ON THE CLASSIFICATION OF ERRORS IN TRANSLATION PAPERS WITH SOME CONSIDERATION OF INTERFERENCE PHENOMENA[1]

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1. DIDACTIC AND LINGUISTIC PERSPECTIVES OF ERROR ANALYSIS

A systematic analysis of errors and/or mistakes[2] in foreign language learning is, in the first instance, a valuable asset for teachers. If students of the same mother tongue (base language — L1) tend to regularly misproduce certain patterns in the foreign language (target language — L2), this fact alone accounts for a closer review in order to draw conclusions for future classroom practice.

If such erroneous constructions are regarded as being the reflection of a systematic failure within the process of language production, reflecting something of the learner's individual competence, the didactic perspective of error analysis is complemented by a linguistic one, and the analysis of errors will perhaps allow conclusions regarding the nature and the process of language production in general. The study of the learner's language, also referred to as "interlanguage", "idiosyncratic dialect", "transitional competence" or "approximative system", would permit, one has reason to believe, some insight into the systematic character of language as such.

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[1] This is a revised version of the author's paper "Errors in German-English translation papers — an analysis of interference phenomena" presented at the 16th International Conference on Polish-English Contrastive Linguistics held at Boszkowo, December 13th—16th, 1978.

[2] The terms "error" and "mistake" will be used synonymously, and no distinction will be made between "errors of competence" and "mistakes of performance" (cf. e. g., Corder 1967).

Common to both the didactic and the linguistic perspectives of error analysis is the fundamental interest concerning the sources of errors. One possible or even likely source of errors in language acquisition is the phenomenon of *interference* (or *negative transfer*), i.e., the transfer of linguistic patterns (signs, rules, and meanings) to fields in which they are not valid. Related to foreign language acquisition, interference may be motivated by the negative transfer of L 1-patterns into the target language (*interlingual interference*), and by the possible over-generalization of linguistic patterns within the target language (*intralingual interference*).

The description system for errors introduced here neither aims at the learner's language expressing individual competence (cf. e.g., Corder 1971, 1972b; Nemser 1971; Selinker 1972), nor does it cover questions of error grading and remedy, which, we believe, are essentials of the didactic perspective of error analysis (cf. e.g., Nickel 1972). The aim is rather to provide a linguistically orientated system for the description of translation errors with regard to their nature, frequency and possible sources, and under the particular aspect of interference. Following the introduction of the system, we will demonstrate some of the results achieved in a practical analysis of 25 German-English translation papers.

2. THE CLASSIFICATION AND DESCRIPTION OF TRANSLATION ERRORS

2.1. For the classification and description of translation errors a rating from two parallel viewpoints appears to be adequate: one level of analysis (Lexis) is constituted by the given meaning in L1 and the related choice in L2, whilst a second level (Grammar) covers acceptability in L2 independent of the meaning in L1:

(1a) L1 Wir haben uns immer *gegen ... gewandt.*
(1b) L2 *We have always *restrained against ...*

Independent of the German original, (1b) is grammatically incorrect:

(1c) L2 restrain sb./sth. *from*

Furthermore, there is a confusion of meaning (a lexical error):

(1d) L2 *restrain* sb./sth. *from*
    L1 jdn. etw. *zurückhalten von*

instead of

(1e) L2 e.g. *to be opposed to*
    L1   *sich wenden gegen*

Along with an error count every mistake registered may be classified according to a 'level of error', a 'type of error', and then categorized into 'groups of errors'.

2.1.1. Following the traditional levels of linguistic description we can establish *levels of error* by means of the following criteria:

ORTHOGRAPHY Infringement of established BE- or AE-spelling.
GRAMMAR (Here regarded as a general term comprising the levels of morphology and syntax.)
Morphology Non-acceptable word-formation within the given L2-sentence pattern.[3]
(Errors in the selection and the use of derivational morphemes and errors in word compounding).[4]
Syntax Non-acceptable sentence formation within the given L2-pattern.
(Errors in the selection and the use of inflexional morphemes and free grammatical morphemes, plus errors in the connexion of grammatical and lexical morphemes.)
LEXIS Non-acceptable expression of L 1-meaning in L2.
(Errors in the selection of grammatical and lexical morphemes, without grammatical infringement of L2-rules, but causing a meaning that when translated back into L1 differs considerably from the original.)

2.1.2. A classification by *types of error* might incorporate the system suggested by Corder (1972a:39f.), employing the following criteria:
ADDITION Attachment of an unnecessary linguistic element.[5]
OMISSION Elision of a necessary linguistic element.
SELECTION Choice of an unacceptable linguistic element.
ORDERING Non-acceptable order of acceptable linguistic elements.

2.1.3. The allocation of one and the same mistake to two different registers (level and type of error) permits the construction of a *classification matrix* (cf. Corder 1972a:40) that by means of cross-checking also ensures a correct registration of data in terms of quantity. For practical reasons of notation,

[3] Word-formation in accordance with Quirk et al. (1972: Appendix I).
[4] Classification and definitions of morphemes according to Welte (1974 : 392f.).
[5] The term *linguistic element* stands for graphemes, morphemes, syntagma, and lexemes.

symbols should be used that facilitate the categorization of errors and the subsequent data processing.

Table 1. Classification matrix and notation symbols

Type of Error

	ADDITION	OMISSION	SELECTION	ORDERING
ORTHOGRAPHY	O+	O—	OS	OO
GRAMMAR				
Morphology	M+	M—	MS	MO
Syntax	S+	S—	SS	SO
LEXIS	L+	L—	LS	LO

Symbol	Level of Error	Type of Error	*Example
O+	ORTHOGRAPHY	ADDITION	periode
O—		OMISSION	exil_
OS		SELECTION	seperation
OO		ORDERING	lettre
M+	MORPHOLOGY	ADDITION	comfortably (adj.)
M—		OMISSION	comfortable (adv.)
MS		SELECTION	beriched (enriched)
MO		ORDERING	hypodronics
			(f. hydroponics)
S+	SYNTAX	ADDITION	in all the modesty
S—		OMISSION	(Ø the) last survivors of)
SS		SELECTION	help defending
SO		ORDERING	the newly to be built house
L+	LEXIS	ADDITION	a new task
			(L l: eine Ø Aufgabe)
L—		OMISSION	a Ø task
			(L l: eine neue Aufgabe)
LS		SELECTION	writing-machine
			(L l: Schreibmaschine)
LO		ORDERING	Paraphrases inducing a change of meaning

2.1.4. Corder (1972a:40) rightly points out that a classification of errors in terms of "level" and "type" alone must be regarded as too superficial. It is said that a sufficiently deep and systematic classification should incorporate the "system of identification or specification", i.e. tense, number, aspect, etc. Within the framework of the description system introduced here, *groups of errors* were established, following the criteria just mentioned. In some cases, however, we felt that the categories provided by the error matrix are of satisfactory depth. So, for example, errors in word-order are adequately covered by SO. L-, in turn, shows which meanings of L1 do not re-appear in L2, whilst L+ reveals added meanings in L2. The real problem lies with syntactic and

lexical errors of selection (SS and LS), as by far the highest proportion of mistakes has to be expected in these fields. On the lexical level of analysis the L1-lexeme seems to be the only practical criterion for further classification. On the grammatical level (morphology and syntax) groups of errors may be established following the sections of a sufficiently detailed grammar book such as the *Grammar of contemporary English* (Quirk et al. 1972), its shorter version the *University grammar of English* (Quirk, Greenbaum 1973), or any other work perhaps considered more suitable for the individual task of instruction.

2.2. Based upon the assumption that linguistic competence in one or several languages (L1 ... Ln) influences positively *and* negatively the acquisition of a second or further language (L2 ... Ln), the following catalogue of possible *sources of errors* was developed:

1. IL 1-D   *Direct interlingual interference*
Negative transfer of a linguistic element or pattern from L1 into L2, motivated by an assumed equivalence in form, function or meaning, when context-independent or context-dependent non-equivalence in L2 is the case. Examples:

L1 Exil   L2 *exil_
    bereichert   *beriched
    das neu zu erbauende Haus   *the newly to be built house
    Schreibmaschine   *writing-machine

1a. IL 1-L 2   *Indirect interlingual interference*
Negative transfer of a linguistic element or pattern within L2, motivated by an assumed equivalence in form, function or meaning, when context-dependent non-equilavence in L2 is the case, and the corresponding element or pattern in L1 is non-existent or less differentiated.

Examples:

L1 *aber* sie hörten nicht auf   L2 *but* they did not stop
    darum hörten sie nicht auf   *therefore* they did not stop
    aber darum hörten sie nicht auf   *but therefore* they did not stop
    innere Angelegenheiten   *internal* affairs
    inneres Exil   *internal* exile

2. IL 2-D   *Direct intralingual interference*
Negative transfer of a linguistic element or pattern within L2, motivated by an assumed equivalence in form, function or meaning, when context-dependent non-equivalence in L2, and context-independent non-equivalence in L1 is the case.

Examples:

L2 *practice* (n.)   L2 *practise* (v.)
   de*fence* (n.)   *de*fense* (v.)
   con*tribute* to   *at*tribute* to
   (L1 : beitragen zu)   (L1 : zuschreiben)

2a. IL 2-P   *Intralingual interference avoiding positive transfer*
Negative transfer of a linguistic element or pattern within L2
when positive transfer L1 → L2 would have been possible.

Examples:

L1 Sep*a*ration   L2 *sep*e*ration (separation)
   verteidigen *mit*   *defend *by* (d. *with*)
   Architekt   *constructor* (architect)

3. SIM   *Simplification*
Omissions of meanings required by L1 and sense-infringing para-
phrases in L2.
(Defined by means of back-translation.)
Examples:

L1 Schreckens *herrschaft*   L2 *terror* (ø *reign of*)
   Kultur*bestände*   *things* of culture (L1: kul-
                                turelle *Dinge*)

4. DIV   *Miscellaneous*
Errors that cannot be classified by means of 1 - 3 above.
Example:

L1 *Schreibmaschine*   L2 *typing-machine*
(Patterns that can neither be fully related to the primary nor the
secondary system; cf. Czochralski 1971:6 — "strukturelle
Entgleisung")

Together with Dušková (1969:16) we believe "that an error analysis should
be based primarily on recurrent, systemic errors that are made by a number
of learners and that can be readily traced to their sources, no matter whether
they reflect defects in knowledge or whether they result from inadequate habit
formation." We therefore suggest that the catalogue outlined above should
only be applied to recurrent mistakes.

2.3. A multiple classification of errors with regard to their level, type, group
and source brings about a number of classificational problems concerning the
demarcation of the individual categories. In many cases such questions can only
be decided subjectively, and the following remarks refer to proceedings used
for the actual analysis outlined below.

In cases of doubt concerning the relevant point of error the analyst procee-
ded from left to right, i.e. taking the first possible point of mistake. Further-
more, the functional aspect of a morpheme (e.g. of a preposition) was given
priority over its lexical meaning, thus differentiating Grammar from Lexis.
For cases such as

(2) L1 *ein* Anrecht auf → L2 *the* right to

a separate category "Errors in lexico-syntactic Selection" was established un-
der the heading of Lexis, as such mistakes result from a change of meaning
caused by a grammatical morpheme but leaving the L2-pattern acceptable.
The range of error sources was applied in the given sequence of order, i.e. higher
ranking types were given priority in case the erroneous pattern allowed diffe-
rent interpretations.

3. THE SYSTEM IN PRACTICE

3.1. The analysis was carried out on 25 English translations of a German
text (230 words, literary style) which had been prepared by students of English
sitting for their intermediate examination at a German university. The papers
analysed had been corrected and graded by two English-speaking lectors
("native speakers" with a solid command of German). As regards the marks
achieved by the students, the sample correctly represented a total of some
100 papers.

The decision on which translation patterns were to be regarded as erroneous
was based upon the correctors' marks, i.e. the precondition for the inclusion
of an error into the analyses was the judgment of native speakers that con-
sidered the system of the target language to have been infringed upon. No
distinction was made between *not acceptable and ?questionable construc-
tions. By means of a second correction procedure assisted by an independent
native speaker of English, obvious oversights were marked, and repetitive
errors (identical mistakes within the same paper) were consistently excluded.

3.2. Excluding repetitive mistakes, the error count registered a total of
806 mistakes which were distributed over the error matrix as follows:

Table 2. Distribution of errors registered

	ADDITION	OMISSION	SELECTION	ORDERING	Total
ORTHOGRAPHY	11	13	19	—	43
GRAMMAR	47	44	167	43	301
— Morphology	7	11	10	—	28
— Syntax	40	33	157	43	273
LEXIS	16	41	388	17	462
Total	74	98	574	60	806

Within the limited scope of this presentation it is obviously not possible to comment on the results in detail. The following points, however, should be noted:

3.2.1. The comparatively small number of orthographical errors indicates that the student on the whole has mastered the difficulties entailed in English spelling. Mistakes in punctuation were excluded from the analysis; it was noticeable, though, that either hardly any commas were used or the German rules of punctuation were applied.

3.2.2. Within Morphology (word-formation) the focus of errors was the use of the suffix -ly:

(3) L1 adj. wohn*lich* → L2 *adj. comforta*bly*
(4) L1 adv. *neu*   → L2 *adv. *new*

Example (3) gives sufficient reason to believe that the German suffix - *lich* generally speaking is identified with the English suffix -*ly*, thus causing a confusion of adjective and adverb. This claim is supported by the fact that the absence of an adverb suffix in L1 (which is usually the case) seems to lead to the same effect in L2, as example (4) demonstrates. Other recurrent errors on the morphological level had to do with prefixes, for example:

(5) L 1 *bereichert* → L 2 *beriched*
Here again the German influence is obvious.

3.2.3. Over two thirds of the mistakes registered under Syntax were accumulated by the following groups of errors:

Table 3. Major fields of syntactic errors

Error Group	% of Syntax
Prepositions	22
Determinants	20
Word-order	16
-*ing*-form	9
Total	67

In terms of grammar book chapters, mistakes occurred most frequently from the wrong positioning of the adverb or the adverbial phrase, from using the definite article in cases of generic reference, from choosing another preposition when *for* or *to* were required, from not using the -*ing*-form, and from choosing a wrong pro-element. This list accounts for 42 per cent of all syntactic mistakes.

3.2.4. Over three quarters of the mistakes listed under the heading of Lexis resulted from non-acceptable selections of L 2-patterns. A total of over 40 per cent of all errors in Lexical Selection (LS) was related to 7 single

structures of the German text, and in the majority of cases the interference constellation IL 1-L 2 turned out to be applicable.

3.3. It has already been indicated that by far the most frequent type of error was that of Selection (Lexis 85%, Grammar 55%). The ratio of recurrent mistakes (545) to nonce mistakes (261) varied substantially according to the different levels of analysis: in Grammar the proportion of recurrent mistakes to nonce mistakes was 4 to 1, in Lexis this ratio was only 1.5 to 1. A similar fluctuation had to be noted as regards the likely sources of errors:

Table 4. Sources of errors (per cent distribution)

		Grammar		Lexis	
IL 1	IL 1-D	64		8	
	IL 1-L 2	9	73	41	49
IL 2	IL 2-D	2		7	
	IL 2-P	25	27	1	8
SIM		—		33	
DIV		—	—	10	43
Total		100	100	100	100

As one can see, interlingual interference (IL 1) plays an important part in both Grammar and Lexis. However, whereas in Grammar almost two thirds of all analysed errors (recurrent mistakes only) could be related to direct interference (IL 1-D), it was indirect interference (IL 1-L2) that accounted for most of the mistakes in Lexis:

		L 2
(6) L 1 *Geist*		spirit
		mind
		intellect
		ghost
		brains
		and others

(7) L 1 *Freiheit*   liberty
     freedom

(8) L 1 *Freiheit*   *geistige*
     mental liberty (5/25)[6]
     spiritual liberty (4/25)
     freedom of mind (4/25)
     intellectual freedom (3/25)
     mental freedom (3/25)
     liberty of mind (2/25)
     freedom of spirit (2/25)

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[6] Frequency of occurrence in 25 translation papers.

This type of interference constellation ("lack of contrast" — under-differentiation of a linguistic element in L 1 causes over-generalization of a linguistic element in L 2) turned out to be the main source of lexical errors. As concerns this level we can therefore fully confirm Juhász's statement that this phenomenon, Juhász calls it "homogene Hemmung", causes the greatest and most apparent difficulty in foreign language learning (cf. Juhász 1970 : 99).

Intralingual interference without an assumed relation to the base language (IL 2) in Grammar could explain about a quarter of the mistakes analysed, in Lexis less than one tenth. It is interesting to note that one quarter of the grammatical mistakes would have been avoided if a direct transfer pattern (a one-to-one translation) had been chosen (IL 2-P).

One third of the lexical errors analysed were regarded as Simplifications (SIM). From this category one could perhaps infer a lack of competence in the target language, similar to what Corder (1967 : 166) calls "errors of competence".

Only some five per cent of all recurrent mistakes could not be explained adequately by means of the suggested list of sources of errors, and therefore had to be registered as Miscellaneous (DIV).

3.4. Besides the fact that from a statistical point of view the small size of the sample does not permit any statement valid beyond the framework of the actual analysis, the results put forward are restricted by some further limitations of the research material.

The value of a translation paper for an analysis of interference phenomena is said to be questionable because of the translator's actual awareness of the interference situation (cf. Nickel 1973:26). This argument is perhaps supported by the considerable share of avoided positive transfer situations (IL 2-P), in which the student might have chosen something different from German in order not to commit an interference mistake. On the other hand, it could be argued that a translation brings about the closest possible contact situation between L1 and L2, thus causing and revealing interfered patterns more readily:

(9a) L1 Sie hörten nicht auf, *Schrifsteller* zu sein.

(9b) L2 *They did not stop being *a writer*. (Registered in 8 of 25 cases)

One must assume that a university student of English is aware of the rules concerning subject-complement concord. Now it seems to be obvious that for some reason he is unable to apply his knowledge of these rules under all circumstances, and one could assume that the ø-plural in L1 *Schriftsteller* supresses the plural form in L2, letting the student choose the 'singular' form instead. In our opinion this sort of L 1-interference constitutes a type of error that can neither be regarded as a systematic deficiency of competence nor as an

unsystematic lapse of performance (cf. Corder 1967:166). Such errors could perhaps be explained by a context-dependent inability of the learner to apply his linguistic competence, a systematic loss of cognitive control over linguistic performance due to interference of the base language (cf. Burgschmidt, Götz 1974:135 f.).

Other deficiencies in the evidence of the analysis result from the specific structure of the translation text used. The German original contained, for instance, numerous constructions that demanded a deviating use of articles in English. On the other hand, not a single pattern required a *if*-clause in the target language. Concerning Lexis, a total of nine, partly word-for-word repetitions had to be noticed. It is natural fact that a language test and a subsequent analysis of test results are limited by what is to be tested, and it is the design of language tests that first of all wants careful consideration if the didactic and linguistic perspectives of error analysis are to fulfil what they appear to promise.

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