Pragmatic Markers and Personality: Approaches to Analysis

Kristina Denisovna Zaides, PhD, kristina.zaides@student.spbu.ru

Daria Alexandrovna Gorbunova, dgorbunova2@gmail.com

Tatiana Ivanovna Popova, tipopova13@gmail.com

Natalia Viktorovna Bogdanova-Beglarian, PhD, Prof., n.bogdanova@spbu.ru

St. Petersburg State University, 7–9, Universitetskaya nab., St. Petersburg, 199034, Russian Federation

Anastasiia Igorevna Ryko, PhD, Assoc. Prof., anastasiia.ryko@ut.ee

University of Tartu, College of Foreign Languages and Cultures, 18, st. Yulikooli, Tartu, 50090, Estonia

UDC 81-25

Abstract. The paper presents the possibilities of multidimensional analysis of pragmatic markers in Russian spontaneous spoken speech and their relationship with the speaker's personality. The research was carried out on the data of two corpora the corpus "One Day of Speech" and the corpus "Balanced Annotated Text Library". The pragmatic markers, such as vot, kak by, slushai, kak ehto, tipa, and some others, play an important role in discourse structuring, filling the hesitation pauses, having metacommunicative, reflexive and other functions. Firstly, the article shows the results of the search for correlations between the use of different groups of pragmatic markers and personality type. The most frequent in extraverts' and introverts' speech turned out to be hesitative and boundary markers. Secondly, the article considers the use of metacommunicative pragmatic markers in the gender aspect, taking into account the social roles of the speaker. The discovered features may be a tendency of change of discourse practices among women. Thirdly, the distinction between students' and teachers' speech can be implemented by studying and counting only one type of pragmatic markers—predicative pragmatic markers, that look like sentences but have only functions in the discourse. The most frequent markers in students' and teachers' speech are different: (ya) ne znayu vs. (po)slushai/te.

Keywords: Pragmatic Marker, Spoken Speech, Speech Corpus, Sociolinguistics, Psycholinguistics

1. Introduction

Different discourse units of spontaneous spoken speech relatively recently began to attract linguists' attention as such speech elements that convey the pragmatic procedural meanings, which are extremely important in communication. Spontaneous speech is characterized by the presence of hesitation pauses (filled and unfilled), self-interruptions, word or phrase breaks, slips of the tongue, elements of

metacommunication (linguistic reflection), as well as discourse and pragmatic means of communication. Among these phenomena, those that have long remained outside the scope of the scientific description as parasite words, formally insignificant elements of speech, are especially interesting. The use of such elements is directly related to the spontaneous nature of speech production:

1) **там** то делай / **там** как бы там задание // чего-то как-то устаю безумно на самом деле // * Π просто вообще как бы / в принципе и * Π не то чтобы я прямо тут так уматываюсь // да? но вот реально очень устаю // * Π как бы вот эти ещё курсы / как бы они (...) очень сильно (...) выматывают (corpus "One Day of Speech", Speaker 27)².

It should be noted that these components of the spontaneous speech structure play an important role in discourse: on the one hand, they are rather frequent in a spoken text—up to 6 % of the total number of words in speech of particular speakers [Bogdanova-Beglarian et al., 2019d], on the other hand, they are not actually language standard units in the full sense (neither lexical nor grammatical). Such markers do not affect the semantic, propositional, content of the text, but they indicate the difficulties of the very process of discourse forming and the features of speech production, alongside often turn out to be polyfunctional, i. e., they perform several functions in discourse at once. There is also another approach to the markers: for instance, some groups of markers can be viewed as the parentheses used by speakers when they want to attract attention to some part of the text, to structure the discourse, and in other functions [Sharonov, 2018].

The psycholinguistic approach to the study of spontaneous spoken speech involves considering the latter from the point of view of the specifics of individual knowledge formed in accordance with the speaker's psychophysiological capabilities. Since speech behavior is a purely individual manifestation of a personality and is associated with its various characteristics, it is highly relevant to study the personality itself, expressed in language and through language, that is, a linguistic personality, in the aggregate of its social and psychological characteristics [Zalevskaya, 1999]. Thus, since pragmatic markers are an integral part of everyday communication, speakers can implicitly manifest themselves through them.

2. Pragmatic Markers as Functional Speech Units

In linguistic research on functional units of speech, many different terms for such units are used, in addition to the term *pragmatic marker* (PM), which is

¹ All the examples in the article are borrowed from the corpus "One Day of Speech". They contain special transcription symbols for denoting the phenomena of spoken speech: *Π—hesitation pause, *B—sigh, *K—cough, etc. For more details on the system of transcription symbols, see: [Russkii yazyk ... 2016: 242–243].

² The attribution of examples includes the data about the corpus, from which the example was borrowed ("One Day of Speech" (ORD)), the number of the informant, and some other information needed for the analysis.

understood in this paper as a purely functional speech unit that has undergone the process of pragmaticalization and performs various functions in the spoken speech. Such units are often referred to the *discourse markers* [Schiffrin, 1987; Fraser, 1990, 1999], *discourse connectives* [Blakemore, 1992], *discourse particles* [Schourup, 1985], *pragmatic particles* [Östman, 1995], etc.

Pragmatic markers are functional units used by a speaker in spontaneous spoken speech unconsciously, under the influence of speech automatism [Verkholetova, 2010]. As a rule, in such usages, the original units (words, phrases, and even sentences) undergo pragmaticalization, and, as a result, practically lose (or significantly weaken) their lexical meaning and acquire a pragmatic meaning or function in discourse. In the process of pragmaticalization, the role of the pragmatic component increases and the importance of the denotative and significative components decreases [Diewald, 2011; Degand, Evers-Vermeul, 2015]. The study of pragmatic markers functions, the very set of these units, as well as the features of their functioning is currently at the stage of active development [Bogdanova-Beglarian et al., 2019b, d].

In the course of the analysis of the spoken data, it is difficult to unambiguously qualify the status of a word or expression and determine whether it is a pragmatic marker or a full-fledged linguistic unit. However, there are several differential features which allow distinguishing homonymic words and markers:

- PMs do not have lexical meaning (or have weakened semantics), and perform one or several functions in spoken speech as a result of pragmaticalization;
- PMs usually are the results of grammaticalization, and their declension is limited:
 - PMs are out of scope of syntactic relations;
- many PMs, as a result, function as parentheses (especially predicative PMs, which are analyzed in section 6 of this article);
- particular PMs (for example, 'xeno'-markers, approximators, hesitative PMs, etc.) tend to appear after full-fledged words and expressions as desemanticized repetitions, which can be characterized as the supportive use [Zaides et al., 2018].

The homonymy of markers and content words makes the automatic annotation of pragmatic markers almost impossible, especially without full understanding and scientific description of their special functions and typical structure.

3. Research Data and Methods

The sources of data for the study are two corpora of spontaneous spoken speech—"One Day of Speech" (ORD) [Bogdanova-Beglarian et al., 2019a] and "Balanced Annotated Text Library" (SAT) [Bogdanova-Beglarian et al., 2019c]. The ORD corpus records all the speech production of the speaker during the day, in

all the variety of genres and speech situations that arise in the course of everyday communication, and for the most part represents the dialogues of the speakers with various interlocutors. The SAT corpus contains spontaneous monologues of speakers, following four communicative scenarios: reading and retelling of plot (e. g., M. A. Bulgakov's "Heart of a Dog") and non-plot (e. g., K. G. Paustovsky's short stories) texts, description of plot and non-plot pictures, and a story on a given topic.

The analysis of the speaker's personality in section 4 was carried out using a set of Data Mining methods [Stepanov, 2008]. The dataset in the present study was collected on the basis of all PMs in the corpus "One Day of Speech" and the metadata of each speaker in the sample. The psychological type of the ORD speakers was determined automatically based on a comparison of the results of two psychological tests — FPI [Balin et al., 2003] and EPI [Lichnostnyi oprosnik EPI, 1995] revealing introverts (IT) and extroverts (ET) [Gorbunova, 2017].

The research in section 5 was carried out on the data of the ORD corpus, based on transcripts of audio recordings obtained in natural conditions. The volume of the subsample was approximately 200,000 words. It includes episodes of "speech days" by 15 women and 15 men of three age groups. The informants act in various social roles, opposed by the principle of symmetry/asymmetry.

The material in section 6 (500 usages of predicative pragmatic markers) was the research subcorpus formed from the material of the two corpora, including datasets of monological and dialogical speech samples comparable in the number of tokens (50,000 tokens of 15 speakers from the ORD and 50,000 tokens of 42 speakers from the SAT). The resulting sample of speakers as a whole is unbalanced, therefore, we consider the ratio of the group sizes in a particular sample.

4. Personality Type Dependent Functional Distribution of Pragmatic Markers

The development of psycholinguistics today makes it possible to look at linguistically significant units from the point of view of their psychological fullness, conditioning with the help of modern numerical methods. From the linguistic point of view, the expression of psychoemotional states exists in a personality, first of all, in speech behavior. To identify specific cases of PMs use by introverts (IT) and extroverts (ET), the percentage of use of a marker in a particular function with different parameters was compared in the work.

Table 1 shows the results of automatic analysis of the functional distribution of pragmatic markers by psychological types of speakers (introvert/extrovert), where

- p-type—speaker's psychotype ("-" in the column means speakers who have not completed one or several tests);
 - Function—PM function;

- NContexts—the number of contexts in which the PM is used in the specified function;
- % TotalPtypeWords—the ratio of the number of PMs in the specified function to the total number of words in the speech of the speaker with the given psychotype;
- % TotalPtypeContexts—the ratio of the number of PMs in the specified function to the total number of contexts in the speech of the speaker with the given psychotype;
- % TotalFuncContexts—the ratio of the number of PMs in the specified function of a given psychotype to the total number of PMs used in this function.

Table 1. Functional distribution of PMs by different psychotype

p-type	Function	NContexts	%TotalPtype	%Total	%TotalFunc
			Words	Ptype	Contexts
				Contexts	
	Approximators	149	0,10	7,62	69,63
	Boundary	393	0,26	20,10	56,30
	Deictic	57	0,04	2,92	51,82
	Replacement	20	0,01	1,02	74,07
	Xeno-markers	115	0,08	5,88	62,84
-	Metacommuni- cative	225	0,15	11,51	61,64
	Rhythm- forming	148	0,10	7,57	67,89
	Reflexive	16	0,01	0,82	53,33
	Hesitative	832	0,55	42,56	61,09
	Approximators	10	0,05	2,56	4,67
	Boundary	112	0,51	28,72	16,05
	Deictic	12	0,05	3,08	10,91
	Replacement	2	0,01	0,51	7,41
IT	Xeno-markers	5	0,02	1,28	2,73
	Metacommuni- cative	63	0,29	16,15	17,26
	Rhythm- forming	4	0,02	1,03	1,83
	Reflexive	12	0,05	3,08	40,00
	Hesitative	170	0,77	43,59	12,48
ET	Approximators	55	0,07	6,36	25,70
	Boundary	193	0,26	22,31	27,65
	Deictic	41	0,05	4,74	37,27
	Replacement	5	0,01	0,58	18,52
	Xeno-markers	63	0,08	7,28	34,43

Metacommuni-	77	0,10	8,90	21,10
cative				
Rhythm-	66	0,09	7,63	30,28
forming				
Self-correction	3	0,001	0,35	100,00
Reflexive	2	0,001	0,23	6,67
Hesitative	360	0,48	41,62	26,43

It is important to focus not on the number of contexts, but on the ratio of the number of PMs in the specified function to the total number of words in the speech of those speaking with this psychotype, since introverts and extroverts used a different number of words in terms of volume. The most frequent in the speech of both types of speakers turned out to be hesitative (H) and boundary (B) markers: among introverts, hesitative PM turned out to be 0.77 % of the total number of words and boundary markers—0.51 %, as for extraverts—0.48 and 0.26 %, respectively.

However, this distribution is not as uniform as it might seem at first glance. In the introverts' speech, the most frequent markers (H, B, and metacommunicative) stand apart, percent of other functional types of PMs in their speech is small. In the extroverts' speech, all 10 identified types of PMs are present, and their use of these markers is uniformly frequent, with some exceptions.

5. Metacommunicative Pragmatic Markers: Gender Aspect

As a result of the analysis of approximately 200,000 units, it was found that women use metacommunication twice as often as men. Metacommunication itself is widespread in the speech of speakers in general. It is found at almost all speakers, but in female speech there are 66 % of metacommunicative pragmatic markers, in male speech—34 %.

Interestingly, in male speech, metacommunication occurs only in symmetrical social roles—communication with friends, mostly at home with the wife and children:

- 2) потом на голодный желудок её лучше не есть / **знаешь** (Speaker 127, 42 y.o., at home with the son);
- 3) идеальных условий не бывает / **понимаешь** ? (Speaker 127, 42 y.o., at home with the son).

Among the material, there is a clear tendency to use metacommunicative markers in order to express dissatisfaction, indignation, in order to refuse:

4) языки показывает / **представляешь**? (Speaker 119, 49 y.o., at home with the wife);

- 5) **слушай** / давай попозже! *П или ты сейчас хочешь? (Speaker 36, 40 y.o., at home with the friend);
- 6) да нет / ты **знаешь** / я как-то / на самом деле (...) сегодня (м-м) немножко грущу опять (Speaker 122, 33 y.o., with the colleague).

There are almost no cases where the PM serves as a mean of expressing an indirect request:

7) привет Андрей // *П слушай / вопрос(:) в следующем / что у нас там по нарядам третьего факультета? (Speaker 102, 27 у.о., with the friend).

The material of female speech looks quite different. In all age groups, regardless of the social role—even at work in a situation of formal communication, women actively use metacommunication:

- 8) *В ну ты **знаешь** вот / ты произнесла фразу / от которой действительно *K (э) волосы дыбом (Speaker 130, 74 y.o., with the friend);
- 9) ну **слушай** ну **видишь** хочет видеть на экране форму ... (Speaker 91, 48 y.o., with the friend).

In female speech, it is difficult to trace the special pragmatic significance of PMs. This special feature of speech is only a way of cooperation, a constant signal to the interlocutor that his/her opinion is important and necessary, that the statement needs a response:

- 10) нет / это значит нужно постепенно с ребёнком / **понимаешь** ? (Speaker 130, 74 y.o., with the friend);
 - 11) **смотри** / $*\Pi$ по поводу четверга (Speaker 65, 48 y.o., with the client);
- 12) a(:) а **понимаешь** / а Сергей не считает вот нужным (a-a) у... y(:)... (м-м) как () как () ужиматься(:) / утруждать(:) себя / копить деньги(:) там на квартиру(:) (Speaker 131, 69 y.o., with the friend).

It is important to note that metacommunication is particularly characteristic for the older age group (from 55 years)—106 cases of 156 (68 %), in the middle age group—34 metacommunicative PMs were used (21.8 %), and in the younger—only 16 (10.2 %):

- 13) **слушай** / этот Евгений Храпов он с офиса или откуда? (Speaker 71, 22 y.o., with the colleague-friend);
- 14) видишь / я переселяюсь на Шевченко (Speaker 69, 20 y.o., with the friend);

15) так / **смотрите** () вы брали серединку зеркальный шкаф / и по бокам каналы дуба / вот вот такие как там полосочки (Speaker 62, 30 y.o., with the client).

In all the cases presented, the metacommunication marker is multifunctional and also acts as a border marker, or rather a starting marker. The discovered feature may be a tendency of change of discourse practices among women.

The main sample of the subcorpus of spoken everyday speech confirms the conclusions described earlier in the works of linguists that women in fact resort to the tactics of making a good impression [Lakoff, 1975; Tannen, 1996].

6. Predicative Pragmatic Markers: Functions and Frequency in Speech of Representatives of Different Professional Groups

In this section, the distinction between pragmatic markers-words, word-combinations, and sentences as predicative units is proposed. Note that such units are only homophonic to the traditional linguistic elements—words, word-combinations, and sentences.

Markers-sentences, or *predicative pragmatic markers* (PPMs), are pragmatic units that formally coincide with predicative units (sentences) and, in our opinion, form a separate group of units, since initially they are formed not from simple word-combinations but on the basis of combinations with a predicative relation, e.g., (ya) ne znayu, (ya) (ne) dumayu (chto), (ty/vy) ponimaesh/te, kak ehto ((mozhno) skazat'/nazyvaetsya), etc.:

- 16) он весь на одном айпи-адресе / и поэтому она говорит / Марин говорит / то что у вас в помещении сейчас никто не качает / не факт что там / Шарена / кто у нас ещё может качать / говорит / Шарена может качать (ORD, S19);
- 17) оказывается / там вот с э... с этого входа / *В там у них вот к.... / всякие конференц-залы / и там устраивают / *П всякого рода (э-э) вот такие (э-э) как это сказать / (...) *В ну вот (э-э) всякого рода там я не знаю / выступления / *В (э-э) образовательные такие / ну ше... шоу (ORD, S24).

To reveal the correlations between the speakers' profession and the number of PPMs in their speech, we compared the frequency of PPMs in the speech of different groups of speakers. The *ipm* of PPM (instances per million words) was calculated for speech of each professional group since the volumes of subcorpuses of speech produced by representatives of various professional groups did not coincide.

The speakers' profession affects the use of PPMs being an integrative characteristic correlating both with the speakers' age and with their level and type of education. Among other professional groups, teachers are opposed to students in

typical PPMs used in speech. However, the mean number of PPMs in their speech seems approximately equal (in the students' speech—4459 ipm, in the teachers' speech—4848 ipm). More significant in this case is the analysis of the most frequent PPM used in the speech of representatives of different professions shown in Table 2.

Table 2. Predicative pragmatic markers in students' and teachers' speech

PPM	Students (ipm)	Teachers (ipm)
znaesh/te	784	758
ponimaesh/te	269	253
vidish/te	67	219
(po)smotri/te	22	320
(po)slushai/te	202	859
predstavlyaesh/te	67	84
prikin'/te	67	17
chto yeshchyo	247	168
kak ehto, kak yego/yeyo/ikh	224	253
ili kak ehto, ili kak	45	51
yego/yeyo/ikh		
sobstvenno (govorya)	112	67
koroche (govorya)	695	337
skazhem (tak)	45	101
(ya) ne znayu	829	589
(ya) (ne) dumayu (chto)	359	303
govorit	381	455

In students' speech, the PPM (ya) ne znayu (829 ipm), znaesh/te (784 ipm) and koroche (govorya) (695 ipm) are the most common. Half of all PPMs in the teachers' speech are metacommunicative ones, and the most frequent is the PPM (po)slushai/te (859 ipm). Koroche (govorya) is the marker used more often by young men, mostly students. The PPM (po)slushai/te, on the other hand, is characteristic of the speech of women of middle age groups, especially teachers.

It should be noted that the students' and teachers' speech belongs to different communicative situations: from picture descriptions and text retellings to everyday talks and work communication. However, some overall observations can be made, not depending on the particular speech situation that needs to be analyzed in future works. Even everyday teachers' speech can be influenced by their professional practice and is manageable due to general professional habits and skills, speech control. Vice versa, the students' monological speech, which requires the more accurate choice of vocabulary, is full of different repetitive hesitative PM (*koroche (govorya), (ya) ne znayu*, etc.) more appropriate in everyday communication. Therefore, in any communicative situation, the influence of the profession at spoken speech is remarkable, not only within the frames of talk of people representing different professional groups.

Thus, we can assume that the set of predicative pragmatic markers that are frequent in spontaneous spoken speech depends on speakers' social characteristics, and, vice versa, the set of PPMs can help us to predict the speakers' gender, age and even profession.

7. Conclusion

The data obtained in the course of analyzing the material of everyday communication, taking into account various sociological parameters, such as social role and communicative situation, will allow us to get a more accurate idea of how our stereotypes affect speech behavior, to understand in which communicative situations they are most active, and when they recede.

The most frequent functional types of pragmatic markers (hesitative and boundary) also require a more detailed analysis. The percentage of difference in their use between introverts and extroverts is negligible, but testing on expanded material may reveal additional characteristics.

Besides, the quantitative analysis of spontaneous spoken speech showed that we can talk about the dependence of the number of certain predicative pragmatic markers and the speakers' profession. Thus, in speech of teachers, the number of the PPM (po)slushai/te is relatively high; in students' speech the most frequent PPM is (ya) ne znayu.

The results of the study show that only discourse approach, taking into account the markers functions and structure, the communicative situation, in which markers are used, the speech genre, the speakers' social and psychological characteristics, allows analyzing pragmatic markers and speech behavior multidimensionally.

Acknowledgment

The presented research was supported by Saint Petersburg State University, project #75254082 "Modeling of Russian Megalopolis Citizens' Communicative Behavior in Social, Speech and Pragmatic Aspects Using Artificial Intelligence Methods".

References

Balin, V. D., Gaida, V. K., Gerbachevskii, V. K. Praktikum po obshchei, eksperimental'noi i prikladnoi psikhologii. 2-ye izd. Seria: Praktikum po psikhologii. [Workshop on General, Experimental, and Applied Psychology. 2nd ed. Series: Psychology Workshop]. St. Petersburg: Piter, 2005.

Blakemore, D. Understanding Utterances: an Introduction to Pragmatics. Oxford: Blackwell, 1992.

Bogdanova-Beglarian, N. V., Blinova, O. V., Martynenko, G. Ja., Sherstinova, T. Ju. Korpus russkogo yazyka povsednevnogo obshcheniya «Odin rechevoi den'»:

tekushchee sostoyanie i perspektivy [Corpus of everyday Russian speech "One Day of Speech": current state and perspectives]. Trudy IRYA im. V.V. Vinogradova, Vyp. 21, Nacional'nyi korpus russkogo yazyka: issledovaniya i razrabotki [Proceedings of V.V. Vinogradov IL RAS, Vol. 21, Russian National Corpus: Studies and Development], 2019a. Pp. 101-110.

Bogdanova-Beglarian, N. V., Blinova, O. V., Sherstinova, T. Ju., Troshchenkova, Je. V., Gorbunova, D. A., Zaides, K. D. Pragmatic markers of Russian everyday speech: the revised typology and corpus-based study. Proceedings of the 25th Conference of Open Innovations Association FRUCT, 2019b. Pp. 57–63.

Bogdanova-Beglarian, N. V., Blinova, O. V., Zaides, K. D., Sherstinova, T. Ju. Korpus «Sbalansirovannaya annotirovannaya tekstoteka» (SAT): izuchenie specifiki russkoi monologicheskoi rechi [Corpus "Balanced Annotated Text Library": analysis of specifics of Russian monologic speech]. Trudy IRYA im. V.V. Vinogradova, Vyp. 21, nacional'nyi korpus russkogo yazyka: issledovaniya i razrabotki [Proceedings of V.V. Vinogradov IL RAS, Vol. 21, Russian National Corpus: Studies and Development], 2019c. Pp. 111-126.

Bogdanova-Beglarian, N., Sherstinova, T., Blinova, O., Martynenko, G. Pragmatic markers distribution in Russian everyday speech: frequency lists and other statistics for discourse modeling. 21st International Conference SPECOM 2019, Proceedings, 11658, 2019d. Pp. 433–443.

Degand, L., Evers-Vermeul, J. Grammaticalization or pragmaticalization of discourse markers? More than a terminological issue. Journal of Historical Pragmatics, 16(1), 2015. Pp. 59–85.

Diewald, G. Pragmaticalization (defined) as grammaticalization of discourse functions. Linguistics, 49(2), 2011. Pp. 365–390.

Fraser, B. An approach to discourse markers. Journal of Pragmatics, 14, 1990. Pp. 383–395.

Fraser, B. What are discourse markers? Journal of Pragmatics, 31, 1999. Pp. 931–953.

Gorbunova, D. Spontaneous oral speech from the psycholinguistic side: pragmatemes in the speech of informants with a different psychotype. Kommunikativnye issledovaniya [Communication Studies], 4(14), 2017. Pp. 73–82. Lakoff, R. Language and Women's Place, Rev. and expanded. New York: Oxford University Press, 1975.

Lichnostnyi oprosnik EPI (metodika G. Aizenka) [Personality questionnaire EPI (G. Eysenck's method)]. Al'manakh psikhologicheskikh testov [Psychological Tests Almanac]. Moscow: KSP, 1995. Pp. 217–224.

Östman, J.-O. Pragmatic particles twenty years after. Organization in discourse. Proceedings from the Turku Conference, 1995. Pp. 95–108.

Russkii yazyk povsednevnogo obshchenia: osobennosti funkcionirovania v raznykh social'nykh gruppah. Kollektivnaya monografia [Russian as a Language of Everyday Communication: Functioning Features in Different Social Groups.

Collective Monograph]. N. V. Bogdanova-Beglarian (ed.). St. Petersburg: LAJKA, 2016.

Sharonov, I. A. Semanticheskiye i pragmaticheskiye aspekty opisaniya vvodnykh slov i kommunikativov [Semantic and pragmatic aspects of analyzing parentheses and communicative units]. Vestnik Tomskogo gosudarstvennogo universiteta. Filologia [Tomsk University Herald. Philology], 51, 2018. Pp. 58–68.

Schiffrin, D. Discourse Markers. Cambridge: Cambridge University Press, 1987.

Schourup, L. Common Discourse Particle in English Conversation: *Like, Well, Y'know.* New York: Garland, 1985.

Stepanov, R. Tekhnologia data mining: intellektual'nyi analiz dannykh [Data Mining Technology and Data Science]. Kazan': Kazanskii Gosudarstvennyi Un-t im. V.I. Ul'yanova-Lenina, 2008.

Tannen, D. You Just Don't Understand: Women and Men in Conversation. New York: William Morrow & Co., 1990.

Verkholetova, Je. Je. Strukturno-dinamicheskii podhod k social'noi stratifikacii ustnoi rechi [Structural-Dynamic Approach to Social Stratification of Spoken Speech]. Avtoref. dis. ... kand. filol. nauk [Abstract of PhD Thesis]. Perm', 2010. Zalevskaya, A. A. Vvedenie v psikholingvistiku [Introduction to Psycholinguistics].

Moscow: Rossiiskii Gosudarstvennyi Gumanitarnyi Un-t, 1999.