

SOME PROSODIC CUES FOR IDENTIFICATION OF LECTURE EXPRESSIVENESS

E. A. Nushikyan, N. A. Kravchenko
Odessa State University, Odessa, Ukraine

ABSTRACT

The aim of this paper is to manifest the results of the experimental research of prosodic organisation of text-lectures in English. The lectures under study were analysed from the point of view of their semantic and syntactic structure. The main task of this investigation is to prove the existence of tight connection between semantic value and expressiveness of a lecture and its prosodic organisation.

INTRODUCTION

A phonostylistic speech study widely spread in this country and abroad has an objective to reveal the peculiarities of prosodic and paralinguistic language means functioning in speech styles. Alongside with other speech styles the scientific prose research is of primary importance, its peculiar characteristics, scientific terminology leading to its language indices stability has always attracted the attention of linguists. Besides, the present state of constantly increasing volume of information results in leading role of scientific prose style among other styles. Lecture is one of the ways of transmission information. It is a very interesting object for investigation since it comprises some features of scientific and oratorical styles.

Many linguists refer lecture to the "influence texts" (Bahtin M., 1979, Leontyev A., 1974) but there are very few investigations of lecture from the view point of pragmalinguistics.

In this paper the prosodic analysis of lecture style in English is undertaken. It is a study of extralinguistic and linguistic factors taking part in structuring text-lecture. The extralinguistic factors are: the aim and the subject of utterance, the relations between a speaker and listeners, speaker's attitude towards the subject of utterance, social conditions of communication (Gaiduchic S., 1973). Among linguistic factors tempo, funda-

mental frequency and dynamic structure of the lectures were analysed.

RESEARCH MATERIAL

Three English lectures delivered by three American professors to the students of Odessa State University and their studio equivalents (written variants) read by the same speakers were taken as the subject of investigation. The material under study allowed to identify eight main parts in any lecture: 1) introduction to a lecture, 2) introduction to a new subject of the lecture, 3) introduction of new notions, 4) the main part of the lecture (the body), 5) deviations from the subject of the lecture, 6) appeal to the audience, 7) drawing conclusions, 8) the end of the lecture.

These parts of the lectures were instrumentally analysed with the help of IBM speech program, which enabled graphical presentation of tempo, fundamental frequency and intensity.

DATA ANALYSIS AND RESULTS

The comparative analysis of the lectures shows that there exists certain regularities in the prosodic organisation of above-mentioned parts of the lecture.

As far as temporal structure of the lectures is concerned the tempo of the introductory part of the lectures is rather slow. The variations in tempo from slow to quick of the main part of the lecture serve as cues of lecturer emotionality and expressiveness. Thus, the most important parts of the lecture are made prominent by changes in tempo - from quick in neutral deviations to slow in emotionally coloured utterances. While approaching to the end of the lecture all lecturers change their tempo to slow or even very slow in order to make it prominent (see Table 1).

Table 1. The average data of mean syllable duration of suprasentential units, included in different parts of the lecture.

part of the lecture	spontaneous lecture	studio lecture
introduction	239	179
introd. of new notions	245	177
introd. to a new subject	238	171
the body	249	185
deviations	212	165
appeal	214	173
conclusions	233	186
the end	252	202

The data of the table show that the spontaneous lecture is characterised by considerably larger value of mean syllable duration, that is the tempo of this kind of a lecture is much slower. Besides, in semantically unimportant parts of both types of the lectures the mean syllabic duration is less - the tempo is quicker than in introductory parts of the lecture and especially in the end of the lecture.

Pauses play an essential part in revealing lecture expressiveness. The analysis of textual pausation shows the considerable difference between spontaneous and studio lectures. Expressive lectures delivered to the audience are characterised by the greater amount of pauses (especially pauses of hesitation) and their longer duration (mainly in introduction, introduction to a new subject of the lecture and in the end of the lecture) whereas in neutral studio lectures pauses are much shorter. Short

pauses prevail in introduction of new notions and appeal to the audience, middle pauses are found mainly in introduction and in the end of the lecture.

The coefficient of pausation is also helpful for differentiation of two types of the lectures (see Table 2)

Table 2. The coefficient of pausation in different parts of the lecture.

part of the lecture	spontaneous lecture	studio lecture
introduction	0,38	0,18
introd. of new notions	0,21	0,14
introd. to a new subject	0,36	0,20
the body	0,25	0,18
deviations	0,09	0,08
appeal	0,18	0,16
conclusions	0,19	0,15
the end	0,29	0,20

The data of this table manifest that in the emotional spontaneous lectures the quantity of the coefficient is considerably larger than in neutral studio lectures and depends on the place of the lecture these pauses occur.

The investigation of melodic component of lecture intonation includes the analysis of fundamental frequency and terminal tones of the utterances of different emotional tenacity.

It is established that phrases in the suprasentential units of spontaneous lectures, characterised by a greater degree of expressiveness, are uttered with various terminal tones and more complicated ones than the same phrases in neutral studio lectures (see Figure 1).

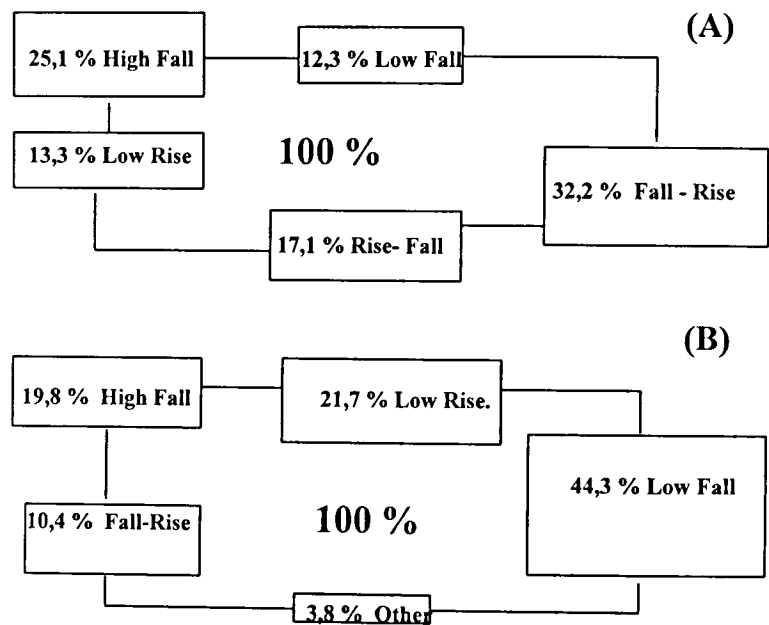


Figure 1. The frequency of different terminal tones in spontaneous lecture (A) and studio lecture (B).

The picture shows that in studio lectures simple terminal tones - Low Rise and Low Fall prevail, while in spontaneous lectures phrases in suprasentential units are pronounced with different complex tones (mainly Fall-Rise, High Fall and Rise-Fall).

The analysis of fundamental frequency shows that higher fundamental frequencies are observed in spontaneous lectures, especially in introduction,

appeal to the audience, and conclusions. Investigation allows to make a conclusion about close interaction of fundamental frequency interval of a separate utterance in spontaneous lectures with semantically important parts of the text.

Figure 2 illustrates fundamental frequency range in the main part of the lecture.

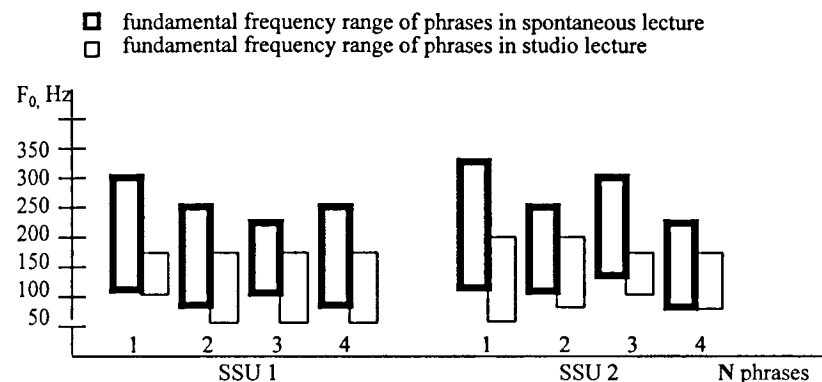


Figure 2. Fundamental frequency range of suprasentential units included in the main part of the lecture

This histogram shows the considerable difference between the value of this parameter in spontaneous and studio lectures. Besides, in the main part of the spontaneous lectures as well as in some other parts of them, the initial phrases are characterised by the highest fundamental frequency.

The analysis of dynamic structure of the lectures included investigation of maximum of intensity of phrases which constituted the suprasentential units of lectures and mean syllabic intensity of these phrases. The research shows that there exists correlation of dynamic structure of the lecture with its expressiveness and emotionality. Table 3 presents the data received by means of comparison of mean syllable intensity of phrases of spontaneous and studio lectures.

The table shows that the quantity of this parameter depends on the part of the lecture. Thus, the most semantically and emotionally important parts of the lecture, such as introduction of new notions, the end of the lecture, drawing conclusions, are characterised by more considerable difference between the dynamic structure of spontaneous and studio lectures. This fact proves the influence of expressiveness upon the parameter of mean syllable intensity.

Table 3. The ratio of mean syllable intensity of phrases included in suprasentential units of spontaneous and studio lectures.

part of the lecture	the ratio of mean syllable intensity
introduction	1,34
introduction of new notions	2,01
introduction to a new subject	1,28
the body	1,21
deviations	1,14
appeal	1,11
conclusions	1,63
the end	1,84

CONCLUSIONS

The obtained results are helpful for identification of lecture expressiveness. They reveal some regularities in prosodic organisation of text-lectures of different types. The analysis of the experimental material allows to make a conclusion about close interaction of prosodic means with different degree of expressiveness of the lecture parts.

REFERENCES

- [1] Bahtin, M. (1979) Estetica slovesnogo tvorcestva, Moscow
- [2] Leontyev, A. (1974) Lectsiya kak obshcheniye, Moscow
- [3] Gaiduchic, S. (1973) Fonostylystychesky aspekt ustnoy rechi, Minsk