PROBABILISTIC LAWS AND RISK AVERSION IN TRANSLATION: A CASE STUDY IN TRANSLATION DIDACTICS

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Abstract

The systemic contrastive analysis of translation shifts in selected textual instances allows the examination of translational behaviour on the level of sociolects and of certain features of the translation act, in terms of both process and function, and on the level of the translation product as such. Such a systemic view of translation is envisaged in the so-called probabilistic laws of interference and growing standardisation, proposed by Gideon Toury. This paper focuses on interference, by analysing synchronically the lexicosemantic and stylistic performance of trainee translators in technical and scientific discourse. Some methodological and didactic conclusions are also drawn [1].

Keywords: Translation didactics, Descriptive Translation Studies, Risk Aversion, Interference, Standardisation

1. INTRODUCTION

In translation and, by extension, in Translation Studies, the so-called probabilistic laws of (growing) standardisation [2] and of interference [3], together with their underlying systemic conceptualisations, have long had a significant impact. In a manner analogous to the study of the linguistic acts of bilinguals (Sella, 2001, p. 55), in cross-cultural studies and, subsequently, in translation, these phenomena are linked to the *transfer* (or *calquing*) of discourse elements between the linguistic systems that come into contact in discourse. In the DTS paradigm (Toury, 1995, pp. 267–279), the translator's behaviour is postulated as developing along these two complementary probabilistic laws, which thus seek to describe and explain the translators' behaviour, both linguistic and communicative.

Interference is observable on the level of the translational discourse. On the other hand, growing standardisation and hence its observation are directly related to the variable and unstable character of the textual relations that are ascribed to the source text (ST). Sometimes, these relations are totally ignored by the translator, thus benefiting choices in the target language (TL), which the translator considers to be more stabilised or appropriate in the communicative situation at hand. This view can be said to correspond to the breakage of the texture of the ST, in favour of a more "target-centred" approach during the translation effort. In this sense, a tendency is observed for greater standardisation and limitation of the textual and stylistic

variation in the target text (TT), or at least for the adoption of "standards" which can be readily attributed to the target culture. Linguistic and cultural adaptation is expressed more openly if translation, seen either as a function or as a product, occupies a marginal role in the target system (cf. Munday, 2008, p. 114-115). By analogy, it corresponds to all of the translator's choices, so that his/her text is harmonised with the lexicogrammatical and stylistic conventions that govern corresponding text genres in the TL (Batsalia & Sella, 2010). In short, interference and growing standardisation should be considered as complementary tendencies (and, hence, in Toury's words probabilistic laws) that, more generally, represent the influence of the contact between the two cultural and linguistic systems, or by extension of two cultural and linguistic communities and of special aspects thereof. Within Translation Studies, interference (i.e. the first probabilistic law that has drawn most of the scholars' attention) is often regarded as being mostly negative (cf. Newmark, 1991, pp. 78–85).

The focus of this paper is to present a synchronic analysis of the lexico-semantic and stylistic performance of trainee translators, using a parallel corpus comprised of two original technical documents, in English, and multiple (eighty-two) translations into Greek. The choices of the trainee translators are recorded in semantically and stylistically delineated chunks of text and analysed on their respective lexico-semantic and stylistic levels (Batsalia & Sella, 2010). The translation choices are then codified on two levels of classification: one schematising marked deviations from registrerial norms (in terms of field,

tenor and mode; cf. Halliday, 1978) and thus codifying a scheme of translation "errors" (or, in Newmark's words [1991, p. 78], translationese), based on an initial "error" matrix that has been adapted from the translation quality assessment model of the Institute of Linguists (IoL DiplTrans, 2006); and one collecting instances of lexical interference, syntactic interference, and standardisation. Using these schemata, the findings on the two levels are annotated in GATE, contrastively analysed further as appropriate, and matched against one another.

The probabilistic explanatory synthesis from the above stage is combined with a "traditional" analytic approach, that of the comparative stylistic method of Vinay & Darbelnet (1977). Aiming to further explore the process of textual and linguistic interference and standardisation, which is tentatively schematised in this paper, we also refer to the students' comments in the translation of the second EN original concerning their translation strategies. This combination seems to substantiate Pym's "risk aversion" postulate that "translators will tend to avoid risk by standardising language and/or channelling interference, if and when there are no rewards for them to do otherwise" (Pym, 2008, p. 326).

2. INTERFERENCE AS A TRANSLATIONAL CROSS-CULTURAL PHENOMENON

Based on the model proposed by Gideon Toury, interference is viewed here as a tentative probabilistic law of translational behaviour, as an intrinsic factor in translation (Newmark, 1991,

p. 78). In this sense, interference is inevitable during the translation process, and has many similarities with linguistic interference in bilinguals. Interference is mostly regarded as negative [4], even though it can also be seen as a targeted or positive [5] condition. Evaluating the phenomenon of interference as negative or positive should, on all occasions, relate to "linguistic constants" that are explicitly or implicitly taken as benchmarks, as *tertia comparationis* (TC) [6].

Besides, interference, considered as a systemic phenomenon, is more in particular placed in the field of cross-cultural studies, as suggested by Itamar Even-Zohar (esp. 1990a, 1990b, 2005), and is expressed in-between two linguistic systems or, more exactly, literatures, "when elements or models transferred from one to the other begin to be used in the latter without reference to their origin" (Domínguez Pérez, 2010, p. 8).

Even-Zohar places his so-called principles of interference in three groups [7]. Here, the focus is on the following four axioms:

(1) Interference is not always imminently visible, or traceable, in the (socio)linguistic system of the recipient (or target) culture: the channels of intercultural transfer may be located in its "periphery". The results of interlingual interference are in principle not visible during the initial stages of the phenomenon, while the observations are not always rationalised in the context of the general interaction between the systems, but, on the contrary, may be regarded as random (Principle 1).

To exemplify his postulate, Even-Zohar rightly mentions the "invisibility" of evidence concerning the connection of the repertoire of Greek mythology with Middle Eastern cultures, from which Greek borrowed its early script (Even-Zohar, 2005, p. 57; our emphasis):

That no clear-cut evidence about the Homeric case can be provided is no wonder. The Homeric texts are obviously produced by an already advanced domestic repertoire. Although it can remind us of its external precedents (possibly through the intermediation of Hittite renderings of the classical texts of Mesopotamia, at least as far as regards the contacts with the ancient Ionians and Achaeans), it obviously also has its own particularities which cannot be traced back to any external source.

(2) Cultural asymmetry on the level of the systemic contact creates corresponding relations of asymmetry also with regard to the linguistic and cultural items that are transferred. In the individual areas where the phenomenon can still be observed, the SL culture unilaterally forces the TL culture to adopt the items transferred (Principle 2). It must be noted, however, that such an asymmetry between the two contacting systems must be examined in the light of two prevailing factors: prestige and dominance. This dual descriptive substance of the prevailing factors is, in our view, a substantial one: the "algebraic sum" of these factors determines the extent and the intensity of the

phenomenon of interference in the contacting systems, synchronically and/or diachronically, while the relation between the two should not be considered always and *a priori* unbalanced [8].

An illustrative example of cultural asymmetry is the wellunderstood prevalence of English, as a lingua franca, in international scientific and specialised communication. In this case, dominance (i.e. roughly, the frequency of usage) may not clearly be the result of some sort of prestige (i.e. the high "status" of a sociolinguistic system) (cf. Even-Zohar's "principles" 6 and 7; 2005, pp. 63-67), yet English becomes a source culture through the unavoidable and conspicuous and calquing of lexemes repertoremes into (socio)linguistic systems, in the domains of modern science and technology.

Moreover, in our approach, this asymmetry is catalysed also by factors which are not necessarily related to the relation between the two linguistic systems (or subsystems) in contact (seen either diachronically or synchronically) but which concern the position of translation in the literary polysystem of the TL. It is catalysed also by a plethora of other historical and conjunctural factors [9]. Finally, such an asymmetry must be examined also on the level of the cognitive and performance-oriented factors of the translation act. In other words, "tolerance" of the phenomenon of interference, mainly when such interference is seen as negative, can be explained both by referring to sociolinguistic factors, and by examining the "prestige" of the various linguistic systems: tolerance can be observed when translation takes place

from a language or a culture vested with "prestige", particularly when the TL or the target culture have a "minor" importance (Toury, 1995, p. 278; cf. also Munday, 2008, p. 114).

- (3) According to Even-Zohar's third "principle", interference may not be observable and does not necessarily occur on all levels of the culture and of the language at hand, since it is a stratified phenomenon, typical of certain sociolects, and is first observed at some levels, perhaps marginally, before rising to the sphere of the official or dominant language.
- (4) Finally, based on the fifth "principle", interference is observed in a system that is characterised by the need to assimilate elements which it either lacks or is unable to produce by itself (Even-Zohar, 2005, pp. 62–63):

A 'need' may arise when a new generation feels that the norms governing the system are no longer effective and therefore must be replaced. If the domestic repertoire does not offer any options in this direction, while an accessibly adjacent system seems to possess them, interference will very likely take place".

Hence, interference may be regarded as one of the general tendencies in translation, a phenomenon that merits examining on a high level of abstraction, because it is deemed to take place in any linguistic pair that is involved in translation (Mauranen, 2004, p. 79). Such an abstraction would in our view require

attempting to study interference, and its complementary law of standardisation, not in lieu of, but in addition to the "traditional" models used in analysing the ST–TT relationship on the level of translation choices. Moreover, we will not adopt Newmark's (1991) generalisation to the effect that each and every shift observed in translation is in fact a by-product of interference. If a generalisation is to be made, it should be investigated at a second stage in the analysis, inductively and hermeneutically, and starting from concrete and observable "instances" of the translation act.

Consequently, the empirical examination of the phenomenon of interference, within a language pair, whether on the level of general language or of its sub-languages, requires:

- (1) Access to various types of comparable textual material, i.e. of original documents in the TL and of translations from various SLs (Mauranen, 2004, p. 79). In this sense, the comparable corpora that should be used in such a type of analysis are general or special language texts collected *ad hoc* from open web sources, e.g. either googled or bootstrapped using specialised tools such as BootCaT or SketchEngine.
- (2) A methodology which will to some extent distinguish between interference, as a generalised phenomenon of translation *per se* in a specific domain and/or culture, and as random, not generalised interlingual transfer on the ST–TT level [10], and which, moreover, will allow for a feedback-oriented and cyclic course for controlling the findings and for drawing

possible conclusions. Mauranen (2004, p. 72) argues that a line must be drawn, on the basis of sound textual data, between translation errors (or negative transfers, or [negative] interferences) and transfers that are in fact indistinguishable from normal (acceptable) target language. However, this perception of acceptability is neither static, nor can it be clearly distinguished from negative transfers (or "translation errors") which may have occurred sometime in the past, in the process of the systemic interaction between the two linguistic and cultural entities (an interaction where translation does indeed play a critical, yet mostly "invisible" role). At the time of observation, such transfers are regarded as "acceptable" repertoremes in the TL. Indeed, Toury (1995, p. 278) suggests that the "tolerance of interference and hence the endurance of its manifestations tend to increase when translation is carried out from a 'major' or highly prestigious language/culture, especially if the target language/culture is 'minor', 'weak' in any other sense". Therefore, we argue that the acceptability of a SL texteme does not necessarily exclude interference but, in some cases, quite the contrary: that interference, or negative transfer, within a specific context of situation (and in the translation process per se) for a given textual pair can in fact form the basis for the creation of repertoremes, or in other words of acceptable textual choices, in the recipient sociolinguistic and cultural system. This is schematised in Fig. 2 below.

(3) A didactic and a methodologically sound scientific aim, which includes, in particular, the capability of restricting

observation and analysis to specific text genres, with the aim being to systematise the findings in the teaching of translation.

3. GROWING STANDARDISATION – A METHODOLOGICAL APPROACH

Growing standardisation is seen in this context as the tendency to break the texture of the original text to the benefit of a more "target-centred" approach of the translation process. In other words, it can be considered as a limitation of the stylistic choices of the TT, or as the adoption of standards that are openly and obviously ascribed to the target culture. In non-literary translation, standardisation can be readily described as a convergence towards the initial norms of the TL (or its sublanguage at hand), which, as will be shown below, may be partly ascribed to pre-existing interference. Such a convergence may be attributed to a need for the "safety" afforded by the lexicogrammatical fixations in text genres which, by nature, impose limits on the translator's creativity.

The probabilistic law of (growing) standardisation is an openended approach encompassing various factors that determine the profile of the translation act: when translations are compared to (assumed) originals, the former are found to be semantically and syntactically simpler and more appropriated to the average reader's expectations, to contain less semantic ambiguities, etc. In a sense, it could be argued that the notion of growing standardisation might encompass also the so-called universals of

translation (*sensu* Baker, 1993). However, as with interference, this law, too, is observable on a higher level of abstraction and can at the same time be identified with regard to specific language pairs and sublanguages. Finally, and to the extent that this would be hermeneutically possible, the probabilistic approach to standardisation might clarify the issue of adaptation in translation, at least to some extent (Toury, 1995, p. 270; cf. Pym, 2008, p. 316).

4. TOURY'S LAWS AND THEIR SCHEMATISATION AS TENTATIVE, PROBABILISTIC EXPLANATIONS OF TRANSLATION PROPER

In a nutshell, Toury's probabilistic laws of the translation activity cannot be considered as being, stricto sensu, experimentally testable theories in their full potential. Pym (2008, p. 315) posits that Toury's probabilistic explanations, "far from being laws that have to be obeyed in order to escape punishment [...], are ideas to be pursued, played with, experimented upon, and thereby extended into an open-ended beyond" (our emphasis). Also, as has been rightly argued, "no discipline, no social science, nor indeed any field of science, can manage without some kind of preliminary assumptions (which are also a form of understanding), without the interpretation of both concepts and data, and hence without hermeneutic explanation of some kind" (Chesterman, 2008, p. 364). If our effort is towards causality and generalisation, then these "laws" seem apt to provide a scenario and some clues towards an explanatory theory proper: in Popper's paradigm of scientific knowledge, such a *theory* is an approximation of a truth on some aspect of the world surrounding us.

The tentative schematisation of how these laws function in real-world translation and in cross-cultural linguistic contact scenarios can also provide an outline of the research methodology that may be pursued, and of the tools that may be utilised in this direction (cf. Saridakis, 2010, pp. 215–217). In

Chesterman's (2008, p. 370) words, "a hermeneutic understanding may also allow probabilistic anticipation (if not precise prediction), and hence reduce surprise. Formulating a generalization, then, is one way of at least beginning to explain".

In the "sociolect" of translation, it would be therefore useful to schematise the inter-relation and the complementarity of these "laws", as is attempted in this paper. In the SFL terminology, the tendencies and paths schematised below correspond to the mechanisms of *logogenesis* (Halliday & Matthiessen, 1999, p. 18) and relate to the (supposedly "global") phenomena of interference and standardisation, as discussed above. Our schema extends Toury's model of initial norm on the preservation of the SL norm, or instead the translator's option for selecting the TT norm (cf. Munday, 2008, p. 113):

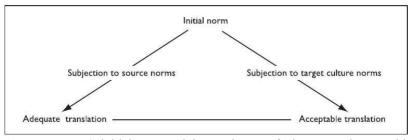


Fig. 1. Toury's initial norm and the continuum of adequate and acceptable translation (Munday, 2008, p. 113)

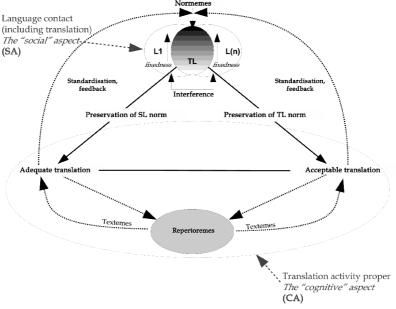


Fig. 2. Normemes as initial norm, Toury's continuum between adequate and acceptable translation and the systemics of the probabilistic laws of interference and standardisation

Interference on the level of the initial norm, as shown in Fig. 2, can be further analysed as follows (Saridakis, 2010, p. 42), to depict the systemic functional interaction, intra- and cross-linguistically, on the level of general languages and their sublanguages:

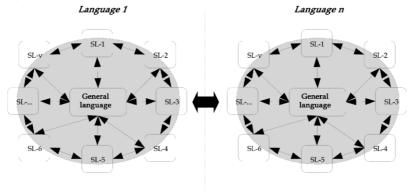


Fig. 3. Systemic functional interaction, intra- and cross-linguistically, as the source of the initial norm (SL = sublanguage)

In Fig. 2, the initial TL norm is cross-linguistic and is thus affected by cross-linguistic interference which results from (i) the already existing contact of the TL at hand with other linguistic systems (L1–Ln), and (ii) previous translations in the specific domain and/or genre. Interference can exist even outside the translation process, through the systemic contact of cultures and languages, e.g. in scientific journals and conferences or other contexts of specialised communication that are not necessarily mediated by translation or interpreting. Interference therefore creates intra- and cross- linguistic normemes in all contacting systems, both distinct and overlapping (e.g. in the case of a *lingua franca*), as is shown in Figs. 2 and 3. In a nutshell, this norm is a pool of "socially preconstructed" normemes that are embedded in the linguistic system. Normemes are "common places" of expression, i.e. elements with a variable degree of fixedness in the linguistic

system (*sensu* Halliday, 1978). Such fixedness can be observable in specific fields or, more generally, in the sublanguages at hand. In sum, the *norm* is deemed to represent the "social" aspect (SA) of the socio-cognitive entity of the translation effort.

The temporary repertoire which the translation act *per se* creates and uses ("repertoremes") is the source of the translator's lexis. chunks textemes: the text or meaningful lexicogrammatical units, which he/she considers to be appropriate for the instantiation at hand, within a given communicative context. Beyond the ideational level, such textemes are aimed at fulfilling also the textual and the interpersonal metafunctions of translational (or translationmediated) discourse (cf. Halliday, 1978, pp. 221–223; Hatim, 1997, pp. 25 ff). In all, the textemes chosen by the translator, which in a given TT can combine both "adequate" and "acceptable" translations, represent the translator's adherence to a pre-supposed or anticipated registerial integrity of the text he/she produces.

On the cognitive end of the cline (CA), the repertoremes included in an instantiation (i.e. a translated text) can include the products of both probabilistic laws simultaneously: of interference, to the extent that the "adequate translation" path is chosen by the translator for specific chunks of a given text, and of standardisation, in case the translator opts for more "acceptable" (or TL-oriented) renditions of certain ST units. Such an amalgamation of translation paths, both deliberately and unconsciously opted for, can be considered typical of non-

literary translation, where translational choices are made on the basis of a multitude of factors affecting the translation process. The most important of these factors is perhaps the specialised translator's perception of risk (Pym, 2012, pp. 107–108; see below).

In turn, new textemes may exercise a standardising pressure on the recipient cultural and linguistic system, by influencing the lexicogrammatical norm(s) of discourse, depending on the prestige and dominance of the translations produced vis-à-vis the genres at hand. However, such textemes can remain only as inputs to translation-mediated communication in "closed text-production loops", e.g. within a corporate environment where translation is involved, and never influence the target culture.

An appropriate yet precarious example of this is the influence exercised on and by the translation process as a result of globalisation (Pym, 2006, p. 746):

When communication regularly crosses the borders of languages and cultures, it tends to wash away those same borders. Thus were the local patois and fiefdoms swamped by the vernaculars and nation states. Thus, also, are the nation states and their languages transformed into parts of greater regions. And so, too, have the regions formed into intercontinental markets with a growing lingua franca. The end of that process would be communication on a truly

planetary scale. Prior to that point, however, globalization is not global; it is a convenient misnomer for an incomplete development.

Hence, and still on a theoretical line of thought, but as will also be shown with regard to the findings of our experiment, it is postulated that:

- (a) On a sociolinguistic level, interference and (growing) standardisation are not contradictory or mutually exclusive but, on the contrary, complementary and can co-exist in the same textual instantiation. Indeed, and perhaps departing from what Pym (2008, p. 321) suggests [11], such a complementarity can arguably exist even on the level of the linguistic variables of a target text.
- (b) Interference can be a source of the translation-mediated standardisation process: this is done through the incorporation in a TT of "foreign(-ising)" textemes, or in other words of textemes that, at a specific time and in a given context, deviate from the registerial norm of the TL. Translation is a norm-producing factor and as such, these textemes influence the recipient cultural and linguistic system by becoming translation standards and ending up in the pool of TL normemes.

To summarise, the two probabilistic laws are deemed to be complementary and inter-dependent, as well as traceable on all three metafunctions of language (field, tenor, mode), synchronically and diachronically, and on all three perceptions of the translation act: product, process and function. Any

empirical approach in this context that aims to describe some aspect of the act of translation must very clearly define its focal points, its methodology, and its textual evidence and, of course, "relate linguistic to extra-linguistic variables in a probabilistic manner" (Pym, 2008, p. 320).

5. RISK AVERSION AS ONE POSSIBLE OVERARCHING TENDENCY

In a process-oriented approach of linguistic and cultural interference, such as the one reported in this paper, it is always opportune to be able to somehow establish what has influenced the translator's decisions. Pym (2008, p. 324) argues that the translator resorts to "whatever seems authoritative". On most occasions, this generalisation seems in fact to be true, at least in the case of the non-professional translator or even the professional translator working on the relatively infertile – in terms of stylistic creativity and textual freedom - field of technical translation [12]. In other words, the translator's single underlying stratagem to reduce the risk involved in every communicative act, by assuming the role of "self-sacrificing mediator" (Pym, 2008, p. 323), can under certain circumstances accommodate both options (interference and standardisation) under a single umbrella. This is what has been termed by Pym as "risk-aversion", and for which he claims the status, not of a universal or law, but of a simple underlying cause that at least merits some intellectual attention (Pym, 2008, p. 313). If there is one and only one overarching tendency in the translation process, that of translators to reduce uncertainty when exposed

to it, professional translation and its dependence on this presumably overarching tendency have not been studied extensively (Pym, 2012, pp. 107–108, our emphasis):

What do we really know about the agency of translators, or the way they think when they work? Very little: for the 333,000 or so 'professional translators and interpreters in the world', we can find empirical process studies on fewer than 400 subjects. Beyond that, we have a few 'tendencies' abstracted from various corpora of translations, sometimes dressed up as 'universals proposed of translation' or precariously synthesized 'laws into of translational behaviour' (Toury, 1995). Without going into those studies [...] all of the observed tendencies indicate that experienced *translators* tend to be risk-averse. Confronted by a juicy translation problem, translators tend to play it safe: they omit, generalise, explicitate, simplify, normalize, and rationalise.

Still then, even when working with the texts of non-professional translators, as in the experiment reported in this paper, an empirical study must properly delineate the perception of the registerial norms in the sub-language and in the thematic fields examined, just as it must also take into account the influence of semantico-syntactic prevalences and habits on the choices of the subjects. In other words, such an empirical study is a critical

investigation of the social and cognitive sub-processes of translating.

6. EXPERIMENTING WITH TRAINEE TRANSLATORS, IN THE EN–EL LANGUAGE PAIR

Our aim is thus to investigate the influence of the probabilistic laws of translational behaviour of trainee translators, by combining a process- and a product-oriented hermeneutic approach, and by correlating the findings with remarks made by the subjects themselves introspectively. These remarks concern the translation process, and hence the subjects' perception of what would be adequate and acceptable in a given translation scenario. The study is synchronic, and, to this end, we have used a learner corpus comprising two English scientific/technical texts (ST A: 417 words; ST B: 901 words), and eighty-two (82) Greek TTs (59,073 words), i.e. 41 translations for each ST, by students of professional translation at the Ionian University. The first text was a written exam of the trainees. The second text was a dissertation, and students were free to use all available means. in an ample deadline. The translation had to be accompanied by the translators' introspection concerning functional aspects of the translation process [13], with particular focus on their lexical and stylistic choices.

The students' choices were recorded and annotated, by textual units of meaning, on the lexico-semantic and stylistic level of

analysis (Batsalia & Sella, 2010). The *ex post facto* codification and explanation of the translators' choices in the TTs thus seek to investigate how the subjects perceive the function of the TT and to explicate their process of translating as far as is possible. This line of reasoning enables us to examine the phenomena examined here (translation errors *vs.* interference on the cognitive level as defined above, and standardisation) in the light of the subjects' assumptions about the function of the TT and the risk involved. The TTs were annotated using GATE [14], by developing a customised typological and classification schema, on two subsequent levels:

- (a) That of "translation errors", by relying on a long-tested evaluation model which was developed along the guidelines for the professional translation diploma of UK's IoL (DiplTrans, 2006; see Kostopoulou & Saridakis, 2011, p. 232). The model was systematised further, in terms of register, and on the basis of Halliday's metafunctions of language (field, tenor, mode) (see also Hatim, 1997, pp. 25 ff).
- (b) That of the lexico-semantic and syntactic interference, on the one hand, and of standardisation, on the other. The data extracted from GATE was statistically processed in LibreOffice Calc.

6.1. Initial codification level: Translation errors

As mentioned above, Mauranen (2004, p. 72) considers instances of negative transfer to represent (or to be representable as) translation errors. In our scenario, and still working on the

cognitive end of the cline (CA), we have considered such instances to encompass (but not to coincide with) instances of interference, on the lexico-semantic and syntactic levels. The indices (or "error types") we have used to annotate the textemes are described in Table 1. It must be stressed that these are all open categories, admittedly subjective to some extent, as is also the case with most linguistic classification and annotation scenarios.

It is natural that such an approach may be deemed as tacitly involving a somewhat prescriptive approach, or at least as referring to an idealistic "third code" (Frawley, 1984). It must also be stressed, however, that, both at the start of our research, and after the analysis of the empirical data, significant overlaps are observable between the classification categories [15] and that, moreover, the level of generalisation is not similar in all our categories. The overlap can be observed on the level of the hermeneutic and causative examination of the research findings, and reflects, in the final analysis, the hermeneutic and descriptive diversity in the field of Translation Studies, which more often than not is obvious even within a single paradigm or scholastic tradition. Also, this overlap reflects the relativity and the subjectivity of the explanation of the phenomena examined, by textual unit or chunk, as well as the dependence of such explanations on the entire textual performance. In short, this can superficial mismatch in the entail annotation of morphologically identical discourse chunks across the texts analysed. Finally, the following can be said with regard to the differentiation of the level of generalisation across categories:

- (a) on the one hand, this differentiation reflects the relatively low degree of maturity of the descriptive-explanatory tool, particularly with regard to the categories of interference and of standardisation (see Table 2);
- (b) on the other hand, it expresses our effort these categories to remain open to descriptive commentary: the aim is to mitigate the risk of ignoring certain phenomena or of facing hermeneutic mistakes.

Category	Description
DEC	Denotes a serious deficit in decoding the sentential or textual meaning of the ST. It is often educed that the deficit is due to erroneous decoding of the morphosyntactic structure of the ST in the discourse segment (chunk) examined. When this applies, the chunk is annotated as <gr+dec>. Correspondingly, when the deficit is considered or educed to be due to erroneous decoding of the signified of a ST lexeme, it is annotated as <term+dec>. In the latter case, there is a borderline and often difficult distinction from instances marked as <term+enc>. However, the didactic, and hence formative approach is quite different, given that the deficit arises at a different stage of the translation process, and requires clarification.</term+enc></term+dec></gr+dec>
ENC	Denotes a serious deficit in the utterance of the sentential or textual meaning in the chunk examined, pinpointed on the level of reformulation in the TL. The shift is often revealed on the semantic and morphosyntactic levels, and cannot be attributed to deficient decoding of the text segment in the ST (DEC). Essentially, this category is a superset of the <reg> category, including also the metafunction of field, i.e. the ideational level of the texteme, in Hallidayan terms of discourse semantics. This category can be combined causally or cumulatively with the <term> and/or <gr> categories.</gr></term></reg>

GR	Denotes syntactic structures of the ST or TT, having a minor impact
011	on the translator's performance.
GR+DEC	See <dec></dec>
GR+ENC	See <enc></enc>
GR+REG	See <reg></reg>
REG	Denotes incompatibility of discourse register between ST and TT, particularly in terms of tenor (Halliday, 1978, p. 62), i.e. on the level of the interpersonal and textual functions. In short, this category corresponds to an utterance of translation discourse equalling the expectancy of the assumed primary readership (cf. Pym, 1992) [16]. Depending on the assumed cause (or the significance) of the incompatibility, this category can be combined with <gr> and <term> categories. It is further combined with category <enc> , to denote the unsuccessful balance, on the level of the TL utterance, between field, tenor and mode (Hatim & Mason, 1990, pp. 64–65; cf. Saridakis, 2010, pp. 72–74).</enc></term></gr>
TERM	Denotes inadequate or erroneous use of a lexeme, with reference to the textual meaning of either the ST or the TT and in relation to either the <i>signified</i> or the <i>signifier</i> . This category covers mainly issues of terminology and terminological/lexical equivalence and can be related causally to <gr> (i.e. denoting semantico-syntactic shift); <reg> (i.e. when lexical choice impacts discourse register); <dec> (i.e. when the deficient decoding of the lexeme examined in the SL influences the decoding of the <i>extended unit of meaning</i> (s. Sinclair, 1996; cf. Zethsen, 2008); <enc> (i.e. when the deficient codification of the lexeme alters the sentential or textual meaning in the TT).</enc></dec></reg></gr>
TERM+E	See <term>.</term>
NC	
TERM+R EG	See <term>.</term>

Table 1. Overview of translation errors (first annotation layer)

6.2. Second-level codification: lexical and syntactic interference, norm and standardisation

The linguistic (textual) material is then annotated with regard to the discourse chunks which, in the investigator's opinion, can be considered as instances of the said probabilistic laws, on the basis of:

- (a) the theoretical delineation described above in this paper; and
- (b) the perception and description of the translation process, as well as the evaluation of the textual function made by the trainee translators, both on the level of the text (ST_B), and with reference to some of the individual lexical and structural choices they make.

It is stressed that, in the pilot corpus of our research, we have combined the comments of the translators on the levels of the textual and interpersonal functions of the text (ST_B), i.e. their comments on the process, with their attested choices (i.e. the product), so as to codify and to provide a causal explanation of the findings, in relation to their choices also in ST_A, for which no comments had been required from the trainees.

STAND	Indication of probable standardisation, with reference to an
	extensive ad hoc corpus, or by selectively resorting to the
	comparable corpus of the documentation sources used in the
	translation environment and to external general reference
	sources (e.g. the EUR-LEX corpus and queries in online web
	search platforms). It clearly relates to more extended textual
	units and can refer to the entire texture of the TT.
SYNTINT	Indication of probable syntactic interference.
LEXINT	Indication of lexical/semantic interference.

Table 2. Overview of the classification of standardisation and of lexical and syntactic interference (second annotation layer)

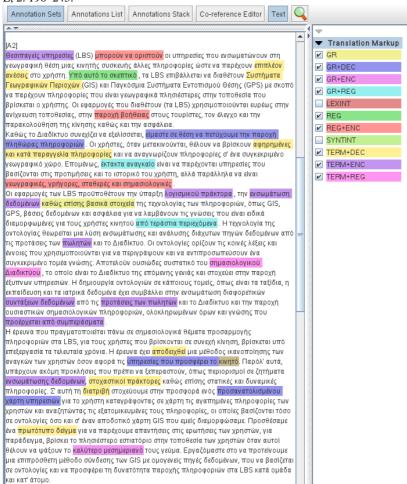


Fig. 4. First-level text annotation (A2) in GATE

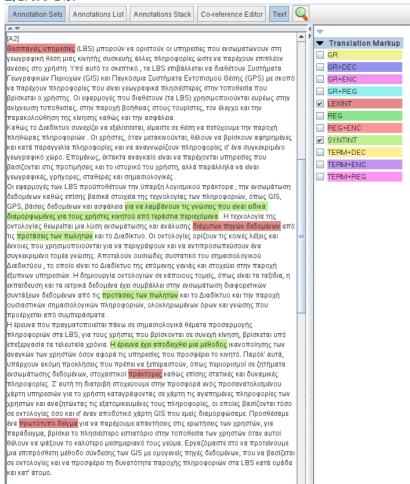


Fig. 5. Second-level text annotation (A2) in GATE

7. FINDINGS, TRANSLATIONS AND TRANSLATORS' COMMENTS

7.1. Standardising as a perceived function

The research corpus, despite its relatively small size and despite the lack of an extensive reference corpus, exhibits instances where adaptation, mainly on the stylistic level, towards utterances that are considered more "neutral" and, hence, "acceptable", is a strategy opted for by the trainee translators. In the examples below, the designations used are as follows: C = Comment; A or B = text A or text B; numeral = ID of each translator, serially numbered; S = Syntactic interference; L = Lexical interference.

(1) [CB5]

- [...] the translator is obliged, inter alia, to subject his/her text to the values of the target language and by extension of the recipient culture [...].
- [...] despite the scarcity of options permitted by technical language, it is the author's aim to attribute directness to the text using informal discourse (informal expressions) and this was maintained in the target text as well to the maximum possible extent [...]

(2) [B5]

Original: For instance, this chapter introduces you to a number of utilities – some of them created by one of the authors, Jan – that let you test and debug a regular expression <u>before you bury</u> it in code where errors are harder to find.

Translation: Για παράδειγμα, το κεφάλαιο αυτό σας παρουσιάζει μια σειρά από βοηθητικά προγράμματα – κάποια από τα οποία δημιούργησε ένας από τους συγγραφείς, ο Jan Goyvartes- τα οποία σας επιτρέπουν να ελέγζετε και να αποσφαλματώσετε μια κανονική έκφραση πριν την εισάγετε στον κώδικά σας, όπου τα σφάλματα εντοπίζονται δυσκολότερα **Back-translation**: For instance, this chapter presents a series of utility programmes – some of them created by one of the authors, Jan Goyvartes – that let you control and debug a regular expression before you introduce it into your code, where errors are harder to find

In (2) above, the normalisation tendency is confirmed by the existence of the syntagmatic and collocational relation of the lexemes {[εισάγω], [κώδικας]} (introduce, code) in a general comparable corpus (the Web). In this sense, the shift observed here corresponds to a "play-safe" transfer device, as selected by the translator, in other words to the non-calquing in the TT of the chunk {before you bury it in code} of the ST, which is creative, both lexically and stylistically. In other words, and perhaps in a more analytic perspective, the above sample could be considered as corresponding to the so-called normalisation

(Vanderauwera 1985) or conservatism phenomenon (Olohan, 2004, pp. 96–99; cf. Saridakis, 2010, pp. 193–194). The translator justifies her choice, in general terms of functional translation theory, considering the lexical and stylistic shift to be necessary.

7.2. Convergence towards "socially pertinent" norms

Also, regardless of the degree of their success and the theoretical model to which they resort, trainee translators recognise the need to converge towards lexicogrammatical options that are "socially acceptable" in the TL, based on the assumed function of the text in the recipient culture.

(3) [CB4]

[...] exactly because the aim of the text is to explain in detail and in the simplest possible steps every concept or action that it analyses, this influences also the frugality in the expression of the text, as well as the use of simple vocabulary, something that has to be maintained also in the TT [...]

(4) [CB3]

The rendition of the text <u>must serve the aim selected it by the author</u>. Thus, second-person plural has been retained, as this is important in order to achieve directness and comprehensibility by the text's recipient. <u>Moreover, the style of the text has been frugal</u> and with a simple syntax, <u>so as to best serve the text's</u>

<u>informative function of the text</u> and contribute to the gradual familiarisation of the reader with the text analysed.

7.3. Literal translations, expressive and cultural calquing as interference

Generally speaking, and with reference to the model of Vinay & Darbelnet (1958 [1977]), the most significant occurrences of the phenomenon of interference can be classified as *loans*, as *literal translations*, and as *expressive* and *structural calques*.

In (5) and (6), particularly, the translators make an obvious effort to explicate the semantic content of the ST, as they have perceived it. In these particular examples, it can be said that the selection of the expressive calque (i.e. of non-natural renditions) is deliberate, because the translators try to transfer the pragmatic load of the text chunk into the TL by incorporating it in the contextual and/or situational environment (Vinay & Darbelnet, 1958 [1977], p. 9).

(5)[SA]

Original: The research has been demonstrated as a method [...] **Translations:**

[A1] Η έρευνα παρουσιάζεται ως μια μέθοδος [the research is presented as a method]

[A2] Η έρευνα έχει αποδειχθεί μια μέθοδος [the research has been proven to be a method]

[A3] Η έρευνα αποδείχτηκε ως μια μέθοδος [the research was proven to be a method]

(6) [SB], [LB]

Original: You can use them to verify whether input fits into the text pattern, to find text that matches the pattern within a larger body of text [...] and to shoot yourself in the foot.

Translations:

[B1] Μπορείς να το χρησιμοποιήσεις για να επαληθεύσεις το κατά πόσον η εισαγωγή δεδομένων ταιριάζει στο κείμενουπόδειγμα, για να βρεις κείμενα που να ταιριάζουν στο κείμενουπόδειγμα σε ένα μεγαλύτερο σώμα κειμένου [—] ή ακόμη και για να πυροβολήσεις το πόδι σου! [to shoot your foot]

[B5] Μπορείτε να χρησιμοποιήσετε τις κανονικές εκφράσεις για να επαληθεύσετε αν μια εισαγωγή ταιριάζει στο πρότυπο κειμένου, να βρείτε κείμενο που να ταιριάζει στο πρότυπο εντός ενός μεγαλύτερου σώματος κειμένου [...] αλλά και να κάνετε πειραματισμούς με ακολουθίες κειμένου όπως της «shoot yourself in the foot» [experiment using text strings such as the string "shoot yourself in the foot"].

(7) [SB]

Original: [...] before you start or when you get frustrated by your use of regular expressions and want to bolster your understanding

Translation: [B2] [...] πριν αρχίσετε ή όταν θα έχετε μπερδευτεί με τον τρόπο που χρησιμοποιείτε τις κανονικές εκφράσεις και θα θέλετε να τις διασαφηνίσετε

Back-translation: [...] before you begin or when you are confused with the way you use regular expressions and you want to explicate them

(8) [SB]

Original: If your job involves manipulating or extracting text on a computer, a firm grasp of regular expressions <u>will save you</u> plenty of overtime.

Translations, back-translations:

[B3] Εάν η εργασία σας συμπεριλαμβάνει επεξεργασία ή εξαγωγή κειμένου σε υπολογιστή, μια βαθιά κατανόηση των κανονικών εκφράσεων θα σας γλιτώσει από πολλές υπερωρίες [If your work involves processing or extracting text on a computer, a thorough understanding of regular expressions will save you plenty of overtime]

[B4] Εάν η εργασία σας συμπεριλαμβάνει την επεξεργασία ή εξαγωγή κειμένων σε έναν υπολογιστή, μια βαθιά κατανόηση και αφομοίωση των κανονικών εκφράσεων θα σας γλιτώσει από πολλές υπερωρίες [If your work involves processing or extracting text on a computer, a thorough understanding and assimilation of regular expressions will save you plenty of overtime]

7.4. Introspection: targeted laws and risk avoidance

Referring now to the introspective activities by the trainee translators, it can be shown that on many occasions, lexicosemantic and syntactic interference as well as standardisation can both co-exist in the same instantiation and be considered deliberate methods for avoiding the risk of "non-acceptability" of the TT renditions. Our experiment with trainee translators thus seems to openly justify Pym's "risk aversion" postulate as

the underlying principle that dictates the translation options and directs his/her decisions.

(9) [CB39]

In addition to being informative, the text can also be considered as vocative, because the wording of the author is such, as to urge the reader to read the book. To achieve this purpose also in the target language, we preserved the use of the second person plural also in the target text.

(10) [CB37]

As pertains to the translation choices, the main aim was to transfer the meaning from the originating language, to the target language, by preserving the simple style of the original extract, which contributes also to the reader's understanding of the meaning of the book. Moreover, during our translation, we have clearly preserved elements, such as the specialised lexicon (given that the public that is interested in being informed on the subject-matter already has some knowledge about it) and the syntax of the text we were asked to translate.

(11) [CB36]

<u>Terminology</u>, too, <u>must in all cases be transferred intact to the target language and must not be simplified</u>, because we should not forget that the character of our text is technical and it constitutes the introduction of a book, the main theme of which is very specialised, and this relates to regular expressions and their uses.

(12) [CB35]

The translation result <u>must be a reader-friendly introduction of a popularised technical text.</u> Its <u>language must be simple, comprehensible and pleasant,</u> with the main aim being to attract candidate buyers, who are both programmers and average computer users. Particular attention must be paid to the various IT and programming terms, <u>because any errors could cause confusion and slips.</u>

(13) [CB34]

Some of my translation choices were influenced more intensely by the <u>obvious tendency of the source text to persuade and to attract readership</u>. The above processes (of persuasion and approach) rely to a large extent on the <u>simple style and the directness of the discourse</u>, which are the characteristics of the text examined.

(14) [CB33]

In relation to our options during the translation process, these are restricted by distinct contexts: we respect the style and the linguistic features of the text (syntax, specialised lexicon) and bring about changes, where such changes are imposed by the target language. Our priority, and the communicative aim of such texts, is the transfer of all the information in such a way as to ensure that the readers will use it rightly and effectively. In other words, the readers should put as little effort as possible to understand the information and should not be burdened additionally by it.

8. CONCLUSIONS AND PRACTICAL AIMS

Based on our experimental research, and with reference to its theoretical foundation, the following summary can be offered here:

- 1. Many of the translation options of the trainee translators can be considered in the light of the probabilistic laws of interference and of (growing) standardisation. This is also consistent with the correlations made by the trainee translators between their options and the situational context of the target text as well as, at certain points, with the correlation between the instances of the probabilistic laws with a more conventional approach to the typology of translation errors.
- 2. Consequently, the probabilistic laws of interference and of (growing) standardisation can be considered an additional, yet non-exclusive, level of explanation of translation performance: it involves the dynamic synchrony and the discoursal sociology and thus combines the traditional, contrastive perception of equivalence with the social and cultural context within which a translation is performed (Toury, 1995, p. 275).
- 3. There is a clear need to refine the hitherto "general" categories in which the instances of the probabilistic laws of interference

and of (growing) standardisation have been classified. We might then gradually overcome the fuzziness of the hermeneutic context, and would perhaps be able to formulate more detailed, descriptive conclusions regarding the so-called translational behaviour. Based on our findings and remarks so far, this behaviour seems to relate largely to the translator's "risk aversion" strategy.

Such a refinement and the consequent formulation of conclusions would enable us to integrate the study of the probabilistic laws of interference and of growing standardisation in the didactic approach to translation which, by its very nature, is prescriptive.

4. The causes of the probabilistic laws examined should also be investigated more thoroughly. The correlation with the cognitive aspects of translation performance, by superimposing the instances of their occurrence on the layer of translation errors, brings to the surface only one aspect of the phenomenon. Translation options must be compared with corresponding options fulfilling "equal" targeted functions, as attested in extended textual data of natural discourse in the TL and in the genres examined.

Moreover, these options should be contrasted to corresponding options, taken from translated texts, in order to aim at their binary classification, between deliberate and non-deliberate ones. Finally, the regularities found should be examined also in

the context of targeted convergence, that is, of growing standardisation.

- 5. A practical future aim is to expand the research material and its genres, so as to systematise its resources of exploitation, and to contrast it to an extensive, *ad hoc*, reference corpus. This would allow for an operational correlation of the findings with the so-called universals of translation (explicitation, normalisation, neutralisation, etc.), in a realistic context of examination of the translation performance, in the specific text genres and in the language pairs covered by the research corpus.
- 6. Last but not least, another practical aim would be to expand and implement this research methodology also with regard to the translation performance and behaviour of professional translators of specialised texts.

Notes

(1) This paper is an expanded and significantly revised version of my 2012 paper "Η παρεμβολή και η τυποποίηση στη μετάφραση ειδικών επιστημονικών κειμένων: προς ένα πιθανολογικό περιγραφικό-ερμηνευτικό μοντέλο της μεταφραστικής επιτέλεσης στα ειδικά κείμενα" [Interference and standardisation in the translation of specialised scientific texts: towards a probabilistic descriptive-hermeneutic model of specialised translation performance]. In Z. Gavriilidou, A. Efthymiou, E. Thomadaki & P. Kambakis-Vougiouklis (Eds). Selected papers of the 10th International Conference of Greek Linguistics (pp. 1110-1127). Komotini: Democritus University of Thrace.

- (2) Toury (1995, p. 268) formulates the law of growing standardisation as follows: "in translation, textual relations obtaining in the original are often modified, sometimes to the point of being totally ignored, in favour of [more] habitual options offered by a target repertoire".
- (3) In its most general formulation, the law of interference corresponds to the tendency "phenomena pertaining to the makeup of the source text [...] to be transferred to the target text" (Toury, 1995, p. 275).
- (4) *Negative transfer* is manifested in the form of "deviations from normal, codified practices of the target system" (Toury, 1995, p. 275).
- (5) In other words, a *positive transfer* is observed when there is "an increase in the frequency of features which do exist in the target system and can be used anyway" (Toury, 1995, p. 275).
- (6) The concept of *tertium comparationis* has been used extensively in Translation Studies, particularly with regard to equivalence. For a detailed description of the concept, see, e.g.: Chesterman, 2008, p. 29–40; Connor & Moreno, 2005.
- (7) Even-Zohar's "principles" are distinguished in three groups and are: (A) General: A1. Interference is always imminent; A2. Interference is mainly unilateral; A3. Interference may be limited to certain domains. (B) Operational, in relation to the emergence and occurrence of interference: B4. Sooner or later, cross-cultural contact will create interference, if there is no resistance; B5. Interference is observed in systems that need to import elements in their repertoires; B6. The prestige of a culture can create interference; B7. The dominance of a culture creates interference. (C) Process-driven: C8. Interference can be observed only in a certain part of the target culture; and C9. An appropriated repertoire does not necessarily preserve the functions of the source culture (Even-Zohar, 2005).

- (8) Given that the relation between the linguistic and cultural systems that are contacted cannot be considered stable and diachronic on all levels and types of communication, we should accept that the systems and cultures with a "minor" importance tend to "create and accept texts with distinct hybrid features" (Zauberga, 2001, p. 269).
- (9) "An example of the possible law governing the relations between the weak-strong opposition and the existence vs. non-existence of a repertoire may be the following: if a target polysystem is weak vis-à-vis a source polysystem, then non-existent functions may be domesticated, thus making a higher relatability (between Target and Source) possible on the condition that the position of the translated system within the target polysystem is central" (Even–Zohar, 1990a, p. 78).
- (10) The question of what distinguishes interference from transfer is indeed not an easy one. "Positive' transfer or just plain 'transfer' is more acceptable than 'negative' transfer or interference. [...] [Transfer and interference] are sometimes used interchangeably, sometimes as polar opposites [...] The distinction appears fuzzy, even arbitrary: if we have difficulty telling the positive from non-transfer, how do we distinguish positive from negative?" (Mauranen, 2004, pp. 67, 71).
- (11) "The main point is that, thanks to these probabilistic formulations, it becomes quite reasonable to have contradictory tendencies on the level of linguistic variables. If social conditions A apply, then we might expect more standardisation. If conditions B are in evidence, expect interference" (Pym, 2008, p. 321). Cf. also his concomitant argument (Pym, 2008, p. 323; my emphasis): "The little that we know about how translators work with translation memories [...] suggests that the technology reinforces some of the standardizing tendencies but reduces others. *Greater consistency at the level of terminology and*

phraseology fits in with everything we have placed under the rubric of 'standardization' (that is why companies use the memories). At the same time, however, the segmentation patterns (the textual "make-up" indeed) tend to come straight from the source text as parsed by the software. When we compare translations done with memories to those done without, the ones done with the memory display a significantly higher level of syntactic interference [...] Toury's two laws are both in evidence, at the same time, on different levels".

- (12) Pym (2008, p. 311) posits that the non-creative context is one characterised by "the relative absence of rewards for translators who take risks".
- (13) The exact question posed to trainee translators was: "Please add your comment about the text from a typological point of view, to the extent that the text type and genre have had an influence on your effort as translator". The level of the students (5th semester in a specialised translation course, in an academic setting) allows us to safely assume that their cognitive background is adequate to address the challenges of the texts, both in terms of the field(s) covered by the STs and with regard to the level of their previous knowledge of translation theory and methodology.
- (14) .
- (15) A more extensive study, perhaps using additional human and corpus resources, would address this overlap through interannotator agreement, see, e.g.: http://goo.gl/nrGi3d.
- (16) "The use of genres is normally linked to clearly defined types of social situations. A given genre may never appear in one type of communicative situation, rarely in another, frequently in still another, and always in some. From the point of view of the actor's knowledge there may be situations in which he is forced to use a particular communicative genre, others in which the matter is optional and he is merely likely to do so, and still others

in which he will rigorously avoid its us" (Luckmann, 1989, p. 11; qt. in Günthner & Luckmann, 2001, p. 61).

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