

# Generating and Structuring of Knowledge about Translation Difficulties

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The paper focuses on a semiotic model of generating, structuring, and evolution of a goal-oriented knowledge system in linguistics (linguistic GOKS). The semiotic model is described by way of example of a *typology* of Russian-to-French *translation difficulties* (TTD) connected with a corpus of parallel fiction texts in Russian and French (Buntman et al.: 77–83). The TTD as a linguistic GOKS is generated by an expert linguist collective that create new meanings using a changeable constellation of signs including personal expert, collective, and conventional signs, their sign-forms and sign-meanings (Zatsman 2009: 77).

Development of the semiotic model is an initial stage of constructing of the TTD. In the model, we use three key semiotic terms: denotatum, meaning, and its representation form. These terms are treated as follows: a denotatum is a pair of fragments of parallel texts in Russian and French, fixing a translation difficulty; a meaning is a notion of the definition of this difficulty described by linguists-experts from France and Russia, as well as a definition position in the typology; a representation form is a verbal designation (name) of the translation difficulty adopted by linguists-experts. From the semiotic point of view the TTD connected with a corpus of parallel texts is interesting because a denotatum of each translation difficulty is a pair of fragments of parallel texts in Russian and French, so it belongs to the social medium.

The main idea of the semiotic model of generating, structuring, and evolution of the TTD is that at a given time moment each translation difficulty is analyzed and computer-coded from three points of view or dimensions: a denotatum of the translation difficulty, its meaning, and a verbal designation. Our semiotic model takes into account that during the process of generating of the TTD emerging meanings can hardly have time-stable representation forms.

At the stage of generating the TTD, denotata of translation difficulties as pairs of fragments of parallel texts are more stable compared with personal expert meanings of translation difficulties. At the beginning of a process of generating the TTD, meanings can still be absent or just starting to take shape, but the object of study (the corpus of parallel texts with marked fragments of parallel texts) has to be determined. In contrast, the variability of meanings is the essential property of any generation process of GOKS.

In our semiotic model, we define a procedure of assignment to each translation difficulty three following computer codes: 1) a code of its denotatum, 2) a code of its meaning, and 3) a code of a name for this translation difficulty. These codes are assigned automatically by a computer program. Three computer codes are assigned at the moment when a linguist-expert describes a typical translation difficulty as an element of the TTD, using the computer program. In the full-text paper a set of computer codes for translation difficulties will be described to build trace routes of a TTD evolution.

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