumption is based on the understanding that the sound of a word holds no inherent connection to its meaning. If sound and meaning were inherently linked, words with the same meaning would have identical sounds across all languages, which is not the case. Hence, the similarity in sound and meaning is attributed to a shared origin. Table 10.2 also exemplifies how each language systematically diverged from the parent language, Proto-Indo-European, supporting the notion of the regularity hypothesis.

Jones formulated his conclusions by drawing upon his expertise in ancient and contemporary languages, coupled with his intuitive understanding of their interconnectedness. Rasmus Rask, a Danish scholar (1787-1832), further
advanced Jones's findings by becoming the first individual to formally delineate specific patterns in sound variations across particular languages. Notably, Rask observed consistent correspondences between certain sounds in Greek and their counterparts in Germanic languages. For example, the Greek ph sound, as in phrater and phero, consistently become $b$ in English (brother, bear) and German (der Brüder, der Bär).

Jakob Grimm (1785-1863), a German linguist renowned for his collection of fairy tales alongside his brother Wilhelm, expanded on Rask's research on the regularity of sound variations. Grimm's comprehensive fourvolume work, written between 1819 and 1822, introduced what is now known as Grimm's law or the first Germanic sound shift. This groundbreaking conclusion explored the systematic transition of sounds from a mother language to its daughter languages. Grimm's contributions extended beyond the discovery of this sound shift, as he also established a meticulous methodology for comparative studies, profoundly influencing the development of historical linguistics.

English, being one of the Germanic languages, underwent significant changes according to Grimm's findings. Specifically, Grimm observed that the Proto-IndoEuropean consonants /p/, /t/, and /k/ consistently transformed into $/ \mathrm{f} /, / \theta /$, and $/ \mathrm{h} /$ respectively in English. These transformations, along with others, are detailed in table 10.3. Despite acknowledging that his "law" had exceptions, Grimm's work laid the foundation for subsequent linguists who expanded upon his research and offered explanations for the deviations from Grimm's law.

Table 10.3 - Sound Shifts Discovered by Jakob Grimm

| Proto-IndoEuropean |  | ${ }^{2} \mathbf{d}^{\mathbf{h}}$ |  |  | *d |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| English | b | d | g | p | t | k | f | $\theta$ |  |  |

*The asterisk indicates that the linguistic form is part of a reconstructed language. $[\mathrm{x}]$ is the phonetic symbol for the voiceless velar fricative, which is the last sound in the name Bach and the initial sound in the word Chanukah. It is produced by making a sound as if you are clearing your throat

Table 10.3 illustrates that Grimm's law involved regular changes in three natural classes of sound. The sounds $\left[b^{h}\right],\left[d^{h}\right]$, and $\left[\mathrm{g}^{\mathrm{h}}\right]$ are in the natural class of sounds called voiced aspirated stops. They systematically become voiced unaspirated stops. The sounds [b], [d], and [g], which are voiced stops, become the voiceless stops [p], [t], and [k]. In turn, [p], [t], and [k] become voiceless fricatives. The distinctive characteristics of the Germanic languages are shaped by these three transformations that differentiate them from other IndoEuropean languages. These specific changes are unique to the Germanic language family. Additionally, Grimm identified another systematic sound shift, known as the second Germanic sound shift, which specifically applies to a variant of German known as High German.

The reconstructed forms for Proto-Indo-European were established by the comparative method. The comparative method involves looking at similarities in languages. Although comparative reconstructions can be done for any level of language, phonological comparisons are most common. Through an analysis of modern and ancient Indo-European languages, linguists concluded that there was a $* / \mathrm{p} /$ phoneme in Proto-Indo-European. Applying statistical analysis and other techniques, all of the phonemes of Proto-Indo-European have been reconstructed. This reconstruction and the analysis of cognates allow for the reconstruction of Proto-Indo-European words. The reconstructed words for father and foot in Proto-

Indo-European are */pəter/ and */ped/, respectively. Latin and Greek maintained the $* / \mathrm{p} /$ (see table 10.2), but the Proto-IndoEuropean */p/ was systematically replaced with /f/ in English (father and foot).

Proto-Indo-European stands as the widely accepted overarching reconstructed language for Indo-European languages among the majority of historical linguists. Additionally, more specific proto-languages like ProtoGermanic, Proto-Balto-Slavic, Proto-Celtic, and Proto-IndoIranian have been reconstructed. Interestingly, the reconstruction of these more specific proto-languages has played a crucial role in enabling linguists to reconstruct Proto-Indo-European itself.

The family tree model of language relatedness encounters several challenges. The diagram presented in figure 10.1 suggests that a mother language simultaneously splits into multiple daughter languages, implying a rapid and complete division. However, these assumptions are inaccurate. Language evolution typically occurs gradually, with sister languages diverging from the mother language at varying rates. Additionally, speakers of sister languages can maintain contact with each other and with the mother language over time. The family tree model also neglects to depict relationships between languages that are not part of the same family. For example, diverse language families can give rise to pidgins and creoles, which are not represented in the family tree diagram. Furthermore, the model fails to account for dialectal variations within a language. For instance, English is depicted as a unified language, disregarding the fact that it is spoken differently in regions such as England, North America, Australia, India, and Hong Kong, among others. Moreover, variations exist within each of these areas, such as differences between the southern and northeastern United States.

### 10.3. The Wave Model

Johannes Schmidt (1843-1901) introduced the wave model of language relatedness in 1872 as a response to the limitations of the family tree model. This alternative model utilizes circles to encompass languages that exhibit common specific features. Within each circle, all the languages share the characteristic described by that particular circle. Figure 10.2 presents a wave model illustrating a subset of Indo-European languages.


Figure 10.2 - The Wave Model of Language Relatedness
The wave model offers an advantage over the family tree model by providing a more precise representation of language relationships. For example, figure 10.2 illustrates this by including a circle (labeled A) that encompasses Baltic, Slavic, and Germanic languages. This circle represents the presence of plural case endings with an $[\mathrm{m}]$, distinguishing these languages from many other Indo-European languages that utilize plural case endings with an aspirated $b$ [bh]. Another circle (labeled B) is drawn around Baltic, Slavic, Indic, and Iranian languages,
excluding German. This circle denotes the presence of extensive palatalization, a phonological process that gives sounds a more palatal quality. Among Indo-European languages, palatalization is exclusively found in the languages encompassed by circle $B$. Each circle in the diagram indicates a shared linguistic feature among the enclosed languages.

The wave diagram also illustrates the concept of linguistic feature diffusion, where phonological, morphological, or syntactic features spread from one location to another. When a feature begins to diffuse from a particular area, typically one with sociocultural importance, it may be either rejected, accepted unchanged, or adapted to fit the linguistic system of the receiving group in other areas. However, it is possible that the feature may not reach more isolated regions. The diffusion of different linguistic features occurs at varying rates. Additionally, the circles on the diagram signify that a language is not a homogeneous system but exhibits internal variation in the form of dialects.

While the wave model attempts to address some of the limitations of the family tree model, it also has its own shortcomings. Wave model diagrams can be challenging to interpret due to their complexity. As new similarities among languages are discovered, the diagram may become cluttered with an increasing number of circles. Furthermore, wave diagrams only depict the relationship among languages at a specific moment in time (synchronic), rather than illustrating how languages evolve over time (diachronic). These diagrams typically show the relationship between adjacent languages, disregarding the fact that non-adjacent languages can influence each other through trade, warfare, and other factors. Neither the family tree model nor the wave model accounts for the presence of language similarities between languages that are not genetically related. Such similarities can arise due to cultural contact, chance resemblances, and universal linguistic features.

Even though the family tree model and the wave model each have faults, they have been valuable, especially when used in conjunction with each other, in helping linguists picture how languages are related to each other and in tracking linguistic change. In reality, the relationship among languages is much more complex than either of these models, separately or together, can reveal. More complicated models have been devised, including one based on the biological evolutionary model called punctuated equilibrium. You can read about it in R. M. W. Dixon's The Rise and Fall of Languages (1997).

### 10.4. Types of Language Change

A sound change refers to the alteration of one or more distinctive characteristics of a sound to different features. Grimm's law serves as an illustration of an unconditioned sound change. An unconditioned sound change is a change that appears to have occurred spontaneously and universally (with a few exceptions) across the language. For instance, wherever there was a /b/ sound in Proto-Indo-European, it is now a /p/ sound in English and other Germanic languages. In other words, the shift from $/ \mathrm{b} /$ to $/ \mathrm{p} /$ did not happen only in specific phonetic contexts; it occurred in all contexts. This is because a sound change involves the replacement of one distinctive feature with another. In this case, the feature [+voice] was replaced by [-voice].

An example of an unconditioned sound change is known as the Great Vowel Shift. This shift took place in the English language between approximately 1400 CE (during the era of Middle English) and around 1700 CE (during the period of Modern English). The Great Vowel Shift affected the positions of all long vowels in Middle English. The two highest vowels in Middle English transformed into diphthongs in Modern English. Regardless of the phonetic context, the Middle English long
vowel [u:] consistently changed into the Modern English diphthong [aw]. As a result, the Middle English term for mouse [mu:s] became [maws] in Modern English. In total, the Great Vowel Shift modified seven Middle English vowels, and these alterations are summarized in table 10.4.

Table 10.4 - The Great Vowel Shift

| Middle English Word | Modern English Word | Meaning |
| :---: | :---: | :---: |
| [hu:s] | [haws] | house |
| [wi:f] | [wayf] | wife |
| [se:n] | [si:n] | seen |
| [go:s] | [gu:s] | goose |
| [na:mə] | [ne:m] | name |
| [ho:m] | [ho:m] | home |
| [se:] | [si:] | sea |

A conditioned sound change relies on the phonetic context in which it occurs. For instance, there is a transformation of the /f/ sound from Old English to Modern English, where it becomes $/ \mathrm{v} /$. However, this change is not universal throughout the language; it would be an unconditioned change if it applied universally. Instead, this transformation only takes place when the /f/ in Old English is positioned between two vowels. Since vowels are typically voiced and /f/ is voiceless, in Modern English, /f/ assimilates to the voiced vowels and becomes voiced itself, resulting in /v/. For instance, the Old English word heofonum transformed into the Modern English word heavens, yfel became evil, and aefen became even(ing). This phenomenon is referred to as voice assimilation. Another example of a conditioned change is observed in certain types of deletions. It is common to find English words spelled with a silent "e" at the end. Toward the end of the Middle English period, unstressed schwa sounds, represented by $/ 2 /$, which were previously
pronounced at the end of words, were omitted in pronunciation but retained in the spelling. The deletion of the unstressed schwa sound is considered a conditioned change because it did not occur in all instances across the language but specifically in word-final positions. Assimilation and deletion are just a couple of the various types of conditioned sound changes.

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## QUESTIONS

1. What are some elements of culture that change over time?
2. How does the movement of people contribute to language change?
3. Give examples of how English is spoken differently in different regions of the world.
4. How did the spread of the British Empire influence the distribution of the English language?
5. What is a language family, and how are daughter languages related to each other?
6. What is the difference between historical linguistics and synchronic linguistics?
7. How many languages are currently listed in the Ethnologue database?
8. What is a proto-language, and how is it related to the concept of language families?
9. Who was August Schleicher, and what did he contribute to the study of language relationships?
10. What is the family tree model of language relationships, and how does it explain language change?
11. How did William Jones contribute to the understanding of language relatedness?
12. What is meant by the regularity hypothesis and the relatedness hypothesis in historical linguistics?
13. Who is credited with discovering Grimm's law, and what does it explain?
14. How is the comparative method used to reconstruct proto-languages?
15. What are some limitations or shortcomings of the family tree model of language relatedness?

## PRACTICAL TASK

## Language Family Tree Analysis

Objective: To analyze and interpret language relationships using the family tree model and apply the concepts of historical linguistics.

Instructions:

1. Study the lecture on historical linguistics, focusing on the section about the family tree model and language relationships.
2. Based on the information provided, create your own language family tree diagram using a blank sheet of paper or a digital tool.
3. Choose at least three language families mentioned in the lecture (e.g., Indo-European, Finno-Ugric, Afroasiatic) and include them in your language family tree diagram. You can also add additional language families if you wish.
4. Include subgroups and daughter languages within each language family to show their relationships. Use arrows or lines to indicate the direction of language change and the emergence of daughter languages.
5. Annotate the diagram with the names of representative languages from each language family and highlight any interesting linguistic features or examples of cognates mentioned in the lecture.
6. Write a brief explanation or description of the language family tree diagram, highlighting the main characteristics of each language family and their relationships.
7. Reflect on the limitations and challenges of the family tree model, as discussed in the lecture.
8. Present your language family tree diagram and explanation to the class, sharing your insights and observations about the relationships among different languages.

Additional Guidelines:

- Conduct additional research if needed to gather more information about specific language families and their subgroups.
- Utilize appropriate resources such as linguistic databases, books, or academic articles to enhance your understanding of language relationships.
- Collaborate with classmates or seek guidance from your instructor to clarify any doubts or questions you may have.
- Be creative in designing your language family tree diagram, using colors, symbols, or other visual elements to make it clear and visually appealing.

Note: The task is designed to encourage students to actively engage with the lecture material, demonstrate their understanding of language relationships, and apply the concepts of historical linguistics in a practical way.

# ПОСІБНИК ІЗ МОВОЗНАВСТВА 

## Навчальний посібник

## (Англійською мовою)

Художнє оформлення обкладинки Н. В. Таценко<br>Редактор Н. В. Таценко<br>Комп'ютерне верстання: Н. В. Таценко, О. А. Литвиненко

Формат $60 \times 84 / 16$. Ум. друк. арк. 10,06. Обл.-вид. арк. 9,32. Тираж 300 пр. Зам. №

Видавець і виготовлювач
Сумський державний університет, вул. Римського-Корсакова, 2, м. Суми, 40007
Свідоцтво суб'єкта видавничої справи ДК № 3062 від 17.12.2007.

Навчальний посібник містить матеріал за основними темами курсу теоретичного мовознавства: природа мови та провідні галузі і підходи до її вивчення; фонетичні, морфологічні, синтаксичні, семантичні, прагматичні та соціолінгвістичні аспекти англійської мови; теорія засвоєння мови; типи письмових систем та історичне мовознавство. Запитання та практичні завдання до кожного блоку уможливлюють самостійне опрацювання навчального матеріалу.

Розроблено для студентів, аспірантів, викладачів та всіх, хто цікавиться мовою та лінгвістикою.

