Silvia Hansen-Schirra (Germersheim, Germany)

Empirical profiling of LSP grammar

Abstract

This poster presents the analysis of LSP grammars in a three-dimensional way: first of all, the horizontal layer of LSP texts is reflected using sub-corpora from the following subjects: archaeology, astronomy, biology, chemistry, mathematics, physics and technology (cf. Fluck 1991). Secondly, the vertical layer is investigated on the basis of contrasting scientific and popular-scientific discourse (cf. Niederhauser 1997). Finally, the last dimension is the interlingual comparison between English and German – including English-German translations (cf. Biber 1995).

The multidimensional corpus is processed in the following way: part-of-speech tagging, phrase chunking and terminology extraction has been applied to all sub-corpora. On this basis, the texts are investigated for the following LSP register features (e.g. Fluck 1991, Halliday & Martin 1993): term density; verbal vs. nominal style; frequency, length and complexity of syntactic phrases; frequency, length and complexity of sentences; nominalisations; compounding; pre- and postmodifications; etc. Based on empirical evidence, the LSP grammars of the sub-corpora involved are contrasted against the backgrounds of language typology, degree of expertise and subject diversity. Additionally, translations from the language pair English-German are evaluated against the originally produced language in terms of specific properties of translated text. The hypothesis, here, is that the translations are more explicit and easier to understand than originals in the source language as well as in the target language (cf. Baker 1996). Moreover, it is tested whether the typical register features of the source language „shine through" in the translations and whether this has an impact on the target language reception.

The long-term aim of the project is to improve the communication between different groups of language users (e.g. expert-to-lay communication) as well as LSP translation. Furthermore, metrics for the classification of translated vs. original and expert vs. lay communication as well as language and subject differentiation are developed.

References

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