NEGATIVE PREFIXES IN THE LANGUAGE OF FINANCE: CAN THEY BE THOUGHT-SHAPING?

A.V. Terenin, A.L. Kormiltseva

Purpose. The article highlights the research aimed at assessing correlation between the frequency of negatively prefixed terms in financial discourse and the outlook of the speakers on their economy. The article opens with a historical reference, which briefly features the problems of Sapir-Whorf theory, its achievements and the stages of its development.

Materials and methods. The authors turn to the description of the research procedure, which involved the study of financial texts, their statistic processing, work with respondents and analysis of their feedback. With the focus on the Russian language the study nonetheless employed English texts as its aims required a comparative study.

Results. The discussion centres on the idea that the reasons of the pessimistic view of Russians on their economy may include a language factor, notably the abundant use of negatively prefixed terms.

Practical implications. The authors are assured that the language conceals more phenomena nourishing Russian pessimism about the economy. The study has opened new language areas that can supposedly be viewed as pessimism shaping.

Keywords: Sapir-Whorf hypothesis; linguistic relativity; language of finance; negative prefixes

ОТРИЦАТЕЛЬНЫЕ ПРЕФИКСЫ В ЯЗЫКЕ ФИНАНСОВ: МОГУТ ЛИ ОНИ БЫТЬ МЫСЛЕОБРАЗУЮЩИМИ?

А.В. Теренин, А.Л. Кормильцева

Цель. Представленная статья освещает исследование, направленное на оценку корреляции между частотностью терминов с негативными префиксами в финансовом дискурсе и взглядами до-
кладчиков на их экономику. Статья подкрепляется исторической справкой, в которой кратко представлены проблемы теории Сепира-Уорфа, её достижения и этапы её развития.

**Материалы и методы.** Авторы представляют процедуру исследования, которая предполагала изучение финансовых текстов, их статистическую обработку, работу с респондентами и анализ их отзывов. Акцент в исследовании сделан на русский язык, хотя для анализа были использованы англоязычные тексты, поскольку цели исследования подразумевали сопоставительный аспект.

**Результаты.** Одним из основных выводов авторы считают то, что причины пессимистического взгляда россиян на свою экономику могут включать языковой фактор, в частности обильное использование терминов с негативными префиксами.

**Практические применения.** Авторы уверены, что язык скрывает больше явлений, влияющих на русский пессимизм в отношении экономики. Исследование открывает новые языковые области, которые можно рассматривать с точки зрения выявления факторов, влияющих на формирование пессимизма.

**Ключевые слова:** гипотеза Сепира-Уорфа; лингвистическая относительность; язык финансов; отрицательные префиксы

**Introduction**

Over years, the Russian economy has been subject to criticism from all the possible parties. It has been criticized by Russia’s partners, Russia’s opponents, and by Russians themselves. Fair as it might be, this criticism shows different attitudes of the authors. Some speak of Russia’s problems with outright cynicism, some with sympathy, still others with annoyance. It would also seem that the causes of the Russian economic constraints are listed all: from severe climate conditions to ethno-psychological background of the Russians themselves. However, there is an aspect of language that has hardly been mentioned.

In much the same way as a word can render a speaker’s attitude to the object it denotes, the varieties of language can reflect the outlook of a community on the sphere where this variety occurs. Thus, assess-
ing the language of science, education or engineering one can judge not only about the sphere itself, but also about speakers’ attitude towards the particular field.

In the following sections we will try to relate Russian pessimism about economy to the overuse of negative prefixes in the Russian language of finance.

**Background**

At various periods of human history, the problem of relation between language and world outlook gave rise to a wide diversity of opinions. Different as they might be most of these opinions centre around two viewpoints that have rivaled each other since classical antiquity.

The adherents of conflicting views have been arguing about the primacy issue: is it language that shapes one’s outlook, or is it thought that modifies language? The idea of language primacy took definite outlines in the early 19th century when von Humboldt developed the theory of linguistic inequality and proclaimed that language was the vehicle of development. In the 20th century Humboldt’s assumption was followed by E. Sapir and later by his student B. Whorf. Following the succeeding confirmations and refutations Sapir-Whorf ideas evolved into two versions: linguistic determinism or language-determines-thought conception and linguistic relativity or language-shapes-thought theory.

In the second half of the 20th century the Sapir-Whorf hypothesis gave rise to heated discussions. The main Whorf’s opponents were the Universalists. Much of the dispute centered on colour terminology. The Whorfians claimed that the systems of colour terms in different languages influenced the way the colours are perceived by the speakers [15], while the Universalists showed that the sphere of colour terms is arranged on the basis of common patterns [5]. Another milestone was the book by E. Malotki [16] who featured the spatial category in the Hopi language and totally disproved Whorf ‘s conclusions on the issue.

The debates also involved several other issues which allegedly argued in favour of Whorf’s conception. These included “no word for X” and “lots of words for X” formulas, and the experiment of Bloom [6] con-
cerning ways of forming a hypothesis in Chinese and English. However, the researches of the Universalists disconfirmed Whorfian approach [1; 21]. All this contributed to the loss of interest in relativistic ideas.

But even under severe criticism the linguistic relativity has found its support in scientific society. Since the mid-20th century, the interest to linguistic relativity has been fueled by contrastive rhetoric that has researched the interdependency of national modes of thinking and writing [8; 13].

The later 20th and the early 21st century marked a new wave of interest in the Whorfian ideas. The empirical advances obtained new data, that argued Universalists’ assumptions on colours [18; 9; 24], and extended the sphere of relativist approach on a number of other issues. The convincing results were obtained by Levinson [14], who proved that space, as a most probable domain to be linguistically universal, is not such. The cognitive force of language was confirmed by researches on bilinguals’ style of thinking who, as case might be, turn to patterns of either language community [17].

Since recently Whorfian approach has been nourished by the feminist criticism of language, which contributed to relativistic judgment of gender categories [3; 22; 23]. Rather notable are researches on numerical concepts [20; 10; 11], contrastive rhetoric [2; 4], and culture as the alternative to language in its thought-shaping force [19].

On the whole, the total of the researches emerges now as a quantity of relativistic effects, scattered in different areas. As assessed in general the researches do confirm the idea of correlation between language coding, and the cognitive abilities of speakers. However, they are not free from contradictions, which enables scholars to come up with the idea to build up a new theoretical model of relativistic studies [7].

**Research and methods**

The idea to study the language of finance from the standpoint of linguistic relativity came to us in 2007 when we taught English to hospitality students. Their English syllabus required enacting role-plays in job-related situations, and as their teacher of English we were expected to have a feel of their profession. Actually, it was our first experience of
instructing hospitality students, and we thought that the best way to get our bearings in the maze of the hospitality industry was to turn over the pages of students’ textbooks.

Assuming that Finance was the most difficult subject in their program, we took an accounting textbook and braced ourselves for irksome and tedious reading. But hardly had we run through the opening paragraphs when we realized that our ideas of finance as of a tiresome subject were not true. The textbook presented finance as an exciting activity, and much of this impression was due to the language. Puzzled by our discovery we took a Russian textbook, but even a cursory glance proved that the comparison will not favour the latter. That made us wonder why the Russian language, so powerful in the works of classics, does not display its best in financial reports and statements.

By force of circumstances, we started the research only in recent years. The study comprised several stages. At the first stage we resorted to exploratory reading in order to outline the framework of the study. The preliminary comparison allowed us to limit the research to the feature, which at that moment struck us as the most evident: the texts under comparison displayed strikingly unequal occurrences of special terms prefixed with negations. The second stage involved the statistical processing. The results are shown in Table 1.

<table>
<thead>
<tr>
<th>Prefixes</th>
<th>Occurrences</th>
<th>Pages (words)</th>
</tr>
</thead>
<tbody>
<tr>
<td>не/вне</td>
<td>94</td>
<td>250 (64600)</td>
</tr>
<tr>
<td>без/бес</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>124</strong></td>
<td></td>
</tr>
<tr>
<td>un/in/im/ill/ir</td>
<td>23</td>
<td>250 (83700)</td>
</tr>
<tr>
<td>non</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>dis</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>63</strong></td>
<td></td>
</tr>
</tbody>
</table>

The next step of statistical processing was calculating the p-value. The results assumed as expected were taken from Russian and English...
dictionaries. They were determined as 3 to 2, the average ratio of Russian to English terms. The observed results were derived from the totals of Russian and English terms occurrences, which accounted for 2 to 1. Further calculation and references to chi square tables assessed the p-value as 0.005 – the threshold of statistical significance.

Russian preference to explicit negation is supported by Table 2 that shows quantitative distribution of negatively prefixed terms and their non-negative synonyms (Table 2 about here).

**Table 2.**

**Negative vs non-negative synonyms in Russian and English financial documents**

<table>
<thead>
<tr>
<th>Russian (per 100 pages)</th>
<th>English (per 100 pages)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Negatively prefixed terms</strong></td>
<td><strong>Terms without negation</strong></td>
</tr>
<tr>
<td>Незавершенное строительство (literally: construction non-completed)</td>
<td>Ведущееся строительство (literally: objects under construction)</td>
</tr>
<tr>
<td>Нераспределенная прибыль (literally: non-distributed profit)</td>
<td>Резервы от прибыли (literally: profit reserves)</td>
</tr>
<tr>
<td>Непроизводительные расходы (literally: non-productive expenditure)</td>
<td>Затраты на период (literally: costs over time)</td>
</tr>
<tr>
<td>Невозмещаемые издержки (literally: unrecoverable costs)</td>
<td>Потерянные капиталовложения (literally: lost investments)</td>
</tr>
<tr>
<td>Неоплаченные счета (literally: unpaid accounts)</td>
<td>Счета к оплате (literally: accounts payable)</td>
</tr>
<tr>
<td>Безнадежные долги (literally: hopeless debts)</td>
<td>Плохие/сомнительные долги (literally: bad debts)</td>
</tr>
<tr>
<td>Non-completed construction</td>
<td>0</td>
</tr>
<tr>
<td>Undistributed/non-distributed profits</td>
<td>2</td>
</tr>
<tr>
<td>Unproductive/non-productive expenses</td>
<td>0</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>3</td>
</tr>
<tr>
<td>Unpaid/unsettled accounts</td>
<td>2</td>
</tr>
<tr>
<td>Uncollectable debts</td>
<td>2</td>
</tr>
</tbody>
</table>
Unlike Table 1 that focuses on texts structured as sentence succession, Table 2 reflects the frequency of terms laid out in a balance sheet manner, i.e., in tables of financial accounts and ledger books. The objective was to reveal the proportions between prefixed and non-prefixed synonyms in the texts directly attributable to the professional activity. As the table shows, the Russian texts display their preference for negatively prefixed units, whereas the English ones tend to avoid explicit negation.

The third stage of the research was the attempt to analyze the sampled units in respect to associations that may arise in the speakers’ minds. The analysis was based on the feedback of 56 respondents, who assessed the terms in question by way of describing their associations and attitudes. The respondents were L2 learners of English who had had experience of employment in financial structures. The general overview of the analysis is presented in the following section.

**Discussion**

A negation as it were is not necessarily evidence of a negative attitude to a signified object. It is a language category that can testify for various intensions of a speaker [12]. However, it is widely known that a high recurrence of a language phenomenon can attest to some additional meaning. These connotations may have emotional or attitudinal nature, and, for that matter, the overuse of negative prefixes in the language of finance is assumed here as a factor that contributes to Russians’ pessimism about the economy.

As said above, the study involved two types of texts: the ones structured as successions of sentences, and the ones where the terms appear as separate units. It seems appropriate therefore to mention that the two types show different distribution of the terms in question. The discourse structured as a narrative tends to absorb the terms and to weaken their attitude shaping force, whereas financial documents display the terms in a certain density. These circumstances were taken into account in interviewing the participants.

The terms to be assessed were presented in two manners: in succession of sentences, and in sets of units as they appear in a balance sheet.
In each of the cases the participants were required to comment on both Russian and English terms. The analysis of feedback gives ground to suppose that the Russian terms presented in a balance sheet manner do not give much credit to the whole picture. They produced on the respondents the impression of everything being unfinished, unpaid or uncollected. English terms received a more diverse treatment with little reference to negative or positive evaluation.

Mostly negative was also the assessment of Russian terms presented in sentences whereas English terms shared positive and neutral evaluation in approximately equal proportions. It is only natural that the respondents were individual in their speculations. However, their reasoning related to some of the terms may be generalized as follows.

Practically each industrial enterprise has at its disposal one or several objects under construction. All these objects are specified in Russian financial sheets as “незавершенное строительство” (literally: construction non-completed), and “construction in progress” in English ones. Similar in their subject-matter, the terms display difference in their emotional and attitudinal meanings. In respondents’ speculations the Russian term appeared as describing these objects only from the standpoint of the past, and the eventual success of the undertaking was called into question. Indeed, the term brings into one’s vision the images of unfinished construction objects. Inherited by Russia from the Soviet epoch they have stood abandoned and unclaimed contributing to the community’s belief that a construction begun is doomed to failure. Unlike the Russian one the English term was described as future-bound inspiring confidence that the project will be successfully completed.

Speculations in disfavour of the Russian terms may be continued after the comparison of another pair of English-Russian equivalents: “неоплаченные счета” (literally: unpaid accounts) – “outstanding accounts”. Alike the above counterparts they are identical in their denotation. The respondents’ reasoning, however, offered the terms different assessment. The word “неоплаченные” brings to the focus the idea of negative situation in this or that part of the business. The word “out-
“Standing” describes the problem as breaking the rank of business issues, thus recommending the manager to include this problem into the list of priorities.

Somewhat similar associations arise from comparing “безнадежные долги (literally: hopeless debts)” and “bad debts”. Pessimism inherent in the Russian term offers but only dark perspectives: the managers will have to raise financial reserves to cover losses. The English word “bad”, though negative in connotations, exhibits quite different communicative functions. It describes the debtor as an unreliable partner, and at the same time calls the partners for financial discipline.

Conclusion

Summing up the above speculations it seems reasonable to specify the following items. Any language is a system that involves innumerable relations between its elements, and the undertaken comparison features but only a small part of it. However, even this limited study fuels the researchers’ confidence that there is certain interdependence between the way the Russians think about their economy and the abundant use of negative prefixes in the language of finance. Furthermore, the authors are assured that the language conceals more phenomena nourishing Russian pessimism about the economy. The study opened new language areas that can supposedly be viewed as pessimism shaping. Such is, for instance, dry and official character of financial discourse or its remoteness from everyday communication.

Actually, the study has a speculative nature, and it might appear that it offers more hypothesis than proof. To get more reliable results, the researchers must draw up a wider guideline for the respondents’ activity, and the program of such communication is currently being developed. Yet, the aim of the study was to draw attention to the problem, and the ventured hypothesis might appear as a viable option.

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