Nouns and Verbs in Russian Sign Language: Phonology and Lexicon.

Many different sign languages demonstrate the same interesting fact: existence of a vast class of noun-verb pairs which are phonologically very similar but, according to some authors, not identical. This fact was first observed for American Sign Language (ASL) by Suppala & Newport 1978. They proposed that verbs and nouns in ASL constitute derivational pairs: a verb and a corresponding noun are derived from the underspecified underlying form by adding restrained manner and repetition to the noun and by adding simple or repeated movement to the verb. Therefore, verbs can be either repeated or contain single movement, while noun should be restrained in manner and repeated. They claimed that this distinction is relevant to the whole system but is better seen on “concrete” actions (i.e. ‘gun vs. shoot’, ‘window vs. open the window’). Johnston 2001 describing the same topic in Australian Sign Language (Auslan) claimed that this analysis is inadequate. He said that this distinction (which was also proposed to be relevant for Auslan by his early paper (Johnston 1989)) is relevant only to the shut small class of so-called ‘reversible verbs’ (i.e. ‘open the window’ – the window can be opened and closed – this action is reversible) and to some other signs which have borrowed this mechanism from reversible verbs. He proposed that for reversible verbs the following procedure is used: the action expressed by the verb is usually unidirectional (it is useful to open the window or to shut it, but not both) and movement of the verb is iconic (expressing this action), so using the bidirectional repetition of the action is preserved to the nominal sign. But other signs (and corresponding actions) such as ‘fly in plane’ are not usually reversible, so this procedure is blocked. As a result he claimed that verbs and nouns in general are distinguishable in context, but not on phonological matters. Voghel 2005 describing Quebec Sign Language also proposed that only few verbs and nouns can be distinguished using phonologically properties such as repetition and temporal characteristics of movement (length and frequency). Both Johnston 2001 and Voghel 2005 observed the fact that nouns and verbs can be distinguished by mouthing: mouthing is often used with nouns and extremely seldom with verbs. Johnston also marked that even when mouthing is used with verbs, the corresponding noun is mouthed (i.e. signing ‘fly in plane’ while mouthing plane).

We analyzed the material of Russian Sign Language (RSL). Our aim was to find out whether there is any (systematic) phonological distinction between corresponding noun and verbs which are phonologically similar. We analyzed approximately 50 noun-verb pairs produced by 10 adult RSL native signers. They were asked to watch a small film and to produce a sign or a phrase describing it. The films were about some objects (i.e. window) and actions connected to these objects (i.e. a girl opens a window). We found out that in RSL there are some matters of distinguishing verbs from nouns, which are not used very systematically but which are not attached to small shut classes.

Firstly, the repetition is usually associated with nouns. This can be seen not only on pairs with reversible verbs (such as ‘open the window’) but also on other pairs (‘comb – to comb one’s hair’, ‘match – to strike match’, ‘food – to eat’ among others). But, surprisingly, even among pairs with reversible verbs such as ‘window – open the window’ some informants use another tool to compose the corresponding noun: while verb contains single movement, noun doesn’t contain any movement.

Secondly, movement in verbs is more smooth, long and slow than in the corresponding nouns. This difference occurs in many noun-verb pairs, i.e. ‘scissors – to cut with scissors’

Thirdly, nouns and verbs can be different in the palm orientation or the handshape. For example, in the sign for rag (which is used for wiping the black-board) the orientation of the palm is to the signer, while in the corresponding verb (‘to wipe the black-board with the rag’) the orientation of the palm is from the signer. Nominal sign saw differs from the corresponding verb to saw by the handshape (not all the informants used this difference).
So we can see that there are several means of distinguishing verbs from nouns in RSL, which are used more or less systematically depending on the signer and on the verb class (reversible verbs are more frequently distinguishable from the corresponding nouns by these means). But we are going to propose that the distinction between nouns and verbs is deeper. Consider the following subtle distinction between two very similar signs: cap and put on the cap. The nominal sign cap is iconic: two fists are moving from the top of the head to ears. This sign contains single movement. The verbal sign is very similar, but there is a difference: in nominal signs movement is straight: fists are moving straight down near the head from the level of crown to the level of ears; in verbal sign the movement is a bit crouched: fists are placed over the crown, and then they are moved to the level of ears, following the head shape. How can we describe this difference? The verbal sign is more iconic than the nominal. The movement of the verb is depicting the movement seen in the film, while the movement of the noun is a meaningless component of the sign. The same phenomenon can be seen in many signs, i.e. ‘skis – to ski’, ‘scull – to scull’ among others. This process is relevant not only to the movement, but to other components of sign. Recall the difference of the orientation in some noun-verbs pairs: here orientation in verb is also iconic, while in noun it isn’t.

The second important distinction between verbs and nouns which can summarize some of the differences mentioned above is the fact that nouns are more economical. This becomes apparent considering some different properties of nouns compared to verbs. (1) Movements of nouns are shorter and more frequent than movements of verbs (as indicated above). (2) In some nouns movement is hand-internal, while in the corresponding verbs the movement uses the elbow or humeral joint (i.e. ‘cigarette lighter – to light a cigarette’). (3) In some nouns handshapes are less marked than in the corresponding verbs (i.e. ‘saw – to saw’). The less iconicity and the greater economy of nouns can lead us to the conclusion that nouns are preserved in the lexicon while verbs are created during the speech, but this generalization needs further research.

The last observation we are going to mention is the fact that not only mouthing usually accompanies nouns (but not verbs), but also fingerspelling is often used after or before nominal signs by some signers (the corresponding Russian noun is fingerspelled), but it is almost never used with verbs. We propose that this fact is connected with economy of nouns: nouns, which are more economic (and therefore less informative) than verbs, are therefore usually accompanied by mouthing or fingerspelling – the supportive material that is helpful for the perception of information.

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