

CHAPTER 1

INTRODUCTION

1.1. PHONETICS – A SCIENCE OF SOUNDING SPEECH

Language – the object of linguistics is a unique peculiarity of mankind, a fundamental link among human beings and between the humanity and the world.

About three thousand languages, existing in the world, are exceptionally different in their sound system, word stress, intonation, lexical and grammatic systems.

There are universal features in the phonetic, grammatic, lexical means of all the languages or some groups of languages. There are features that are common for all the languages in the world – they are the **structure** of the language and its **function**. It is possible to single out two levels – lower and higher in the structure of the language. The units of the lower level, sounds for example, have no meaning of their own. The units of the higher semantic level, for example sense-groups, phrases, overphrasal unities, obtain some meaning.

Each linguistic unit of the semantic level has some definite sounding connected with some meaning due to what communication among the people of a definite language society can be realized.

Communication is the essence of human life. All that exists in human society is built on the basis of communication. All the material objects created by people, everything spiritual, the inner development of a human being and of the human society in general is possible only on the basis of communication. The main basis of communication is language.

Language is the main system of communication between people, it is obviously the main system available for people for accumulating information for knowing the world and everything around them.

There are two main types of information – written and oral.

In this day and age, at the time of radio, television, the Internet and various

talking devices, oral speech information acquires especially great significance.

People got interested in the nature of speech sounds centuries ago, but scientific study of speech sounds began at the end of the 19th and the beginning of the 20th century.

The factors that stimulated the development of phonetics as a science were:

1. more thorough acquaintance with the functioning of the human speech apparatus;
2. the investigation of many linguists who studied languages that had no alphabets;
3. the compiling of alphabets for such languages.

The definition of phonetics as the science of speech sounds, given by most linguists of that time (Sweet H., Jones D. in England, Vitomskaya A.N., 1948; Dikushina O.I., 1981 in the former USSR), was narrow and did not reveal the essence of the science of phonetics.

Segmental units – speech sounds and syllables are to be examined from physiological, acoustic and functional point of view but they constitute only one of the elements of the phonetic system of the sounding speech.

Besides the sounds, the object of phonetics is suprasegmental units of speech – phonetic words, sense-groups, phrases, overphrasal unities and the text – the highest suprasegmental unit of speech.

The narrow definition of phonetics, which was acceptable at the early period of the development of phonetics, has become inadequate now.

Nowadays phonetics is understood as a science which studies all the phonetical means of semantic expression in oral speech – speech sounds, stress and intonation (Torsuyev G.P., 1950; Zinder L.R., 1979 and others).

Phonetics is a branch of linguistics that studies pronunciation, i.e. all the phonetic means of semantic expression in oral language – speech sounds, word stress and intonation and all the phonetic units of speech: speech sounds, syllables, phonetic words, sense-groups, phases, overphrasal unities and the text. Their formation,

physical acoustic nature, perception and their semantic, grammatic and lexical role and functions in speech are to be studied.

Several branches of phonetics are distinguished. The main of them are:

Articulatory phonetics is a branch of phonetics that studies the production and the articulation of sound means in oral speech.

Acoustic phonetics is a branch of phonetics that studies acoustic qualities of speech sounds, syllables, phonetic words, syntagmas, phrases, overphrasal unities and the text.

Auditory phonetics is a branch of phonetics which studies the perception of all the phonetic means of oral speech and their interpretation.

Phonology is a branch of phonetics which studies the semantic functions of speech sounds and other phonetic means of semantic expression in verbal communication – speech sounds (phonemes), word stress and intonation.

Speech sounds (phonemes), word stress and intonation are phonematically relevant in English and Ukrainian.

The substitution of one phoneme for another can change the meaning of the word or its grammatic function, e.g.

corn [kO:n] – cork [kO:k]
СІЛЬ [С'ІЛ'] – БІЛЬ [Б'ІЛ']

The position of word stress in English may change the meaning of the words.

For example:

blackboard ['blxkbLd]	класна дошка	black board ['blxk 'bLd]	чорна дошка
greenhorn ['gri:nhLn]	новак	green horn ['gri:n 'hLn]	зелений ріг
redwing ['redwIN]	дрізд	red wing ['red 'wIN]	червоне крило

Word stress in Ukrainian has the same phonematic function. This may be illustrated by the following examples:

білизна [Б'ІЛІЗНА] – білизна [Б'ІЛИЗНА]
важниця [ВАЖНИЦ'А] – важниця [ВАЖНІЦ'А]

In English the position of stress may distinguish parts of speech as well. The words given below differ in stress and at the same time their grammatical functions are different, e.g.

convoy [ˈkɒnvɔɪ] <i>n</i>	–	convoy [kɒnˈvɔɪ] <i>v</i>
export [ˈɛkspɔːt] <i>n</i>	–	export [ɛksˈpɔːt] <i>v</i>
import [ˈɪmpɔːt] <i>n</i>	–	import [ɪmˈpɔːt] <i>v</i>

In Ukrainian word stress is also one of the means of semantic expression in speech and the changes in its position may influence the meaning of words as well as their grammatical functions, for example:

брати [БРА́ТИ]	–	брати [БРАТІ́]
варений [ВА́РЕНИЙ]	–	варений [ВАРЕ́НИЙ]

Any component of intonation (tone, sentence stress, tempo, timbre) can change (or add to) the meaning of a sentence and thus, fulfil its phonematic function.

Consequently, if we substitute the falling tone for the rising tone in such sentences as: *Open the window, please. Fetch the newspaper. Hand in the paper*, etc. the communicative type of the sentence will be changed. Pronounced with the falling tone (↘) it means an order, pronounced with the rising tone (↗) it will express a request:

<i>Order</i>	<i>Request</i>
Open the window, please. [ˈqVɒn Dɔ ˘wɪndɔV pli:z.]	Open the window, please. [ˈqVɒn Dɔ ↗wɪndɔV pli:z.]
Fetch the newspaper. [ˈfetS Dɔ ˈnju:s ˘pɛlpɔ.]	Fetch the newspaper. [ˈfetS Dɔ ˈnju:s ↗pɛlpɔ.]

In the same way a statement may be changed into a question by exchanging the falling tone for the rising one.

<i>Statement</i>	<i>Question</i>
Ready. [˘redl.]	Ready? [↗redl?]
The boy is here. [ˈDɔ ˈbɔɪ ɪz ˘hɪə.]	The boy is here? [ˈDɔ ˈbɔɪ ɪz ↗hɪə?]

Sentence stress, one of the main components of intonation, may be phonematically important changing to some extent the meaning of the utterance by emphasizing one or several of its words.

The difference in intensity, i.e. different degrees of sentence stress, can give a different shade of meaning to the whole sentence by emphasizing a certain word or words, for example:

Hand in your paper. [˘hænd ɪn jɔ ˈpɛlpɔ. ||]

Hand in your paper.	[hxnd ˘In jq pelpq.]
Hand in your paper.	[hxnd ln ˘jL pelpq.]
Hand in your paper .	[hxnd ln jq ˘pelpq.]

A change in the speed of utterance or in the intervals between the words can give a sentence a different emotional colouring.

The same sentence may express anger, irritation or wonder, making the speed with which it is uttered slower or quicker.

Therefore it may be asserted that a component of intonation – speed of utterance or tempo fulfils a phonematic function in speech.

The components of intonation are interdependent. In most cases several components are involved simultaneously to give a sentence a definite shade of meaning.

Phonetics studies all the phonetical means of semantic expression in speech. All the phonetical means – phonemes, word stress and intonation are important and neither of them should be underestimated in studying a language.