

## Towards a Model of Comprehension of Foreign Oral Text (Analysis of English Tale Texts)

Yelena Yarkova

**Abstract.** The process of bilingual comprehension of a foreign text can be viewed as a system. Since perception is actualized via various speech units, the system should be based on the minimal segment the listener resorts to in order to remove an error in each case of inadequate comprehension. The data obtained from the research reveal that the segment a bilingual listener chooses to comprehend the misinterpreted text information is a *syntagm*<sup>1</sup>.

To give the correct description of any system it is required that a constant, the so-called reference point, be chosen. We presume that this function can be performed by a syntagm, because it does not only links the constituents of the speech continuum into a coherent semantic structure, but also manifests itself as a constituent element of such hierarchical units as a phrase, superphrasal unity and a text. The principle of interdependence of various speech units makes the very fact of the actualization, perception and comprehension of an utterance come true.

Speech reality, as any other system, manifests itself as an entity, the whole, whose parts interact according to the principle of multi-tier stratification. In conformity with Hedel's affirmation, the contradiction – non-contradiction of a certain formal system can't be proved through the same system. Thus, it is not possible to prove that a language is a system through the system itself, which makes it necessary to appeal to mathematics. Applying mathematic approach to a linguistic object we suggest a model of bilingual comprehension of an oral text.

**Key words:** *speech units; speech perception and comprehension; the speech continuum; boundary markers; consonant and vowel combinability; the grammar of immediate constituent; syntagmatical/ lexical/ morphological/ phonetic analyses.*

### Introduction

Commonly, on decoding an utterance the listener resorts to various speech units, in most cases these are the key words, emphasized by the reader in every syntagm. Meanwhile, on decoding separate words in the speech continuum the listener relies on boundary markers (e.g. cluster phenomena, the peculiarities of consonant and vowel combinability). At the same time the absence of a single strategy in decoding a foreign text throws doubt on the existence of a universal unit of speech comprehension.

Our research is aimed at the definition of speech segments to be presented to listeners of different levels of the English language command to provide their adequate comprehension of a given oral text. In every case of miscomprehension the non-native listeners use syntagmatical (lexical, morphological, syntactical and phonetic) analyses of the texts of English oral tales, produced by native speakers, to eliminate the error. In many cases, they apply the grammar of immediate constituents to construe a miscomprehended utterance by separate elements, which is evidence of the integrity of speech perception and speech production. The method based on a complex psycho-linguistic approach with some elements of cognitive analysis, is devised to facilitate non-

speakers in construing phrases that should be equivalent to the original ones, which verifies the data obtained by analysis (decoding) through synthesis (speech production).

### Theoretical background. The main theories of a foreign text segmentation

One of the topical issues in the study of a foreign text comprehension is the construing of a system of correspondence between the signified and signifying of the languages in contact, which describes the way a bilingual individual uses the native and foreign languages.

A number of linguists contributed to resolve the question about which speech units are employed by the listeners on decoding the perceived information, as well as which factors determine their choice of the right meaning (e.g. experiments on the identification of means of linking, of the structural features of delimitation of the components of the speech continuum as the integral whole) (Горский и др. 1971; Панов 1961). Particularly, it was presumed that the process of comprehension should begin with the search for the general idea that makes the content of an utterance. After that a transfer to the lexical and phonemic level (i.e.

<sup>1</sup> According to L. V. Shcherba the syntagm is defined as "the phonetic entity, which expresses a semantic entity in the process of speaking (and thinking) and which may consist either of one rhythmic group or of a number of such groups" (Щерба 1963: C44).

defining the meaning of separate words) and the syntactical level (i.e. defining the meaning of separate phrases) occurs.

However, on addressing the problem of a foreign text segmentation by the listener the following questions still remain not clear enough: at which stage of auditing comprehension errors arise, what factors they depend upon, and how they are influenced by the length of a phrase fragment (segment) being audited.

There is an opinion that the process of communication, i.e. the transfer and comprehension of the sense of an utterance, is carried out through the listener's dividing the speech continuum into meaningful units – syntagms. Each of the segmented units can be viewed as entity in terms of meaning, phonemic and intonation constituents. Thus, the listener's activities become sense oriented, and the act of comprehension occurs via syntagms. Meanwhile, in reality human speech is a continuum of acoustically heterogeneous sounds, which are not perceived separately, independently one from another, but converge into more complicated units, characterized by a certain degree of discretion (Касевич 1977; Леонтьев 1974, 2003; Лурья 1998).

As far as any utterance consists of various speech units, there was an assumption that its segmentation should occur on all these levels through various means. It caused controversy about how segmentation on each level of linguistic analysis is carried out, and whether segmentation on one level should correspond to the segmentation on another, if there is such correspondence (Реформатский 1975; Pike 1979). Some linguists considered chains of elements integrated by their suprasegmental structure, i.e. accentual units, to be primary in speech perception. It is within the accentual units that the initial semantic analysis is actualized, while the accentual and syllabic structure of an utterance in the speech continuum is viewed as a model, in which information is located in particular spots – junctions (Bond 1973). According to other scholars, the minimal perceptual unit is a syllable, whose constituent elements are phonemes (Джапаридзе 1974; Потапова 1981; Потапова 1986).

All the above mentioned variety of phonetic experiments revealed that segmentation of the speech continuum into words in perception is the result, but not the reason for recognition and comprehension of the meaning of an utterance. It gives ground to the following presumption: the segmental and structural composition of speech can be determined not only by a set of constant segmental characteristics (phonetic, grammatical and syntactical), but variable segmental and supra-segmental ones. These characteristics (lexical, grammatical, syntactical and prosodic) can be viewed both in terms of the phonetic interpretation of the signal perceived and the complex approach to the perception and comprehension of various speech units, i.e. in light of the linguistics of the text.

## Methods

Our research is an investigation into the segmental and structural composition of English speech from the perspective of its bilingual perception. The experiment was based on the authentic material and carried out with a complex

method, which implied the use of perceptive and auditive analyses. In separate cases we resorted to structural, contextual and situational analyses. On analysing the perception of emotionally coloured utterances we used some elements of linguostylistic analysis.

The necessity to perform the main and subordinate tasks of the research implied that a definite decision should be taken on each stage of the experiment. It was carried out both through various subjective methods (e.g. the listeners were asked to put down the perceived variants) and the complex method of phonetic experiment, which included not only the auditive but also the multi-tier linguistic analysis of the experimental material.

Supposedly, the speech segment the listener chooses for better comprehension of a foreign text in each case of inadequate comprehension depends on the distribution of key words in it. Then, the minimal segment to influence its comprehension should be a word, while the minimal segment the listener should be presented for better comprehension of a text is a syntagm. To confirm the hypothesis it is required that certain perceptual and comprehension requisites for the segmental and structural composition of the perceived speech should be determined.

Among the tasks of the present study were the following:

- to single the typical errors of speech perception and comprehension out of the speech continuum and account for their reasons, viewing phonetic means of delimitation as a case of inadequate comprehension;
- to classify comprehension errors committed by the listeners of a different English language command;
- to determine a segment that should be presented to the listeners for better and adequate text comprehension;
- to answer the question about how the segment depends on the listeners' foreign language command.

## Results of the experiment on the listener's construing the misinterpreted utterances by separate elements and discussion.

An auditive experiment on the comprehension of oral English tale texts produced by professional native speaker announcers was conducted in the sound laboratories of Minsk State Linguistic University.

To reveal the comprehension errors that influence the bilingual comprehension of an oral text it was implied that the segmentation of a given text at the first stage of the experiment should be done by the listeners, which allowed to directly appeal to the listeners' language awareness.

The second stage of the experiment suggested that the teacher's presentation of the text to the listeners should confirm the data obtained through the method of analysis (i.e. at the first stage of the experiment) by the method of synthesis.

On comparing the data obtained through the auditive analysis within two groups of listeners of a different foreign language command we registered 63 most frequent examples of inaccurate comprehension (Table 1).

**Table 1.** The quantitative correlation of comprehension errors, committed by the Russian language listeners of low-middle, middle-high level of English command.

№ in classification	The character of comprehension errors	The total quantity of comprehension errors		% from	
		Low-Middle Level	Middle-High Level	63 errors	39 errors
		63 errors	39 errors	100 %	100 %
1	Errors in the perception and comprehension of prepositions	13	8	20,6	20,5
2	Errors in the perception and comprehension of words	34	23	53,9	58
3	Errors connected with changes of words into acoustically similar words (see №2)	29	8	46	20,5
4	Errors connected with the identification of key words (see №2)	13	9	20,6	23
5	Changes of syntagms into acoustically similar ones (see №2)	10	5	15	12,8
6	Syntactically wrong phrases	3	1	4,7	2,5
7	Changes of syntagms into acoustically similar ones	12	8	19	20,5
8	Errors on the level of prosody	3	1	4,7	2,5
9	Miscomprehension of an utterance	1		1,5	1,5

**Remark:** Sometimes in one and the same case various analyses are used to remove a perception and comprehension error. It is not only evidence of the integrity of the units of different speech levels in the process of comprehension, but also of the integral character of the process of comprehension itself. In some cases one and the same error can be classified in different ways (for example, a difficulty in the identification of a key word can be viewed independently and as an error in the identification of a word in general). The calculation of the percent correlation of the errors was carried out through making proportions in every separate

case from the total quantity of the committed errors.

The compared percentage of comprehension errors reveals approximately the same frequency of the above-mentioned examples of inaccurate comprehension within groups of different foreign language awareness.

To confirm our assumption it seems indispensable to compare approximately the same quantity of comprehension errors within groups of low-middle and middle-high levels of competence in the English language (approximately 40 randomly selected errors) (Table 2).

**Table 2.** The quantitative correlation of comprehension errors, committed by the Russian language listeners

№ in classification	The character of comprehension errors	The total quantity of comprehension errors		100 % from	
		40 er.	39 er.	40 er.	39 er.
1	Errors in the perception and comprehension of prepositions	15	8	37,5	20,5
2	Errors connected with changes of words into acoustically similar words	13	8	32,5	20,5
3	Changes of syntagms into acoustically similar ones	12	8	30	20,5
4	Grammatically wrong phrases	4		10	
5	Syntactically wrong phrases	4	1	10	2,5
6	Changes of syntagms into acoustically similar ones	7	5	17,5	12,8
7	Errors of mixed character	11		27,5	

**Remark:** Sometimes in one and the same case various analyses are used to remove a comprehension error. We registered 11 cases of the kind, which makes 27,5% from the total quantity of comprehension errors. It is not only evidence of the integrity of the units of different speech levels in the process of comprehension, but also of the integral character of the process of comprehension itself. In some cases one and the same error can be classified in different ways (for example, a difficulty in the identification of a key word can be viewed independently and as an error in the identification of a word in general). The calculation of the percent correlation of the errors was carried out through making proportions in every separate case from the total

quantity of the committed errors.

The data of the comparative analysis confirm the assumption that the differences observed within the two groups of listeners manifest themselves in the amount of grammatically incorrect utterances, which is evidence of the listeners' lack of foreign language command. It confirms our next assumption that listeners of a low level of language competence resort to grammar constituents to construe the unrecognized or miscomprehended utterances by separate elements. Other qualitative characteristics of comprehension errors are not the criteria to judge about the listeners' language awareness.

For example, listeners of a low level of language command perceived the utterance

*The 'woman 'paled | and 'hid him in her 'wood-box, | and, 'just as the 'lid 'fell , shut, | 'in 'strolled the 'giant. // in a wrong way.*

Instead of the correct variant *fell shut* the listeners perceived morphologically incompatible fragments, such as *were shut, well shut, there shut*. The correct variant was found on their resorting to grammatical (morphological) analysis of the syntagm *just as the lid fell shut*, namely the verb phrase.

On the contrary, listeners of a higher level of English command resorted to either lexical or syntactical analyses. For example:

*The 'floor 'creaked, | the 'walls 'trembled | and the 'woman's 'face 'paled. //*

Instead of *creeked* (*to creek* 'скрипеть') some listeners perceived *quaked* (*to quake* 'трястись'). However, the errors observed on the phonetic level (the wrong perception of the cluster [kr], the perception of the sonorant [w] instead of [r], the wrong replacement of the vowel [i:] by the diphthong [ei]), do not prevent the listeners from understanding the meaning of the utterance. Being classified as communicatively irrelevant, the error is removed on a second auditing of the syntagm *the walls trembled*, which already contains the word *tremble* (*to tremble* 'дрожать'), a synonym of the word *quake*.

Thus, adequate comprehension of a foreign text depends on the listener's foreign language command: the better the listener's language competence, the fewer phonetic and grammar and the more lexical and syntactical errors are expected due to the variability on the syntactical level.

Further on we determine speech segments chosen by non-native listeners to remove the committed errors in each case of miscomprehension (Table 3).

**Table 3.** The typical comprehension errors committed by non-native listeners

Error of comprehension	Ways to remove the error	Choice of a segment to remove the error
The wrong identification of a junction	-- a second slower auditing of the syntagm -- analysis by immediate constituents (IC) -- grammatical (morphological) analysis of the utterance -- semantic analysis -- lexical analysis -- meaning of the text	-- phonetic word -- syntagm -- phrase
The wrong identification of a preposition	-- second slower auditing of the syntagm -- second auditing of the precedent or next paragraph -- second slower auditing of the phrase -- semantic analysis of the phrase -- lexical analysis -- analysis by IC	-- syntagm -- phrase -- superphrasal unity (SU) -- text
Difficulties in the identification of a lexical unit (a word)	-- semantic analysis -- grammatical (morphological analysis) -- lexical analysis	-- syntagm -- SU -- part of a phrase that -- consists of several syntagms -- the key word which can be found in the next syntagm, phrase, etc.
Difficulty in the identification of a syntagm	-- slower auditing of the same syntagm -- grammatical (morphological) analysis of the phrase -- a second auditing of the SU -- meaning of the text	-- syntagm -- phrase -- SU -- text
Comprehension errors on the grammatical level	-- analysis by IC -- grammatical (morphological) analysis	-- syntagm
Comprehension errors on the syntactical level	-- a second auditing of the syntagm -- analysis by IC -- grammatical (morphological) analysis	-- syntagm

The data obtained reveal that the segment a bilingual listener chooses to comprehend the misperceived text information is a syntagm in all cases of inadequate comprehension.

To give the correct description of any system it is required that a constant, i.e. a reference point, should be chosen. We presume that this function can be performed by a syntagm. Furthermore, the functioning of a syntagm in the speech continuum not only contributes to the integration of its

constituents into a coherent semantic structure, but allows to view this segment as a constituent element of such hierarchical units as a phrase, superphrasal unity and a text. Thus, the principle of interdependence of various speech units and their feedback relations make the very fact of the actualization, perception and comprehension of an utterance come true. In almost all the registered cases of inadequate comprehension the listeners resorted to various speech units to

remove their errors. For example:

*"I'm hungry!!!", -- roared the lion, "I 'haven't had a `thing to eat to ,day:/ `not a `thing, except of a 'thin 'bonny `antelope,/ and a 'puny `monkey, and a ``buffalo,/ but such a `tough ,one,/ and 'two `turtles;/ but you 'can't `count , turtles:/ there's 'nothing 'much to `eat between / 'those `saucers / they 'wear for `clothes. //*

Instead of the noun *turtles* the listeners perceived *turkeys* (the voiceless plosive [k] was identified instead of the voiceless plosive [t]). Analysing the misheard part we observed that the function of prognostication often had an adverse impact on the quality of comprehension errors. The listeners expected to hear the word *turkeys* after the very first sounds pronounced by the speaker. The correct variant was found after a second auditing of the so-called explanatory part of the utterance containing two syntagms *'there's nothing much to eat between those saucers they wear for clothes'* with the key word *saucers* 'блюда'.

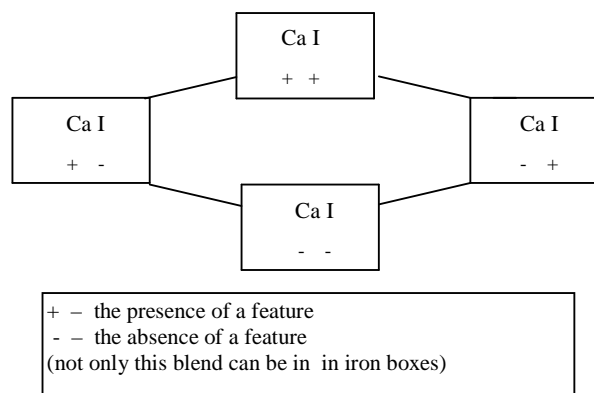
It can be presumed that expressive means, e.g. metaphors, can cause additional comprehension difficulties due to the necessity of enhancing the context to remove an error. For example, in the above-mentioned variant the listeners had to analyze the syntagm *they wear for clothes* to associate the word *saucers* with the notion 'clothes'.

The miscomprehension of the word *turtles* entailed errors on the phonetic level. The listeners of a low level of English command perceived the sets of sounds *tattlers*, or *tatters* instead of *turtles* (the vowels [æ] и [ə:] were not properly distinguished).

Instead of *I haven't had a thing to eat today* the listeners perceived *I have had an injury today*, or *I haven't had an inch to eat today*. The registered perception errors consisted in the following replacements: the voiceless fricative [θ] was replaced by the sonorant [n] (*an inch* instead of *a thing*), the affricate [tʃ] by the affricate [dʒ] (*inch* and *injury*). Difficulties were observed in the identification of the word junctions [ŋ-tu] (*thing\_to*), [nʃ-tu] (*inch\_to*). To correct the misperceived utterance the listeners had to resort to its sense to admit the fact that the lion didn't have any trauma.

The above-mentioned examples prove that speech reality, as any other system, manifests itself as an entity, the whole, the interdependence of which parts is actualized according to the principle of multi-tier stratification.

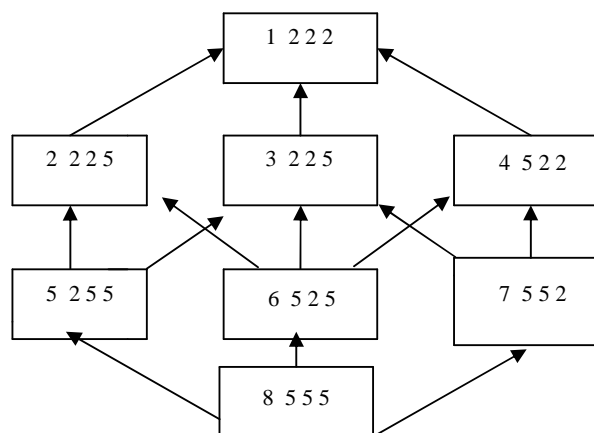
In conformity with Hedel's affirmation, the contradiction – non-contradiction of a certain formal system can't be proved through the same system. Thus, it is not possible to prove that a language is a system through the system itself. All this makes it necessary to appeal to mathematics. Developing the idea, V. A. Karpov presumes that for construing a model of any system in the structural aspect one should use the so-called N-measured cubes because of their universal nature (Карпов 1992). To build a system a non-linguistic object can be chosen, i.e. a tea blend in a cartoon (Ca), or iron (I) box. Two initial features make it possible to build the whole system out of four subordinate systems (fig.1).



**Figure 1.** A system built out of four subordinate systems.

N-measured cubes correspond to the formula  $2^n$ , in which 2 is either a plus or a minus, N – the quantity of features, on which basis the system is built.

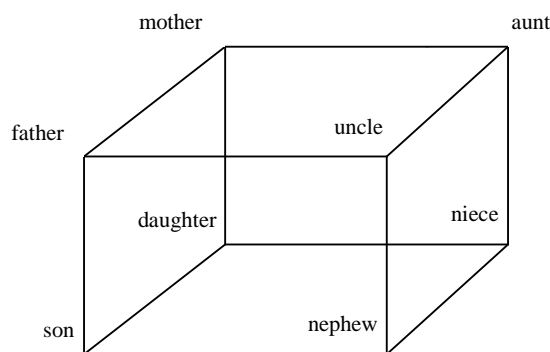
The so-called numerical cube is a variant of the above-mentioned cube (fig.2).



**Figure 2.** A numerical cube.

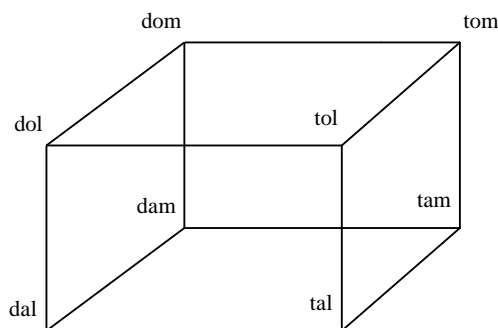
This system reflects both progress and regress. There are 6 ways how to transfer one quality in its contrary (Fig.2).

The first way: 8—5—2—1; the second way: 8—5—3—1; the third way: 8—6—2—1; the fourth way: 8—6—4—1; the fifth way: 8—7—4—1; the sixth way: 8—7—3—1. The system of N-measured cubes is universal and can be applied to the theory of a semantic field. Further on the semantic field "family" is presented (Fig.3).



**Figure 3.** The application of the system of N-measured cubes to the theory of a semantic field.

The system of N-measured cubes can be used in the study of a phonetic system (fig 4).



**Figure 4.** The system of N-measured cubes in the study of a phonetic system.

Evidently, the information on the combinability of phonemes, as well as on the grammatical (morphological and syntactical) skeleton of an utterance, is acquired by a child in the early childhood, i.e. simultaneously with mastering a mother tongue. It is known that a bilingual child, i.e. in the conditions of coordinative bilingualism, acquires the systems of two mother tongues, which are actualized due to the so-called switching of codes in speech. The fact arises a question about the way this or that word is identified, and, consequently, about the way text information is decoded (Леонтьев 1974; Леонтьев 2003; Лурия 1998).

Presumably, a human brain has certain vector links, providers of neuron currents and energy impulses. Our experiment gives ground to assume that these links are not single-directed. In conditions of subordinative bilingualism the above-mentioned processes are slowed down (it may depend on the time needed for switching the codes) (Лурия 1998).

The scheme below demonstrates which segments are chosen by a non-native listener to remove a comprehension error in the conditions of subordinative bilingualism (Fig.5) (see table 3).

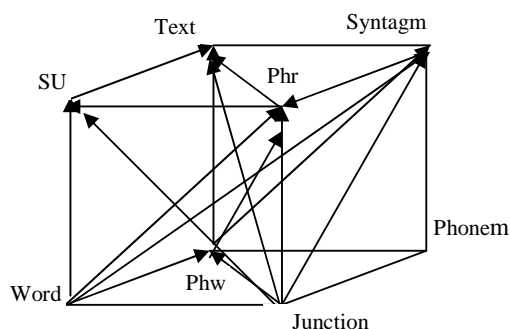
**A junction** – Phw (a phonetic word); a syntagm; Phr (a phrase), a text

**A word** – a syntagm ; a SU (superphrasal unity); Phr (a phrase), a text

**Phw (a phonetic word)** – a syntagm; Phr (a phrase); a SU; a text.

**A syntagm** – a syntagm; Phr (a phrase); a SU; a text.

**A phrase (Phr)** – a SU; a text.



**Figure 5.** The choice of a segment by a bilingual listener to remove a comprehension error.

Though the units of lower levels are known to identify themselves in the units of upper levels, the units (segments) used by non-native listeners for better text comprehension in the conditions of subordinative bilingualism are not clearly determined, and, in our opinion, for quite obvious reasons. One, and the most important, reason is the ambiguity of comprehension errors. The example is given below.

*"I smell the blood of an Englishman! 'Be he a `live, / or 'be he `dead, / I'll `grind his bones / to, make my `bread!"*

Instead of the verb *to grind* the listeners perceived the variant *to drain*. On the phonetic level we observe a difficulty in the identification of the vocal plosives [g] and [d], as well as the diphthongs [ai] and [ei]. To make the right choice the listeners give their preference to the verb *to grind*, because its meaning is closer to the meaning, conveyed by the syntagm *to make my bread*, for to make one's bread one should make flour, and to make flour one should grind seeds. Compare it with the Russian ideomatic phrase *косточки по ветру развезать*.

What factors is this comprehension error predetermined by, and which is primary in the comprehension of a foreign oral text – the phonetic structure of the constituent words or the listener's planning the further events of the text? The question can be given a partial solution through the listeners' choice of a required segment to remove comprehension errors, because a junction, a word, a phonetic word – all are identified in the unit of an upper level, i.e. a syntagm.

## Conclusion

The results of the analysis of literary sources, supported by the data of our experiment, give us ground to affirm the following:

- The interdependence of speech production and speech perception is revealed on the stage of syntactical prognostication and is actualized in the listeners' construing unrecognized utterances by immediate constituents if syntactical and morphological analyses are required, i.e. on the grammatical (syntactical) level.
- On the phonetic level the interdependence of speech production and speech perception is manifested in the integrity of analysis and synthesis of the units of various speech levels. This affirmation can be supported by numerous examples of the listeners' either seeking for a proper segment to recognize vowel or consonant junctions, or a segment to remove such errors as faulty articulation of unarticulated accentual units, perception of one sound instead of several, and vice versa.
- On analyzing and classifying perception and comprehension errors in the conditions of subordinative bilingualism particular attention should be focused on the problems of interference, variability and identification of words in the speech continuum. We assume Kasevich's and Leontiev's position on the absence of a single strategy for a foreign oral text comprehension as every time on comprehending newly perceived information the listener resorts to various speech units. For lexical or semantic analyses the listener should be produced a variety of speech and language segments (i.e. a syntagm,

phrase, superphrasal unity, paragraph, text); a syntagm is involved in the process of utterance construing of necessity for morphological or syntactical analyses.

- There's no doubt that the minimal segment that influences bilingual comprehension of a foreign text is a word. But the minimal segment used by the listener in a secondary auditing of an unrecognized or mis-comprehended text fragment is a syntagm. A word is actualized fully only in the context. Thus, the minimal segment that should be produced to the listener in case of inaccurate comprehension is a syntagm.
- The level of a foreign language command has a direct influence on the perception of an utterance. Listeners of a worse language command need to construe a phrase by immediate constituents, while the main problem within listeners of a better foreign language command is variability, predetermined by the use of different grammatically accurate utterances in the same position.
- The data obtained confirmed the assumption that in the conditions of subordinative bilingualism listeners of a low level of a foreign language command construe a perceived utterance by separate elements. Thus, a non-native listener uses a grammatical principle when construing a phrase. Furthermore, the integrity of speech production and perception is manifested in the very fact that the perception of an utterance greatly depends on its production, as the listener uses a grammatical principle to remove an error and correct the misheard utterance.
- Despite the primacy of a sound signal in perception, phonetic information can hardly be considered primary in the comprehension of the meaning of an utterance. This affirmation can be proved by the character of comprehension errors (i.e. the decoding of prepositions, the use of several variants in one and the same environment).
- To the most frequent perception errors that occur in the speech of Russian listeners we refer the change of voiceless plosives for voiced/ voiceless fricatives or voiced/ voiceless plosives; voiceless fricatives for voiceless plosives or voiced fricatives; the voiced plosive [d] for the affricate [dʒ]; the affricate [tʃ] for the affricate [dʒ]; voiced fricatives and sonorants (but for nasal and the lateral [l]) for the pharyngeal fricative [ħ]; the pharyngeal fricative [ħ] for the voiced plosive [b]; mixtures of voiced and voiceless fricatives, etc. The difficulty in the identification of the sounds [ʌ] and [ʊ], [e] and [ɛ], [ai] and [æ], the diphthongs [ai], [ei], [ɛ ə] и [ʊi] caused the following perception errors: instead of the diphthong [ai] the listeners perceived the phoneme [æ], instead of the diphthong [ei] they perceived the diphthong [ɛ ə], instead of the phoneme [ʌ] -- the diphthong [ʊi], instead of the diphthong [au] -- the phoneme [æ]. Perception errors on the phonetic

level can't be isolated from the phonemic combinability and prosody.

Through the classification of perception errors it becomes possible to throw light on the listener's choice of a speech segment for better comprehension of an oral foreign text. We presume that the choice of a segment should depend on the character of the mistake. It confirms Kasevich's opinion that a universal segment for speech perception can hardly be found, as comprehension of a given text is always actualized through various units (Касевич 1977).

The choice of a text fragment to be produced to listeners for adequate and accurate comprehension depends on the listeners' command of a foreign language, the teacher's ability to envisage possible comprehension errors, and is determined by objective and subjective factors due to the absence of a single perception unit. As there is no single strategy for a foreign text comprehension, a complex psycholinguistic and cognitive approach should be applied to the comprehension of a foreign text, as it involves all the levels of a given language system. We hope that our research facilitates a foreign language teaching, and the data obtained will contribute to the methods of correction and prevention of perception errors.

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### Sakytinio teksto užsienio kalba suvokimo modelio kūrimas (pasakų anglų kalba analizė)

Santrauka

Teksto užsienio kalba dvikalbio suvokimo procesas gali būti laikomas sistema. Kadangi suvokimas vyksta per įvairius sakytinės kalbos vienetų, sistema turi būti pagrįsta trumpiausiu klausytojo išskiriamu segmentu, kad būtų galima pašalinti klaidą kiekvienu netikslaus suvokimo atveju. Tyrimo metu gauti duomenys rodo, kad sintagma yra segmentas, dvikalbio klausytojo pasirenkamas klaidingai suprastai teksto informacijai suvokti.

Siekiant tiksliai apibūdinti bet kurią sistemą, reikalaujama, kad būtų pasirinkta konstanta, vadinamasis atraminis objektas. Daroma prielaida, kad šią funkciją gali atlikti sintagma.

Sintagmos funkcionavimas sakytinės kalbos kontinuume ne tik padeda sujungti sakytinės kalbos sandus į rišlią prasminę struktūrą, bet leidžia šį segmentą laikyti sudedamąja tokių hierarchinių vienetų, kaip žodžių junginys, didesnis už frazų vienetą ir tekstas, dalimi. Įvairių sakytinės kalbos vienetų tarpusavio priklausomybės principas lemia tai, kad pasakymas yra realizuojamas, suvokiamas ir suprantamas.

Sakytinės kalbos tikrovė, kaip ir bet kuri kita sistema, pasireiškia kaip esybė, kaip visuma, kurios sudėtinių dalių tarpusavio priklausomybė realizuojama pagal daugiasluoksnės stratifikacijos principą. Remiantis Hedelio teiginiu, konkrečios formalios sistemos priešara ar neprieštara negali būti įrodyta pasitelkiant pačią sistemą. Todėl per kalbos sistemą neįmanoma įrodyti, kad kalba yra sistema. Visa tai, kas paminėta, verčia pasitelkti matematiką. Lingvistikai taikant matematinį metodą, siūloma naudoti dvikalbio sakytinio teksto suvokimo modelį.

Straipsnis įteiktas 2006 03

Parengtas spaudai 2007 12

### The Author

**Yelena Yarkova**, a senior teacher at the Department of Speechology and Theory of Communication at Minsk State Linguistic University. The doctoral thesis "Segmentation of a Foreign Oral Text in Its Comprehension (Analyses of Russian-English Comprehension of English Tales)" was presented for further procedures. The main research results were published in 25 scientific editions and presented at international conferences in Minsk, Riga, Kaunas and Kiev.

*Area of research interests:* applied linguistics.

*Address:* The Department of Speechology and Theory of Communication, Minsk State Linguistic University, Zakharov str., 21, 220034 Minsk, Belarus.



