

## PROBLEM SOLVING STRATEGIES IN TRANSLATION

**Gerd Wotjak**

### **Introduction**

Space does not permit us to describe in detail the state of the art in the greatly neglected field of problem solving strategies in translation. This can be treated in a separate paper as very little has been published on the subject in English; scholars who read German may consult Henschelmann's survey article "Zur Beschreibung und Klassifizierung von Übersetzungsverfahren" (1993), Schreiber (1993) or Wilss (1992), who gives a broad theoretical foundation.

There can be no doubt that, apart from the three titles mentioned above, there is a considerable lack of information and interest within translation and interpretation studies with respect to problem solving procedures, techniques and (sub)routines of translating/interpreting. This is surprising, given that for more than 15 years translation scholars have agreed upon the necessity of concentrating on the analysis of the complex processes underlying translating/interpreting, whereas previously, in the early stages of translation theory, the emphasis was placed on description of the results of the translation activity, i.e. a more static approach than the now dominant dynamic paradigm was favoured.

Despite the fact that, in the past, studies of the systemic aspects of language took priority over those devoted to performance (the use of

language in text production and or, more precisely, discourse), we do find some studies on translation procedures or techniques within the discipline known as comparative stylistics, as practised above all in France or with French as one of the pair of languages analysed (cf. Vinay/Darbelnet, *“Stylistique comparée du français et de l’anglais, Paris 1958; Malblanc, “Stylistique comparée du français et de l’allemand”, Paris 1961*). In these studies, however, descriptions were limited to listing, from a static perspective, quasi-systemic correspondences of single or combined lexical items as recurrent standard textual equivalents. Lists of textually equivalent pairs for German and French and German and English were elaborated primarily in order to facilitate second language learning and to assist students taking degree examinations. We must acknowledge, however, that there is still a considerable lack of genuinely translation-oriented, empirically-based applied studies in this field, which could serve - from a dynamic and processual perspective - in the training of future professional translators.

Besides the paper by Henschelmann mentioned above, which also presents a detailed classification and systematisation of various types of translating procedures or techniques, we particularly value the insights in Wilss (1977, 1982, 1992) regarding these questions, above all with regard to problem solving strategies. In these publications, the well-known scholar describes in detail, from a psycholinguistic-cognitive perspective, what happens when translators - just like other professionals - are forced to make decisions and choices in order to solve a particular problem encountered on the job. We assume that Wilss' important reflections on this subject are widely known (especially since papers dealing with this area have appeared in English) and postulate that any analysis of problem solving strategies is not only strictly linked to the concept of translation to which we subscribe and to the notion of what constitutes a translation problem, but also to the controversial concept of equivalence. Research on such procedures, even if these are taken to be highly stereotypical, recurrent, fixed,

conventionalised and even partially algorithmisable phenomena, is not opposed to, or incompatible with, a definition of translation activity as a highly creative and subjective phenomenon (cf. the objections formulated against such research based on this erroneous presupposition by Deslile 1984).

### **Problems in translating - a short overview**

For us, translation, considered as a bilingually mediated communication process or activity, involves as such a large number of interacting factors:

- (i) the sender of the original/source text,
- (ii) the translator as a professional or spontaneous “natural” mediator - qualified, firstly, as a competent receiver of the source text and, secondly, as a no less competent producer of a target text to be submitted to
- (iii) receivers of this translated text, who
- (iv) share a distinct sociocultural background (target background) distinct from that of the sender and the receivers of
- (v) the original text, which also contains
- (vi) non-linguistic semiotic factors and information deduced from the
- (vii) attendant extratextual communicative conditions/situations, in which the bilingual communicative activity takes place or which are inferred from the
- (viii) encyclopedic knowledge interiorised and shared by the receivers’ community, or which is idiosyncratic for an individual receiver.

Obviously we cannot correlate here in detail our concept of translation problems and the strategies to solve them to the wide variety of factors mentioned above. We are only able to provide selected

bibliographical references to our own publications (Wotjak 1981 - in Spanish, and 1985 - in German) and to papers by Fleischmann (1987) and by our late colleague Schmidt (1985 and 1992). We refer no less superficially to our detailed and stratified concept of equivalence, i.e. Wotjak (1996); Koller (1995), which will be indispensable should we seek to correlate problem solving strategies to the equivalence aspects involved in translation activity (a desideratum for future research; cf. also Henschelmann (1993), who did not offer a solution in this respect). Briefly, we can postulate the following stratification of successive and mutually inclusive levels of equivalence which, as an abstract descriptive device, will help us to organise the extremely diverse ideas surrounding the controversial notion of equivalence. We propose to start from a lexical-systemic partial or quasi-complete sememic correspondence of the lexical meaning of the items and combinations of items included in dictionaries and terminological lists (=systemic level, level 1), and to proceed to the (hierarchically) higher level of syntagmatic semantic macrostructures of phrases, paragraphs (=level of allosememic partial or quasi-complete correspondence, level 2); from here we progress to the next level, where we have to deal with text fragments characterised with regard to their orational mode (Satzmodus) by means of constituent lexical and syntactic (suprasegmental) elements and by the fully expanded communicative potential of the lexical units constituting them - we have arrived at the so-called communicative macrostructure level (level 3). We have not yet, however, reached the most important level, the discourse level (level 4), where the deixis EGO-HIC-NUNC and the illocutive function constitute the raw material with which the translator and communicator are concerned.

As a guideline or rule of thumb for the translator, who does a complicated and generally not sufficiently appreciated job, one may recommend that s/he try to produce a target text which is communicatively equivalent (=level 4) to the response the original text author intended to stimulate in his or her source receivers or to the

communicative value attributed to the text/discourse event or utterance by receivers sharing the same socio-cultural and linguistic/communicative background. There may, however, be a major difference between the socio-cultural backgrounds of the sender and target text receivers and, as an obvious consequence of this, there may also be a considerable disparity between the socialised shared knowledge stored in the brains of the members of the source and target linguistic (and cultural) communities respectively. This disparity in the knowledge acquired as a social, historical and cultural heritage by the speakers of the two communities may generate numerous specific translation problems cf. Galisson (1991); Wotjak (1993b).

Translation problems may also result from differences in encyclopedic knowledge. The preconditions for mutual understanding available to sender and receiver of the message which are due to considerable differences in the knowledge of the phenomena dealt with, that is the subject matter of the communicative activities: In the case of such differences within the conceptualisations of the real world, the universe of reference and/or of discourse instantiated by the propositional component of the linguistic/textual speech event, there may or may not be a concomitant lack of linguistic signs to denote them. Compare, for instance, the so-called *realia*, that is, cases of zero-equivalence due to divergent conceptualisations and designation/denotation, as well as to differences in how the events and processes denoted are appraised and the differences in the connotations of linguistic and semiotic signs/gestures, etc. cf. Wotjak (1991, 93a and b); Galisson (1991).

Problems may also be due to differences in the grammatical and lexical structures of different, though genetically closely related languages, as well as in their individual conventions for text production and communicative use. There may also be differences in other communicative resources utilised in the respective communicative activity. The system-based problems have been dealt with, when at all, primarily within the framework of contrastive linguistics, comparative

stylistics, (though here the emphasis is also on performance, not just on the language system), and, tentatively, descriptive translation studies. It is not surprising that the most important and detailed contributions to the study of problem solving strategies have been made in this field.

Problems may also be due to circumstances outside the translation process and its implied constituents, pertaining, for instance, to the determination of the external *scopos* imposed by the person who commissions the translation, and distinct from the inherent communicative and illocutive function of the source text. In the following, we will consider only those translation problems which are source-text-induced reproduction activities with an invariant communicative function. We will eliminate cases of a differing *scopos* and varying communicative functions of both source and target texts (cf. Nord 1989). Problems also arise due to subjective difficulties and errors by the translator and the original text producer.

### **Some proposals for translational problem solving strategies**

This incomplete inventory of problems which may arise for the professional translator is extremely varied and shows very clearly why it is not easy to present a comprehensive and systematic classification of the various kinds of procedures, techniques and problem solving strategies; it is true, too, that not all procedures applied by the translator have the same degree of complexity, nor do they always serve to solve actual translation problems; for instance, if a simple transfer(ence) or substitution procedure can be applied, that is, if a quasi-obligatory regular and acontextual systemic equivalence between the two languages in question exists, then the translator will not be confronted with any translation problem at all. This explains why some scholars do not include such techniques or procedures in the basic catalogue of translating procedures, cf. Königs (1987). If there is no choice to be made, we are dealing with what we could call - at least on the lexical level - in opposition to the famous "false friends" - the "true friends" of

the translator. Of course, everything depends on a round definition of a real translation problem, and this regardless of the degree of professional experience acquired by the translator be s/he a professional or not - cf. the concept of "natural translator" in Hernández Sacristán (1994), cf. also Lörscher (1991), and others. On the basis of thinking aloud protocols produced by a professional and four non-professional translators, Krings (1990) demonstrated that, surprisingly, the professional translator had offered much more tentative solutions before arriving at a final decision and that the professional produced a much "freer" target text than the other test subjects.

We cannot present a truly satisfying and generally acceptable classification of problem solving strategies and further translating procedures here - indeed this might not even be feasible; terminological chaos still persists, with different terms being used to designate the same phenomenon and, vice versa, apparently identical terms being used to refer to quite different procedures. We may, *grosso modo*, differentiate with Henschelmann and others (cf the appendix for the different classification criteria and propositions advanced by Wilss (1977), Nord (1989), Zimmer (1990), Wotjak (1981/85) and Henschelmann (1993)) between generic main procedures which are applicable to virtually all languages, and a more or less open list of specific techniques which are of a more idiosyncratic (language-pair-specific) character and which are also more strictly correlated to the particular text types to be translated.

Such main procedures are, in particular, what Henschelmann and others call *transposition* (we personally use the term transformation to emphasise the fact that the translator has to apply formal transformations in order to preserve the content) and *modulation procedures*; in this context, for instance, we may add substitution (we called it reproduction) and the second main category in Henschelmann's classification, the so-called intertextual procedures (which we called transfer/ence).

These procedures, and the resultant techniques, which specify them and allow for further subgroups, generally occur in combination. We require further empirical analyses of the respective techniques applied in translating; for instance, we can study the thinking aloud protocols of the translator, as well as draw on comparisons of translated texts with their originals. The techniques do not apply strictly and obligatorily, that is, it will be difficult to discover algorithmisable routines, and even if a relatively strong correlation can be observed between a certain translation problem and the technique utilised to solve it, it is not at all easy to determine under exactly what conditions (text types, communicative spheres and situations) the alternatively or optionally applicable techniques are chosen. It is not sufficient to present a catalogue of such techniques without making an effort to correlate these with the problems which can be solved by applying them, and with the conditions which must be fulfilled in order to guarantee correct use of the corresponding technique or combination of techniques available. But it is better to present some techniques than to ignore the importance of this kind of analysis altogether.

## **Conclusion**

There is a long way to go yet, but we are convinced that we can now proceed with better chances of success, thanks to the new insights offered by translation theory and particularly to the results presented in the growing number of descriptive translation studies. I believe that our chances can be further enhanced if we not only draw on psycholinguistic studies of what happens in the brains of professional and non-professional translators, but if we also proceed to analyse the products of the translating activity in cases where this has been carried out by a renowned professional translator (cf., for instance, the studies on so-called translemic theory by Santoyo and his group, cf. also Rabadán (1991)). To attain this objective (such a systematisation yield interesting and stimulating conclusions regarding the training of future



translators, while also pointing to unsolved theoretical problems) we need a universally recognised terminology or, at least, a descriptive apparatus which may be correlated unequivocally to others and applied on a broad scale to translations of varying text types.

### **Appendix of different translation procedures/strategies**

(1) Translation procedures proposed by K. Reiss (1985, 281):

|   |   |  |  |
|---|---|--|--|
| substitution+<br>punctual para-<br>phrases<br>(transposition<br>and modulation<br>with regard to<br>structures of<br>the target<br>language sys-<br>tem | substitution+<br>annotation/<br>commentaries<br>to transmit<br>the necessary<br>knowledge to<br>the target<br>receivers | substitution+<br>obligatory<br>paraphrases<br>to guarantee<br>textual equi-<br>valence in<br>cases of con-<br>stancy of the<br>text function,<br>i.e.<br>transposition<br>+ modulation<br>+ adaptation | substitution+<br>facultative<br>paraphrases<br>to guarantee<br>functional<br>equivalence<br>in cases of<br>change of the<br>text function,<br>i.e.<br>transposition<br>+ modulation<br>+ adaptation<br>corresponding<br>to the new<br>function of<br>target text |
| literal trans-<br>lation/ word-<br>translation<br>for-word<br>translation   | philological<br>translation   | communicative<br>translation   | elaborating<br>translation   |

3)K. Henschelmann (1993: 55/56) (only main procedures type I):

### **MAIN PROCEDURES type I**

MP T Main procedure TRANSPOSITION

- MPT.1 Functional Change of Class
- MPT.2 Syntagmatic Changing Operations
- MPT.3 Categorical Change
- MPT.4 Intracategorical Change
- MPT.5 Subcategorization/Discategorization
- MPT.6 Change of Lexical Class
- MPT.7 Change of Lexical Structure
- MPT.8 Reduction of Range/ Upgrading of Range
- MPT.9 Paradigmatic Change open/closed

MP M Main procedure MODULATION

- MPM.1 Specifying Modulation
  - MPM.1.1 Hyponymic Modulation
  - MPM.1.2 Synonymic Modulation
- MPM.3 Explicitation
- MPM.2 Generalising Modulation
  - MPM.2.1 Hyperonymic Modulation
  - MPM.2.2 Dissynonymisation
  - MPM.2.3 Implication
- MPM.3 Antonymic/Conversive Modulation
- MPM.4 Metaphoric Modulation
- MPM.5 Metonymic Modulation

MP S Main procedure SUBSTITUTION

- MPS.1 Pure Substitution
- MPS.2 Hybrid Substitution
- MPS.3 Contaminated Substitution

(4) G. Wotjak (1981) - here without the techniques of  
TRANSPOSITION/TRANSFER and REPRODUCTION:

**III. TRANSFORMATIONS (general technique) with the  
following special techniques:**

III.1 Intracategorial transformations and routines:

III.1.1 Changes of number

III.1.2 Changes of gender

III.3.3 Change of determiner/article, etc.

III.3.4 Change of tense

III.3.5 Change of mood

III.1.6 Change of voice

III.1.7 Change of case

III.1.8 Change between pronouns

III.1.9 Change from past participle to present participle and vice versa

III.2 Categorial Transformations

III.2.1 Verbalisation

III.2.2 Substantivisation/Nominalisation ( $V \rightarrow N$ ;  $Adj \rightarrow N$ ;  $Adv \rightarrow N$ )

III.2.3 Adjectivisation

III.2.4 Adverbialisation ( $V \rightarrow Adv...$ )

III.2.5 Pronominalisation ( $Art. \rightarrow P$ ;  $Noun \rightarrow P...$ )

III.2.6 Compound Noun into Noun+ Prep. + Noun constructions

III.3 Intraphrastic Changes in word order/ Intraphrastic Permutations

III.4 Transphrastic/Interphrastic Changes/Permutations

III.5 Intraphrastic Structural changes (for instance gerund construction into subordinated and coordinated clauses in German)

III.6 Complex Textual Permutations/Rearrangements

- III.7 Formally required lexical/syntactic adaptation  
(reductions/expansions) to target text conventions
- III.8 Formal orthographic adaptations to target language usage
- III.9 Synonymic alternation
  
- III.10 Range Crossing TRANSFORMATIONS
  - III.10.1 Lexicalisations
  - III.10.2 Grammaticalisations
  - III.10.3 Phonologisations
- III.11 Idiomatic TRANSFORMATIONS (changes of word order,  
of image..)
- III.12 Explications/Implications

#### **IV. MODULATIONS**

- IV.1 Generalising Modulation/Hyperonymic Modulation
- IV.2 Specifying Modulations/ Hyponymic Modulation
- IV.3 Antonymic/Conversive Modulations
- IV.4 Metonymic Modulations
- IV.5 Idiomatic Modulation (Phraseologisation)

#### **References**

- DESLILE, J. (1984) *L'analyse du discours comme méthode de traduction. Théorie et pratique. Initiation à la traduction française de textes pragmatiques anglais.* Ottawa.
- DOHERTY, M./ Angermüller, H. (1983) "Sprachliche Operationen beim Übersetzen."  
In: *Fremdsprachen* 27, 3. Leipzig: Enzyklopädie, 166-170.
- FLEISCHMANN, E. (1987) "Zum Problem der Übersetzungsverfahren und ihrer Klassifizierung." *Fremdsprachen* 31, 4. Leipzig: Enzyklopädie, 231-135.
- FRIEDERICH, W. (1969) *Technik des Übersetzens Englisch und Deutsch.* München.

- GALISSON, R. (1991) *De la langue à la culture par les mots*. Paris: CLE international (=Didactique des langues étrangères).
- HENSCHELMANN, K. (1980) *Technik des Übersetzens Französisch-Deutsch*. Heidelberg: Quelle & Meyer.
- HENSCHELMANN, K. (1993) *Zur Beschreibung und Klassifizierung von Übersetzungsverfahren*. Travaux du Centre de traduction littéraire. Lausanne. no. 17.
- HERNÁNDEZ SACRISTÁN, C. (1994) *Naturaleza del traducir Traducción natural/ traducción profesional*. Centro de Semiótica y teoría del espectáculo. Universidad València. Eutopías 2a época, Documentos de trabajo, vol. 68.
- HERTING, B. (1987) "Arten, Ursachen und Auswirkungen von lexikalisch-pragmatischen Verschiebungen bei der Übersetzung." Doctoral Dissertation, Universität Leipzig.
- KÖNIGS, F. G. (1987) "Was beim Übersetzen passiert. Theoretische Aspekte, empirische Befunde und praktische Konsequenzen." *Die Neueren Sprachen* 86,2, 162-185.
- KRINGS, H. P. (1986) *Was in den Köpfen von Übersetzern vorgeht. Eine empirische Untersuchung zur Struktur des Übersetzungsprozesses an fortgeschrittenen Französischlernern*. Tübingen: Narr.
- KRINGS, H. P. (1990) "Blick in die 'Black Box' - Eine Fallstudie zum Übersetzungsprozeß bei Berufsübersetzern." In: Arntz, Reiner/Thome, Gisela (eds) *Übersetzungswissenschaft. Ergebnisse und Perspektiven*. Tübingen: Narr, 393-412.
- LÖRSCHER, W. (1991) *Translation Performance, Translation Process, and Translation Strategies: A psycholinguistic Investigation*. Tübingen: Narr.
- NORD, C. (1989) "Loyalität statt Treue. Vorschläge zu einer funktionalen Übersetzungstypologie". In: *Lebende Sprachen* 34, 100-105.
- RABADÁN, R. (1991) *Equivalencia y traducción. Problemática de la equivalencia transléctica inglés-español*. Universidad de León.

- REISS, K. (1985) "Paraphrase und Übersetzung. Versuch einer Klärung." In: Ghilka, J./ Rieger, H.P. (eds.): *Die Übersetzung der Bibel - Aufgabe der Theologie*. Bielefeld, 272-287.
- SCHMIDT, H. (1985) "Welchen didaktischen Wert hat ein Katalog von Übersetzungsverfahren für die Übersetzungslehre?" *LAB 47*. Leipzig: Sektion TAS, 31-38.
- SCHMIDT, H. (1992) „Übersetzungsverfahren - Metamorphose eines traditionellen Begriffs.“ In: Salevsky, H. (ed.): *Wissenschaftliche Grundlagen der Sprachmittlung*. Bern etc.: Peter Lang, 129-139.
- SCHREIBER, M. (1993) *Übersetzung und Bearbeitung: Zur Differenzierung und Abgrenzung des Übersetzungsbegriffs*. Tübingen: Narr.
- WILSS, W. (1977) *Übersetzungswissenschaft. Probleme und Methoden*. Stuttgart: Klett.
- WILSS, W. (1982) *The Science of Translation: Problems and Methods*. Tübingen: Narr.
- WILSS, W. (1988) *Kognition und Übersetzen*. Tübingen: Niemeyer
- WILSS, W. (1989) "Towards a Multi-facet Concert of Translational Behavior." *Target* 1-2, 129-149.
- WILSS, W. (1992) *Übersetzungsfertigkeit: Annäherung an einen komplexen übersetzungspraktischen Begriff*. Tübingen: Narr.
- WOTJAK, G. (1981) "Técnicas de traslación." In: Caballero, L. et al. (eds.) *Aspectos fundamentales de teoría de la traducción*. La Habana: Ediciones Sociales, 197-230.
- WOTJAK, G. (1985) "Techniken der Übersetzung". In: *Fremdsprachen*, 29,1, 24-34.
- WOTJAK, G. (1991) "Kommunikatives Wissen in interlingualer und inter-kultureller Sicht." In: *Zeitschrift für Phonetik, Sprachwissenschaft und Kommunikationsforschung* 44,1, 111-125.

- WOTJAK, G. (1993a) "Interkulturelles Wissen und Sprachvergleich." In: Rovere G./Wotjak G. (eds.) *Studien zum romanisch-deutschen Sprachvergleich*. Tübingen: Niemeyer, 55-68 (= Linguistische Arbeiten 297).
- WOTJAK, G. (1993b) "Interkulturelles Wissen und Übersetzen." In: *Revista de Filología germánica* 1. Madrid: Universidad Complutense, 181-196.
- WOTJAK, G. (1996) "Äquivalenz und kein Ende? Nochmals zur semantischen und kommunikativen/translatorischen Äquivalenz." In: Wotjak, G./Schmidt, H. (eds.) *Modelle der Translation/Models of translation*. Frankfurt: Vervuert (= Leipziger Schriften zur Kultur-, Literatur-, Sprach- und Übersetzungswissenschaft, 2).
- ZIMMER, R. (1990) *Äquivalenzen zwischen Französisch und Deutsch. Theorie-Korpus-Indizes. Ein Kontextwörterbuch*. Tübingen: Niemeyer.

| INTERCULTURAL TRANSFER |                    | DOCUMENT                        |   |  | INSTRUMENT   |   |  |  |   |   |
|------------------------|--------------------|---------------------------------|---|--|--|---|--|--|---|---|
| transfer function      | transfer type      | TRANSCRIPT                      | DOCUMENTARY TRANSLATION                 |  |  | INSTRUMENTAL TRANSLATION                      |  |  |   |   |
| transfer form          | transfer objective | IDENTICAL TRANSFER              | WORD-FOR-WORD TRANSLATION               | LITERAL T.                                 | PHILOGOLOGICAL T.  | EXOTICISING T.                                | FUNCTIONAL CONSTAT T.  | FUNCTIONAL VARIANT T.  | CORRESPONDING T.                              | VERSION   |
|                        |                    | reproduction of source graphy   | reproduction of source system           | reproduction of form                       | repr. of source, form and content                              | repr. of form, content and situation          | achievement of source text function in target receivers            | a. of compatible function(s)   | a. of corresponding effects                   | a. of incompatible functions and effects                |
| transfer focus on      |                    | graphic features of source text | morpholog., lexical, a. synt. phenomena | words, syntagmas a. phrases of source text | syntagmas, phrases, text (a. sit. of source, communic. source) | phrases, text, situation a. culture of source | function of source text in source situation                        | function of source text in source situation                          | function of source text in target literature  | function of target text in target situation             |
| transfer procedures    |                    | transcription                   | substitution                            | subst. + punct. synt. paraphrases          | subst. + punct. paraphrases + commentary (extern)              | subst. + obligatory synt. + semant. paraphr.  | subst. + obligatory synt. + semant. paraphr. + commentary (intern) | subst. + obligatory synt. + semant. pragram. paraphr. (= adaptation) | subst. + paraphr. + own loyal new formulation | subst. + paraphr. + own new formulation without loyalty |