# SOCIAL DIFFERENTIATION OF LANGUAGES WITH THE ANALYSIS OF AGGLUTINATION INDICES

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Abstract: This article deals with the modelling of special frames "written language unwritten language" in the context of the Nakh-Dagestanian languages. The method for frame modelling is based on the material of the Nakh-Dagestanian languages belonging to different types of national minorities (indicating graphic (Tabasaran) language, unwritten languages – Andi, Archin, Akhvakh, Karata, Chamalal). For a complex description of the Nakh-Dagestanian languages, the method of text translation was used. Text translation was carried out through the lens of a professional linguist and was directly relevant to the high level of interviewing. For the peoples of the North Caucasus whose "second" mother tongue is Russian, this kind of correspondence comes from the recipient language (from Russian to the native language). The author of the poem Telizeng is Tabasaran poetess G. Omarova; "Telizeng" is "cellular phone" in translation. The method of typological indices "Russian as an intermediary and donor" of minority languages is become actual within the translation of the poem. This gradation reflects the direct dependence of the languages of national minorities of Russia in the North Caucasus. Since the main source of information was obtained through direct contact with the speakers divorced from "natural Russian environment", it can be recognized that language contacts and multilingualism of Russian cities are differentiated by the types "city language \* written language  $\leftrightarrow$  village language \* unwritten language".

*Keywords: discourse, speech, language of national minorities, language of the city \* language of the village, written, unwritten languages.* 

# INTRODUCTION

Strange though as it may appear, the profile of oral language in terms of languages of the peoples of Russia has recently commanded scholars' special attention. System analysis of the profile of unwritten language as a living variety of



texts appears in publications covering the study of languages of the peoples of Russia (Alekseev, 2009). This functional variety of unwritten languages of the peoples of Russia exists in various texts of different periods. They belong to famous scholars – I. Guldenstadt (1809), J. Klaproth (1814), P. K. Uslar (1875), R. Erkert (1895), A. M. Dirr (1903). Today it is not possible to generalize the varieties of languages of national minorities of Russia in the North Caucasus since the texts belong to different eras (Gildenshtedt, 1809). During the short period of existence of the relationship between unwritten language and scientific literature in the North Caucasus, important social changes affecting the history of the development of the languages of national minorities in Russia have occurred. In other words, the birth of linguistic traditions is associated with anthropological surveys of the Caucasus. The first attempt to examine the languages of ethnic minorities of the Caucasus dates back to the historic period - "A survey of the Caspian Sea by A. Bekovich-Cherkassky on behalf of Peter I (1722)"; the second attempt – to the era of the censorship committee of the Imperial Academy of Sciences – "The Latest Geographical and Historical news of the Caucasus by S. Bronevsky \* IV (1770)." The third attempt is the era of Catherine II, on whose behalf in 1787 German scholar Peter Simon Pallas compiled "Comparative Dictionaries of All Languages and Dialects" (Baranov, 2014). Further, on the instructions of Catherine II, Russian scholar P. K. Uslar began to study of "unwritten" languages of national minorities of the North Caucasus. P. K. Uslar studied the alphabets of "unwritten" languages of national minorities, and then compared them with the alphabets of European languages: Russian, Georgian, Armenian, Arabic, Latin. The above traditions of written culture of the languages of the national minorities of the Caucasus justify the form of the existence of the resource of the Latin script. The term "бака" / "baka" as a form of "Latin script" was fixed to the written tradition of the Nakh-Dagestanian languages in 1870 ("baka" in Arabic means "necessary"). The original corpus of "baka" appeared in the genre of prayer "Our Father" in 1870 (Hermann Dalton, 1870). Correspondingly, the history of the prayer genre "Our Father" as the history of the study of the languages of national minorities of Russia is merged. When it comes to the correlation between the language of small national groups and the corpus of linguistic terminology, the answer to this question is directly dependent on the language of the recipient. For the peoples of the North Caucasus, who speak Russian as the "second" mother tongue, this kind of correspondence comes from the recipient language (from Russian to the native "ethnic" language).

# METHODS

This linguistic study is the first attempt to describe national literature in direct dependence on the Russian language – Recipient's language. Since the main source of information was direct contact with native speakers divorced from the "natural rural environment", one may agree that linguistic contacts of the rural and urban population are differentiated by the types of multilingualism of the "cities" of Russia (Neroznak, 2002). See Table 1.



Table 1.							
Language of the village as a name of unwritten language	Ethnic minorities with rural types of peoples of Russia						
	men/ women	men	women				
ANDI	11448	5603	5845				
ARCHI	7878	3623	4015				
AHVAH	7923	3816	4107				
KARATA	4761	2272	2489				
CHAMAL	27848	13478	14102				

The composition of national minorities with the types of rural population shows that the areas of Caucasian languages expect a high level of interviewing (Zabitov & Effendyev, 2001; Ter-Minasova, 2008). Urban Linguistics and Linguistic Diversity. Naturally, within studies of the context of the languages of ethnic minorities of the Caucasus, the choice of respondents was not on a casual basis. All respondents have Russian citizenship and live in the city of Makhachkala. In terms of occupation, the respondents are workers in the field of science (the speakers of Andi, Akhvakh, Chamalal), the two are the workers in the field of culture and education (Archin, Karata). All respondents point to two languages of interviewing – the first Mother's Ethnic language mastered in childhood; "Russian" (the second) learnt at school. Since the language of interviewing delivered the goals of a high level of language proficiency, the selection of respondents was carried out not in rural areas, but in urban environments. See Table 2:

	Table 2.								
	General characteristics of respondents								
	who are at native speaker level in urban space								
NºNº	Respondent and language proficiency	Respondent's Family	Context Interviewing the respondent	Context of every day SMS-Language					
11	Mother's language ANDI	own communication	Ethnic language ANDI	Individual consciousness					
22	Mother's language ARCHI	own communication	Ethnic language ARCHI	Individual consciousness					
33	Mother's language AHVAH	own communication	Ethnic language AHVAH	Individual consciousness					
44	Mother's language KARATA	own communication	Ethnic language KARATI	Individual consciousness					
55	Mother's language CHAMAL	own communication	Ethnic language CHAMAL	Individual consciousness					

The respondents' life in urban space was determined by their personal linguistic behavior with other interlocutors – mobility and type of occupation, way of moving around the city. The probability of approving the localization of the population along ethnic lines was determined by scholars in the city of Makhachkala. All respondents agree that when moving from a village to the city, the level of communication in their native language (Mother's language) drops sharply. In urban areas, the very respondent speaks not in their native language (Mother's language), but in the Russian language. The Results of Statistical Data



Processing. In the metropolitan urban space, we have studied the foreign language level of their native language. See Table 3:

Table 3.						
FOREIGN LANGUAGE LEVEL	OF THE NATIVE LANGUAGE					
Mother's Ethnic langua	ge ↔ village language					
Etn Lg ↔M Lg	Rus Lg					
Russian language ↔ Urban language						
{«N»}	[«N»]					

The experience of studying linguistic units of a foreign language level shows that the form of graphic modeling with two dimensions is limited to translating the text "N" into the respondent's native "ethnic" language. Using the respondent's knowledge of the Russian language and their knowledge of the ethnic language, we translated the text "N" into the "mother" language (MLg). The table with quantitative and qualitative assessments of ethnic language helps to differentiate variables of a foreign language level – tel "wire", zeng "sound". The Veitch matrix, borrowed from ethnotypologists, is defined as an ordered table of texts consisting of 4 lines (m) and 10 columns (v). The first description of the variables distinguishes the opposition of oral texts in Cyrillic characters тел\*тил\*телe\*тели, the second description represents the variables in Latin transcription tel \*. See Table 4

Table 4.							
Differential features of							
		variables of th	e text "N"				
Combination	Combination	City	Combination	Number of variables of			
of roots	of languages		of languages	the text			
tel-e	RUS	Makhachkala	RUS	195			
til-i	ANDI	Makhachkala	ANDI	110			
til-i	ARCHI	Makhachkala	ARCHI	183			
tel-e	AHVAH	Makhachkala	AHVAH	165			
tel-e	KARATA	Makhachkala	KARATA	165			
tel-i	TABAS	Makhachkala	TABAS	133			
tel-e	CHAMAL	Makhachkala	CHAMAL	137			

The Veitch matrix with qualitative measurements of variables of the text turned out to be useful in order to overcome "hidden pitfalls of translation" in the corpus of oral languages. Distinguishing the formal properties of texts in the Veitch matrix, translators can hardly be reproached for their not being able to preserve the rhyme of poetic description. Variable features with combinations of graphic modeling give evidence of typical technologies for preparing the corpus of language (Neroznak, 2002). It can be assumed that the variability of the corpus is an integral property of the variables of "unwritten" language, reflecting the stylistic diversity of the poetic text "N"  $\leftrightarrow$  4 (m) + 10 (v). An attempt to show script for oral languages in modern urban space is based on the calculus of graphic sets of the language of national minorities. Particular attention is paid to the types of graphic sets, divided according to common linguistic behavior of national minorities in urban space: namely, the semantic structure of the words "tel-i-zeng (cellular phone)". In the field of morphology, mastery of the factors of spelling and orthoepy telezéng [telizéng] "cellular phone" is revealed. In our case, the property of the original foreign-style



meaning is understood as an interest in native language applied by linguists – [telezéng \* telizeng]. Under current conditions of the popularization of native language, the only opposition to extinction is the preservation of a small part of world spiritual culture in primary school education (Alekseev, 2009). The idea of creating markers for oral language combines the factography of native language with the indication "the language of the city  $\uparrow$  the language of the village  $\leftrightarrow$  written language  $\uparrow$ unwritten language". When choosing the syntactic unit of languages of national minorities, the scholar's main focus proved to be focused on the stimulus words "city language  $\rightarrow$  written language" (Virt, 2005). It is in the dimensions of a living associate of the city that the component of the languages of national minorities of the peoples of Dagestan is structured. The special nature of the description of the components of the corpus of languages is designed primarily for the criterion of organizing the basic meanings of the original vocabulary of languages of national minorities. Additional linguistic descriptions of the original vocabulary of national minorities are to prepare materials for the corpus of "unwritten language" and preserve texts for reading in the family.

In other words, we are referring to new methods for studying the corpus of unwritten languages. The Veitch matrix lattice, applied to study the markers of an unwritten language, unites the commonality of graphic modeling of the text as part of the present resident population of Russia. At the first stage of testing text markers, our attention was focused, on the one hand, on the study of the components of the literal language; on the other hand, the study of the value landmark of the written language among unwritten languages (as defined by Andrew Viterbi, "convolutional decoding algorithm"). The coding of phrases was structured via background information of transcribing of a written language for unwritten languages. It was carried out by breakdown into phrases: dividing into separate phrases meant the possibility of correlation of the unwritten phonetic reality with the constructions of a written language. A similar algorithm combines the practice of word-by-word fragmentation. The words resulting from the fragmentation of a Tabasaran text are characterized by a high frequency of authenticity and are real types of word-by-word fragmentation. Putting these ideas into practice revealed an iterative algorithm for fragmenting the written language. The first step is the primary fragmentation of the text corpus according to the criterion of informational community. The second step is the compilation of a vocabulary from the translated words of the language and the construction of an n-gram language model (Yakovlev, 1928). The third step is the segmentation of the language model based on the written language algorithm. See Table 5:

	Table 5.										
Inf	Information about organization of basic meanings of nominal vocabulary								ulary		
1	ANDI	13	14	12	10	12	12	13	13	11	11
2	ARCHI	17	22	18	20	16	21	16	17	17	19
3	AHVAH	14	17	15	18	16	18	14	16	18	18
4	KARATA	16	16	17	19	15	21	14	16	17	15
5	CHAMAL	14	18	17	15	18	21	15	11	19	17

The task of studying lexical associations was not to conduct the experiment, but, from our point of view, the materials of our study give an occasion to reflect on the problems of the regional language situation (Shikhalieva, 2016; Shikhalieva, 2018). Let us summarize the study of regional vocabulary with a variety of texts (42 nouns,



17 adjectives, 15 pronouns, as well as 51 verbs, 11 adverbs, 10 particles, 7 interjections included for our purpose in the markers of nominal vocabulary). For the linguistically determined method of translation the analysis of the text diagram proved to be relevant (Kibrik, 2017). See Table 6:

_	Table 6.								
*	Documentary portrait of the urban population as a cultural landmar								
Nº	Translator's nationality	Sociological group of terms	Translator's age/ gender						
1	ANDI	state non-title / unwritten	woman	40					
2	AHVAH	state non-title / unwritten	man	64					
3	ARCHI	state non-title / unwritten	woman	45					
4	KARATA	state non-title / unwritten	woman	58					
5	CHAMAL	state non-title / unwritten	woman	54					

### SUMMARY

The work with native speakers of the Nakh-Dagestanian group was considered in the range of national minorities with a gradation of five unwritten languages. Within each context the markers to translate the name of the Tabasaran phrase teli\_zeng "cellular phone" were created. The first projection of the translation "teli" fixes the source of Indo-European languages: Latin téle "loom"; Greek tel "remote place"; English tell "say". The second projection differentiates the root of various graphemes in the Indo-European languages "zeng zi (ng)": Persian زنگ زي sound, bell"; Talysh талышское zi-l "high-pitched sound" (Yakovlev, 1928). In identifying the role of the successful perception of the components of the translator, it should be noted that the text of the poem with contacts was directly related to the high level of interviewing "the language of men \* the language of women". Since the main source of information was direct contact with native speakers of national minorities, divorced from the natural rural environment, one has found that multilingualism of the peoples of Russia is differentiated by language contacts in the urban area unwritten language "the language of a man \* father  $\leftrightarrow$  the language of a woman \*mother" // written language "the language of a man \* father  $\leftrightarrow$  the language of a woman \* mother".

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