

## LINGUISTIC RELATIVITY AND ITS THEORETICAL AND PRACTICAL VALUE AT THE TIME OF GLOBALIZATION

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*A survey of the theory of linguistic relativity, its development and major principles and statements are presented. Case studies of various words, word combinations and sentences expressing the same ideas and objects in English, Russian and Lithuanian are provided. They show the main differences between languages which present difficulties for learners of foreign languages.*

*It is shown that linguistic relativity-based analysis helps to overcome these difficulties and to avoid many mistakes by providing the insight of the native speakers and developing more flexible thinking and linguistic guess. The theory of linguistic relativity also helps to reveal the specific character of every language which should be highly valued at the time of globalization.*

**Keywords:** linguistic relativity, similar and different patterns, comparative analysis, globalization.

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### Introduction

At the time of globalization, the problem of determining the specific features of any language which makes it a unique system different from others is of paramount importance. The specific character of a language should be considered a great value to be preserved by native speakers, though it presents difficulties in learning foreign languages and is a cause of mistakes. However, only in comparison the learners can see the peculiarities of their native tongue and evaluate it as an original linguistic system.

People dealing with a foreign language in any form, be it translation, learning or teaching, are faced with many difficulties. Various theories have been developed to deal with these problems. However, one of them, the theory of linguistic relativity, was little known to linguists in the countries of Eastern Europe.

There were several reasons for this which were primarily associated with social and political life in the past.

As the name suggests, the above theory emphasizes a relative nature of languages. In the countries of the former USSR, where science and research were politically engaged, the study of relativistic theories was not encouraged because it contradicted the dominating materialistic approach and its dogmas. The access to the works of foreign linguists and philosophers was also limited. No wonder that the only survey of the theory of linguistic relativity of that time (Leontjevas 1972), mainly based on the works of B. L. Whorf, contained severe criticism of his ideas. Now the situation has changed and the names of the founders of the theory of linguistic relativity can be met in recent papers. However,

a thorough analysis of its major statements and approaches is still needed.

**The aim** of the present paper is to provide a brief review of major ideas and concepts put forward by the American scientists F. Boas, E. Sapir and B. L. Whorf and formulated as the hypothesis of linguistic relativity and to show its multidimensional character and practical and theoretical value.

**The material** for analysis was taken from special and general dictionaries, text-books and students' and other non-native speakers' translations (their mistakes have been collected for several years by the author). English, Lithuanian and Russian words and expressions were compared from the perspective of linguistic relativity.

## General description

The fact that languages differ in something more than phonetics, grammar or lexis has been known to linguists for many years now. Hence, the remarks about a specific 'spirit' of language (Гумбольдт 1956: 115) and the specific 'internal form' of the word (Потебня 1965: 74). However, a comprehensive study of this problem was conducted only by the American scientists Franz Boas, Edward Sapir and Benjamin Lee Whorf, who developed a consistent theory of linguistic relativity in the first half of the 20-th century (cited here from later editions).

F. Boas was developing linguistic anthropology. For this purpose, he was studying the interaction of language with reality (experience). He clearly demonstrated (by considering a lot of examples) 'how a given experience would be differently rendered in various languages or how a set of experiences would be differently grouped (classified) by different languages' (Boas 1966: 146–147). His most famous example concerns the various words in Eskimo relating to snow. Less familiar examples show the use of multiple words in English for what is a single word in other languages.

His other productive ideas concerned interrelation between language and concept (notion). He observed that 'in each language only a part of the complete concept that we have in mind is expressed, and that each language has a peculiar tendency to select this or that aspect of the mental image which is conveyed by the expression of the thought' (Boas 1966: 39).

He also made an important conclusion that linguistic phenomena are unconscious in character, apparently because of their automatic production. This in turn leads to a situation that 'the linguistic classifications never arise into consciousness' (Boas 1966: 63). This observation is very important for explaining the difficulties in learning foreign languages, and the role of comparative analysis, because only then people become aware of the peculiar patterns of their native language compared to other languages. F. Boas also studied the interrelations of language with thought and culture but he was cautious in formulating which of these phenomena stronger influenced the others. He believed that language in part directed thought in various channels and influenced culture but was not inclined to overestimate this influence (Boas 1966: 181–183); Edward Sapir was Franz Boas's student in the area of linguistic studies. He elaborated on Boas's arguments in a number of ways, the most important of which was his statement about the formal completeness of each language as a symbolic system (Sapir 1963: 153). This systematic nature of language was itself a source of the formal diversity of languages. He emphasized that languages are 'only loosely equivalent to each other as symbolic devices, being incommensurable in the sense in which two systems of points in a plane are, on the whole, incommensurable to each other if they are plotted out with reference to differing systems of coordinates' (Sapir 1963: 128). He mainly considered grammatical concepts to show the differences of languages in representing the reality. He also stated the priority of language over thought and experience (reality). The unconscious character of linguistic

phenomena was attributed by him to natural focus on function over form.

Benjamin Lee Whorf was not a linguist but his works in linguistics are recognized as being of superb professional quality, many linguists taking his formulations as their starting points, even if they are critical of some of his ideas. B. L. Whorf studied rare languages of American Indians. Under the influence of E. Sapir, he took interest in the theory of linguistic relativity and made an important contribution to it. 'He transformed E. Sapir's preliminary statements about linguistic relativity into empirically investigable claim and provided the first evidence of the existence of the hypothesized effects' (Lucy 1992: 68). He also emphasized the role of analogy allowing linguistic structures to link apparently diverse elements of experience together.

In his empirical research into specific cultural practices distinctive from Western European practices, he came to the conclusion about close connection of the language patterns to broad cultural patterns and the distinctive role of language in this process. B. L. Whorf talked about a 'fashion of speaking' typical of a language and was the first to put forward the idea of a specific picture of the world provided by the linguistic means to the speakers of the particular languages (Whorf 1976: 252).

## Discussion

Now, when we have briefly outlined the ideas developed by three outstanding scholars about the linguistic relativity, let us try to more generally describe the essential features of this concept. Linguistic relativity is a complicated multilevel and multidimensional phenomenon referring to the relations between language, thought, experience (reality) and culture.

The term relativity may be interpreted differently, depending on the level of analysis. Thus, basing ourselves on the F. Boas's statement that the word expresses only part of an idea, we may say that at the level of single words (or

expressions) language presents only a relative view of the real objects not describing them in all detail.

At the level of the picture of the world described by individual languages relativity implies that every language presents its own picture different in many ways from the others. This in turn results from various handling of the same 'pieces of reality' by different languages. Since all these different languages are successfully used as a means of communication, relativity may be perceived as the absence of a single absolute system to perform this function.

The authors referred to their theory as the hypothesis of linguistic relativity. However, the examples provided to show how the same segments of reality are differently expressed and classified by various languages allow us to conclude that in this part the theory is absolutely true. Its hypothetical nature refers to the statements about the priority of language over thought, reality and culture. These ideas are open to criticism, though we have seen that F. Boas remained highly cautious to claim the leading role of language, emphasizing that universals across languages reflect the psychic unity of man.

B. L. Whorf who was considered a most consistent relativist also stressed that any language can express everything that is expressed by another language and firmly believed in the possibility of meaningful comparison and generalization. As to the interrelations between language, thought and culture, the statements of the priority of language as a shaping instrument are not straightforward as well. Thus, E. Sapir emphasized the interaction and mutual influence of language, thought and culture by saying figuratively that 'the instrument makes possible the product, the product refines the instrument' (Sapir 1963: 17).

The problem of interrelation between language, thought and reality is apparently not purely linguistic, and its solution should be sought in interdisciplinary approaches, involving philosophy, biology, medicine, psychology and other sciences.

The interest in the topic discussed is constantly revived, when new generations of linguists and new methods of linguistic analysis emerge. The review of these new approaches may be found in the book of J. A. Lucy (Lucy 1992: 68) describing the investigations conducted by the representatives of psycholinguistics (Lenneberg, Roberts, Brown, etc.). The theory of linguistic relativity also gave a strong impetus to developing contrastive linguistics (James 1999: 19). More recent data can be found in these works (Boroditsky 2003: 917–922) and (Saxton, Towse 1998: 66–79).

The work of L. Boroditsky has provided new insights on the controversial question of whether the languages we speak shape the way we think. She was first to note important empirical examples of cross-linguistic differences in thought and perception that stem from syntactic or lexical differences between languages. This work has affected the predominant belief in the fields of psychology, philosophy and linguistics that human cognition is largely universal and independent of language and culture.

M. Saxton and J. N. Towse considered the problem of place value in multi-digit numbers from the perspective of linguistic relativity. They studied children's understanding of place value and the results of their investigation confirmed the validity of the considered theory.

Concerning the practical aspect of the theory of linguistic relativity as a tool of explaining the difficulties encountered in learning foreign languages and giving some clues to overcoming them, its role cannot be overestimated.

## Case study

The authors of the theory of linguistic relativity, the American scientists F. Boas, E. Sapir, B. L. Whorf, illustrated their ideas by the examples of separate words and general grammar categories (the latter being their particular concern). In the present investigation, we tried to analyse more examples from lexis and to extend

the theory to cover such linguistic phenomena as compatibility of words by comparing several languages.

Let us illustrate the main statements of the theory of linguistic relativity by the examples from English, Russian and Lithuanian:

1. There are different 'modes of expression' or 'fashions of speaking' in various languages. This idea may be demonstrated by the following examples from various semantic fields.

Handling of time is different in the above three languages. It is hardly possible to define in a single English word a concept expressed as 'сутки' (Russ.) and 'para' in Lithuanian. In contrast, such expression as 'one o'clock in the morning' does not make sense to Russians and Lithuanians because they perceive this as night.

Now, compare the names of home appliances which are also based on different principles: vacuum cleaner – *dulkių siurblys* – пылесос.

As one can see, the differences are as follows: an English word relies on the feature of the above home appliance 'to clean by vacuum', while another characteristic of an object – its ability 'to suck dust' is taken as a basis for nomination in Lithuanian and Russian.

The same refers to the relations between the words 'food processor' and 'virtuvinis kombainas', 'кухонный комбайн'. Compare also the names of mushrooms: brown cap – *paberžis* – подберёзовик; red cap – *raudonviršis* – подосиновик.

We may also find cases where the nomination principles differ in all three languages. For example: expansion joint – *kompensatorius* – температурный шов. Different patterns can also be observed in such modern expressions as user-friendly – *patogus vartotojui* – лёгкий (удобный) в работе; energy-efficient – *taurus* – экономичный, and the names of computers based on their location: desktop, laptop, palmtop. Such models are not characteristic of Russian and Lithuanian, except for 'delnukas' in Lithuanian.

**Table 1.** *Compatibility of semantically equivalent words in English, Lithuanian and Russian*

English	Lithuanian	Russian
heavy heavy traffic heavy-handed heavy-headed to make to make friends to make captain (to achieve the rank)	sunkus intensyvus judėjimas neapsukrus, dramblotas bukas daryti, atlikti susidraugauti tapti kapitonu	тяжёлый интенсивное движение неуклюжий, неловкий тупоголовый делать, выполнять подружиться стать капитаном (дослужиться до капитана)

**Table 2.** *Comparison of English, Lithuanian and Russian terms*

Lithuanian	Russian	English
movą	муфта	(depending on the type and function of the part) coupling clutch sleeve socket collar box
dispersija	дисперсия	dispersion (in physics) variance (in mathematics)
(transporto priemonių) parkas	парк (транспортных средств)	(car) park (bus) fleet (rolling) stock (refers to locomotives)
utilizavimas	утилизация	salvaging (of metal scrap) waste recovery (of heat) reclamation (of waste materials)
turbokompresorius	турбокомпрессор	gas generator (of gas turbine engine) gas producer, turbo-supercharger (of piston engine)
nepereinamumas	непроницаемость	impenetrability proofness (through a material) tightness (at joints)
dozatorius	дозатор	weighter weighing machine batch-type scale batcher (for concrete) portioner (feed) meter metering tank metering pump (for liquids)

2. Different compatibility of words considered to be equivalent in English and Russian/Lithuanian may illustrate the idea that language as a complete system of linguistic elements is itself a source of differences. Let us consider the following collocations (Table 1).

One can see that the compatibility of semantically equivalent words is different in English, Russian and Lithuanian.

3. Objects of reality are differently grouped (classified) in different languages. Here are some examples to illustrate this idea which means that multiple words in one language may correspond to what is expressed as one word in another. For example, we find two words in English for 'vertėjas', 'переводчик': 'translator', 'interpreter' (depending on whether the translation is oral or written). More examples can be found in Table 2.

These examples show that speakers of different languages differently approach the objects of reality: what is considered similar or integral by the speakers of one language is perceived as separate objects (belonging to the same category) by the speakers of another language.

4. We think that the above principles also apply to some borrowings, helping to explain their different meaning in the language which imported them. The inclusion of loans in the analysis performed from the perspective of linguistic relativity is an innovative approach. It extends the range of application of the above theory as well as demonstrating its great capabilities which were only briefly outlined by the authors.

Generally, the differences in the meanings of the so-called international words in different languages may be explained by different approaches of languages to giving names to the same objects of reality, i.e. linguistic relativity is based on the needs, preferences and traditions of every language. Thus, the word 'actual' comes from the Latin word 'actualis', meaning 1) real and 2) important, significant. The English language adopted it in the first meaning, while Russian and Lithuanian – in the second. As a result, speakers of Russian and Lithuanian

often make mistakes in using and translating this word.

The same applies to the word 'concurrent' often associated in Russian and Lithuanian with 'konkurencija', 'конкуренция', though in English it means 'acting at the same time'. Another example is the verb 'to double' defined in English as 'become twice as much or as many', i.e. 'dvigubėti', 'удваиваться'. However, 'dubliuoti', 'дублировать' in Lithuanian and Russian mean 'pakartoti', 'kopijuoti', 'повторять (то же самое)' and is often used by non-native speakers in the wrong context, e.g. 'they double the process'.

In many cases, international words, in addition to common meanings, have some peculiar meanings in one of the languages (e.g. 'alligator' in English means not only a reptile, but a technical device 'jaw crusher'). Examples of such cases can be found in Table 3.

The trend of extending the range of derivational patterns of international words can also be observed, implying that the patterns of native languages are transferred to them. For example, students try to translate the word 'signalizacija', 'сигнализация' as 'signalization' into the English language, though the suitable term is 'alarm system', while the derivative 'signalization' means 'a conspicuous indication' and is mainly used in traffic regulation.

The application area of the borrowed English word 'combine' is also extended in Russian and Lithuanian. Thus, it is used to denote an object called 'food processor' in English, e.g. 'virtuvinis kombainas', 'кухонный комбайн'. In English, this word is not used for naming this kitchen appliance.

However, it should be noted that the main difficulties arise at the level of the sentence. Let us consider an English sentence 'He is second to none', expressing the idea of supremacy or superiority (it can be translated as 'Jis yra pirmas' or 'Jis niekam nenusileidžia'). This sentence was offered to students for translation. Their versions (one can see that none of them is correct) are given below (see Table 4).

**Table 3.** *International words having different meanings in English, Lithuanian and Russian*

International word	Meaning		
	English	Lithuanian	Russian
actual	real, true	svarbus, reikšmingas	важный, значительный
to double	to become twice as much or as many	pakartoti, kopijuoti	повторять (то же самое)
signalization	conspicuous indication (in traffic)	(apsauginė) signalizacija	(охранная) сигнализация
occupation	a job or profession	užėmimas, užgrobimas	насильственное занятие территории другого государства
alligator	jaw crusher (techn.)	aligatorius (zool.)	аллигатор (зоол.)
conservatory	greenhouse	konservatorija (aukštoji muzikos mokykla)	консерватория (высшая музыкальная школа)
block	a building, a group of buildings	pastato konstrukcijos elementas	конструктивный элемент здания
design	a plan, purpose or intention	gaminių meninis konstravimas	художественное конструирование предметов

**Table 4.** *Translation versions of an English sentence suggested by students*

He is second to none
<ol style="list-style-type: none"> <li>1. Jis sekantis būti niekuo</li> <li>2. Jis sekantis į nieką</li> <li>3. Jis sekantis po nieko</li> <li>4. Jis yra niekas (neegzistuoja)</li> <li>5. Jis yra priešpaskutinis</li> <li>6. Jis antras po vienuolės (a very amusing variant, where the words 'none' and 'nun' are confused)</li> <li>7. Sekančiam/antram: nieko</li> <li>8. Antras nereikalingas</li> <li>9. Jis yra sekantis į nebūtį</li> <li>10. Jis lygus niekam</li> </ol>

In fact, only one or two students in the group could understand this sentence properly because the way of expressing the idea is very unusual to the speakers of Lithuanian. However, when some logical and linguistic analysis had

been made the sentence did not seem difficult to students. They even wondered why they could not guess its meaning at once.

## The role of the theory of linguistic relativity in teaching

Linguists of various schools claimed that comparison was useful to explain certain aspects of the language to be taught. It could help students to understand the causes of their mistakes and to avoid them.

In the 1970's, Lewis (1974: 103) explained the relatively high success of foreign language teaching in the former Soviet Union (where, as we know, the contacts with foreigners were highly restricted) in terms of the policy of making use of conscious learning. This approach is harmonious with current trends of emphasizing the cognitive aspect of foreign language learning (James 1999: 156). The above statements fully apply to linguistic relativity-based analysis.

When a teacher explains to students that any object of reality has many facets and the choice of the particular facet for giving a name to this object may differ from language to language, and illustrates this by a number of examples, the students would hardly call *an alarm system* – *signalization*, *food-processor* – *kitchen combine*, etc., which they are inclined to do, being unaware of the above differences.

The cases provided show how different the expressions of the same things are in different languages and how difficult it is for non-native speakers of English to choose the proper words and their combinations to express their ideas in English.

However, the wrong use of words and word-for-word translation, ignoring the actual English patterns, is typical not only of students, but of all non-native speakers (including the teachers). This can be seen in scientific articles written in English. Let us give only some examples: 'kertinis akmuo' should be translated as 'milestone', rather than 'foundation stone', 'systemacity' should be better expressed by 'regularity', 'thinking time' should become clearer when expressed as 'time for thinking', etc.

Another problem is associated with the use of borrowings. The mistakes are made because

of the interference of the native tongue and the meanings these words acquired in it (as a part of a new linguistic system).

The above-mentioned cases of multiple English words for what is one word in Russian and Lithuanian also present difficulties: for example, 'dispersion' can be found in the translated mathematical texts where the word 'variance' should be used in English. The words 'insulation' and 'isolation' are often confused by non-native speakers of English, with isolation being commonly used in both cases. The list of mistakes can be easily continued.

Therefore, non-native speakers of English should be informed about the basic principles of linguistic relativity which can show the differences in languages to help them to avoid many mistakes. Then, they would learn to ask themselves a question 'How do they put it in English?'; rather than trying to make word-for-word translation from their mother tongue, which often seems amusing to the native speakers of English. The Internet is now a perfect tool to check oneself, particularly, if collocations are concerned.

## Conclusion

The article presents a survey of the theory of linguistic relativity developed by the American scientists F. Boas, E. Sapir, B. L. Whorf, stating that the main differences between languages and their specific character depend on different approaches of the speakers to naming and classifying the same 'pieces of reality'.

The main statements of this theory have been analysed and illustrated by case studies from English, Lithuanian and Russian. The efforts have also been made to extend the scope of the theory's application by including borrowings into the analysis. Moreover, some new derivational models, constructed in the languages that adopted international words have been described. The latter show that each language system strongly influences not only the semantics of borrowings, but their form as well.



The cases analysed which represent actually all levels of the language system, embracing individual words, collocations and sentences, show that the theory of linguistic relativity is universal and can be used in the comparative analysis of any languages.

The authors of the theory of linguistic relativity emphasized the need for more extensive research along the lines considered, primarily concerning the comparative analysis of ways of expressing the reality by various languages. Now, in the age of globalization when mass and multimedia (radio, TV, newspapers, the Internet, etc.) perform a leveling function, smoothing the differences in language patterns, the more important it is to search for and identify the features which make every language a specific and original system different from others. Since Russian and Lithuanian do not directly contact with English (because of geographical locations of the respective states), the more interesting it is to see how far the differences between them reach with respect to the problem analysed. Therefore, the empirical studies from the above perspective are of great value.

Linguistic relativity-based analysis is thought-provoking and can provide the learners of English with 'native speakers insight', as well as showing them the alternative ways of approaching the same objects of reality in giving names to them. This, in turn, allows the learners to become aware of the peculiarities of their native language and to develop the 'linguistic guess'.

The problems dealt with by the theory of linguistic relativity remain topical because they are associated with fundamental relations between language, reality, thought and culture as well as major differences between languages.

Boroditsky, L. 2003. „Linguistic Relativity“, in L. Nadel (Ed.). *Encyclopedia of Cognitive Science*. London: Macmillan.

James, C. 1999. *Contrastive Analysis*. London: Longman.

Leontjevas, A. 1972. *Žmogaus kalba ir protas*. Vilnius: Mintis.

Lewis, E. G. 1974. *Linguistics and Second Language Pedagogy – A Theoretical Study*. The Hague: Mouton.

Lucy, J. A. 1992. *Language Diversity and Thought*. Cambridge: Cambridge University Press.

Sapir, E. 1963. *Language*. London: Hart-Davis.

Saxton, M.; Towse, J. N. 1998. "Linguistic Relativity: The Case of Place Value in Multi-Digit Numbers", *Journal of Experimental Child Psychology*, 69. London: Academic Press.

Whorf, B. L. 1976. *Language, Thought and Reality: Selected Writings*. Massachusetts: Mit Press.

Гумбольдт, В. 1956. «О различии строения человеческих языков и его влиянии на духовное развитие человеческого рода», в кн. Звягинцев, В. А. *Хрестоматия по истории языкознания XIX–XX веков*. Москва: Учпедгиз.

Потебня, А. А. 1965. «Из записок по русской грамматике», в кн. Щеулин, В. В.; Медведев, В. И. *Хрестоматия по истории грамматических учений в России*. Москва: Высшая школа.

## References

Boas, F. 1966. *Race, Language and Culture*. New York: Free Press.

## KALBŲ RELIATYVUMAS IR JO TEORINĖ IR PRAKTINĖ VERTĖ GLOBALIZACIJOS LAIKAIS

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*Pateikiama kalbų reliatyvumo teorijos, sukurtos amerikiečių mokslininkų F. Boas'o, E. Sapir'o ir B. L. Whorf'o, apžvalga. Nagrinėjama pagrindinių kalbų skirtumų koncepcija, grindžiama įvairiais požiūriais į realybę ir skirtingais objektų pavadinimais. Parodyta, kad kalbų reliatyvumas yra daugialypė ir daugiamatė sąvoka, kurią galima nagrinėti kaip susidedančią iš įvairių lygių. Kiekvienas lygis pasižymi tik jam būdingais bruožais ir tik susipažinus su jais galima geriau suvokti skirtingų kalbų savitumus ir išvengti nemažai klaidų. Nagrinėjami praktiniai kalbų reliatyvumo aspektai ir pateikiamos kai kurios besimokančiųjų klaidos bei teorijos taikymo mokymo procese rekomendacijos. Taip pat parodyta, kad kalbų reliatyvumo teorija padeda atskleisti kiekvienos kalbos savitumą, kuris turi būti labai vertinamas globalizacijos laikais.*

**Reikšminiai žodžiai:** kalbų reliatyvumas, panašūs ir skirtingi modeliai, lyginamoji analizė, globalizacija.

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