ABSTRACT

This paper dealing with the experience of using computers in teaching Russian phonetics describes a working program of a teaching automatic transcription and a number of controlling phonetic programs for students of Russian, foreign teachers of Russian phonetics who wish to raise their qualification and others. These programs allow to study theoretical phonetics, reading rules and work out practical transcription skills.

Computer-assisted means of teaching already familiar in foreign language learning (at the Department of Philology of the Leningrad State University such programs have been worked out on two languages and are used in teaching process), can be successfully used in different courses for students studying Russian philology. At the Department of Philology of the Leningrad State University a whole series of such programs has been worked out and is actively used in teaching process. In the first place they are intended for doing exercises which demand a student to have some definite analytical skills and automatism. Such skills often can be acquired only long training and its’ control is very boring to a teacher and takes much class time.

So at the course of Russian phonetics original work of students is provided at a computer class where they can do exercises on transcription, syllable division and phoneme description in terms of differential features. Working out practical transcription skills takes particularly much time. The teaching automatic transcription program (AT) created at the Leningrad State University is a kind of the universal AT which had been worked out for the Computer Russian language Fund as a part (or one of structural blocks) of the Phonetic Fund. This one is able to translate any orthographic text into a sequence of transcription signs with different degree of detailization - phoneme, phonetic and detailed phonetic which is used in synthesized speech creating. The teaching AT has other aims - teaching and control of transcription skills. The AT program includes 3 series of exercises: phoneme transcription, phonetic transcription and a multi-variant phonematic transcription taking into account different modern phonological conceptions. The phoneme part of the teaching AT includes 12 exercises located according to increasing of their complexity. Each exercise introduces concrete phonetic rule: pronunciation of jetted and unjetted vowels in the stressed and non-stressed positions, assimilation of consonants in different features, pronunciation of consonant sequences including dubble and “non-pronounced”. In all cases a word displayed on the screen corresponds to its’ transcription presentation, it means that the rules are formulated “from letter to sound” or to be more correct - to its’ transcription designation. Separately taken, it contains words-exceptions pronunciation of which should be learned by heart (что, конечно, мягк.) etc. The next exercise in this part contains transcription of combinations of words and a summary of all considered phonetic features in Russian speech. This part of the teaching AT has rather wide sphere of application. Besides its ability to control the acquiring of phonetic transcription skills within the framework of Shcherba’s phonological conception it can carry out other functions. In this test as it reveals a difficulty of hearing people with difficulty of hearing has the only way of gaining orthoepic skills left: orthographic word image - its’ sound image. The intermediate linguistic case is the transcription notion of sound word image which is provided by the AT. In this sense methodologies of the speech training of foreigners and people with bad hearing is very monotype.

Computer-assisted teaching and the AT programs are supposed to be organized in the following way. A student or a patient is communicating with computer in a computer class. Words the transcription of which should be typed on the keyboard are displayed on the screen according to the booted program. The user types transcription according to his own idea of the word sounding. Pronunciation mistakes which are characteristic to the student and audience. Phoneme transcription based on Shcherba’s phonology fully can serve as this test as it reveals a real pronunciation. Another sphere of using the phoneme part of the teaching AT is teaching pronunciation people with difficulty of hearing. Generally such a methodologies may be applied to the people who lost their hearing at a rather early age. It is known that if inborn hearing skills are lost before 12 years of age many of pronunciation skills concerning phonetic active laws of the Russian language - opposition of voiced and voiceless consonants, difference between vowels with different degrees of reduction etc. are not formed. Thus, when there is no natural way: perception of sound - production of sound - people with difficulty of hearing has the only way of gaining orthoepic skills left: orthographic word image - its’ sound image. The intermediate linguistic case is the transcription notion of sound word image which is provided by the AT. In this sense methodologies of the speech training of foreigners and people with bad hearing is very monotype.

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are the results of wrong or significant Russian speech perception will be reflected in the transcription. In the case of a wrong answer "?" is displayed on the screen in the place of the mistake and the program suggests user to transcribe this word once more. If it is necessary the student can make an inquiry to the computer memory and get a rule corresponding to this case.

On the stage of training in the Russian Literary (standard) pronunciation this rule can be considered as orthoepic rule. On the advanced stage of teaching students can get knowledge of Russian orthoepic standard variation. At last if the right answer is not received the program suggests the right answer and goes to next word. Words specially selected for exercises and step by step passing from simple rules to more complicated ones should help people with difficulty of hearing and patients with temporary violation of hearing and speech to eliminate mistakes in pronunciation and acquire right orthoepic skills.

Next part of the teaching AT - phonetic - considers all main laws of Russian speech: the law of quality and quantity vowel reduction, mutual influence of sounds in speech flood, positional distribution of Russian phoneme allophones. This part of the teaching AT contains 17 exercises which are located according to their increasing complexity. Each new exercise introduces next phonetic rule and suggests a new transcription sign. All these rules are stored in computer memory and can be displayed on the screen at the user's inquiry on any stage of work with the program. The main part of the AT also contains information on the Russian language phoneme system, its structure, differential features and their correspondence within the framework of the phoneme transcription. Any part of this information can be demanded by the user either before work or in this case doing exercises, is absolutely original without teacher's help - or in course of work if some difficulties appear. This part is supposed to have more limited sphere of application - it is intended for phoneticians who study Russian phonetics. However it is acquiring phonetic transcription skills that takes particularly long training; but replacing auditory classes with work at the computer-equipped class saves much teaching time.

The third part of the AT is even more specific. It contains exercises on phoneme transcription within the framework of different phonological conceptions. According to the Russian phonetics teaching curricula students of the Department of Philology get acquainted with the point of view of Moscow School supporters and the theory of weak and strong phonemes by R.I. Avanesov. Serious knowledge of these phonological statements expect students to be able to give a phoneme structure of any word from the point of view of both these conceptions. In this part of the AT each word displayed on the screen should have 5 corresponding transcriptions: phonetic, Shcherba's, Moscow School phoneme and 2 transcriptions by Avanesov - word-phoneme and morph-phonetic. Such skills also take much teaching time to be gained. When using the AT teacher only has to prepare student for this work and control its' fulfillment which is fixed in computer listing.

The program of the AT, as it is clear from the previous part of the report, is organized according to the principle when student enters the needed form of the given word. The exercises on syllable division in the Russian language have the same structure. In this case practical work also improves the knowledge gained at lectures. Students acquaint themselves with all existing theories on syllable division and use them in practice. As in all previous cases computer checks the correctness of the answers, appreciates the results and memorizes mistakes.

Checking theoretical knowledge of Russian phonetics also takes much of teacher's efforts and time, it is realized with the help of a series of phonetic exercises. The main attention is paid here to the phoneme system of the Russian language, its differential features and phoneme modification in speech flood. This program is based on the "menu" principle when the user is to choose the right answer among several suggested variants. The student is only to press one key to answer the question on Russian phoneme differential features, their difference and similarity. The student of the Department of Philology T.Taalmann took part in working out the recent phonetics program.

All considered programs are intended for the students of Russian (including foreigners) and for those who perfect their Russian. They can be of great help for foreign teachers of Russian who teach Russian phonetics. The programs are open, can be added and work under all operational systems.