

Studying cultural–axiological aspect of spoken discourse by axiological scaling

Abstract

This research article takes the reader through each stage of a psychometric experiment from a brief sketch of psychometric method to applying it to axiological scaling of spoken discourse and finding out the subjects' preferences in relation to the speaker's voice qualities, intonation and the segmental level of discourse realization. The article is an introduction to psychometric methods of studying axiological relations between an individual and spoken discourse. The idea is based on the fact that this sort of relations is connected with perception as a form of psychic activity. Viewed from within the framework of experimental phonetics, psycholinguistics and axiology the article focuses in particular on the axiological values of spoken discourse as a cultural phenomenon belonging to the field of culture of the society.

Keywords: axiology, spoken discourse, scaling, voice qualities, intonation, sounds

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Irina A Anashkina

Foreign Languages Department, Mordovia National Research State University, Russia

Correspondence: Irina A Anashkina, Foreign Languages Department, Mordovia National Research University, Russia, Email iraida952@gmail.com

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Introduction

The results of the experimental phonetic research of the last decades owe much too newly devised instruments for speech sound analysis. But many of these first-hand data and findings were received thanks to the simplest ways of observation and self-observation. One can only marvel at the intuition and ingenuity of the researchers of XVIII–XIX centuries, who achieved major linguistic knowledge without any sophisticated technical instruments and appliances.

Academician Shcherba LV¹ was absolutely right asserting that speech, both spoken and written, is the reality of the language. We can observe language in its concrete manifestations. Speech is the ultimate reality of the language. And that's why experiment in linguistics is not only possible, but unavoidable, especially in phonetics.

Nowadays the words of Artyomov VA,² the great Russian phonetician and experimentator, written in 1956, saying that raw speech material for a researcher can be found on records, tape-recorders and other old-fashioned speech preserving devices sound naïve. Taking the level of development of speech recording devices of that time it was very problematic to study spontaneous speech.

It may be stated as axiomatic that at the present level of developing speech preserving devices there is no need to use records or tape-recorders because we have the Internet, computer programs for electro-acoustic analysis of speech. Any sample of unprepared, emotional speech can be found in the Internet. In other words, the facilities for experimental analysis of speech in any realisation have developed and their effectiveness has become almost boundless.

The theoretical starting point of the project is drawn from a number of basic points about the position of discourse in the society. In Foucault's view any society controls discourse ("controlled, organised and redistributed according to a certain number of procedures, whose role is to avert its powers and dangers").³ The "powers" of discourse can be interpreted from the point of view of axiology, part of philosophy, which is defined as science of cultural values.

The main aim of this article consists in describing psychometric experiment as a model for axiological scaling of spoken discourse. To

start with it makes reason to give a brief sketch of the sort of theoretical work that has helped me with this project. A circumstantial account of the history of experimental phonetics is given in the fundamental work by Gordina MV⁴ (in Russian) under the title "A History of phonetic investigations (from the ancient world up to phonology)".

O Jespersen suggested the term "instrumental phonetics" instead of the one widely used at the end of XIX century "experimental phonetics" supporting this decision with the fact that experiment is quite possible without using special appliances.⁵ O Jespersen's arguments concerning the relationship between experimental and instrumental phonetics are well grounded because phonetic experiment can be conducted without any appliances or instruments. By way of example a psycholinguistic experiment can be suggested, which as a rule is conducted with subjects who listen to speech or read texts depending on the forms of speech that is tested. In this connection it is worth while referring to the numerous works by Zalevskaya AA.⁶ Japaridze ZN⁷ tested the subjective impressions when listening to speech sounds. He suggested an independent status of perceptual phonetics.⁷

I can't help mentioning the works of L. K. Cepletis devoted to speech intonation analysis that was also done with the help of instrumental methods.⁸ On the whole it should be stated that studying phonetic phenomena by the electric-acoustic method turned out to be very prolific both in the former Soviet Union and in the present-day Russia. More often than not they were connected with the perceptual analysis of the auditors' impressions and their electric-acoustic correlates.

Besides, psycholinguistic methods, psychometric ones, were widely used in experimental works, especially in the USA and Europe. Frumkina RM & Vasilevich AP⁹ (in Russian) wrote about the usage of psychometric methods in psycholinguistic investigations in the 1980s.⁹

The analysis of spoken discourses is by far a more time-consuming thing because, besides meaning, which is found in written discourses, in spoken discourse there appears, according to R Bathes,¹⁰ something "gastrosophic" enabling listeners to experience "a language thrill".

The “gastsophy” of intonation and speech sounds can be analysed with the help of psychometric scaling, as it facilitates to find evidence to a person’s preferences in relation to the discourse perceived.

It is a psycholinguistic experiment which enables to measure the subjective impressions of the listener in relation to the perceived spoken discourse of the shortest length up to the most extended. Psycholinguistic scaling can also be axiological when listener or reader’s preferences are measured.¹¹

Guilford JP & Fruchter B¹² wrote that things can be counted and measured. Accordingly, the data received in the course of these two procedures can be organized either in enumeration or measurements. The latter form a group of metric data.¹² Scaling is qualified as measurement. This method helps to study the subjective space of person’s perception. The method presupposes a special way of processing data. Scaling is a method of measurement consisting in number ascription. It is an intuitive experiment used in psychometrics.¹¹

Any measurement, as it is known, implies number ascription either to objects or their qualities in accordance with some definite rules. Torgerson WS¹³ suggests that measurement is always connected with measuring quality and never with measuring system. The numbers ascribed to objects (a spoken discourse can be viewed on as an object of culture) describe the relations between objects and their qualities or between object and the perceiving subject. In case with phonetic experiment the numbers ascribed to spoken discourses are endowed with a twofold meaning. First of all they testify to presence of some quality (a good diction, a pleasant voice quality, melodious speech) in the discourse tested. Secondly, they demonstrate axiological relations fixed between the individual and discourse. Indirectly these numbers reflecting the subject’s assessment of the object perceived (discourse) reflect the person’s sociocultural experience and communicative competence.¹⁰

As it was aforesaid one of the variant of scaling is axiological. And scaling means measurement. So axiological scaling can be interpreted as measurement of axiological relations within a subject–object system, in which there is the object of assessment, on the one hand, and the subject who perceives and assesses the spoken discourse.

Axiological scaling as an experimental method of studying the phonetic and voice quality aspect of speech is a psychometric method of analysing spoken discourses conducted with a group of subjects in order to find out the axiological assessment of the discourse, their preferences in relation to the factors determining this assessment such as prosody, segmental level of realization and the voice qualities of the speaker.

The choice of axiological scaling as a method of studying axiological relations between an individual and oral text is based on the fact that this sort of relations is connected with perception as a form of psychic activity. That’s why these relations cannot be analysed directly. So it is necessary to develop indirect methods of measurement. Hausenblas K, a well-known Czech linguist, member of the Prague Linguistic Circle, wrote that study of the culture of perception of oral speech is hampered due to the fact that mistakes of perception can be discovered only through native speakers’ reaction and by the results occurring through these faults of perception.¹⁴ The processes determining perception of oral discourses remain beyond direct observation. Japaridze ZN⁷ wrote that perception of oral speech cannot be subjected to direct observation,⁷ with the characteristics of perception being formulated in this way it is necessary to find out a

method of investigation characterised by indirect ways of analysis. American psychologists have conducted a number of experiments on speech perception. Thus, the three authors Johnson RC et al.¹⁵ conducted an experimental research on establishing dependence between “pleasantness” of a word and its frequency in the result of which there was received a positive correlation between these two factors.¹⁵ Concerning axiological scaling one more experiment of these authors is of interest. The subjects were to tick a more pleasantly intoned word of a pair. The pairs were composed of a frequent word and of an infrequent one. The authors found a positive correlation between the into national characteristics of a word and its frequency. Gregory A. Kimble wrote about indirect measurements of different types of social and individual perception.¹⁶ He wrote that sometimes these methods disclose very interesting things. Thus, the readers’ interest to an advertisement in a magazine was found out by counting the number of finger prints discovered on the pages of library copies of magazines with advertisements.

The psychometric method of studying discourse is not new in itself. Discourse scaling aimed at psychological processes: recognition, memorizing, psychological reaction to different stimuli. Content–related aspect was scaled as well, but more often than not these were experiments on frequency of a group of words or grammar structures. Scaling of texts can test perception of units of the highest level, clarify the influence of linguistic context and prove the fact of semantic prognosis. A number of research being done the problem of discourse perception remains by far less investigated. Even less investigated remains the axiological aspect of the perception of spoken discourse.

Material and methods

The experimental method applied in the research –axiological scaling–developed by the author of the article, is defined in the following way: a specially devised psychometric test of auditing spoken discourses, conducted with participation of subjects, aimed at finding out the general axiological assessment of a discourse and axiological preferences of the listeners in relation to the factors (prosody, sounds and voice qualities) and their combination determining the assessment of the discourse. Axiological scaling is a procedure of measuring of the subjective (auditory) perceptions of an individual (in the situation of experiment it is a subject).

The material is presented by discourses as a result of two types of speech activity–artistic reading (actors’ performances) of poetry and spontaneous monologues by native speakers (British variant). The spontaneous monologues were addressee–oriented. They were originated in the result of role improvisation by Englishmen and English women. The poetic texts were chosen from anthologies of classic British poetry. The verses were recited by Ustinov P et al.¹⁷ The total time of recitation is 2 hours and 15 min.¹⁷

The subjects were chosen among native speakers (male and female), students of English and students of German those who do not study English as their second foreign language, i.e. English in this case has the status of 0–incorporated linguistic code of culture. The experimental material belongs to two large groups of spoken discourses belonging to a literary poetic and informative styles.

Results and discussion

This part of the article gives a very compact presentation of the results of the experiment. Speech voice can be regarded as a

component of spoken discourse which is a symbolic value, one of the numerous in the socium, belonging to the field of culture. Vox humana can be viewed on as an instrument of creating cultural values, which form the socio–cultural habitus of man.

Speech voice is a mechanism that helps a person who has learnt to grasp the world with the help of signs. In this context it is logical to suppose that vox humana is a mediator that connects two modes of cognition of the world – abstract (symbolic) and sensuous. They interweave and interact in spoken discourses. The results of axiological scaling led to the conclusion that speech voice has its own zone of functionality in the vocal code of discourse. Speech voice within the structure of its parametres intensity, timbre and pitch – is connected with the following spheres of interaction in the hierarchical system “spoken discourse – the evaluating subject”:

- a. Spoken discourse as object of assessment.
- b. Speaker as subject of speech.
- c. The individual who perceives discourse as subject of evaluation.

Taking into consideration that speech voice substantially conveys multifarious information (linguistic, paralinguistic) it is necessary to attribute the information perceived to three functional zones: a zone of linguistic relevance, a zone of paralinguistic relevance and a zone of axiological relevance.

The first one is connected with the object of assessment via speech voice, as it (voice) carries the meaning of discourse and its (voice's) parametres are realized in the sounds pronounced and in the prosodic pattern chosen by the speaker. Prosody and sounds are the most important linguistic components of spoken discourse. The zone of paralinguistic relevance connects speech voice with the subject of speech, as it explicates the speaker's psychic and emotional condition and it is also a source of sociocultural information about the subject of speech (cultural aspect of voice quality, education, professional activity).

The zone of axiological relevance connects speech voice with the subject of assessment, voice exerts influence on the individual's subjective assessment of discourse. Analyzing speech voice in this zone of functional relevance I accentuate the idea that speech voice is closely connected with culture of the sound aspect of speech, its (voice's) development as a vocal instrument, with the rhetoric aspects of speech. All these details are more or less closely connected with functioning of a language sign which in the theory of sign systems is traditionally termed as pragmatics, or otherwise, the sphere of interrelation of language sign and its the user. In this article this sphere is developed into a different paradigm. Within the framework of which spoken discourse is viewed on as a complex semiotic sign in the structure of individuals' symbolic activity; user of signs (speakers) occupies the position of not only a perceiving subject but also that of an assessing one. In accordance with this approach to the pragmatic relations the tandem “ spoken discourse–perceiving subject” reveals the modus of axiological relations by way of axiological assessment which is the result of the individual's subjective evaluation.

Qualities of speech voice (inherited or acquired through exercise and practice) contribute to differentiation the vocal codes of discourses and determine axiological evaluation of the spoken discourse perceived and the character of axiological relations.

So out of the vast sphere of pragmatics we lay emphasis on the

axiological aspect of language sign and perceiving subject. Individual and socium appreciate highly things which are of great value for them. In this connection a question arises what qualities a spoken discourse should acquire to be assessed as a cultural value. The results of axiological scaling have definitely indicated that it is vox humana.

Conclusion

Speech voice has been substantially studied in two zones of its functional relevance–linguistic and paralinguistic. This category got a full coverage and description in the folios of Ancient rhetors and theoreticians of rhetorics.¹⁸ In 20th century it is analyzed in the terms of articulatory setting and its social differentiation.¹⁹ As for its axiological relevance it has not been so far thoroughly investigated.²⁰ And that is why there is much to be done in this aspect. Axiological scaling can be applied for further scaling of spoken discourses belonging to different genres for proving their positions in the field of social semiosis of the society as cultural value.

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Conflict of interest

None.

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