

Cognitive approach to phonetic studies

The present day linguistics is characterized by cognitive approach based on revealing the nature of linkage between linguistic form, speech substance and mind. This approach originated cognitive phonetics, a relatively new field of studying the sound matter of language and the processes of knowledge representation during speech production, as well as of the mental processes operating on those representations, i.e. speech perception, recognition, understanding, and remembrance, or storing. In combination these processes of coding and decoding of oral speech permit people to perform an unlimited variety of complex mental tasks connected with the use of language in general and its phonetic means in particular. Thus, the analysis of phonetic phenomena should be carried out through the speaker's cognitive capacities.

According to N. Cook, the phonetic representation of people's knowledge in oral communication is usually organized around specific intonation patterns or 'intonatopic maps', i.e. the form of an utterance and sets of vowels and consonants, organizing definite speech acts. For instance, one type of intonatopic mapping refers to the phonetic organization of stating the facts; another – of asking for information; another – of getting people react to this or that stimulus; others refer to specific ways of expressing and evoking certain emotions and feelings or accomplishing a goal; others still relate to the adequate phonetic representation of different forms of speech or various types of texts and speech situations, considering psychological, social and age types of speakers, their communicative and cognitive experience, etc. All of these intonatopic maps play an important role in speech processing since they provide a framework for correct organizing and then expressing complex ideas and thoughts in oral communication.

The assumption can be made that phonetic organization of speech is best studied and described with reference to its cognitive, experiential, and social contexts, which go far beyond the phonological system proper. Thus, at present the aim of cognitive phonetics research is to examine the relation of phonetic phenomena to things outside language. Moreover, the results of such investigations will facilitate understanding of the problems connected with the questions of interference in non-native speakers' pronunciation.