

## The methodology of sociolinguistic study of intonational level

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**Abstract.** The article is devoted to research of supersegmental level of speech and peculiarities of conducting phonostylistics experiment. The aim of this work is the determination of stages, methods, techniques and computer programs, which are required for such type of re-researches. The article also includes an example of using the described technique based on the study phonostylistics features of the intonation of modern sociolect of Germany officials.

**Keywords:** *phonostylistics variability, speech, experimental material, interpretation.*

In the modern world which immediate parts are globalization, a computerization and integration the linguistics became so many-sided science that during the researches linguists are not limited to own methodological base for a long time, and attract knowledge and results from such sciences as sociology, criminalistics, psychology, ethnography and even mathematics. Features of the most various texts, their forms and styles are studied in different aspects (lexical, phonetic, pragmatic and so on). At the same time the most interesting is their combination.

For example, the monograph "Social Stratification of English in New York" by W. Labov became a fundamental stone of sociolinguistic researches. In his work the outstanding American linguist studied a divergence or inconsistency which are shown by a concrete form of language in comparison with the abstract orphoepic standard [11, p. 131]. Studying of oral speech of a certain social group which leans on a concrete communicative situation is important for sociolinguistic investigations. Such the directions of researches are engaged phonostylistics and sociophonetics. These sciences help to define phonetic options of speech of a certain group of people in a certain situation at a specific goal. The interpretation of variability in the choice of language / speech means under the influence of extralinguistic factors of the sociopsychological plan is one of possible criteria of approach. It allows to define optimum criteria of variability of the phonostylistic phenomena in a social plan, as leads up relevance of such researches. Besides, experiments of this sort by studying of a question of stratification phonostyles give the chance to define the main sources of sound changes and to make the assumption concerning reliability of hit of this or that option to the system of orphoepic norm.

The main direction of researches of the sciences stated above is studying of systemacity of speech skills of a certain social group by means of such concepts as variability, a sociolinguistic variable, the speech style, a situation of communication and another. Much attention is paid to this question [3; 5; 6; 9; 10; 13]. A lot of works [2; 7; 9] confirm dependence of the pronunciation variant elected by the speaker on a situation of communication and social characteristics of the communicant and emphasize importance of studying of the concept "sociolect".

The purpose of the present article is to define the main stages of carrying out a sociolinguistic research of supersegmental level for data acquisition of a phonostylistic and sociolinguistic order. The main tasks at the same time are to describe stages and ways of carrying out an experiment which purpose is to describe dependence of language behavior on the level of officiality of a communicative situation and to establish features of reflection at the intonational level of language of such speak-

er's characteristics as age, sex, a sort of professional activity.

The method of an experiment is the basic in carrying out similar researches. It is combined with use of methods of data collection and processing. The special value gets a factor of a situation of communication of informants here. The main criterion of the description of these circumstances is degree of officiality during communication which components are different factors which characterize two poles: informal (IC) and official (OC) communication.

For carrying out any linguistic research it is necessary to get material. In a case with a phonostylistic experiment it is an audio material in the form of sound recordings of separate phonemes, words or even certain pieces of speech. For the correct selection of material, by the beginning of carrying out an experiment, it is necessary to establish its criteria. Depending on the chosen subject and a goal the researcher's task is to exclude from the experimental material dialect, colloquial, gender or age forms or statements of emotional character or such which do not correspond to a communicative context.

Determination of phonostylistic features of speech is the progressive direction of linguistic researches. At the same time much attention is paid to definition of informants, speech variation which becomes an experiment object. Informants can be people of different professional (doctors, teachers, military), age (children, youth, senior generation), gender (men, women), geographical (bilinguals, dialect) and a number of other groups.

For getting data of a sociological order about informants the methods of questioning and poll were used. The purpose of sociolinguistic poll is, according to the researcher of sociology of communication V.P. Konetska, data acquisition about characteristics of informants which have to define their belonging to the corresponding social group and also determine advantages of speech normativity of interviewed; that is a process of illumination of socially important information and its assessment during which answers are interpreted by the researcher [4, pp. 182-183].

The essence of an experiment of a research consisted in:

- collecting speech material;
- defining of types of intonational contours in speech of informants
- establishment of average maximum and minimum indicators of frequency of the main tone (Hz) and intensity (dB),
- description of character of a pausation and determination of their temporal features;
- analysis of rate of informants' speech.

During collecting speech material it is better to use methods of "the hidden record", "a semi-standard interview" and "the included observation". The audio recording can be carried out by mini-dictophones, smartphones, tablets and

even cameras. The use of dictophone is directed first of all to record of speech, the camera serves as the instrument of establishment of situation officiality level. Members of target group should be known that they will participate in a sociolinguistic experiment. But the aim should be explained in general and details of that what material will be gathered must be unknown. It is done for obtaining objective data on speech skills of informants and not to prevent the speaker to use the language potentialities unconsciously and automated [1, pp. 303-304].

For obtaining system information on speech behavior of informants it is also possible to use a method of a semi-standard interview which principles are that the one who conducts an interview has an opportunity depending on circumstances to vary a question form, remaining at the same time in set context. W. Labov specifies that the interview is, on the one hand, successfully developed strategy, and on the another, a number of hierarchically structured complexes of questions [11, pp. 32-34]. A question of an interview are not directed to obtaining a certain information from interviewed as necessary will already be given by questioning, but to receiving necessary models of speech. The attention of an informant is concentrated not on control of speech, but on a conversation subject.

For recording speech in informal situations it is necessary to adhere to such main conditions:

1) the situation of communication and character of the message should be informal: informants have to be in conditions of usual setting, and subjects of conversations have to be familiar to speakers, close to their social reality;

2) communication should be unprepared;

3) there should be informal relationships between speakers: group members should be of the same social collective with friendly, close relationships;

4) the communication should be happened directly to the listener. During the communication in the conditions of IS the method of "the hidden record" is applied. It gives the chance to receive models of speech which display natural speech behavior of the speaker most precisely.

For identification and interpretation of collected material the method of the auditive analysis is used too. Auditor assessment provided objectivity of the received results. Auditors can be both experts and ordinary people who have no necessary professional level, but will provide independent assessment of results (native speakers or students who study at philological faculty). Experts of a phonostylistic research can become philologists who are or aren't native speakers, people who have experience in carrying out of this sort experiments and have the appropriate psychological preparation. The main task of auditors is to define features of realization of supersegment composition of experimental material.

To establish the variants of realization of a certain intonational design which can't be definitely interpreted and for confirmation of received result of auditive and auditor analyses it is possible to apply the electroacoustic analysis, because auditors' information in research of phonostylistic variability of speech can display a certain subjective degree. Electroacoustic analysis shows more exact and detailed information of units which are analyzed. Quantitative characteristics and variable rules of sociolinguistic variables are reflected in the graphic representation of an observed ratio - in the form of tables, charts or schedules. As a result models of speech of informants will be displayed on oscillograms and spectrograms. Processing of records of communicative situations can be carried out by means of

various programs of computer processing of a sound signal (Speech Analyzer 3.0.1., Praat, WASP, Computerized Speech Laboratory(CSL) 4500).Data of analyses should be processed mathematically by means of a quantitative method. The average size of realization of a certain intonational design is defined at first in speech of each informant, and then in speech of all representatives of target group.

Linguists argue on unambiguity of interpretation and on differentiation of concepts prosody and intonation. The intonation is a basis of prosodic system of language. This term is synonymic to a concept prosody as both terms are used for designation of functional system of supersegmental means of language. Intonation has a lot of functions (organizing, communicative, logical, syntactic and modal or emotional) and it is difficult to underestimate its importance for colloquial speech, considering that the spontaneity and unpreparedness are the main characteristics of the last. During studying of features of suprasegmentny level it is possible to use A. Muller's classification [12, p. 7] according to which three acoustic parameters belong to prosody:

1. frequency of the main tone and its change;
2. intensity of a sound and its variation;
3. longitude of structure, pause and their modification.

And there are the following characteristics of speech:

- melodious / voice pitch frequency (Hz)
- dynamic/loudness (dB),
- temporal / time (ms).

Final investigation phase is linguistic interpretation of the data obtained experimentally, that is their logical analysis, generalization, forecasting and conclusions.

As an example, we suggest to consider some moments of the research conducted by us which purpose was to investigate phonostylistic features of modern sociolect of german employees at the supersegmental level. Models of speech of informants were registered in three communication situations. For models of official speech performances of informants before large audience in the form of any reports (auditor, budgetary, credit and others) were taken. Also informants were offered to read the text aloud for preparation of reading the list of words. Except answers to an interview question, discussions during the business talk, conversations with colleagues in conditions which demanded certain, but not high degree of officiality were models of less official communication.

Informal speech often is followed by abrupt increase and decrease in tone, pauses, changes of speed and a rhythm of speech. Other features of supersegmental level of colloquial speech are decrease in prosodic indicators of loudness of quality of a voice, bigger compared with the literary language quantity of short rhythmical steps, phrase accents, rhythmical steps with the falling intonation, an ellipsis of syllables what leads to reorganization of a component and rhythmical structure of a word.

The main types of intonational designs allocated in speech of informants were:

- intonation of increase (steigende Kontur),
- intonation of decrease (fallende Kontur),
- intonation of decrease-increase (fallend-steigende Kontur),
- intonation of increase-decrease (steigend-fallende Kontur),
- neutral intonation (progrediente Kontur).

In the situation of IC indicators of intensity were higher than in OC situation. It is connected with such extralinguistic factors as the place of communication, noise, allowed among

the friends loudness (even whispering) for creation of a certain communicative context.

Character of a pausation in situations of OC and IC different and connected first of all with such extralinguistic factor as preparedness of speech. The context of official communication demands from the speaker the previous acquaintance with a conversation subject (reading the text, a performance, business negotiations, etc.) that leads to a pausation of speech between syntactic connected groups of words. Spontaneous speech is divided into unfinished semantic pieces therefore in the context of IC more than in OC situation. The situation of informal communication provides any nature of communication, improvisation and is characterized by emergence of pauses even in syntactic group. As various types of pauses (psychological, hesitation, deliberate and others) perform different functions, they were not connected with the rate of speech in any way. Results of determination of temporal features of pauses in both communicative situations became interesting. At the end of the sentence pauses were longer in OC situation, and in the middle – in the context of IC (see tab. 1.)

Rate of speech can be determined in two ways. The first – calculation of quantity of sounds or syllables for a certain period (second, minute), and the second – determination of average duration of a sound or structure. As the rate of speech to a great extent depends both on a communicative situation, and on specific features of the speaker, we made

such an experiment. In the context of OC, as well as in the conditions of IC the employees were asked to read the sentence “Im Jahre neunzehnhundertvierundfünfzig strandete ein alter, bärtiger Mann auf einer einsamen Insel”. In OC situation the sentence was read for 5, 2 sec., and in the context of IC for 4.4 sec. that demonstrates increase in speed by 15%. However, for confirmation of the results established in the above-stated way, we also counted quantity of the pronounced in a second sounds in both communicative situations. In the context of OC it represented on average 16, and at the IC situation – 23 sounds in a second (increase in speed by 25%)

**Table 1.** Average temporal characteristics of pauses in situations of OC and IC.

Pausation type	OC	IC
intraprase	35 msec.	20 msec.
interphrase	50 msec.	30 msec.

Therefore, the sociolinguistic research has to be carried out in several steps, the essence of each of them at the same time has to be defined by a concrete task. In general, the phonostylistic experiment of the analysis of intonational variability of speech of a certain social group is based on empirical scientific methods (observation, measurement, comparison) and special methods of an experimental and phonetic research (sound recording, acoustic analysis, the intonographical, computer, quantitative analysis of data).

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#### Методика проведения социолінгвістического исследования интонационного уровня

**А. Ю. Корягина**

**Аннотация.** Статья посвящена вопросу исследования суперсегментного уровня речи и особенностям проведения фоностилистического эксперимента. Целью работы является определение необходимых для такого рода изысканий этапов, методов, приемов и компьютерных програм. В статье также приводится пример использования описанной методики на основе изучения фоностилистических особенностей интонационного уровня современного социолекта служащих Германии.

**Ключевые слова:** фоностилистическая вариативность, интонация, речь, экспериментальный материал, лингвистическая интерпретация.