

Counter-Text as a Tool of Psycholinguistic Diagnosing Comprehension of Foreign Language Utterance

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Abstract

The research built on the anthropological approach to text comprehension links philosophical and psycholinguistic perspectives of speech perception. The article analyzes the factors influencing adequate comprehension when perceiving foreign language oral speech, in terms of testees' approximately similar level of language competence and linguo-psychic characteristics. The object of research is counter-texts defined as those fixed in written form samples of a recipient's internal speech emerging in the process of perceiving utterances. A counter-text reveals intertextual links between two pictures of the world – the author's and recipient's ones, wherein a new formation is a projection of a recipient's consciousness on the initial text. Using the technique of counter-textual analysis, we were able to ascertain students' individual strategies of understanding instrumental in adequate comprehending foreign language utterance. These strategies are retelling, translation and assertion, i.e. the ones that fix in recipient's consciousness sense knots of the utterance for further cognitive processing. It has been established that understanding is marked by a small number of deviations from the author's idea when, firstly, a recipient has a rather wide cultural scope, which provides points of coincidence of dominant knots of the communicant and recipient, and, secondly, he or she has verbal thinking. The received data also bears evidence to the fact of negative impact of creative thinking mechanisms that can distort the initial sense of the utterance.

Keywords: counter-text, initial texts, dominant, comprehension, thinking profile, strategies

1. Introduction

The issue of perception and comprehension of text is complicated and versatile, relying on scientific achievements of many sciences such as philosophy, physiology, psychology, psycholinguistics, linguistics, neurolinguistics, etc. Meanwhile, there still remain many issues waiting for solution, in particular, the one of variability of integrity and adequacy of comprehending text in terms of similar linguistic and cultural competence of participants of communication. At the same time understanding is the obligatory stage of formation of new knowledge, precondition of effective communication and being in society, development of consciousness and self-consciousness. Thus, addressing the issues related to the nature and mechanisms of perception and understanding is permanent throughout development of science and philosophy, therefore the research topic can be eligibly referred to relevant and topical.

The guideline in the study was the philosophical interpretation of text as a result of the primary interpretation of reality, and its comprehension – as the secondary interpretation; the idea of internal, subjective precomprehension

and comprehension as a result of mental stereotypes, socio-cultural ideas, values and mental associations in the mind of the individual; philosophical concept of dialogue in text comprehension.

1.1 Literature Review

A particular place in analysis of the issue is occupied by philosophers-hermeneutics who believe that understanding is determined by the boundaries of the horizon of the one who is trying to understand (Gadamer, 2008).

Essential results have been obtained in the sphere of psychology and methods of teaching foreign languages by the following scientists: Akimova, 2018; Brownell, 2013; Bruner, 1983; Grekova, 2016; Davletova, 2012; Zhinkin, 1982; Zimnyaya, 1976; Kilman, 2014; Clark, 1979; Cole, 1979; 2014; Kharchenko, 2017, etc.

According to I. Zimnyaya (Zimnyaya, 1976), the content of perceived utterance is regulated by the internal program of an addressee. For example, if a person is interested in information, he or she will understand the content of the message faster, deeper and more accurately. Conversely, if a person's internal program is not tuned to the perception of information, the meaning of the statement will remain unclear.

The similar idea can be traced in the philosophical views of J. Bruner (Bruner, 1983), H.-G. Gadamer (Gadamer, 2008), etc. who explain mechanisms of perception, in particular, reasons for its selectivity. Perception, according to the scientists, largely depends on the value system of the individual, his or her attitude to or expectations from objects of the external world. H. Gadamer believes that comprehending a text always means applying it to ourselves. In the process of perception stable hypotheses come to the fore, which has a powerful effect on formation of opinions by selecting only those data that agree with these hypotheses. This results in formation of individual systems of perception, structured in a modular way, creating so called semantic maps in the mind of the recipient building a conceptual picture of the world in a different way (Tourimpampa, Drigas, Economou & Roussos, 2018: 229).

Some scientists analyze the issue in the perspective of psycholinguistic ideas of O. Leontyev and I. Zimnyaya (Zimnyaya, 1976), emphasizing variability of text comprehension, which depends on the recipient's knowledge, memory and standards stored in the long-term memory and involved in the act of perception (Andriets, 2013; Kostyk, 2016; Fedchyk, 2007).

The scientific and methodological basis of the research was the theory of dominance by A. Ukhtomskiy, the latter being the neurophysiological basis of the act of perception and thinking that determines the focus of the recipient's attention (Ukhtomskiy, 2002). All the above-mentioned studies treat the process of comprehending as a procedure of counter-generation due to the influence of dominant centers in the recipient's mind. A prominent place in studying the issue is occupied by Bashkir scientific school (Ufa) (Davletova, 2012; Kirsanova, 2006; Matveeva, 2018; Peshkova, 2006, etc.) whose representatives regard the concept of sense-formation as the result of projecting individual consciousness on the initial text.

Analysis of recipients' reactions to initial texts obtained during empiric research allowed scientists to assert the presence of the so called collective dominant among members of one social group (Nesterova, Kotelnikova, & Pozdeyeva, 2017: 50), which, in our opinion, affects the adequate sense-formation in perception of any utterance.

Data obtained during a massive philosophic, neurolinguistic, psycholinguistic and physiological study on the influence of dominants on perception of an utterance and sense-formation explain the quality of perception of utterances – its depth, accuracy, selectivity, adequacy; although, in our opinion, do not reveal the way they affect adequacy of sense-formation in the mind of the recipient perceiving a foreign language speech.

2. Methodology

2.1 The Aim and Tasks

The aim of our research was to determine the factors influencing recipient's adequate sense-formation in the process of perceiving foreign language utterance in terms of approximately the same level of language competence and linguistic and mental characteristics such as short-term memory, phonematic hearing and verbal intelligence.

Achieving the goal involved the following tasks: (1) to investigate reactions (individual strategies of comprehension) that arise in the minds of recipients during perception of foreign language utterance, and identify those that correspond to the fullest understanding of what is heard; (2) to find out what ratio between collectivized and individualized dominants of perception provides the most accurate understanding of oral speech; (3) to determine some permanent psychological traits determining the quality of comprehending a foreign language utterance.

The hypothesis of the study was the assumption that the most constant determinant of the quality and scope of

comprehension of a foreign utterance is a type of thinking. Besides, we assume that for adequate sense-formation in the process of perception of an utterance the correlation between the collectivized dominants of perception and the individualized one should be in favour of the former.

The objects of the study were counter-texts – samples of recipient's internal speech recorded in written form in the process of perception of foreign language utterance.

The aim and tasks of the study demanded expert psycholinguistic analysis involving a multi-stage inductive-deductive research procedure for studying complex constructs – counter-texts – in the minds of the listener. In this context, the method of contextual analysis was used to study the correlation of the semantic aspect of individual author's messages and individual counter-texts that arose in the minds of recipients in the process of perception and semantic processing of the phonopassage of the utterance. This enabled analyzing the dominant centers of the testees.

To confirm the hypothesis, testing methods were used, which allowed identifying the mental profiles of the testees. For this purpose, we turned to the method elaborated by G. Rezapkina (Rezapkina, 2006) aimed at determining the predominating types of thinking and the level of creativity and Torrance Tests of Creative Thinking (Torrance, 1974).

The principal methods were the method of introspection, observation and experiment.

The experiment involved 42 third-year students majoring in Secondary Education, Language and Literature (English) of the State Establishment "South Ukrainian National Pedagogic University named after K. D. Ushinsky" (Odesa, Ukraine) and 18 third-year students majoring in Secondary Education, Language and Literature (French) of Izmail State University of the Humanities (Izmail, Ukraine).

The material of the study involved audio recordings of the TED-conference (<https://www.ted.com/talks/quick-list>), podcasts of the series "Authentic French with Johan Tekfak" (<https://www.francaisauthentique.com/johan/>) and more than 920 counter-texts of the testees.

3. Result/Findings

3.1 General Statements

Perception and comprehension of an utterance is the basis of any act of oral communication. If we model a process of communication as a program, it is possible to see that each subsequent remark depends on the quality and scope of understanding the stimulus. Although the term "understanding" in psycholinguistics is considered to be the final result of semantic perception of the utterance, the former always involves an analytico-synthetic process of comprehension of speech, and it begins at the stage of perception or decoding.

In the process of decoding, selection of encoded information follows rules different from the ones used when identifying meaning of speech elements. In the first case, we deal with complex models of transformation of superficial, physical, objective structures into deep, personal ones, which provides semantic interpretation of the text. It is at this stage that proper comprehension occurs.

Comprehending is a process of assimilating new content by including it in the system of established ideas and personally significant, subjective models of worldview. Comprehending an utterance results in creation of secondary meanings consistent with those already present in the mind of a recipient (Akimova, 2018: 38). Thus, comprehension can be treated as a neuropsychic conglomerate that is formed in the mind under the influence of individual and collective picture of the world.

Comprehension as an analytico-synthetic process includes creating "semantic markers" that act as mnemonic pillars in both sense-forming and semantic formulation (Narolina, 1982). The specificity of the process of text comprehension is in complex mental work, as a result of which the main idea is extracted from an expanded utterance; a perceived utterance is compressed in the recipient's internal speech to a "complex of meanings" – a kind of internal code equivalent to the perceived text. As a result of mental processing of textual information, the recipient forms a certain model of the text which is a semantic formation compressed to thematic semantic points, or the sense of what is heard (Narolina, 1982).

The essence of comprehending is reduced to the process of perception of the meanings of an original message and the synthesis of new meaning as a result of combining these meanings and the semantic field of the recipient. This is where intertextual connections emerge, combining two worldviews – an objective understanding of any phenomenon and its new, subjective interpretation, with the new formation always being a projection of the recipient's consciousness onto

the source text. It happens because while perceiving information a recipient in a particular pattern keeps in memory only certain semantic knots, and restores missing fragments by extracting information from his or her consciousness.

To understand what patterns affect activating particular semantic knots in the process of perceiving information by ear, and how they get combined in the mind of a recipient, we turn to the theory of dominant as a sense-forming factor and the concept of "counter-text" in the works of A. Novikov (Novikov, 1983; 1999) and his followers – O. Grekova, N. Matveyeva, N. Nesterova and others (Grekova, 2016; Matveyeva, 2017; Nesterova, 2017).

According to A. Ukhtomskiy (Ukhtomskiy, 2002: 46), the dominant is a stable center of high excitation of nerve centers, in which excitations coming to the center serve to increase the excitation in the cell, while in the rest of the nervous system there is a phenomenon of inhibition. It is this center that controls all thought processes, including understanding and perception, as it is the physiological basis of the act of attention and its focus.

Studying the nature of comprehending, A. Novikov relies on the key thesis of the theory of dominant of A. Ukhtomskiy (Ukhtomskiy, 2002: 39): "we see the current state of affairs in the world through the prism of our dominants". The scientist's thesis that "we can perceive only the objects for which our dominants are prepared" allows forming a clear idea of the direction of perception and understanding of an utterance by a recipient.

This idea clearly demonstrates the dialectics of relationship between the objective and subjective, understanding of the deep commonality of the external and internal.

How does the dominant center of the brain work, controlling the process of sense-formation in perceiving information by ear?

When perceiving verbal material, the recipient captures the main direction of the information impulse, without differentiation of smaller and subordinate ideas, connections, relationships. Consciousness is filled with fragments, unfinished fragments of the text, forming conceptual knots, or symbolic codes. Each individual recipient forms own network of such knots, or individual semantic code, under the influence of an individual set of dominants that draw other dominants or inhibit them, leading to one information being perceived more clearly and the other ignored. This, of course, affects the quality of perception of oral speech, because the existing dominants of the recipient may not coincide with the author's one, so the former may misinterpret the semantic code of the primary text. It also affects what meaning the recipient attaches to the message. The emotional, evaluative, subjective components that accompany this process form the basis of meaning. Thus, the meaning of the message is presented to us as a mental conglomerate that goes beyond the level of content of the initial text, reflecting the semantic sphere of personality. Meaning conveys a unique picture, unstable, variable, personally dependent, which involves a dialogue with the semantic structure of personality. This dialogue is the counter-text.

The basis for the idea of counter-text can be found in the research by N. Zhinkin (Zhinkin, 1982: 10) substantiating the postulate of productive analytico-synthetic activity of the recipient's consciousness during perception of information. Due to it, perception of any text involves interaction with incoming information. There is a so-called "internal speech" – mental reaction of recipient to the information received with the message.

Structurally a counter-text consists of compressed codes – semantic knots and links – and relations between them. The quantity and quality of these knots is determined by the dominants of the recipient, and in practice of experimental research is detected by analyzing selected topics, subtopics and microthemes (Matveyeva, 2018: 100). Dominants are formed as a result of human experience, outlook, level of development of the affective sphere and other factors that are not static and tend to change with the development of personality. Since in the process of listening to an utterance in a foreign language we do not change the dominants but rely on existing ones, often understanding the message is not adequate to the communicative purpose of the speaker. Thus, we can talk about adequate, partially adequate and inadequate counter-text. The first case includes counter-texts demonstrating the balance between individual and collective worldview. Note that in this case we can observe appearance of stereotypical thinking, which, however, contributes to the accuracy in perception of foreign uttered speech. Inadequate, or inconsistent with the original one, counter-text appears when the recipient incorrectly identifies the topic, when there is an omission of a semantic markers, often due to lack of knowledge, rejection of the concept, difference in individual or collective worldview, etc. A partially adequate counter-text is a text in which the recipient restructures the hierarchy of subtopics, subtopics, microthemes, shifting semantic knots or establishing incorrect (or inconsistent with the author's intention) connections and intentions.

To establish and analyze the leading dominants, verbalized in the form of a hierarchy of subtopics, we may resort to determining recipients' strategy of comprehending an utterance, or in other words, study their reactions. Analysis of reactions obtained in the process of listening can demonstrate the links that have been formed in the mind of the

recipient during perception and comprehending of information, and show the quality, or correctness, of comprehending a foreign language utterance.

A. Novikov identifies 15 basic reactions to the speech stimulus: association, conclusion, visualization, generalization, intertext, infixing, statement, opinion, orientation, evaluation, translation, assumptions, prediction, paraphrasing, free response (Peshkova, 2014: 117). Research conducted by scientists of Ufa school complements the classic list, adding up reactions of complication and sense- substitution (Kirsanova, 2007); statement of lack of knowledge on the problem, accompanied by self-criticism (Davletova, 2012); direct reference to personal experience and the reaction of positive / negative / ironic wish (Moiseyeva, 2012).

3.2 Procedure

In our study, we tried to determine reactions prevailing in students' brain in the process of perceiving uttered foreign language speech, and to establish correlation of testees' dominant cells with the degree of adequacy of perception of such utterances.

The first stage of our experiment involved determining the profile of thinking of the testees, which reflects the dominant ways of processing information (thinking types), and the creativity level. Determining the level of creativity, in our opinion, can reflect the level of prevalence of collective or individualized dominance in the human mind.

To establish the thinking profile, we used the method of G. Rezapkina (Rezapkina, 2006) which determines the leading type of thinking out of the following ones: kinesthetic, visual, abstract and verbal, and measures a person's ability to think creatively. The data obtained showed that the majority – 61% – are students with a visual type of thinking. The second largest number is represented by ones with verbal profile (29%). The number of people with abstract profile is the same to kinesthetic one: it reaches 5% for each group.

The second stage of the experiment involved determining the degree of influence of the thinking profile on the quality of perception of a foreign language utterance. For this, we evaluated the adequacy of the testees' understanding of the utterance both at the level of meaning and sense. Since the semantic variability of the utterance during its perception depends on the mechanisms of sense-formation realized in the form of individual reactions of recipients, we turn to the method of constructing a counter-text modified according to the requirements of neurophysiological processes of perception of oral texts compared to written ones. Thus, in the original method, the source text is divided into sentences; in our case, the object of influence on the consciousness of the recipient was a phonopassage as a minimal sense-forming unit that contains a semantic center, and therefore has value in terms of realization of the functional perspective of the message, i.e. expression of its main sense.

The students were invited to listen to the audio recordings of public speeches of the informational genre from the archives of TED conferences ("What you didn't know about language barriers" by Roxanne Pomerantz) and podcasts from the series "Authentic French with Johan Tekfak", which were divided into phonopassages with breaks lasting 15 seconds. In the process of listening students were to construct consecutive counter-texts, writing down in the pauses what arose in their minds as a result of the perception of each fragment – in the form of questions or statements, reproducing the fragments or expressing emotions and describing images and memories. The counter-texts were written on a special form next to the number corresponding to the fragment of the source text acting as a stimulus. We emphasized that they should understand the message as well as possible.

For the texts offered to the students and comprising 11-20 phonopassages there have been obtained 920 counter-texts.

The data analysis procedure included:

- firstly, determining the types of reactions to the stimuli;
- secondly, establishing adequacy / inadequacy of sense-formation in the process of perception and mental processing of utterances by comparing the conceptual model of the source text with that which got formed in the minds of the recipients during listening and reflected in the counter-texts;
- thirdly, determining the degree of influence of the thinking type and the creativity level on adequacy of sense-formation in the process of perception of a foreign language uttered text.

Analyzing the data obtained during the experiment (Table 1, Table 2) we noted that the most commonly used reactions of the students are presented here. Besides, indicators in Table 1 are arranged in the order of descending value, respectively, the higher rows show the students' most commonly used strategies of perception of foreign language utterances.

As we can see in Table 1, the most commonly used strategies used in perception of foreign language utterances by third-year students were as follows:

- 1) *reproduction* (repetition of the text content using endolexis (the term coined by N. Nesterova (2017)) and *translation* (representing the content of the text by exolexis, usually in a shortened form, which can be treated as a semantic interpretation of the text) – the figure for these two strategies stood at 15% of the total number of reactions;
- 2) *substitution* adjusting of the meaning of information to the conventional or usual for a recipient as a result of mismatch between the expected content and the one that was heard) – the number of reactions of this type accounted for the same percentage as the first group-15%;
- 3) *reference to own experience*, which was demonstrated by 9% of the respondents;
- 4) *statement* (confirmation, agreement with what is said in the source text) and *evaluation*; the percentage of these is 10% of all the testees.

Table 1. Strategies of Perception of a Foreign Language Utterance by Third-year Students

Order Number	Prevailing Reactions	Number of Reactions (%)	Perception Adequacy (%)	Perception Inadequacy (%)
1	Reproduction and Translation	15	7	8
2	Substitution	15	-	15
3	Assertion (Confirmation)	10	6	4
4	Reference to Personal Experience	9	5	4
5	Evaluation	9	5	4
6	Generalization	7	-	7
7	Assertion of Incomprehension	7	0,5	6,5
8	Association	6	3	3
9	Orientation	5	1	4
10	Opinion	5	3	2
11	Rejection	3	0,5	2,5
12	Assertion of Lack of Knowledge	1	1	-
	Total Percentage of Prevailing Reactions	92	32	60
13	Others	8	5	3
	Total	100	37	63

Table 2. Representation of Reactions to a Speech Stimulus in Thinking Types

Order Number	Typological Groups with Marked Thinking Profiles				Creativity Levels	
	Visual	Verbal	Abstract	Kinesthetic	High, Intermediate	Low-Intermediate Low
1	+	+	+	+	+	+
2	+	-	-	+	+	+
3	+	+	-	-	-	+
4	+	+	+	+	+	-
5	+	+	+	-	+	+
6	+	+	+	-	+	+
7	+	+	-	+	+	+
8	+	+	+	-	+	-
9	+	+	-	+	+	+
10	-	+	+	-	+	+
11	+	-	-	+	+	+
12	+	-	-	+	+	+

Analysis of effectiveness of strategies in terms of adequacy of perception of the source text demonstrates that only three of them – reproduction (or translation), reference to own experience and assertion, i.e. semantic reactions

(according to A. Novikov (Novikov, 1983)) – result in high performance. Unexpectedly high results are demonstrated by respondents who turn to the strategy of translation – the simplest one in the process of perception of foreign language speech, since it does not surpass the scope of understanding the content. This tendency can be traced in all typological groups (see Table 2). In this case, we can assume that for representatives of this contingent what comes to the fore during listening is understanding of the original dominant knots inherent in the author's picture of the world. Repeating the content of the text both at the content and semantic level, they fix its semantic markers in consciousness, trying to build a line of semantic knots of the source text parallel to their own line of dominants. This is obviously due to the leading dominant of this contingent at the moment of the study – accuracy and completeness of understanding of the message, which is a key indicator of foreign language listening competence.

4. Discussion

The following researchers N. Yesypenko, T. Pavlovysh, O. Migorian, I. Bloschynskyi & O. Mysechko carried out a comprehensive linguistic-cognitive analysis having its focus on conceptual metaphors on the textual level (Yesypenko et al., 2022). Some authors performed a qualitative analysis and compared the number of critical elements in the written text (Hromova et al., 2022). Scholars consider that students can understand non-physical concepts based on their own actions and characteristics while reading texts (Soloviova et al., 2021). Certain psychological issues of the foreign language comprehension of the students at international relations faculties are revealed by (Lysenko et al., (2020).

Political advertising investigation in terms of its generic structure potential, namely in multimodal texts, and interpreting the contextual schemas was conducted out on two levels (literal and interpretative) in the article of (Batorynchuk, 2022). Development of translation memory, phonemic hearing and ability to forecast what can be heard from your interlocutor, ability to use audiovisual supports (pictures, screen images, printed version of text, background conversation, etc.), speech reactivity, psychological stability and the ability to “switch” from one language to another as quickly as possible were substantiated in the article of (Kyrda-Omelian et al., 2022). Another research presented the results of the analysis of the terminological units of the border-related sphere regarding military and law enforcement texts (Bloschynskyi, 2021).

Considering some counter-texts obtained in experimental work we were able to determine additional dominant knots inherent in students majoring in Secondary education, Language and Literature (English).

1. It is **important** for us **to learn languages**, as important as to walk, for example. We learn it for fun and always feel wrong. But it's amazing to speak other languages and speak to foreigners while travelling.
2. The **language** that you speak **influences your behavior**.
3. **Mind** categorizes everything **labelling words**.
4. She said about difficulties that you have when you act as a **translator** between your mother who is Russian and your **American girl friend**.
5. She tells about **differences in languages**.
6. Her friend **fell in love**.
7. **Language** is expanding, and every day people create **new words**.
8. People are **to like what they do**.
9. **Learning languages** is useful for **children**.

The dominant centers in the counter-texts are given in the bold type; the highlighted words represent semantic knots of the phonopassage.

As we can see, dominant conceptual centers – language as a cultural phenomenon (5, 7), learning language (1), teaching language (9), language-thought relations (2,3), peer relationships (4), love (6), person's place in the world (8) – reflect professional and personal interests of the third-year students and, coinciding with the dominant conceptual centres of the communicator, ensure adequacy of comprehension. Indeed, students who were not interested in their future profession showed a low level of comprehension of the text with a dominant focus on “foreign language proficiency” (understanding about 16% of the total information); the ones for whom interpersonal relationships were not a priority at the moment did not respond adequately to signals related to, for example, love (thus having missed almost a fifth of the general sense of the passage).

Nevertheless, Table 1 provides ample evidence that even if this strategy was the most commonly used, it does not always provide adequate understanding of the message. Firstly, absence of the required dominant knot leads to inability of reading information and decode it according to the author's intention. Secondly, we realize that correctness of comprehension is also influenced by the level of complexity of the language material and conceptual content of the passage, which may not coincide with the level of foreign language communicative competence of recipients and their outlook. We will add that this strategy is not influenced by the level of creativity in its essence; therefore, in this case we can ignore this correlation.

More effective in terms of adequacy of comprehending the utterance was the strategy of assertion (confirmation), almost absent in students with a high level of creativity, where it was mostly replaced by reactions of adjustment, evaluation or reference to personal experience. Here are some examples of counter-texts obtained as a result this strategy:

1. We can easily learn 25 **languages**. Yes, this phenomenon is wonderful.
2. **Languages** help communicate. It gives us an opportunity to be in society, to understand information. I agree.
3. One word can be of different genders in different **languages**. Yes, I know that.
4. Really, **language** that is in use depends on the level of prestige.
5. Yes, it can make us **citizens of the world**, which is so important these days.

These reactions mostly focus on the concept “language as a cultural phenomenon”; the highest rate of adequacy for this reaction is obviously determined by the dominant prevailing for this contingent – “mastering a foreign language”. It is noteworthy that this reaction does not differ in essence from the one described above, which is another fine illustration of controllability of sense-formation by correctness and completeness of understanding, the latter being a principal dominant in perception of uttered speech.

The ratio between adequacy and inadequacy of comprehension for this reaction is 60% and 40%, respectively, which argues in favor of choosing this strategy in the process of perception of foreign language uttered speech. Besides, as Table 2 shows, this reaction was used by recipients with both visual and verbal types of thinking, which are inherent in most recipients of this contingent. Via introspection and observation, we concluded that this strategy contributes to the adequacy of sense-forming under the following conditions:

- the recipient has a fairly broad cultural experience, which expands the range of coincidence of communicant's and the recipient's dominant lines;
- extroverted nature is a major personality orientation of the student;
- asserting (reproductive) character of perception prevails over the analytical one.

The obtained data argue that students with verbal thinking show higher performance in perception of foreign language speech; but even in this case, students mostly resorted to semantic strategies, namely – reproduction, translation, asserting.

As it may be seen from Table 1, reactions of reference to personal experience and evaluation can affect adequacy of comprehension, both positively and negatively. Let's turn to examples:

1. I used to be this person, an **interpreter**, and like the woman in the record says, it may really be **frustrating**. And it could have been easier if there weren't any language barriers there. (adequate)
2. When I travelled I understood how **important English** is for me. (adequate)
3. I remember our **German lessons** and grammar rules on the masculine gender. (inadequate)
4. Having an American friend can **improve your language skills**. That's why I try to find friends when I travel. (inadequate)

The same dominant cell – “mastering foreign language” – works differently in these examples: in the first and second cases it draws information, in the last two it evokes associations that fill in a lacuna formed due to incomplete understanding. Therefore, these reactions are not the leading strategies that ensure adequacy of comprehension for the given group of students.

5. Conclusions

As opposed to, for example, art and literature, where subjectivity of perception is approved, in the process of

perceiving information by ear it is crucial to adequately interpret the verbal stimulus. In this case, obviously, the collectivized, conventionalized format of sense-forming proves to be more constructive, as it is the objective content of sense-forming components, as well as their invariant internal form, that is the means of understanding an interlocutor in the act of communication.

The study proves that when perceiving a foreign language oral speech, future foreign language teachers limit the set of individual strategies of understanding by content-level strategies that are directly related to the content of the text and are a tool for extracting information. Such strategies include translation, reproduction, and statement, i. e. those that are able to capture in the mind and memory of the recipient semantic knots of the message for further mental processing. If encounter of individual line of dominants and the author's one is marked by coincidence, we can talk about adequacy of comprehension. Under conditions of mismatch of dominant cells, lack of knowledge or misunderstanding of information, the recipient involves relative strategies: evaluation, rejection, opinion, which, for the most part, leads to inadequate understanding.

The conceptual structure of the source text undergoes minor distortions provided that the recipient has a wide outlook that provides points of coincidence of the communicant's and recipient's dominant knots; and has verbal thinking that ensures effectiveness of any speech and thinking work with linguistic material, especially when establishing a "form-meaning" relationship. The obtained data also indicate negative impact of involving mechanisms of creative thinking that can distort the original meaning of the message; therefore, adequacy of comprehension is provided by ascertaining (reproductive) nature of information perception. Thus, we can talk about advantages of the collectivized mode of perception of oral foreign language speech over individualized one.

The obtained data are valid only for cases of perception of oral foreign language speech; besides, they may be different for any other contingent of testees.

6. Suggestions for Further Research

Perspectives for our further research involve, firstly, ascertaining features of counter-texts that arise in the minds of recipients in the process of perception of oral communication as opposed to those formed during perception of similar content of written texts; and, secondly, comparing individual strategies of comprehending foreign language oral speech compared to the one in the native language.

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