From product to process: Towards an empirical model of translation

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Empirically-based translation research has so far been developed within two major self-standing approaches: corpus-based work on properties of translated texts (*product*) and experimental studies of translators' expert performance (*process*). Recent advances in corpus architecture and multi-level corpus querying and an increasing incorporation of methods from psycholinguistics and cognitive science into process-oriented research point to a desired combination of linguistic corpus studies with more direct, experimental insights into processing efforts for the development of an empirical model of translation.

The present paper reports on results based on the exploitation of the CroCo Corpus of English and German originals and translations and some preliminary findings of a combination of this corpus-based approach with process-based experimentation. The multi-layer annotation and alignment of the CroCo Corpus allows findings on various kinds of translation properties and their interpretation in the light of explanations such as language contrast, register typology and understanding in the translation process. The paper gives an overview of various findings in terms of properties of translated texts (e.g. explicitation and shining-through) that distinguish them from non-translated texts (cf. Hansen-Schirra et al. 2007).

While the CroCo corpus design yields evidence of the influence of language contrasts and register differences, the impact of processing during translation cannot be observed directly when examining the product but is rather inferred from an indirect process of elimination in which all other possible explanations for the distinctive features in the translations are ruled out. Here, we employ process-based methods (a combination of key-logging, eye-tracking and retrospective protocols) as a valuable complement to corpus-based observations (see Alves et al.2009).

The methodological integration of product- and process-based research is attempted here for the theoretical concepts of *grammatical metaphor* and *unit of translation* as well as for their correlations with translation properties:

-   *Units of translation*: The annotation and alignment of the corpus allows identifying segments without corresponding equivalents ("empty links") and aligned segments which are not part of the same aligned segments on a higher level, e.g. aligned words in different grammatical functions ("crossing lines"). The process-oriented research analyses pauses in key-logging to identify translation units as instances of foci of attention. The aligned segments are then mapped onto the cognitive units. Eye-tracking is used to identify patterns of eye fixations that can be correlated to text processing generating empty links and crossing lines. Translation units which contain empty links or crossing lines may be due to normalization effects.
-   *Grammatical metaphor* (i.e. semantic units mapped onto different grammatical units): Grammatical shifts are detected by querying crossing lines in the corpus (e.g. aligned words which occur in nominal constructions in one language and in clausal constructions in the other). Drawing on key-logging and eye-tracking data, foci of attention (and potential processing problems) can be identified in instances of grammatical metaphor. We thus obtain insights into the routes in unpacking (de-metaphorization) and repacking (re-metaphorization) meanings – and this even more densely compared to the source text (metaphorization). Eye-tracking helps identifying the elements in the source text that trigger this process. De-metaphorization may result in simplified and more explicit structures.

With the development of an empirical translation theory in mind, the product- and process-based findings are validated against an interdisciplinary perspective: the theoretical modelling is checked against architectures from cognitive science, whereas the applied branches of the empirical translation theory profit from workflow models developed in business administration – both based on empirical evidence. In a more general perspective, our research can be seen as compiling a wide range of empirical findings on different aspects of translation (both process- and product-based) which serve as building blocks for a comprehensive empirical model of translation that combines source language-, target language- and translator-related aspects. This opens up new horizons for an interdisciplinary and empirical view on the translation process, the translation product and the translator.

References

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