

Modeling the dynamics of speech behavior in the pragmatics of the language

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Abstract. The research is devoted to the study of the author's behavior in the texts of personal correspondence. The research is based on the material of letters of writers of the early twentieth century. The subject of the study was a corpus of texts by six writers. Collectively, the study of (linguistic-rhetorical) works. The analysis was carried out from the position of studying the author's strategy of influencing the reader in order to study the formation of a certain attitude. The use of pragmalinguistic methods of studying the speaker's speech portrait in the context of diachronic personality development allows us to identify personal speech preferences that characterize the speaker and determine the dynamics of his personality development based on his speech preferences. The conducted experiments show the possibility of speech diagnostics of the speaker's personality and reconstruct his speech portrait based on the materials of the monuments of writing.

1 Introduction

Pragmalinguistics is a philological science about speech acts, about a speaking person, his ability to influence the interlocutor through speech.

The pragmatics of the text is considered by these researchers on the material of business correspondence. In the works of these scientists, it is noted as an indisputable fact the existence of a special specificity of the epistolary, which allows us to speak about the existence of epistolary speech genres. Separately, the speech genre of personal correspondence was not considered by the researchers and requires additional study in this work. Based on the concept of a speech genre, we can talk about a six-part model, namely the communicative goal (communication with a specific person or people), the personality of the author, the personality of the recipient of the message, the presence of process-event or emotional-descriptive content, the presence of communicative experience of the addressee and addresser, the presence of a common communicative future that will come after the implementation of the author's illocution as a perlocutionary effect. An additional criterion for determining the specific features of the speech genre of writing is the presence of lexico-grammatical, syntactic and style units [1-3].

The specificity of the genre theory itself is so diverse that there are a number of approaches to defining the essence of the epistolary genre, which imposes certain limits on

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the determination of the speech genre of personal writing. Let us briefly consider the main features of genres in relation to the pragmalinguistic approach to speech and speech act.

1. The largest number of researchers in determining the essence of epistolary genres use a formal-logical or formal-functional approach [4-6]. The genre is determined by the formal compositional features of the text, from the point of view of the implementation of speech in the works of this genre, formal organizing markers (the presence of an addressee and addressee, appeals, etc.) are put forward in the first place.

2. Less popular is the structural-content approach, which assumes the proximity of the content side of the text. With this approach, the main attention is paid not to the formal features of the organization of speech and the manifestation of the author's principle in the choice of constructions, but to the general content of a holistic text and its compliance with the intentions of the author. The prominence of the locutionary component relates such a determination of genres in general, and epistolary genres in particular, to the synthesis of rhetoric and functional pragmatics and cannot be accepted by us as a working approach.

3. Functional approach - a way to implement the author's intention through the unity of aesthetic and organizational principles, which would represent a holistic image [7-9]. The illocutionary-locutionary dominant of this approach is generally within the framework of functional pragmatics and allows us to consider the genre as a conscious model of a purposeful choice of speech units.

2 Materials and methods of research

Epistolary speech genres, in particular personal writing - the unity of extralinguistic features of communicative-pragmatic and functional-linguistic features [10-12]. This allows us to separate the functional component, expressed in the author's choice of the method (channel) of communication (personal correspondence) and the hidden pragmalinguistic component - the author's intuitive use of his inherent choices of linguistic units in the speech stream without their priority purposeful selection.

The basis for this decision is the approach of a number of researchers who believe that the genre reflects the specifics of the functional style associated with it [13-15]. Such correlation allows us to single out the genre of personal correspondence in a special series, as the implementation of spontaneous colloquial speech [14]. The peculiarities of the colloquial style of speech lie precisely in the priority of the very fact of expressing thoughts over the choice of means of expression. The author strives to reproduce live communication by means of remote communication and the choice of speech units, although present in the process of writing a letter, remains secondary in comparison with the need to fix the flow of thoughts and emotions as quickly as possible in order to convey it to the addressee. This allows us to consider that the bulk of the text is not edited in terms of the choice of grammatical and textual categories, but remains the implementation of the author's speech behavior fixed in writing.

The influence of the Speaker on the interlocutor is one of the promising and multi-level directions in the study of language, a person and his speech from the position of linguopragmatics.

This article proposes a predictive model for determining the effectiveness of "author-reader" communication on the Internet based on the measurement of the perlocutionary effect of the writer's influencing speech.

To this end, the following tasks have been solved:

1. Definition of basic concepts
2. Brief description of experiments
- 3 Description of the model and conclusions about the possibility of its application.

Mathematical modeling makes it possible to predict the long-term effect of an influencing function on a material object or social group. Such studies are widespread in management science, sociology, technical mechanics, etc. In our opinion, this method is also applicable in pragmalinguistics .

Modeling is understood as the replacement of an object of material reality with a similarity - a model. This similarity allows you to explore the given properties of the object. Therefore, any, the most complex model is always simpler than the original material object. When building a model, the researcher seeks to obtain the simplest similarities of the object under study, which allow instrumental methods to measure the specified final parameters. Hence, the structure and type of the model are completely determined by the purpose of the study. For example, when modeling computer systems, the task of determining the correspondence between the performance of the processor (server) and the intensity of the flow of applications (requirements for service) is most often posed [1]. When constructing a mathematical model that allows solving such problems, the flows of applications and their characteristics are considered: processor performance, maximum queue length - and many other factors are not taken into account at all: the type of processor and its technological base, characteristics of the operating system, the presence of anti-jamming codes etc.

3 Research results

Starting to study the perlocutionary effect of the writer's speech influencing the reader of letters, the magnitude of the reaction to the addressee's speech on the part of the perceiving audience was measured in specific numerical values. The reaction was measured by the responses in the questionnaires of readers based on a survey of specially created groups of volunteers. The units of measurement were small predicative units - small syntactic groups of MSG). The impact effect was assessed according to the pragma -linguistic hidden speech strategy "Evaluation by the Recipient of the Sender's message" [1].

To this end, all comments obtained by observing blog commentators and as a result of interviewing participants in the experiment were stratified according to the plans of the mentioned hidden speech strategy.

Graph 1 (Figure 1) shows the evaluation results for all experiments

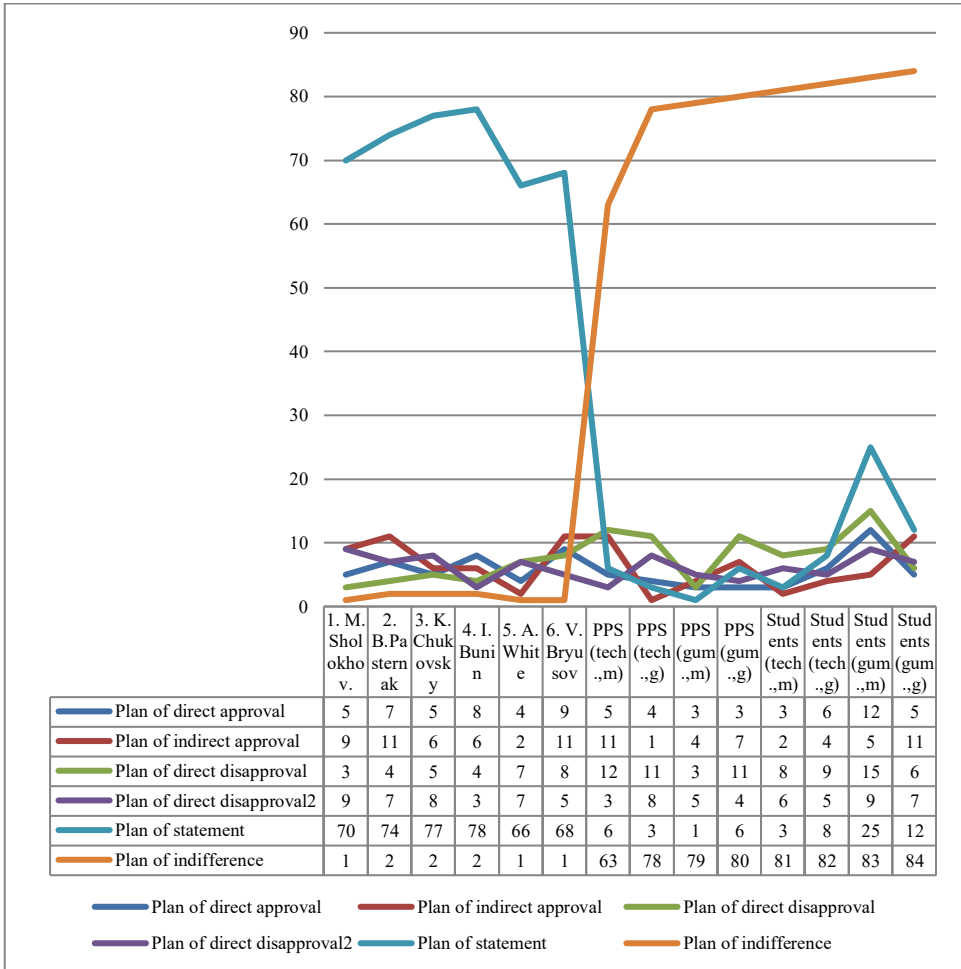


Fig. 1. Summary diagram of assessment based on correspondence materials and reader questionnaires (data obtained by the authors).

The top horizontal row lists the plans of the strategy.

The leftmost column lists the names of the writers and the names of the respondent groups. First, writers are listed and indicators of their assessment in questionnaires on strategy plans are given.

Then the data of the experiment to identify the evaluation of groups of volunteers from among the faculty and university students are presented.

The first step in constructing the model will be the determination of unknown indicators of indifference for evaluation by the authors of the experiment. We know the results of the assessment of the three authors who have the lowest, average and highest scores on the plans of the latent speech strategy. A group of volunteers repeats real readers in their main characteristics, which means that the average value of the percentage of indifference (41.07%) from 100% of the considered reviews means the probable average value of indifference for a casual reader. Thus, the average indicators for the hidden speech strategy look like Table 1.

Table 1. Mean scores for the latent speech strategy for evaluating writers.

Name of the indicator of the group (writer, group of respondents)	plan of direct approval	plan of indirect approval	plan of direct disapproval	plan of direct disapproval2	plan of statement	plan of indifference
Mean	5.642857	6.428571	7.571429	6.142857	35.5	41.07143

Where 41.07 is the probable value of indifference. Now let's determine the difference between the average values of the estimates by the authors of the study and the estimates of the volunteers. This will allow us to determine the coefficient of fluctuation (reality) between the control group (volunteers) and the researchers

Table 2. Reality coefficient for the latent speech strategy for evaluating writers.

Name of the indicator	plan of direct approval	plan of indirect approval	plan of direct disapproval	plan of direct disapproval2	plan of statement	plan of indifference
Mean Researchers	6.333333	7.5	5.166667	6.5	72.16667	1.5
Mean control group	5.125	5.625	9.375	5.875	eight	70.75
Difference	-1.20833	-1.875	4.208333	-0.625	-64.1667	69.25

From here, taking into account the coefficient of reality and the average values of indifference, the plan of indifference is calculated. The results are presented in Table 3.

Table 3. Coefficient of average indifference for the latent speech strategy for evaluating writers (data obtained by the authors).

Writer	Plan of indifference (from 100% likely readings)
1. M. Sholokhov .	21.03571
2. B.Pasternak	21.53571
3. K. Chukovsky	21.53571
4. I. Bunin	21.53571
5. A.A. Belyj	21.03571
6. V. Bryusov	21.03571

4 Discussion

These indicators of indifference are the estimated average percentage of all possible ratings, statements and indifference by random readers. It should be borne in mind that these indicators are in continuous dynamics - in the readings and evaluations by readers of specific texts of letters, these indicators grow and decrease depending on the effect achieved by the author of the letter. Statistical modeling makes it possible to determine the boundaries of such fluctuations, taking into account the uneven distribution of indicators for a group of writers in comparison with the control group. This will allow us to identify the coefficient of unevenness and predict the boundaries of probable indifference for each writer.

The coefficient of unevenness is determined by the formula

$$OK = \frac{\max(a_i - a_k)}{a_k} \quad (1)$$

where, oh_{to} - coefficient of uneven distribution of the assessment, calculated by the modulus of the results obtained,

a_i - the sum of the assessment indicators for reading letters; a_k - indicator of control assessment

Hence, the predicted result of the perlocutionary effect for the studied group of writers is t (Table 4).

Table 4. Prediction of reactions of the average reader to the correspondence of writers (data obtained by the authors).

Name of the indicator	plan of direct approval	plan of indirect approval	plan of direct disapproval	plan of direct disapproval2	plan of statement	plan of indifference
1. M. Sholokhov	5.9 -4.01	9.01-8.9	2.875- 3.125	9.5-8.5 _	70.1-68.9	1.9-0.01
2. B.Pasternak	7.9-6.02	10.9-11.06	0-10	7.3-6.6	74.7-75.2	2.9-1.02
3. K. Chukovsky	5.9-4.02	5.9-6.08	5	8.2-7.8	77.1-76.8	2.9-1.02
4. I. Bunin	8.9-7.02	5.8-6.1	4.62-3.37	3.3-2.6	77.5-78.4	2.9-1.02
5. A. Belyj	4.9-3.01	2.08-1.9	7.12-6.85	6.8-7.1	65.2-64.71	1.9-0.01
6. V. Bryusov	9.9-8.01	11.03-10.9	8.37-7.62	4.6-5.3	67.4-68.6	1.9-0.01

5 Conclusions

The obtained data can be interpreted as a range of reactions in which the probable assessments of the average reader's perception of the writers' speech behavior in letters turn out to be. And if the readers of B. Pasternak are characterized either by a positive assessment according to the "Disapproval" plan (value 0), or a negative one (value 10), then for the rest, boundary fluctuations within 1-2% are possible, which indicates the ambiguity of assessments on the part of readers. It should also be noted that the desire of the indicators of a number of writers (Sholokhov, Bely, Bryusov) to demonstrate the absolute impact - a vanishing small percentage of indifference to their letters (0.01%).

Thus, it is possible to predict the perception of the average reader and his reaction to the texts of personal letters.

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