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# LINGUOCOGNITIVE AND SOCIOCULTURAL ASPECTS OF BILINGUALISM 

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#### Abstract

The concepts and data accumulated to date on bilingualism are summarized and generalized in the article. Bilingualism is the presence of two or more languages in a person's actual life and operating them whenever necessary, regardless of the level of proficiency and medium of language acquisition (natural or artificial). In the cognitivepsycholinguistic perspective, the study of a foreign/second language is primarily about the goals of language training: with a distinct lag from a first language (top-down training) to gain conceptual knowledge of one's own and foreign cultures and read cognitively complex works in two languages VS together with a first language from early childhood (bottom-up training) to gain the skills of authentic usage of both languages and be fluent in everyday communication. In in the socio-cultural perspective, in multinational states bilingualism is an objective necessity, provided that it is endoglossic. This is an alternative to the full or partial assimilation of linguistic minorities to the language and culture of the majority. The ideal is not linguocultural assimilation, but mutual integration, the formation of a single nation. As for an external foreign language learnt for international communication, it should be mastered less zealously and generally perceived as a mere substitute for an "international auxiliary language" - a simple code, universal and flexible, to convey a person's individual and national meanings. Acculturation in the spirit of a foreign culture is excluded, it is optimal to focus on the heritage of the internal, national and indigenous, cultures and literatures and learn them in both national/ethnic languages and a foreign language.


Keywords: linguodidactics, bilingualism, partial identity, semilingualism, enculturation, acculturation, subtractive bilingualism, additive bilingualism

## Introduction

The consideration (and re-consideration) of the issue of bilingualism from the cognitive-psycholinguistic and socio-cultural sides remains a topical problem due to the multidimensionality of this phenomenon, interconnectedness of its properties and the controversy or ambiguity of empirical data accumulated so far. This article is essentially an attempt of a reflective assessment of the cognitive-psycholinguistic and socio-cultural properties of bilingualism, as we analyze definitions and classifications of bilingualism, providing verified empirical data of previous research, list the main advantages and disadvantages of this phenomenon. It is basically a review-theoretical article, but not abstract, as we try to clearly express our position. The study is novel in that it is one of the few in the field to critically assess the modes and trends in educational bilingualism, which is very relevant in the modern world. We aim at the generalized assessment of

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linguodidactic approaches to language education in bilingual/multilingual communities and the fundamental consideration of strategies for teaching a second and a foreign language in an endoglossic and exoglossic language environment.

There are more than 7,000 languages in the world, and most of the world's countries are multilingual and multicultural. In monolingual countries, and those that previously tended to maintain linguocultural "purity" and have the only state and official language (for example, most European countries, including France, Germany, Britain), the influence of globalization grows, they have experienced an increase in migration and population flow, de facto becoming multicultural, multiethnic and multilingual. As the indigenous ethnic groups awaken there alongside widespread immigration, the minoritarian languages stand a good chance of gaining official statuses ${ }^{1}$. Members of communities sometimes create multilingual families, whose members identify themselves as belonging to more than one culture. One of the consequences of this is the development of natural bilingualism. At the same time, natural bilingualism as a trend is combined with artificial bilingualism acquired in the course of training.

Artificial bilingualism is the bilingualism arising from teaching a foreign, mainly exoglossic language (i. e. the external language of a foreign country). Its rationale today is primarily the ease of interaction worldwide in a language that, as stated, is the world language of international communication. It is closely related to linguodidactic policies and practices. Currently, early and intense instruction in a foreign language has become quite common and widespread ${ }^{2}$. While earlier the teaching of foreign languages began only in secondary school, now, according to statistics, the age of teaching this subject is reduced to 7-8 years of age, and the principle of "the younger the better" prevails. Modern schools offer a curriculum where a foreign language begins in the second form; it is considered quite acceptable to teach it even at preschool institutions, manuals and textbooks are designed for teaching children of primary school age a foreign language by the method of "immersion3."

[^0]Moreover, modern methodological manuals focus not only on the development of oral and written skills, but also on the familiarization of the student with a foreign culture. An indepth study of a foreign language and culture results in the early foreign acculturation (as distinct from the national enculturation), partial identity and the formation of a bilingual linguistic personality.

Given the close connection between language and consciousness (thinking), it is logical that a person's cognitive processes largely depend on their linguistic abilities and competencies. How does the number of known languages affect the formation of consciousness? How does early bilingualism affect the formation of speech? How does bilingualism affect a person's social life? There are no unambiguous answers to these questions due to the multifaceted aspects, globality and inconsistency of empirical data.

The concept of bilingualism includes many aspects that are interdependent. Cognitivelinguistic, psychological (psycholinguistic), sociolinguistic and neurophysiological aspects of bilingualism are studied quite actively, studies in the field of socio-cultural and linguocultural aspects are somewhat less represented.

Researchers have not yet come to a consensus on the definition of bilingualism. It is noted that bilingualism as a term has an open-ended semantics. To describe the signs of bilingualism is also problematic, since it can endow different characteristics to different people. It is recognized that bilingualism has certain - both negative and positive consequences for the individual's speech, cognitive development and the formation of their cultural identity. When characterizing bilingualism, it is necessary to take into account many factors. First it is the ethnic-social environment, the functional spheres of social communication that correlate with a particular language, and the communicative situations of bilingualism actualization. Then, it is the actual personality of the bilingual, such as the context of the acquisition of the second language, the frequency of switching from one language to another, the age of a bilingual, their socio-economic status, education, including competencies in non-linguistic subjects, their profession and other criteria for personal realization.

Given the multidimensionality of bilingualism, we will begin this article with the definitions of the term and classifications of bilingualism, then proceed to the actual discussion of the cognitive-psycholinguistic and socio-cultural aspects of bilingualism and, finally, present a generalized list of the main advantages and disadvantages of bilingualism.

## Definitions, evaluation and classifications of bilingualism

Bilingualism in a general sense is the knowledge of two or more languages and bilingual speech performance. It is more common to consider bilingualism a command of two languages irrespective of the level of competence, the degree of and frequency of usage. So bilingual is an individual who functions in two languages in the same or different degrees of proficiency.

The concept of bilingualism has been discussed for a long time. K. Hakuta, B. Ferdman and R. Diaz conventionally divide all works on bilingualism into three groups. The first group of studies, which defines bilingualism as the sum of the language abilities and competencies of an individual, thanks to which they speak two languages or use two linguistic systems,

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represents the cognitive or a cognitive-linguistic approach. The second group, which defines bilingualism as a socio-psychological phenomenon characteristic of individuals as representatives of society, social groups and as participants in social situations associated with two languages is the socio-psychological approach of studying bilingualism; here symbolism of group identities is important. The third group of studies concerns societal bilingualism - institutional and non-institutional (informal) interaction of individuals and groups in a multilingual society, in which the symbolism of the use of a particular language is associated with the social and institutional status of its speaker [Hakuta et al. 1987].

Such a significant discrepancy in the dimensions of consideration of the problem leads to the ambiguity of the understanding of this phenomenon. Much of the confusion in this area is also related to the breadth/narrowness of the understanding of bilingualism: it can be understood broadly, as in the definition given at the beginning of this section, or it can have a number of narrower interpretations. Some researchers do not consider bilingual those who acquired a second/foreign language when studying at school or university, but only those who acquired it in the natural conditions of social multilingualism. For example, U. Cunningham in the guide to bilingual families avoids using the term "bilingual." A person can have a bilingual education and upbringing, a childhood with two languages, a family who speak two languages at home. This only means that there are two languages in a person's life. But the degree of competence in them can be so different that it is often difficult to recognize all such people as bilinguals. So instead of "bilingual" Cunningham uses the expression "(living) with two languages" [Cunningham 2011].

However, most researchers prefer to apply the term "bilingualism" to capacity for communication in two languages with both equal and unequal degree of language proficiency, gained through both natural and artificial media of language acquisition. In other words, the presence of two or more languages in a person's actual life and any operating them whenever necessary may be regarded as bilingualism.

Studies of bilingualism in the West began in the 1920s due to the influx of immigrants to the United States and the difficulties in their adaption there. In that situation, the point of view of the so-called Hereditarians initially prevailed, who claimed that these difficulties, as well as the low IQ scores of immigrants who came mainly from the South and Eastern Europe, was largely explained by genetic factors. This also applied to language abilities; cf. the following statement by the researcher Florence Goodenough: "Those nationality groups whose average intellectual ability is inferior do not readily learn the new language" (quoted from [Hakuta et al. 1987]). Another group of scientists, represented mainly by psychologists, came to the conclusion that low IQ scores of immigrants can be associated with bilingualism as a factor in their life experience, which leads to weak development of verbal skills and causes confusion in concepts. Here is the statement of the American child psychologist George Green Thompson (1952): "There can be no doubt that the child reared in a bilingual environment is handicapped in his language growth. One can debate the issue as to whether speech facility in two languages is worth the consequent retardation in the common language of the realm" (quoted from [ibid.]). It should be noted that the attitude to bilingualism as a negative factor of psychic development prevailed until the 1970-80s. ${ }^{4}$

[^2]Further research was aimed at studying the differences between monolingual and bilingual individuals and determining the correlation of early bilingualism with such personality traits as linguistic abilities, the level of linguistic and intellectual development, personality traits. To date, the prevailing point of view is the positive influence of bilingualism in general and early bilingualism in particular. The development of thinking, formation of conceptual constructs in different languages, operating with the grammar and lexico-semantic tools of both languages, metalinguistic awareness - all this is recognized in balanced bilinguals. But even though there is a lot of research data, it is difficult to draw a conclusion about the definitely positive or negative influence of bilingualism, since the results are ambiguous and contradictory. This is due to the multifactorial nature that accompanies the phenomenon of bilingualism.

There are several criteria on the basis of which classifications of bilingualism can be created. Here are the most significant of them:

1) Circumstances of language acquisition. Bilingualism can be natural and artificial. Natural bilingualism is embedded in a child from birth, when he/she is surrounded by a bilingual environment, grows up and is brought up in it. Artificial bilingualism begins at school, when, on the basis of the first language already known to the child, the study of a second/foreign language begins in a class where an artificial language environment is created [Залевская, Медведева 2002]. There are also classifications depending on the time of acquisition of the second language, that is, early/late bilingualism; on the method of acquisition: simultaneous or relatively simultaneous bilingualism and successive (sequential) bilingualism; on the reason for learning a language: primordial bilingualism, systemically existing in a multi-ethnic society, or bilingualism acquired by circumstances (circumstantial bilingualism). There is also "functional" bilingualism meaning that a person is able to function freely in a second language in certain areas of communication, for example, in a production field, having the necessary written and oral language skills. ${ }^{5}$
2) Correlation of speech mechanisms. Based on this criterion, bilingualism may be classified into subordinative, coordinative, and mixed. In subordinate bilingualism, the individual speaks one language at a higher level than the other, i. e. for him/her one language is dominant and the other - recessive. Basically, in the endoglossic native language environment, where indigenous languages are official in a region or country, there is a dominance of native languages, which affects the use of a foreign/second language system. The lexical semantics and grammar-logical structures of L2 in speech production and perception are based on L1. If the second language is socially widespread, the influence in the course of time may reverse, the lexical semantics and grammar-logical structures of L2 begin to serve as the base for those of L1. The coordinative, or pure, bilingualism implies that there are two or more coexisting languages, and these languages are autonomous, they are used in different functional spheres of social communication, in different conditions of interaction. The speaker's concepts and discourse practices shift together with the switching of linguistic codes. The mixed bilingualism implies a single mechanism for analyzing and
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synthesizing speech, the speaker operates the same concepts and discourse practices, while there is speech difference at the level of surface structures. The individual easily switches from one language code to the other dependent on the circumstances and expresses his/her thoughts and intentions with the equal ease [Щерба 1974].
3) Type of speech activity and skills. In receptive (passive) bilingualism, the individual understands speech works in a language (second or unused native) but does not speak it. This type is characteristic primarily of the study of dead languages. Reproductive bilingualism is characterized by the ability of an individual to reproduce in L2 what he/she heard and read, which is often accompanied by linguistic error. Productive (active) bilingualism means the command of L2 at a level where the individual understands speech in this language and meaningfully creates new utterances [Верещагин 1969]
4) Functional distribution of languages or dialects in different spheres of use. This division is related to the societal aspect of bilingualism, it is termed "diglossia" - a type of bilingualism in which two languages or two forms of the same language coexist in a certain territory or in a certain society but are applied in different functional spheres. Diglossia, in Ch. Ferguson's understanding, implies a hierarchy of languages, it is associated with a dichotomy of "high" (H) and "low" (L) languages - in accordance with their spheres of use. Ferguson explained that the "low" language is used in everyday life, in everyday communication, and "high" is applicable in the formal spheres of life. The H language is characterized by prestige in society, the L language is not prestigious. "In all the defining languages the speakers regard H as superior to L in a number of respects. Sometimes the feeling is so strong that H alone is regarded as real and L is reported 'not to exist'" [Ferguson 1959, Fishman 1967]. Diglossia is also associated with a dichotomy of balance/imbalance of bilingualism, which implies the equal/unequal level of linguistic and cultural competencies of bilinguals. It should be noted, however, that diglossia does not necessarily imply the hierarchy, the division of languages in "high" and "low", it may merely imply the customary functioning of languages in different communicative functional spheres, no matter if formal or informal (e.g. Russian and nationalities' languages in the post-Soviet space).
5) The influence of bilingualism on speech ability and competence of individuals. W. Lambert distinguished additive bilingualism, in which "in no case would the learning of the second language portend the dropping or the replacement of the other" and subtractive bilingualism, referring to situations where "ethnic minority groups $<\ldots>$ because of national educational policies and social pressures of various sorts are forced to put aside their ethnic language for a national language" [Lambert 1975]. When the native language L1 remains the main language and is not replaced by L2, bilingualism is additive, it has a positive effect on the individual. A person acquires L2 with preservation of all competences of communication in L1. This type of bilingualism occurs in situations where children of the minority ethnolinguistic group learn their native language at school. With subtractive bilingualism, a child does not learn L1 at school or learns it on an optional basis, whereas the training itself takes place in L2. Subtractive bilingualism takes place when society does not value the language of the minority, and vertical mobility is possible only with the acquisition of the language of the majority.

In addition to the above-mentioned criteria and classifications based on them, we will mention other classifications of bilingualism in the form of a list: childhood/adolescent late (according to the age criterion); initial/residual, progressive/regressive; contact/non-contact
(through direct contact or through the media, literature, culture); immediate/mediated (with or without connection to thinking) [Верещагин 1969]; group/individual/mass; symmetrical/ asymmetrical (according to the criterion of social roles and functional equality); unilateral/ bilateral (bilingual activity with communicants); endoglossic/exoglossic (according to the intranational/extraterritorial official language chosen by native speakers); intragroup/ intergroup; inequality/equality of languages (according to hierarchical/equal use in functional spheres of social interaction) [Жеребило 2010].

After the analysis of the concepts and classifications of bilingualism, we will consider how bilingualism affects consciousness and how bilinguals' thinking and speech operate.

## Cognitive mechanisms of bilingual interaction

Our analysis of bilingualism is based on two hypotheses that explain its mechanism.
The first of these, the transformational (generative) hypothesis involving deep and superficial structures (surface structures) transformations, seems to be a convenient and plausible method when considering the cognitive mechanisms of bilingual thinking and speech. To date, a number of studies have been conducted that have confirmed the scientific nature of the transformational hypothesis. Some of them revealed that Broca's area is activated only in the case of language sentences constructed on the basis of a hierarchical model of the immediate constituents and is not activated when sentences were based on a simple linear word order. An experiment showed algorithmic processing of deep and superficial structures of an utterance during speech perception/production based on the rules of the immediate constituents, and the rejection of mental actions for semantic processing, if it was required to perceive/produce a meaningless set of words [Bahlmann et al 2008; 48].

The second hypothesis involves the switching of codes in the production and perception of speech. E. Peal, W. Lambert ${ }^{6}$ [Peal, Lambert 1962] mean by code-switching the change of languages in speech communication when performing the corresponding cognitive-linguistic operations. Understanding of this process by L. S. Vygotsky, the founder of the codeswitching theory [Выготский 1934], and his followers from the Moscow Psycholinguistic School is more complicated than the visible external speech switches in two languages. The code transitions include such intermediate stages as the inner speech and the "code of images and schemes" (N. I. Zhinkin's term [Жинкин 1964], close to M. Johnson's image schemas [Johnson 1987]). In monolingual communication, we carry out mental and linguistic "switches" through the stages of external, internal speech, images and schemes and thinking in speech reception and vice versa in speech production.

Bilinguals, on separate occasions and (less frequently) in parallel, in speech perception hear external speech in different languages, process the messages through their inner speech which also occurs in different languages and through the image-schema stage, form mental images or concepts - either similar, or different, or synthesizing features of both languages. In speech production, bilinguals process concepts or mental images through the image-schema stage and the inner speech which occurs in different (two) languages and produce outer speech in either one or the other language. The inner speech, in its turn, itself involves the code-switching between the deep structures and surface structures of two languages in the production and perception of messages in these languages. According to H. Curry [Curry 1961], A. A. Leontiev [Леонтьев 1999], it includes tectogrammatical and phenogrammatical stages.

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Bilinguals also switch social and cultural codes based on socio-cultural archetypes and stereotypes, which causes a constant symbolic change in social and cultural identity [Шелестюк, Яковлева 2019].

## Bilingual education

When discussing bilingualism from the cognitive-psycholinguistic point of view, it is important to consider the ontogeny of speech development and the phenomenon of bilingual language acquisition. Many scientists note, on the one hand, significant achievements of the individual with the early training in two languages, and on the other hand, the confusing or even retarding effect of early bilingualism.

The opinion about the need for early learning of several languages is based on a natural factor - the maximum ability of young children to learn languages. Flexibility of cognitive processes, absence of language barriers, rapid memorization of information, craving for cognizance of the world - all these psychological features help in early learning of languages, including non-native ones. Recognizing this fact, most teachers, psychologists, philologists have nevertheless considered optimal the model when children learn their native languages for a certain number of years before they start learning a second/foreign language.

Back in the $19^{\text {th }}$ century, when subtractive European-Russian bilingualism took place in the highest circles of the Russian Empire ${ }^{7}$, the teacher and pedagogy theorist K. D. Ushinsky observed that within a few months of a foreign language training the child gets so accustomed to speaking it as he cannot learn in several years. At the same time he stressed that teaching foreign languages should not begin too early. First it is worth making sure that the native language has taken deep roots in the child's mind. The study of a second language should be started only when the child acquires complete freedom in their native language. If bilingual language learning takes place notwithstanding this recommendation, then the more zealously children are engaged in learning a foreign language, the more zealously they should be engaged in studying their native language; only this can paralyze the inevitable harm that occurs to the mental development of the child from the intensified early studies of a foreign language [Ушинский 2015: 242].
L. S. Vygotsky believed that the assimilation of certain knowledge, skills and abilities most easily and effectively occurs at certain "sensitive periods", when the child is most receptive to corresponding subjects and competencies. Vygotsky identified five sensitive periods of child development ${ }^{8}$, believing that the age of 1.5-3 years is the most suitable for learning language/speech and active vocabulary replenishment. However, speaking about the relationship between language and thinking, Vygotsky clearly outlines the optimal

[^5]sequence of studying the native and foreign language: a foreign language should be studied after the native language with a lag of several years and on the basis of already formed concepts verbalized with the help of it. The acquisition of a foreign language occurs in a way that is directly opposite to the acquisition of the native language. The child never begins the acquisition of the native language with the study of the alphabet, with reading and writing, with the conscious and deliberate construction of the phrase, with the logical determination of the meaning of the word, with the study of grammar. But all this usually takes place at the beginning of the acquisition of a foreign language. The child learns the native language unconsciously and unintentionally, and the foreign language - consciously and intentionally. Therefore, it can be said that the acquisition of the native language comes "from the bottom up", while the acquisition of a foreign language goes "from the top down" [Выготский 1999: 244].

According to Vygotsky, the study of a foreign language is based on the semantics of native speech, on the already developed system of word meanings. It resembles the acquisition of scientific concepts, which is based on the already "widely developed conceptual fabric of spontaneously and actively developed notions" acquired in the process of the child's own experience. The acquisition of a new language does not occur through a new appeal to the objective world, nor through the repetition of the development that has already been accomplished, but through a formerly acquired speech system, standing between the newly acquired language and the world of things. Similarly, the acquisition of the system of scientific concepts is not possible otherwise, as through the indirect reference to the world of objects through the previously developed notions. And the formation of scientific concepts and demotic notions require completely different cognitive acts [Выготский 1934: 180]. This statement suggests that the ideal situation in the bilingual development is the acquisition of the foreign/second language "from the top down", that is, on the basis of the linguistic and conceptual system of the first, native language (mother tongue), which for its part is learned "from the bottom up", primordially, in parallel to cognition and thinking development. In our view, this situation is ideal even though the foreign/second language acquired on the basis of one's own native linguistic and conceptual structures may lack colloquial speech authenticity and fluency.

Similarly to Vygotsky's sensitive periods hypothesis, Western scientists developed on a critical period theory. However, opinions on the range of the period for the study of a foreign language vary. W. Penfield, L. Roberts measure it from 4 to 8 years [Penfield, Roberts 1959]. R. Ellis estimates this period from 1.5 to 7 years of age and observes that during this period language acquisition can take place naturally and efficiently, but after it the brain is no longer able to process language in this way [Ellis 1986]. T. Scovel believes that after about the first dozen years of life, everyone faces certain constraints in the ability to pick up a new language [Scovel 1988]. M. Montessori, known for her author's method of early development, determined the natural period of language/speech acquisition as $0-6$ years, and considered the optimal age for a second language to be 5-9 years. A child under 9 years of age actively participates in the development of speech, after this point the mechanisms of speech become less flexible and cannot so easily adapt to new conditions. At the same time, most scholars are agreed that perseverance and concentration of attention increase in preadolescence and adolescence.

Some publications hint at a loss of a unique chance to learn two or more languages instead of one before a child starts learning to read and write in their native language, that
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is, before the age of 7. Cf. the conclusions of the supporters of "the younger the better" concept [Dulay, Burt 1982; Johnson, Newport 1989; Morford, Mayberry 2000]. Some studies provide data supporting "the older the better" view. They reveal that L2 learning ability "improves with age" [Ekstrand 1975], acknowledge the faster acquisition rate among later beginners [Harley 1986], etc. We can conclude that there is much discrepancy and controversy in these views, due to the controversy of the results of the bilingual education, as well as the lack of understanding of the criteria for the success of the second/foreign language learning and, ultimately, its further use in social interaction.

Notably, even supporters of preschool foreign L2 acquisition set the starting point for learning a foreign language as 5 years of age. This age marks a qualitative transformation when the child acquires the ability to concentrate attention for a more or less prolonged period, to act purposefully, he/she masters a sufficient vocabulary and a stock of speech models to meet his/her communicative needs. Among Soviet researchers this point of view was held by E. A. Arkin, E. Y. Protasova, N. M. Rodina, N. D. Galskova, Z. N. Nikitenko, E. I. Negnevitskaya, I. L. Sholpo, Z. Y. Futerman, M. M. Gokhlerner, G. V. Eiger and others [e.g. Аркин 1968; Футерман 1984; Шолпо 1999]. Methods and recommendations for learning a foreign language from preschool age are proposed, including immersion and game-playing integration [Ломакина, Лаep 2014]. It is obvious that the popularization of preschool learning of L2 is associated with the prestige of the external foreign language, which underlies ambitious parents' demand for its study by their children, whereas pedagogy reactively reflects this demand in the form of recommendations and methods [Кушнир 2004].

Let us consider early bilingual learning in the paradigms of universal grammar and codeswitching theory.

Psychologist V. Rotenberg directly connects the protoverbal structures ("deep structures" of the language) and the image-schemas preceding verbalization with the right hemisphere of the brain, which is responsible for unconscious, synthetic, intuitive processes. Based on this and considering the usual sequence of learning languages, Rotenberg hypothesizes that the native language involves both hemispheres, transforming deep structures into superficial and vice versa, and the foreign language relies on both superficial and deep structures of the native language for syntactic transformations, and uses to a greater extent the left hemisphere [Ротенберг 2001].

The quality of foreign/second language acquisition by bilinguals is directly related to the way of mastering it: 1) rationally, "from the top down", in the traditional classroom environment, proceeding from the deep and surface structures of the native language through the rational and consistent study of foreign/second language phonemes, letters, grammar, learning reading and writing, logical determination of the word meaning, conscious and deliberate construction of the phrase in speech production etc., or 2 ) imitatively, "from the bottom up", through immersion in a foreign linguocultural environment, with the earlyassimilated deep structures both of a native and second/foreign language, spontaneous grasping of phonetic and grammar rules, imitating the usage of lexis, immediate emotive and motivation-based speech production.

In the first case the teaching of the native and foreign languages occurs successively, when the material of the second language is consistently superimposed on the learned structures of the native language. Early assimilation of the system of the native language and gradual learning to transform its deep structures into increasingly complex surface
structures is a guarantee that for the child a particular language and the corresponding type of linguistic consciousness will be native. Then, with some lag, on the basis of the structures of the native language, it is reasonable to begin to master the second language. However, the second language thus learned is to a large extent rational-logical and abstract in nature ${ }^{9}$. It is common knowledge that it is not conducive to fluent authentic speech in L2, and to achieve it a sufficiently long immersion in the authentic linguistic environment is needed (which can be carried out at a later age, if necessary).

In the second case the teaching of the native and foreign languages occurs simultaneously, the learning of both languages is achieved through immersion in the natural languocultural environment, or they are re-created. In immersive methods of language learning subliminal influence is widely used, it is achieved through rich culturally laden imagery working on visual, auditory, sometimes kinesthetic sensory perception systems; fascination or stunning with images; singing, poetry declamation, playing, performing; participation in L2-based activities; entertainments involving L2 usage.

Immersion includes suggestion and imitation during communication in L2, which dominate over the rational learning. Suggestion implies subliminal impact on the human mind bypassing consciousness, it means communicative (verbal, emotional, behavioral) influence without a recipient's comprehension and critical evaluation of the information received. It results in a "blind" assimilation of the proposed information: the imbibement of speech/communicative patterns, together with concepts, emotions, evaluations and even values, norms, cultural codes and role-models that are not subjected to logical analysis on the part of the recipient.

With the early immersive second/foreign language acquisition, the deep structures of the non-native language are acquired along with the deep structures of the native language and are "imprinted" in the mind as certain prototypes of the language system. Their imprinting is accompanied by the imprinting of cultural archetypes and stereotypes reflected in speech.

In the case of simultaneous or even advanced acquisition of a foreign/second language, the deep structures of the native language are not firmly assimilated, they are distorted or replaced by the deep structures of another language. Thus the second/foreign linguistic and cultural units can participate on an equal footing with their native counterparts in the formation of linguistic consciousness, influence the ethnogenetic foundations of a person, they can coexist or compete, displace and, possibly, replace native units ${ }^{10}$.

In addition, it is shown that if a child simultaneously learns two languages at an early ("pre-threshold") age, then he/she is likely to have a slowdown in the assimilation of linguistic structures and patterns of L1 [Cummins 1976]. The amount of L1 vocabulary he/ she has learned becomes twice less than if he/she has studied one language (several sources

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confirming these conclusions are given in [Hakuta et al. 1987]). In the early simultaneous study of two languages, interference and intercalation are very common, including the situations when simultaneous learning continues at the stage of mastering reading and writing, and the second language is studied in the same or greater volume ${ }^{11}$. It is believed that with the early study of two languages (native and foreign) at once, their words and structures will get mixed. That is, early bilingualism is fraught with a serious violation of literary speech due to non-separation, or mixing, of languages.

In general, in the simultaneous study of languages, the period when a bilingual child does not separate languages is inevitable. L. V. Shcherba notes that when two languages are in direct contact, the phenomenon of mixing occurs [Щерба 1958]. The reason for this is the lack of language acquisition. Such cases may acquire social significance, and errors of language owing to mixing may become a generally recognized norm in an indigenous environment [ibid.]. The way out of this problem could be a conscious differentiation of languages: if teachers do not mix languages, then children, imitating them, will learn to differentiate them too. At the same time, the task of spontaneous code-switching for the bilingual child will remain difficult, hence balanced bilingualism is unlikely. Mixing is also a serious problem at a conscious age, when one language is spoken by inserting words from another (for example, Franglais, or Frenglish in Montreal).

With the ethnically and territorially affine languages it is natural and inevitable that the structures and lexis of two languages somehow affect each other, and they need to be of necessity regulated (for example, educational institutions should focus students on problem areas of speech production in which undesirable code-switches are most often found). As for foreign language structures interacting with indigenous ones due to the early simultaneous foreign-native language education, this creates an unnatural (artificial) bilingualism, and the resulting code switches are in most cases perceived by native speakers as foreign elements, contaminating the native language.

We can infer from the above that the socio-political and socio-cultural conditions of bilingual language learning may not be neglected, as they determine the moral side of language education. If bilingual language learning is endoglossic - pertaining to internal, indigenous languages of a multinational/polyethnic region or country, then it is natural, unavoidable and objectively necessary. Such situations happen in mixed bilingual families, preschools, schools and colleges of a multinational/polyethnic region or country. If, following the exoglossic fashion of engaging an external foreign language (viewed as a language of international communication) as an official language in a country, educators approve of the early foreign language learning, simultaneous with mastering native oral and written speech, then such a situation, in our view, is unsustainable, unnecessary, and better be avoided.

## Sociocultural aspect of bilingualism

In this section we will focus on the aspect of bilingualism referred to at the end of the previous section. Among the research in the field of socio-cultural aspects of bilingualism we should primarily mention the studies in the field of multinational language planning in Soviet and currently Russian linguistics, which traditionally pay considerable attention

[^7]to Russian-nationality and titular-minority bilingualism of federal republics and regions. In the West, we note the works that developed sociolinguistic issues in connection with the adaptation of emigrants, as well as modern research in the field of language rights, language diversity, subtractive spread of global English, cultural identity, national-linguistic integration, etc.

Below we will present in broad brushstrokes the sociocultural (societal) concepts of bilingual/multilingual linguistic situations worked out so far.

Firstly, in the choice of a national language there are linguistic policies and situations of endoglossia and exoglossia. Much of the population in multinational and polyethnic states are bilingual. In multinational countries, endoglossia and exoglossia can be adopted as the official language policy. Endoglossia means providing the official status and use for the native language(s) of the titular and/or majority nationalities of the country. It is a linguistic situation which is natural, just, ethnically and socially justified, and it obtains in sovereign national states. Exoglossia is the use of an external, non-native language for the peoples of the country as an official or state language (cf. English and French in many African countries, English in India, Bangladesh, Malaysia, Singapore, etc.). It is the language of the ethnic group, which is not represented in any significant number among the ethnic groups living in the country. Exoglossia is viewed by many as a relic of the colonial past, when metropolitan languages were deemed to ensure technological progress and facilitate communication between multilingual ethnic groups, and therefore adopted as official (state). But it may also be quite voluntarily opted for by non-colonial countries (e.g. English in the Netherlands, Scandinavian, Baltic countries, etc.). Exoglossia may be overtime somewhat mitigated by the development of indigenous languages, the elevation of their statuses and the indigenization of education and social life.

Secondly, we should regard diglossia and social hierarchy of languages as connected but quite discrete phenomena. Language hierarchy entails diglossia, but diglossia does not indispensably entail language hierarchy - in the sense of social and ethnic inequality. The linguistic situation of actual interchangeability of languages in social interaction (like truly balanced bilingualism in an individual) is a rather rare phenomenon. Instead, in most multinational countries there is diglossia, i. e. the situation where two languages coexist in a certain territory or society and used by their speakers in different functional spheres of social communication. Diglossia may be formed spontaneously or constructed. As was noted in section 1 of this article, diglossia, if unregulated, is frequently characterized by the social hierarchy of languages, where one of the languages or variants acts in "high" spheres and the other in "low" ones - for which reason diglossia is often criticized. But diglossia may mean that languages are alternately used in different "high" spheres, or customarily serve in different spheres of communication. We posit that diglossia in a multiethnic society is inevitable, but the hierarchical social inequality of languages should be guarded against. ${ }^{12}$

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It is important that bilingualism does not arise without sociocultural foundations, the functional distribution of languages is rather rigidly determined by objective social and ethnic conditions, as well as by historical tradition. Societal bilingualism is an imposed state of affairs in any multi-ethnic society. It depends on various factors, e.g. the number of languages, population size of nationalities, their languages' development, etc. The dominant factors of the natural language hierarchy are: 1) the population size of nationalities, 2) their autochthony (indigeousness), 3) the anciency of their languages and written traditions.

In fact, the very conditions of life in multinational/polyethnic countries or on the boundaries of linguistic areas ensure the active functioning of bilingualism and multilingualism. These conditions encourage individuals to constant bilingual code transitions, and, if unregulated, the speech of bilinguals in both languages is often full of speech errors, interferences and intercalations. It leads to the emergence of pidgins and creoles. To prevent this, states legitimate diglossia, which serves to regulate and normalize the linguistic intercourse and ensure a stable language situation, in which in certain circumstances one of the speaker's languages may be dominant, and the other recessive, and in others - vice versa (this is the ideal to which, e.g., Kazakhstan and Russia.

According to V. M. Alpatov, language hierarchy in most multinational states can be schematically represented as an overturned pyramid consisting of three strata. The upper (the most numerous) stratum is constituted by monolingual speakers of the official (state) language; the middle stratum includes bilingual/multilingual citizens of nationalities; the low stratum are monolingual speakers of minority languages, who may also be multilingual, but are not proficient in the official language(-s). In some countries (India, a number of African countries), the upper stratum is absent, and the middle stratum -bi-/multilingual citizens - move to the top. This hierarchy does not coincide with the social hierarchy but correlates with it in one aspect: belonging to monolingual speakers of the official language does not say anything about their social status, but the lower stratum of the language hierarchy (knowing minority languages, not proficient in official languages) is usually formed by people who do not have a high social status [Алпатов 2012].

With the emergence of the USSR this regularity was broken, as the statuses of minority languages were raised. It was in line with the new national policy of the social and national equality, which entailed aligning ("levelling") of the "national outskirts" with the center socio-economically, culturally and educationally, the boost of their economies (modern production facilities were built on their territory), indigenization of their governance, the overall result of which was the rapid development of the Soviet nationalities. Among other things, this policy necessitated a law on education in the native languages of the USSR's numerous nationalities and ethnic groups. Schools and universities were opened, cultural and press institutions were created (both in Russian and in nationalities' languages), the study and cultivation of the features and traditions of ethnic culture and history were encouraged. The languages of nationalities and ethnic minorities were developed, taught at schools and universities, literature was encouraged in them, large editions of journals

[^9]and books were published, nationalities' theater troupes and film studios were created, nationalities' intelligentsia was formed. Despite all this, in general, the situation of language and sociocultural hierarchy - naturally forming according to V. M. Alpatov - obtained in the USSR as well.

Thirdly, an important concept within the sociocultural (societal) dimension of bilingualism is enculturation, i.e. individuals' familiarization with national/native languages and cultures, conditioning their national/ethnic identification. Approaches and attitudes to enculturation determine the degree of propitiousness of a linguistic situation in a multiethnic society. Four major approaches to enculturation specified to date are assimilation, separation/segregation, marginalization, and integration [Белая 2008] ${ }^{13}$. Assimilation is a widespread approach to enculturation in which individuals adopt a common national language, culture, and ideology and identify themselves with a nation, and, in case of belonging to a linguistic minority, to a large extent forgo their native languages and cultures. Separation is identification with one national/ethnic language and culture and rejection of others; segregation is a forcible isolation of certain individuals and groups, exclusion them from a national/ethnic language and culture. Marginalization means the loss of identity with one's own or other national/ ethnic language and culture, fraught with cultural failure and degradation, including alcoholism and antisocial lifestyle. Integration implies identification with both minority and majority languages and cultures and balanced sustenance of them; it is a product of the amalgam of cultures and implies the emergence of a super-ethnic culture.

It seems that bilingualism, which arises from linguistic and cultural integration, is the best choice, the golden mean between enforced state monolingualism and ethnolinguistic separatism. This is the best way to avoid the assimilation of small peoples, their languages and cultures, and at the same time to ensure national unity. Integration is the optimal and most developmental principle of enculturation, to which any multinational state should aspire.

Fourthly, the societal aspect of bilingualism involves the concept of bilingualism as social encumbrance, as well as a social benefit. It should be understood that bilingualism is to a large extent a duty, a burden for representatives of linguistic minorities, since the speech activity of bilinguals is aggravated by the stress of code transitions, adequate choice from two sets of vocabularies and speech patterns available to them, avoidance of interference between the two languages in communication.

According to many scientists, including J. Cummins [Cummins 1976], S. E. Duncan and E. A. de Avila [Duncan, de Avila 1979], (balanced) bilingualism is achieved after reaching the optimal threshold of oral proficiency in a second/foreign language, as well as after reaching the threshold of meaningful reading of complex works in both native and second/ foreign languages. With individuals who have reached and surpassed these thresholds, bilingualism leads to positive cognitive development. These findings are supported by a number of currently fashionable studies of brain morphology and activity; cf. the cautious conclusions about structural changes in bilinguals' brain compared to monolinguals [Stein et al. 2014] and the involvement in bilinguals' speech activity of various areas of the brain that are not involved with monolinguals [Кручинина et al. 2012].

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At the same time, it is obvious that a significant part of students does not achieve the optimal thresholds for mastering a second/foreign language, and in this case the language training will not be successful; moreover, it can have an inhibitory effect on the linguistic development of individuals, including the non-assimilation of grammatically correct and logically complex structures of their native language.

Nevertheless, bilingualism, as we emphasized hereinabove and in our previous work [Суюнбаева, Шелестюк 2019], in a multinational, polyethnic society is an inevitability, a natural necessity. Therefore, teaching languages, the practice of linguodidactics is a process that involves a subtle balancing, the choice of a golden mean between native, official and functional foreign languages, the assessment of their importance for the individual as a person and a citizen, supported by the allocation of time for their training, the way of learning and the choice of specific knowledge, skills and abilities.

As V. M. Alpatov shows, monolingualism has a number of advantages. For one thing, the acquisition of each new language, especially its conscious learning, requires additional effort, and people's abilities in acquisition of foreign languages differ. There are people, even very capable in other fields of knowledge, who cannot learn any language other than their native language. For example, for A. F. Pisemsky, a prominent Russian writer and the mathematical department of Moscow University graduate, foreign languages were a bane, and he more than once suffered from the 'mean ignorance of foreign languages', explaining it by the preponderance in him of capacities in philosophical and abstract sciences [Алпатов 2012].

Then, a person acquires languages in different ways and with different quality at different periods of life. When using the native language, a person uses both hemispheres of the brain, complementing each other. In the process of language acquisition after the age of 5-7 years, the left hemisphere begins to dominate, and the newly acquired language competences may be imperfect. There are cases when a person speaks more than one maternal language, but they are not so common. And, as experts point out, there is no absolute balance of languages, and in a person one of two or more languages will always become main and the other - recessive [ibid.].

Last but not least, the concept of mother tongue has a clear social and national meaning. Most often L1 is the language of a native ethnic group, a native culture. Using a second/ foreign language in the functional spheres higher than those served by the mother tongue may evoke a sense of ethnic, cultural, and social inferiority. With the "forced" study of English it is no longer about the "mutual orientation and clarification" of languages, but about the unification of thinking on the basis of the English-language picture of the world. English is prestigious, but its dominance can cause social and ethnic discontent, and it is not easy for everyone to master [ibid.].
V. M. Alpatov concludes, that modern science cannot prove the advantages of monolingualism over multilingualism (as well as vice versa). It is well known that world heights in science and literature were achieved in monolingual environments, with diglossia, and with multilingualism of different types. All of them can be a natural state depending on the national linguistic situation [ibid.].

To the above we can add that, in contrast to the hype around the usefulness of bilingualism - primarily the artificial English-national bilingualism - the current situation in the world reveals that monolinguals living in the countries of the "first" world are generally
more socially prosperous in terms of income, education, career, than bilinguals living in former colonies ${ }^{14}$. In the countries of the "third world", where exoglossia takes place, social bilingualism, too, does not show correlation with the optimum individual prosperity. In this case, an individual who has mastered the language of the former colonizer at a good level will often be more successful than their bilingual (semilingual) compatriots. Therefore, we believe, that exoglossic bilingualism in a country is for the most part subtractive.

As for the "second" world countries, the USSR was a striking exception to the described pattern, as it consistently pursued the national policy of elevating the outskirts to the level of the center and virtually developed its nationalities. Russia inherits it, adopting all the positive achievements of the USSR, including the indigenization of minority languages in the higher functional spheres in the titular republics, national and cultural autonomies, national schools and universities (faculties).

In general, we agree with V. M. Alpatov that modern science cannot prove the advantages of monolingualism over multilingualism, as well as the opposite. At the same time, we emphasize once again that in multinational states bilingualism is an objective necessity (with the provision that it is endoglossic bilingualism). This is an alternative to the full or partial assimilation of ethnic linguistic minorities to the language and culture of the majority. The ideal to which bilingual education should aspire is not linguocultural assimilation, but mutual integration, the formation of a single nation. As for the external foreign language acquired as a language of international communication, it should be mastered less zealously and perceived as a substitute for an 'international auxiliary language', a simple code, universal and flexible, to convey individual and national meanings, but not as a means of acculturation in the spirit of a foreign culture.

Speaking about linguodidactic strategies and practices, they should, as was said above, involve subtle balancing between the native, the official and a functional foreign language with the view to ensuring their right and just place in an individual's life as a person and a citizen.

## Discussion and conclusions

Based on all the outlined facts and ideas, we can draw complex and somewhat contradictory inferences. In the cognitive-psycholinguistic perspective, the study of a foreign/second language should be primarily about the goals of language training and education in general. If such a goal should be the acquisition of knowledge and comprehension of the cultural heritage of another language, it is preferable to learn a foreign/second language after the

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formation of a conceptual apparatus and a general outlook based on one's own language and literature, with a lag of several years after they are formed (top-down training). If the goal is primarily fluent communication on everyday topics in a multilingual or global environment, whereas the literary and cultural competence is relegated to the background, then it is possible to learn a foreign/second language from early childhood (bottom-up training). In the first case, language training means more thorough knowledge of the concepts of one's own and foreign cultures, and in the second case - the skills and abilities of authentic usage of languages in everyday communication. It is likely that in the first case the student will read in a foreign language, as well as in their native, cognitively complex works, in the second - that their linguistic skills will be instrumental for oral communication. In the first case, the student will not be able (without a certain period of immersive adaptation) to express themselves in a foreign language with the same ease and fluency, as in the second.

In in the socio-cultural perspective, we conclude that in multinational states bilingualism is an objective necessity, but it is important that it should be endoglossic bilingualism. This is an alternative to the full or partial assimilation of ethnic linguistic minorities to the language and culture of the majority. The ideal to which bilingual education should aspire is not linguocultural assimilation, but mutual integration, the formation of a single nation. As for an external foreign language learnt for international communication, it should be, on a scale of a nation and the average citizen, mastered less zealously and generally perceived as a mere substitute for an "international auxiliary language" - a simple code, universal and flexible, for the individual to convey their personal and national meanings. No acculturation in the spirit of a foreign culture should be involved in the curricula, so far from the present-day common practice of intense culture (and literature) studies in a foreign language. And since the sociocultural perspective is axiologically important, in terms of values it is optimal to focus more on the heritage of the internal, national and indigenous, cultures and literatures and teach/learn them in both national/ethnic languages and a foreign language.
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# ЛИНГВОКОГНИТИВНЫЕ И СОЦИОКУЛЬТУРНЫЕ АСПЕКТЫ БИЛИНГВИЗМА 

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## Аннотация

В статье обобщаются накопленные на сегодняшний день данные о билингвизме. Билингвизм означает бытование в жизни человека или социума двух или более языков, которые субъекты используют при необходимости, независимо от уровня владения и среды овладения этими языками (естественной или искусственной). В когнитивнопсихолингвистической перспективе изучение иностранного/второго языка, в первую очередь, связано с целями языковой подготовки: с явным отставанием от первого языка

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(обучение «сверху вниз»), чтобы получить концептуальные знания о собственной и чужой культурах и научиться читать когнитивно сложные произведения на двух языках VS с раннего детства вместе с первым языком (обучение «снизу вверх»), чтобы получить навыки аутентичного использования обоих языков и свободно общаться в повседневном общении. В социокультурной перспективе в многонациональных государствах двуязычие является объективной необходимостью, однако важно, чтобы оно являлось эндоглоссным. Это альтернатива полной или частичной ассимиляции языковых меньшинств с языком и культурой большинства. Идеалом является не лингвокультурная ассимиляция, а взаимная интеграция, формирование единой нации. Что касается внешнего иностранного языка, изучаемого для межнационального общения, то его следует осваивать менее ревностно и в целом воспринимать как простую замену «международному вспомогательному языку» - простому коду, универсальному и гибкому, для передачи индивидуального и национального смыслов человека. Аккультурация в духе иностранной культуры исключена, оптимальной является ориентация на наследие национальных и коренных (внутренних) культур и литератур и интенсивное изучение этого наследия как на национальных/этнических языках, так и на иностранном языке.

Ключевые слова: лингводидактика, билингвизм, частичная идентичность, семилингвизм, инкультурация, аккультурация, субтрактивный билингвизм, аддитивный билингвизм
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[^0]:    ${ }^{1}$ For example, in France, along with the official language, 7 languages and dialects have recently gained the status of indigenous regional languages: Basque, Breton, Flemish, Alsatian (German), Catalan, Corsican (Italian), Occitan. In the summer of 2010, the French Constitution was amended to equate French and regional languages, recognizing the latter as "part of the country's heritage" [https://rg.ru/2010/09/20/menshinstvo.html]. In Germany the recognized languages of national minorities include Danish, Frisian, Lusatian, Romani, as well as a regional language - Lower Saxon (Low German), which has been recognized by the EU since 1994. However, the status of some common languages in Germany is uncertain. Thus, according to estimates, about 6 million people in Germany speak Russian in one way or another, including more than 3 million immigrants from the countries of the former USSR (and their descendants), mainly from Kazakhstan, Russia and Ukraine. Also in Germany, Turkish (2.1 million), the languages of the peoples of the former Yugoslavia $(720,000)$, Italian $(612,000)$ are spoken. Migrants who do not speak German often find themselves in an information vacuum and/or dependent on sources of information [https:// rg.ru/2010/09/20/menshinstvo.html]. In Britain, as well as in the United States, second indigenous and foreign languages education traditionally occupy a modest place. A foreign language is compulsory only at secondary school, from 11 to 14 years of age. The number of schoolchildren who are taught indigenous Welsh, Scottish Celtic or Irish has been slightly growing, especially, in Wales, where $20 \%$ schoolchildren under 16 years of age are either taught in Welsh or Welsh is taught as a second language [http://news.bbc.co.uk/2/hi/uk_news/education/7885493.stm].
    ${ }^{2}$ In the Anglo-Saxon world the situation is different. In England, primary school (7-11 years) does not provide for the study of foreign languages. Schoolchildren learn foreign languages from 11 to 14, they are required to learn a second language up to 14 years in England, and up to 16 in Scotland [http://news.bbc.co.uk/1/hi/education/3983713. $\mathrm{stm}]$.
    ${ }^{3}$ In a broad sense, foreign/second language immersion implies bilingual learning process or instruction in L2 alongside L1; the re-creation of a foreign linguoculture and active acculturation; the natural active use of L2 (along with

[^1]:    L1) in extracurricular and everyday communication at school or preschool. Immersion can be social-environmental, based on the natural bilingual acquisition in a polyethnic culture with languages functioning on a more or less equal footing, and educationally imposed, adopted as a standard practice in educational institutions.

[^2]:    ${ }^{4}$ In the West, the milestones in the transition to a positive assessment of bilingualism were the books of E. Peal and W. Lambert, as well as J. S. Miller, J. Cummings.

[^3]:    ${ }^{5}$ An immigrant child enters the "functional" stage of L2 proficiency after about two years of staying in a new country. At this stage, the child often begins to avoid using his/her native language (provided there are no external linguistic factors). Adult expats are not likely to enter the functional stage until they have lived in the new country for 10 years. Their native language will remain a priority for them.

[^4]:    ${ }^{6}$ Their hypothesis was based on the theory of L. S. Vygotsky.

[^5]:    ${ }^{7}$ Let us recall A. S. Pushkin's view, who in Evgeniy Onegin reflected on the linguistic the situation in the Russian highest circles of the early nineteenth century: "I must translate -- there's no presuming -- / the letter from Tatyana's hand: / her Russian was as thin as vapour, / she never read a Russian paper, / our native speech had never sprung / unhesitating from her tongue, / she wrote in French... what a confession! / what can one do? as said above, / until this day, a lady's love / in Russian never found expression..." (Translated by Ch. Johnston).
    ${ }^{8} 1.5-3$ years is the period of perception and assimilation of speech, replenishment of vocabulary. At this age, the child is very susceptible to learning foreign languages. It is also favorable for the development of motor skills, manipulations with objects, perception of order. 3-4 years is the period most favorable for familiarization with the symbolic designation of numbers and letters, preparation for writing, the development of conscious speech, thinking, an intensive development of the sense organs. 4-5 years is a period marked by the development of interest in music, mathematics, writing, distinction of color, shape, size of objects, intensive social development. 5-6 years is the most favorable period for the transition to reading, cultivating social skills and behavior in the child. 8-9 years is the period when language abilities reach a peak, it is favorable for the development of imagination and cultural education.

[^6]:    ${ }^{9}$ This correlates with the fact that the widespread method used in secondary school is rational grammar-translation language learning going back to the classical method of teaching Ancient Greek and Latin.
    ${ }^{10}$ According to I. I. Kondrashin, neurotic and neuropil structure of the brain is the material basis for reflex arcs, analytical functional centers and mentality in general. The primary arrangement of these arcs and centers depends on the genome inherited by man from his ancestors; it creates is the original basis of mentality (perhaps together with archetypes as its component), but then the qualitative "filling" of mentality depends on individual upbringing, education and personal experience (quoted from [Гринева 2003]). Currently, some studies are tentatively experimenting with the view to showing the change of the neural functioning and even the morphological structure of the brain when the method of language immersion is used compared to the traditional method of a second/foreign language learning, for example [Stein 2014].

[^7]:    ${ }^{11}$ See the above footnote with the quotation from Pushkin as a testimony of poor command of the Russian language among many offspring of the 19th century gentry and aristocracy.

[^8]:    ${ }^{12}$ Though the spontaneously formed language hierarchy is often imperfect, the artificially constructed social conditions for the existence of languages may also be inequitable. So, declaring and de facto making English the international communication language, particularly for science, the world community inevitably perpetuates it as a second and third language of instruction in all countries of the world. Hence the disputable maxims that sound like axioms: "Mastering English manifests a set of factors of non-linguistic properties related to global economic integration and changes associated with improving the quality of life and standards in general. Everyone who wants to reach the global level of communication must necessarily become bilingual. The national educational policy of multi-ethnic

[^9]:    states and supranational state formations should be aimed at consolidating the status of languages that can provide access to world values and knowledge at the level of world standards, as well as ensure a modern level of social mobility. Linguistic management (ways of adequate and effective language teaching; integration of the population into civilized civil institutions and development of a skilled workforce) is entering new positions, including the local level" [Гришаева 2007].

[^10]:    ${ }^{13}$ These levels coincide with the levels of acculturation of immigrants into a foreign culture.

[^11]:    ${ }^{14}$ Let us recall, for example, that in English-speaking countries foreign languages occupy a modest place in the classroom and qualify not a scholastic discipline comparable to the native language, reading (literature), mathematics, natural science, but as a useful skill along with fine arts or physical culture. According to R. Phillipson, with native English speakers, the study of foreign languages remains traditionally mediocre. According to a report by the British Council, $75 \%$ of UK adults cannot maintain a conversation in any of the ten languages in the report (French, German, Spanish, etc.). The teaching of foreign languages is limited and uncoordinated, preventing most students from mastering them at the level of fluency. In England, students are given only 216 compulsory hours of foreign language. They learn a foreign language in a small amount in primary school for a year or two years, then in secondary school for a year or two years. In colleges and universities, a foreign language is required only in some departments. The lack of consistency and continuity affects the foreign language proficiency of schoolchildren. Besides, the recognition of English as the international language exacerbates the belief in the uselessness of learning a foreign/second language. Mediocre proficiency in foreign/second languages also means that foreign values, customs and traditions have little or distorted penetration into the English-speaking culture and people's minds.

