

Russian Sign Language: History, Grammar and Sociolinguistic Situation in Brief

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Abstract

The paper briefly sketches some outlines of Russian sign language: vocabulary, grammar, dialects and speech styles. Based on a range of studies on Russian sign languages published in 21st century, it aims to provide the reader with a representative list of recent papers, monographs and electronic resources about Russian sign language and a general notion of it. Besides, this paper makes some contribution to the description and documentation of Russian sign language, because nowadays, the Russian sign language remains a low-resource language just for spoken communication of deaf people in Russia and neighbouring countries, and it is still poorly studied.

Keywords: Russian sign language, sign language grammar, signed Russian

Résumé

В данной статье конспективно излагаются базовые сведения о русском жестовом языке: словари, грамматика, диалекты и речевые регистры. Работа основана на ряде исследований, опубликованных с начала 21 века, и призвана снабдить читателя перечнем основных материалов по русскому жестовому языку, а также дать общее представление о нем. Кроме того, статья вносит некоторый вклад в описание и документацию русского жестового языка, поскольку на сегодня русский жестовый язык все еще остается малоресурсным языком устного общения глухих людей в России и близлежащих стран, и он пока недостаточно изучен.

1. Introduction

This paper surveys basic features of Russian sign language (RSL), focusing on genetic classification, history, dialectal variations and elements of phonology and grammar. The aim is to give the reader a notion of RSL, as well as provide him with a list of essential papers and monographs about RSL.

RSL is the language of communication among the deaf and hard of hearing in Russia and some neighbor countries (mainly ex-Soviet countries; the main exception is Bulgaria). The total number of people using RSL in everyday life is more than 120 thousand (according to Ethnologue). Since 2012, RSL has enjoyed an official status in Russia as a language of communication.

2. Brief History and Genetic Classification of Russian Sign Language

The first school for the deaf in Russia was founded in 1806 near St. Petersburg (Williams and Fyodorova, 1993). The first deaf teachers came from Europe, and schools in St. Petersburg and Moscow maintained close ties with other European deaf schools until 1917. It is traditionally believed that RSL belongs to the French sign language family. However, this statement is based only on the fact that the first sign language teachers in Russia - Jean-Baptiste Jauffret and father Sigmund - came from France and Austria, respectively. Little is known about their teaching methods (Williams and Fyodorova, 1993).

This point of view is followed by the author of the study (Bickford, 2005), who provides analysis of wordlists in

various sign languages, which does not confirm the hypothesis about the relationship between Russian and French sign languages.

3. Dialects and Speech Registers in RSL

There are not many studies on RSL dialects. Almost all the researchers note that there are certain differences of the phonological and lexical nature between idioms of RSL. However, in the study (Burkova and Varinova, 2012), it was shown that the real level of lexical differences in the local varieties of RSL is much lower than is commonly believed. Researches on grammatical differences in the dialects of RSL are very scarce, with very few exceptions. One can mention the work (Kimmelman, 2009), in which, inter alia, problems of reflexive pronouns variability in the dialects of RSL are investigated.

On the other hand, (Grenoble, 1992) states that there is definitely dialectal variations between Moscow and St. Petersburg. Differences are reported in approximately 50% of all the signs compared between Moscow and St. Petersburg.

Besides RSL, there exists the Signed Russian or “calqued sign speech” (Zaitseva, 2000), which directly interpolates grammar of spoken Russian, i.e. is a manually coded version of the Russian language. Signed Russian is used for formal and official situations and is regarded as the prestige, ‘academic’ variety of RSL by the deaf community in Russia.

The problem of correlation between of RSL and Signed Russian vocabularies has not received detailed coverage

in scientific works. However, (Zaitseva, 2000) points out that “the main gestures come to Signed Russian from RSL and form the largest and most stable lexical class of Signed Russian” (Zaitseva, 2000: 34). This is because the first language of a deaf person is RSL, and only after starting to attend school, the child begins to master Signed Russian. Gestures that are specific to Signed Russian include official style idioms, special vocabulary, and borrowing from foreign sign languages.

The most authoritative vocabulary of RSL is (Geilman, 1975), which actually manifests the norms of literary language for both RSL and Signed Russian.

4. Grammar and Phonology

The basic features of the RSL grammar are given, for example, in (Zaitseva, 2000; Davidenko and Komarova, 2006; Kimmelman, 2010; Lvovskaya, 2006; Prozorova, 2007; Shamara, 2007; Kimmelman, 2014; Zavaritsky, 2015: 8–34). RSL nevertheless remains a low-resource language: despite recent interest in RSL, there is still a general lack of RSL descriptive grammars.

4.1 Phonology

In (Stokoe, 1960), gesture decomposition into five components was introduced: 1) handshape; 2) location; 3) orientation; 4) movement; 5) non-manual features (such as mimics). Specific forms and orientations of the hand, location and manner of movement are essential elements of any gesture, being, roughly speaking, analogous to distinctive phonological features of the sound languages. The set of realizations of these features is finite (see (Battison, 1978) for American sign language statistics). All phonological theories describing sign languages operate with these features in one way or another.

In the study (Klezovich, 2019) based on the annotation and analysis of more than 5000 images of RSL gestures there has been identified 116 configurations in the RSL, of which only 23 were phonemic. The most frequent configurations coincide with these of other sign languages (such as American, Israel, British, Dutch sign languages). Typologically, 23 is not a very extensive inventory.

Gestures in the sign languages of the world can be divided into iconic and non-iconic. Iconicity is an essential feature of both sign and sound languages. Iconicity can be defined as a formal resemblance between the designee and the associated sign (sounds or handshapes, movements, locations) (Taub, 2012). (Kimmelman and Klezovich, 2018) introduces a project of iconicity patterns in sign languages, which takes into account RSL data.

4.2 Morphological meanings

Two types of morphological structures are distinguished in sign languages: linear and non-linear. Linear structures include affixation (joining a certain additional segment with a specific meaning to the main gesture), reduplication (full or partial repetition of a gesture), and word composition. RSL uses the most common strategy

from the typological point of view: reduplication and word composition, to express some morphological meanings. Importance of affixation is low. The following morphological meanings can be found in the substantive domain of RSL:

a) natural gender marking: a range of RSL substantives are classified according to the category of the natural gender, indicating that the referent belongs to the male or female gender. To express the meaning of “male gender”, the gesture is shown at the level of the upper part of the face (forehead); the meaning of “female gender” is transmitted by the localization of the gesture at the level of the lower part of the face (cheek).

b) plurality: in (Burkova, 2015), the following types of nominal plurality in RSL are distinguished: additive, collective, associative, and distributive. Each type of multiplicity is transmitted using specific lexical and morphological means. The “standard” plurality is additive, being expressed as the reduplication either of the entire gesture, or of its part, or non-manual components.

Another way of expressing additive multiplicity in RSL is making use of classifier constructions and quantifier gestures MANY, ALL, as well as numerals. In some cases, additive multiplicity is not expressed morphologically or lexically, being expressed by the context.

Collective multiplicity for contactless gestures is expressed morphologically, by modification of movement pattern, or analytically for contact gestures, using index gestures.

The meaning of associative plurality (“X and similar objects”) in RSL is expressed by a combination of a significant gesture / several gestures that summarize the elements of the designated population and the word MISCELLANEOUS.

Distributive multiplicity (indicating a set of objects located at different points in space) for contactless gestures is expressed by a combination of reduplication and localization shift.

In the verbal domain of RSL time and aspect meanings can be expressed morphologically (Davidenko and Komarova, 2006). The Past and Future are expressed analytically with words WAS and WILL BE, IT’S ABOUT TO, or lexically, with time adverbs (YESTERDAY, TOMORROW, THREE YEARS AGO etc.) Aspect meanings are marked with some change of movement character/pattern. For example, repetition corresponds to habituality, or multiplicativity, or distributivity, slow movement expresses durativity, a single sharp movement can be associated with completivity, or selfactivity (i.e., completion or punctuality of a situation), etc. Special words such as READY/FINISHED (perfective), can be used as well.

4.3 Syntax

The main contribution in the study of RSL syntactical structures was made by (Kimmelman, 2012). It has

demonstrated, that two basic world orders exist in RSL: SVO and SOV. There are many factors that affect the world order in RSL. For example, classifier constructions are related to SOV world order, while verbal constructions are associated with SVO world order. Aspect markers, animacy and inanimacy of arguments, modifiers and objects belong to the world-order affecting factors as well.

5. Electronic Resources

Being an independent language with its own grammatical system and vocabulary, RSL has no writing system, and books, descriptive grammars, vocabularies and databases therefore are scarce. The only writing system developed for of RSL, is presented in (Dimskis, 2002). This system is based on the principles developed in (Stokoe, 1960), but did not gain much popularity in the deaf community of Russian Federation.

Among the principal electronic databases and electronic dictionaries, one should list “Thematic dictionary of Russian sign language” developed by the Moscow organization of All-Russian society of the deaf in 2006 (1480 signs), “Russian Sign Language Explanatory Dictionary RuSLED” (2537 videos with single words and phrases) with etymology of the signs (Voskresenskii et al., 2009); on-line video dictionary of Russian sign languages (Spreadthesign corpus), created in the framework of the European project “Spreadthesign” (14347 videos, comprising a mixture of words, phrases, utterances and variations); sign language corpus (RSLC, 2010-2011), recorded by the Novosibirsk State Technical University in 2010-2011 (230 spontaneous narratives by 43 native signers, annotated with ELAN tools). Surdoserver web-service (Surdoserver 2.0) and on-line dictionary (about 600 words and phrases). In the end of 2019, TheRuSLan database collected in SPIIRAS came into the world. TheRuSLan is aimed at RSL recognition tasks, being not very large, but recorded in 3D (Kagirov et al., 2020).

As (Kharlamenkov, 2017) states, most of the current RSL databases are either too small, or of poor quality: some of them are a mere mixture of lexical units that belong to different speech styles and dialects.

6. Conclusion

The main aspects of Russian sign language were sketched or mentioned in this paper: history, usage and dialects, phonology, grammar and databases. Despite a significant number of native speakers, RSL remains a low-resource language just for spoken communication of deaf people in Russia and neighbouring countries, and it is still poorly studied. The authors hope that the number of informative descriptions of RSL will increase in the future, and more databases will appear, which would enhance investigations of RSL in linguistic purposes and for applied systems, for example, automatic recognition, synthesis, and machine translation of Russian sign language.

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