

When a Clue is not a Clue.

A corpus-driven study of explicit vs. implicit signalling of sentence links in popular economics translation¹

GIUSEPPE PALUMBO - MARIA TERESA MUSACCHIO

Università di Trieste - Università di Padova

ABSTRACT

Lo studio si propone di analizzare la traduzione di una particolare categoria di elementi coesivi, i connettori interfrasali, in un corpus di articoli di argomento economico tratti da quotidiani e riviste specializzate tradotti dall'inglese in italiano. Lo studio mette in rapporto i risultati sulla frequenza dei connettori con quelli derivanti dall'analisi di un corpus comparabile di articoli scritti originariamente in italiano. Soffermandosi in particolare sui casi di esplicitazione traduttiva tramite l'inserimento di connettori non presenti nel testo di partenza, lo studio conclude che tale esplicitazione può, da un lato, essere collegata al tentativo dei traduttori di uniformarsi a una norma di produzione testuale tipica dell'italiano e, dall'altro, essere considerata come spia del processo di decodifica dell'informazione (spesso di carattere specialistico) veicolata dall'originale.

1. Introduction

This paper investigates connectives as an English-Italian translation issue in a corpus of popular economics texts – i.e. magazine and newspaper articles – by comparing and contrasting them with their use in a general language corpus. Our study aims to expand research both to learn more about translation as a

¹ This article is very much a product of joint research by the two authors. Giuseppe Palumbo wrote sections 2 and 3, Maria Teresa Musacchio sections 1 and 4.

product and to draw implications for translating as a process. In particular, it aims to identify regularities or patterns in the use of connectives without neglecting the possibility of unique items in a specific text/translation type and translation direction.

Connectives as text-organising devices are referred to using a number of different terms such as connectors, conjuncts, conjunctions, discourse markers, cohesive markers, link(ing) words and the like. Each term is meant to signal what is regarded as the most relevant feature in the connecting word in question and may refer to a different linguistic or more generally communicative theory. For the purposes of this paper we have decided to use mainly the term 'connectives' as it appears to be widely used in Translation Studies – cf., among others, Halverson 2004 – and it reflects common usage in Italian linguistics, where a distinction is made between connectives as text-organising devices used in written texts and discourse markers, which are generally studied with reference to spoken language. Following Halverson (2004: 563), we consider connectives as an umbrella term including conjuncts, conjunctions, adverbs, prepositional phrases and as devices at the crossroad of syntax, semantics and pragmatics. This aspect is particularly relevant in our case for two reasons. First, it enables us to account for instances when connectives are 'added' in translations – i.e. they are used when no apparent markers exist in the source text – and signal a different rhetorical organization of source texts as opposed to target texts. Second, it allows us to investigate how cohesion is achieved in different Languages for Special purposes (LSP) text types to meet diverse requirements in terms of relevance, coherence and, ultimately, communication.

In linguistics, connectives are usually investigated from the point of view of syntax, semantics and pragmatics. With reference to syntax, attempts at classification have soon run against problems owing to the inescapable difficulty of assigning functions to connectives such as English *because* and *yet* straddling the syntactic categories of coordination and subordination. In semantics, a number of classifications have been proposed on the basis of semantic relationships, but all seem to be variations of the four basic ones, namely additive, adversative, causal and temporal as identified by Halliday and Hasan (1976). For easy operability in our analysis, we adopt a similar, standard classification in Italian which distinguishes between copulative, disjunctive, adversative, explicative and conclusive connectives (Dardano and Trifone 1997: 372-379). As can be inferred, Halliday and Hasan's additive conjunctions are spread over the two categories of copulative and disjunctive connectives, while causal and temporal markers are differently distributed in the explicative and conclusive categories. Classifications are to some extent a question of convention and convenience. Indeed, part of the debate in semantics has focused on the fact that many connectives seem to carry little meaning. This is a relevant aspect in pragmatics too where 'discourse markers' are studied in terms of implicatures, coherence and relevance. With reference to implicatures, in a sentence such as "[A] Oscar is here but [B] he has forgotten his calculator" truth only depends on the content of clauses [A] and [B]. *But* does not affect the truth of the two clauses, it indicates procedurally how content in clause [B] is related to previous discourse. As to coherence, discourse markers are studied as guides to interpretation of utter-

ances (Knott and Dale 1994; Sanders and Noordman 2000) and as structural or functional contextual coordinates in the production and designed interpretation of sentences (Schiffrin 1988). In terms of relevance, discourse markers are analysed with reference to the conceptual or procedural cognitive information they signal, i.e. as devices that set a number of constraints on the relevance of utterances rather than on the connection between clauses (Sperber and Wilson 1995; Blakemore 2004).

Syntactic, semantic and pragmatic considerations play a crucial role in any investigation of LSPs. Science and technology are supposed to be universal enterprises with very similar formulations in any language, yet their logic does not reflect common sense, and is often counter-intuitive. In terms of implications for their discourse, the meaning(s) and functions of connectives in LSPs may be difficult to fathom for non-experts in the field such as translators. In the following sentence, for example, it is debatable whether the translator has managed to capture the intended meaning and functions of the source text by inserting the connective *pertanto* (therefore, so) in the target text:

He blames this, in part, on hidden support in the form of subsidised raw materials; “huge amounts of unpaid receivables”; the absence of any concept of earning a return on capital invested; and export subsidies, which, in his business, he calculates to be worth 17% of the price. Phoenix, he says, simply cannot compete, and has retreated altogether from some products and some markets in Europe and South America.

Egli ritiene che ciò sia dovuto in parte a sovvenzioni nascoste, “ingenti quantità di effetti esigibili non liquidati”, assenza di un qualsiasi concetto di ritorno economico del capitale investito, nonché sussidi all’esportazione che, nel suo settore, ritiene rappresentino il 17% del prezzo. PERTANTO la Phoenix non può assolutamente competere e ha eliminato completamente alcune linee di prodotti, ritirandosi anche da alcuni mercati in Europa e in Sud America.

In translation studies, the problem of connectives has long been recognised as a direct consequence of the clear cross-linguistic variation in their use, which involves issues of typological differences of languages, text-types, and functions. Similarly to cross-linguistic investigations where connectives have been studied to test hypotheses on language universals, translation studies have focused on the relation with translation universals as addition or omission of connectives have been used in support of explicitation and implicitation. Relevant contributions to the study of connectives in translation also come from source and target language contrastive research throwing light on rhetorical, discourse and domain-specific functions. Within this framework, our investigation aims to bring together several strands, ranging from translation universals and corpus-based and/or driven studies to the debates on norms and the so-called cultural turn.

Within the debate on translation universals and their existence, explicitation featured early on together with addition and omission (Vinay and Darbelnet 1958), as part of addition (Nida 1964), or as a more general notion than addition (Seguinot 1988) in the classification of translation strategies. Subsequently, textbooks on translation referred to the need of explicating sentence links by means of connectives – cf. Hervey and Higgins (1992: 49) for English to French

translation. While these early prescriptive approaches may appear to offer (over-)generalisations since they are based on translational practice and report a limited number of examples, recent textbooks (for example, Scarpa 2008: 160 for English-Italian translation) provide further attempts at classification and cautious generalisations based on empirical studies of source-text (ST) implicit logico-semantic links made explicit in the target text (TT) by inserting textual connectives with a view to making the TT more cohesive. Subsequent, more extensive descriptive studies appear to have confirmed earlier preliminary results (Englund Dimitrova 2005; Chen 2006; Castagnoli 2008). Especially with reference to LSPs, connectives pose considerable challenges both in translating as a practice and in translation as an object of research. Considering what has been outlined above with reference to linguistic investigations, there should always be doubts about assumptions of stable content “particularly when that content is paradoxically held to be at once hidden and obviously available to all” (Pym 2005). When connectives are present in an LSP text, can translators take for granted that their content is what they take it to be? When content is hidden as in the case of ‘implicit’ connectives, how can translators be sure that the ‘missing link’ is exactly what they think it is, especially if they are not subject-domain experts and may not master the subtle nuances of expression in the field? To what extent can translators assume that scientific discourse follows international rhetorical norms in all languages? And what is the impact of English as the international lingua franca of science on other languages?

Translator-added connectives have been ascribed to “S-universals”, as items that make explicit information that is implicit in the source text(s), or “T-universals”,² as items indicating a higher degree of explicitness than target language originals (Puurtinen 2004: 165). The hypothesis of explicitation as a translation-inherent process has been refined and considered to be in an asymmetric relation with implicitation, as explicitation from L1 to L2 is not always counterbalanced by implicitation from L2 to L1, i.e. it is optional and does not belong to specific features of the languages in contact (Pym 2005). In LSP translating, professionals – when they are not subject experts – tend to protect themselves from risk, or “the probability of an undesired outcome”, to use Pym’s words. In trying to solve a problem of ST interpretation, they may explicitate what they have just understood. Though they do that when interpretation is still fresh in their mind, they may proceed by focusing on smaller textual units than non-translators (Pym 2005). With reference to connectives, this may result in both explicitation and implicitation. In terms of relevance, the interpretive effort and risk aversion may explain the provision of more or fewer communicative clues. In a contribution focusing on the pitfalls of research into universals, Chesterman (2010) invites to consider the merits of discussing contextualisation as opposed to generalization, patterns of similarities/differences/variation instead of universals, working with pairs of – contrasting – hypothe-

2 The terms “S-universal” and “T-universal” have been originally proposed by Chesterman (2004) to distinguish between universals of translation that concern the relationship between source and translation and universals that have to do with the difference between translated and non-translated texts in L2.

ses rather than single ideas, and changing the initial research question if it proves to be formulated at an unsuitable level of abstraction. Over and above the conflicting results and models, which call for careful design of investigations into universals, Snell-Hornby (2006: 152) sees translation universals as a return to the predominance of linguistics in Translation Studies: as favourite notions in transformational generative grammar, they detach translation from culture. Discussing interference as a universal which is often investigated as a result of the influence of the source language on the target one – though it could be seen as an attempt at adherence to target language rules – Malmkjær (2008: 57) suggests referring to norms rather than universals as pointed out earlier on by Bernardini and Zanettin (2004) within the framework of corpus research.

Considering all the different strands and debates in research mentioned above, our study on connectives arises from observations derived from a comparison between source and target texts, and target texts and target language originals. (The study builds on earlier work presented in Musacchio and Palumbo 2009, which was based on a slightly different corpus). Multiple hypotheses – in particular different rhetorical organisation due to typological differences, explicitation vs implicitation, and universals vs target language norms – are discussed in a cultural-pragmatic context using a corpus-driven approach.

2. THE CORPUS

Our investigation was conducted on a corpus having a parallel (EconPAR) and a comparable (EconCOM) component, each containing newspapers and magazine articles on economic affairs. The articles in the parallel component are translations of articles taken from: *The Economist* and its yearly special issue *The World In...*; *Project Syndicate*; and *The Financial Times*. The articles from *The Economist* were translated into Italian by the Italian economic weekly *Economy*, while *The World In...* articles in our corpus were published in special yearly supplements to the Italian daily *La Stampa*. *Project Syndicate* and *Financial Times* articles were published in a column entitled “Global view” in the Sunday edition of the Italian economic and financial daily *Il Sole 24 ore*. Comparable articles were taken from the economic and financial pages of the Italian dailies *Corriere della Sera*, *La Stampa* and *Il Sole 24 ore* and were chosen to reflect the same topics as the translated articles (the articles in both corpus components were all published between 2007 and 2009). EconPAR contains 145 articles totalling ca. 150,000 tokens; EconCOM includes 113 articles totalling ca. 145,000 tokens (we only give an approximate count for the total number of tokens as figures are bound to differ slightly when different software programmes – such as WordSmith Tools and AntConc – are used for counting tokens; the larger number of tokens in EconPAR is due to the fact that one of the articles contained in it is considerably longer than the others). To provide a benchmark for the frequencies of connectives in our two corpora, we compared them to the frequencies observed in a general-language corpus of Italian, the 120-million-word CORIS (Rossini Favretti 2000), which we used as a reference corpus against which both our parallel and our comparable corpora could be tested.

3. CORPUS ANALYSIS AND RESULTS

Our analysis of connective usage in the corpus described above was carried out in three steps:

1. Based on a list of coordinating conjunctions provided by a standard grammar of Italian, we first compared the frequency of connectives in our two corpus components; the aim was that of obtaining a *rough* measure of connective usage and see whether translated and non-translated texts could be observed to differ in this respect.
2. We then identified the ‘signature’ connectives in EconCOM, our comparable corpus; the aim was here that of identifying a group of connectives that could be said to be typical of the particular text types included in EconCOM.
3. We finally focused on connective usage in EconPAR, the translated texts; in particular, we identified and counted all cases where a connective was used by the translator to make an intersentential link explicit, as in the following example taken from EconPAR (for a discussion of more examples of connective addition see 3.3.1 below):

(1) But the government’s approach to regulation has so far been inept. In January, it squeezed out the chief of the telecoms regulator, casting doubt on the independence of all regulatory bodies (source: *The Economist*).

(1a) Ma il modo in cui il governo ha affrontato questi nodi finora è risultato inefficiente. In gennaio, INFATTI, è stato estromesso il capo dell’Authority delle telecomunicazioni, mettendo in dubbio l’autonomia di tutti gli organi di controllo (source: *Economy*; emphasis added).

These items were compared with the list of signature connectives for EconCOM, the non-translated texts. We took the extent to which the two groups overlapped to be an indication of the tendency, on the part of translators, to follow target-language patterns of connective usage at the time of making explicit an intersentential link in the TL through the addition of a connective.

3.1 FREQUENCY OF CONNECTIVES

For a picture of the frequency of connectives used as coordinating conjunctions in the two components of our corpus we considered the list of conjunctions provided in Dardano and Trifone (1997: 372-379; see Table 1 below for a representative sample), who classify them into five categories: copulative (e.g. *nemmeno*, ‘not even’); disjunctive (e.g. *oppure*, ‘or’), adversative (e.g. *invece*, ‘instead’), explicative (e.g. *infatti*, ‘indeed’, ‘as a matter of fact’) and conclusive (e.g. *dunque*, ‘then’). We made no distinction at this stage between items serving a clear function as intersentential “linking adverbials” and items used as “coordinating” conjunctions (cf. Biber *et al.* 1999: 875-892).³ The figures provided here are essentially meant to provide a rough, comparable measure of connective use in

3 Also note that at this stage the frequency count includes items that may serve functions that are not relevant to our analysis. The item *allora*, for instance, is sometimes used in Italian not as a linking adverbial but as an adverb with a temporal meaning, equivalent to English ‘then’ or ‘at that time’. Such instances were filtered out in steps 2 and 3 of the analysis.

our two corpora (relative to each other and as seen against the backdrop of general language; see Figure 1).

Overall, the frequency of these connective conjunctions is higher in the non-translated than in the translated texts (4.24% in EconCOM as opposed to 3.38% in EconPAR), which suggests that Italian writers of this text type make slightly greater use of such items. When looking at individual categories, other differences between the two corpora emerge. The graph in Figure 1 shows, in percentage terms, the frequency of each category of connectives in the two corpora we are considering and contrasts them with the frequencies observed in a corpus of general-language Italian (CORIS).

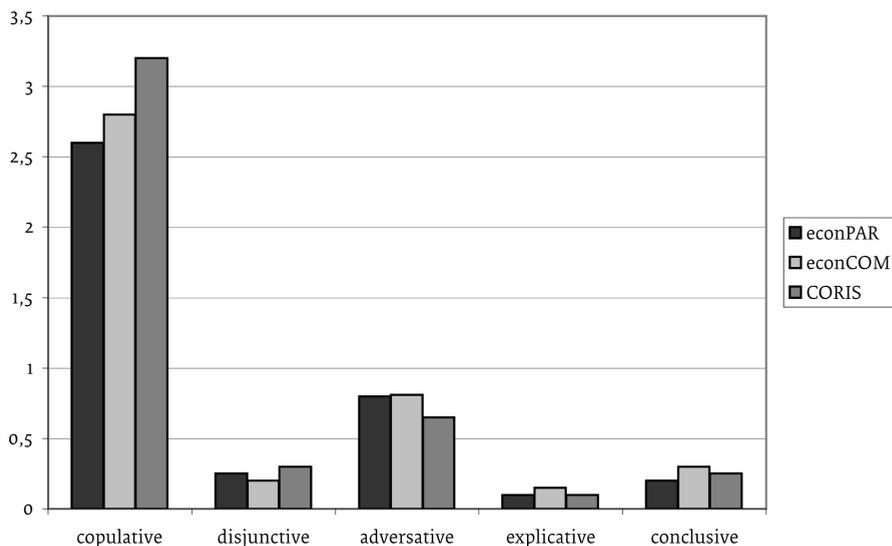


Figure 1. Frequency of categories, in %, of coordinating conjunctions in translated texts (EconPAR), comparable non-translated texts (EconCOM) and general-language Italian (CORIS).

Compared to EconPAR, EconCOM has a greater frequency of coordinating conjunctions for all categories except disjunctive conjunctions. EconCOM also has a greater frequency of coordinating conjunctions than CORIS, except for copulative and disjunctive conjunctions. The higher frequency of copulative conjunctions in CORIS may be due its containing a wide range of text types, including samples of oral texts that make extensive use of items such as *e* (“and”), *anche* (“also”) and *nemmeno* (“not even”). The more frequent use of adversative, explicative and conclusive conjunctions in EconCOM, a collection of semi-specialised texts, may point to their use in the construction of arguments. In any case, we believe that our findings give some support to the hypothesis that specialised texts in Italian make more extensive use of certain conjunctions than comparable English texts (insofar as translations from English into Italian are taken to reflect the English texts serving as their sources).

3.2 IDENTIFYING THE ‘SIGNATURE’ CONNECTIVES IN THE COMPARABLE ITALIAN CORPUS

To identify connective items that are typical or characteristic of each individual component of our corpus we used the “weirdness” coefficient (as presented, among others, in Ahmad 2007). This coefficient can be used to identify the items that occur comparatively more frequently in a given specialist corpus than in a reference general-language corpus (CORIS, in our case). The coefficient is calculated as a ratio: R_s/R_g , where R_s is the relative frequency of an item in a corpus of N_s words and R_g is the relative frequency of the same item in a general language corpus of N_g words. The higher the weirdness value of an item, the more typical it is of the corpus it appears in, relative to the general-language corpus. Note that we are here using weirdness to compare the two sections of our corpus to one another. The comparison is indirect and is made in relation to the general language corpus, with weirdness acting as a coefficient of the significance of a given item in each individual component of our corpus. More specifically, an item will be considered more or less significant depending on whether its weirdness is greater or smaller than 1. Where an item has weirdness greater than 1 in both corpus components, then it will be considered more sig-

	EcoPAR	EconCOM		EconPAR	EconCOM
COPULATIVE			EXPLICATIVE		
anche	0.83	1.05	cioè	0.87	1.20
e/ed	0.80	0.88	infatti	0.67	1.88
né	0.72	0.49	ossia	1.00	1.34
nemmeno	0.45	0.28	vale a dire	2.07	0
neppure	0.52	0.49	invero	0	0.73
nonché	0.13	0.13	CONCLUSIVE		
pure	0.58	0.38	allora	0.68	0.95
neanche	0.48	0.50	dunque	0.30	1.45
DISJUNCTIVE			ebbene	0.29	0.60
o	0.70	0.57	pertanto	0.96	2.08
oppure	0.01	0.53	quindi	1.03	1.70
ovvero	0.55	1.09	perciò	0.8	0.77
ADVERSATIVE					
anzi	0.81	1.55			
effettivamente	1.71	0.89			
eppure	1.60	1.18			
in effetti	1.79	0.72			
in realtà	1.40	1.41			
invece	1.12	1.50			
ma	1.16	1.18			
nondimeno	0.02	1.38			
peraltro	0	1.93			
però	0.86	1.04			
piuttosto	1.81	1.27			
tuttavia	3.36	1.59			

Table 1. “Weirdness” value for selected connectives in Italian translated (EconPAR) and non-translated (EconCOM) texts

nificant in the corpus where it has higher weirdness (the same applies where weirdness is smaller than 1 in both corpora).

Table 1 gives the weirdness value for each of the connective items we considered in the two corpora (remember, once again, that we are here considering all occurrences of these items and not just those expressing an intersentential relation).⁴

The items that have weirdness greater than 1 (or just higher weirdness) in EconCOM tend to be concentrated in the adversative, explicative and conclusive categories. In particular, in the category of conclusive connectives all items except *perciò* have higher weirdness in EconCOM; among explicative connectives, *vale a dire* is the only exception (it never occurs in our translated texts). The following is a detailed list of these items:

ADVERSATIVE	EXPLICATIVE	CONCLUSIVE
<i>anzi</i>	<i>ciòè</i>	<i>allora</i>
<i>in realtà</i>	<i>infatti</i>	<i>dunque</i>
<i>invece</i>	<i>ossia</i>	<i>ebbene</i>
<i>ma</i>	<i>invero</i>	<i>pertanto</i>
<i>nondimeno</i>		<i>quindi</i>
<i>peraltro</i>		
<i>però</i>		

This is further confirmation of what was observed in the raw frequency counts: these connectives can be said to be typical selections for establishing intersentential links in semi-specialised articles on economic matters written in Italian. It is in this sense that we label this the group of ‘signature’ connectives observed in our comparable corpus. Perhaps stretching the argument a bit, we could say that, in terms of paradigmatic choice, these items reflect the norm of connective usage for this type of text in Italian.

3.3 ANALYSING ADDED CONNECTIVES IN THE TRANSLATED TEXTS

In this final step of our analysis we focused on connective usage in EconPAR, the translated texts. In particular, based once again on the list of Italian coordinating conjuncts provided by Dardano and Trifone, we identified all cases where the conjunct was actually used to signal an intersentential relation and, within this group, we manually counted all cases where the connective had been inserted by the translator to make an intersentential link explicit. We call cases where such an insertion was observed *additions*; where a connective in the TT was found to have a surface equivalent in the TT, we speak of *translations*. The graph in Figure 2 shows what the added connectives in EconPAR are and, for each of them, also indicates the proportion of cases in which the same connec-

4 Weirdness is taken to equal 0 (although it would actually equal infinity) when a given item does not occur in one of the corpora used to calculate the index; see for instance *invero* (an explicative connective) and *pertanto* (a conclusive connective) in Table 1.

tive was not an addition but a translation. (Note that we have excluded two extremely frequent connective elements, the coordinating conjunctions *ma* and *però*, from this count to make the manual analysis of individual cases more manageable).

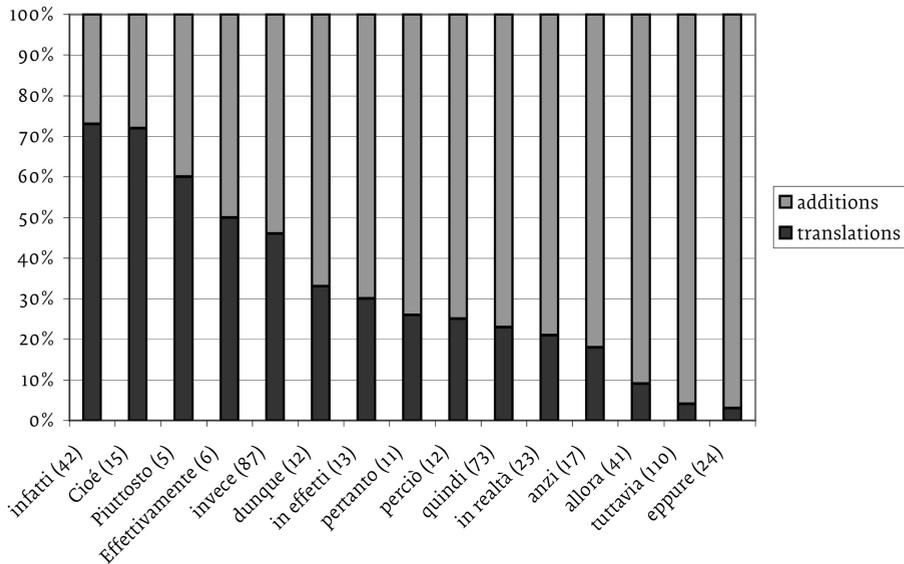


Figure 2. Translator-added connectives in EconPAR bq (as a % of total occurrences; no. of occurrences in brackets)

The majority of the items represented in the graph (*infatti*, *cioè*, *invece*, *dunque*, *pertanto*, *quindi*, *in realtà*, *anzi* and *allora* – 9 of the 15 represented items) are also items for which the weirdness value turned out to be higher in EconCOM than in EconPAR, i.e. they are among the ‘signature’ connective items used in comparable text types in the target language. Translators who use these items as additions are making an intersentential link more explicit; at the same time they may also be conforming to norms of text production in the TL. The basis for their decision can be seen either as a (non-linguistically motivated) translation effect or as an attempt to follow a language systemic convention. In the latter case, given that the elements they choose for making the links between sentences explicit tend to be those favoured by writers of non-translated texts in the TL, translators may be adhering to an initial norm inspired by “acceptability” (Toury 1995).

3.3.1 A TENTATIVE CLASSIFICATION OF TRANSLATION SHIFTS INVOLVING CONNECTIVES

Following Hyde (1996), intersentential links in discourse can be represented by means of a basic schema, $A r B$, where A is a conjoin consisting of one or more sentences which stand in a particular relationship, r , to a contiguous conjoin of one or more sentences, B . The relationship is one established at the logico-

semantic or pragmatic level. It may be implicit or explicit: an implicit relationship is one inferred by readers of the text; an explicit relationship is one that has a “tangible realization” (Hyde 1996: 77) consisting of a conjunct (such as those studied here) or a wide variety of other alternative realizations including phrases or even whole sentences. In translational terms, when the relationship *r* has a tangible realization (i.e. when it is an ‘explicit link’) in the ST, the translator basically has two options: 1) reproducing the link; 2) suppressing, or ‘implicitating’, the link. When *r* is not expressed by an explicit link in the ST, the option for the translator is also twofold: 1) leaving the relationship implicit; 2) making the relationship explicit by providing a tangible linguistic realization for it. The translation of intersentential links can therefore be schematically summarised as the choice of one of three basic options:

- ONE-TO-ONE CORRESPONDENCE, i.e. an explicit link in the TT corresponds to an explicit link in the ST;
- ZERO-TO-ONE CORRESPONDENCE, i.e. the TT introduces an explicit link not present in the ST;
- ONE-TO-ZERO CORRESPONDENCE, i.e. the TT suppresses an explicit link present in the ST.

The cases represented by the graph in Figure 1 only cover the first two of these three options; at this stage, cases of ‘one-to-zero’ correspondence have been left out of the analysis but they, admittedly, will have to be considered in subsequent studies so as to gain further insight on how translators deal with intersentential links. An interesting aspect of the cases we have already considered is that the addition of a connective in the TT is frequently more than just the insertion of an item that leaves the structure of the TT sentence unaltered – what in Hallidayan terms may be called a “linking adverbial” (such as *infatti* in example 1 above). A closer look at the cases of explicitation of the intersentential relations present in our corpus of translated texts reveals that the insertion of a connective is often part of a more elaborate reformulation of the text. In other words, the ‘zero-to-one’ option identified above may include a whole range of translation shifts that go from the insertion of an individual item through to major reformulations. To be sure, even in cases of one-to-one correspondence between an ST and a TT explicit link, the equivalence may be established between elements of a different nature, e.g. when a cohesive element such as a pronoun in the ST is translated with a connective in the TT. In short, the three basic options listed above are realised through a variety of shifts of varying complexity. Table 2 shows representative examples of such shifts for each of the three options, providing a brief gloss for each example (the linking elements are highlighted in bold; for lack of space, only the sentence containing the linking element is shown for most examples).

4. FINAL REMARKS

A number of scholars in translation studies (e.g. Mason 2001; Salkie 2002) have expressed dissatisfaction with corpus-based studies, and particularly with those that make claims relating the features observed in a corpus in order to study the

SOURCE TEXT	TARGET TEXT	TYPE OF SHIFT
(1) Dell, IBM and SAP, ON THE OTHER HAND, have been doing well, [...]	(1a) Dell, Ibm e Sap, INVECE, stanno ottenendo ri-sultati soddisfacenti, [...]	ONE-TO-ONE CORRESPONDENCE
(2) THE SAD TRUTH is that development aid to Africa has decreased from \$49 per person in 1980 to \$38 per person in 2005.	(2a) Gli aiuti allo sviluppo per l'Africa, INVECE, sono scesi da 49 dollari pro capite nel 1980 a 38 dollari nel 2005.	ONE-TO-ONE CORRESPONDENCE: the linking element in the TT is a conjunct corresponding to a noun phrase in the ST; this is also a stylistic shift, as the TT neutralises the emotiveness of the ST lexical choice.
(3) THIS leaves Japan, which has the second-lowest average tax rate in the OECD, next to South Korea, plenty of scope to shore up its finances.	(3a) PERTANTO il Giappone ha - con l'aliquota media più bassa nell'Ocse subito dopo la Corea del Sud - molte possibilità di sostenere le proprie finanze.	ONE-TO-ONE CORRESPONDENCE: the TT linking element, a conjunct, translates an anaphoric encapsulating pronoun in the ST.
(4) INDEED, it [i.e. Italy] may be better placed than other countries – its banks were initially untouched by the subprime crisis.	(4a) [...]: ANZI [l'Italia] si troverà in una posizione migliore DAL MOMENTO CHE i subprime da quelle parti non sono arrivati.	ONE-TO-ONE CORRESPONDENCE: this excerpt has two cases of one-to-one correspondence; the first is the translation of <i>indeed</i> with <i>anzi</i> ; the second is the translation of a punctuation mark (the dash in the ST) with a causal adverbial.
(5) Ford is hoping to fight back using techniques that it has learnt from the Japanese and already applied in Europe.	(5a) La Ford spera, DUNQUE, di poter reagire mettendo in pratica quelle tecniche apprese dai giapponesi e già applicate in Europa.	ZERO-TO-ONE CORRESPONDENCE
(6) For the Democrats, the challenge will be to establish credibility as a governing party.	(6a) I democratici, DAL CANTO LORO, dovranno INVECE risultare credibili come partito di governo.	ZERO-TO-ONE CORRESPONDENCE: The TT here adds not one but two connectives in the same sentence. It should be noted, however, that the word order in the English is marked for emphasis.
(7) But with India still providing hospitality to the Dalai Lama, and China refusing to recognise India's incorporation of Sikkim in 1975 as a state of the Indian union, there is plenty besides the border wrangle to keep the two countries wary of each other.	(7a) Tuttavia, Delhi offre ancora ospitalità al Dalai Lama, e Pechino si rifiuta di riconoscere l'annessione del Sikkim che nel 1975 è diventato uno Stato dell'unione indiana; PERTANTO, oltre alla questione del confine, c'è ben altro a tenere le due nazioni sul chi vive.	ZERO-TO-ONE CORRESPONDENCE: addition of connective as part of syntactic restructuring of sentence.
(8) Phoenix, he says, simply cannot compete, and has retreated altogether from some products and some markets in Europe and South America.	(8a) PERTANTO la Phoenix non può assolutamente competere e ha eliminato completamente alcune linee di prodotti, ritirandosi anche da alcuni mercati in Europa e in Sud America.	ZERO-TO-ONE CORRESPONDENCE: the addition of a connective in the TT is here linked to a modulation, as the translation eliminates the verbal clause signalling indirect speech in the original (<i>he says</i>); the TT could here be said to change the propositional content of the original.
(9) There are good reasons to expect the more gradual, and favourable, scenario. Foreigners' love affair with American assets has not been speculative, but has consisted in large part of long-term financial flows (including a lot of direct investment), based on productivity improvements that are increasingly evident.	(9a) La passione dimostrata dagli stranieri per i titoli americani non è effimera. È PERTANTO improbabile che questo flusso di capitali si esaurisca da un giorno all'altro. Esistono ottime ragioni per pensare che il cambiamento sarà più graduale e favorevole.	ZERO-TO-ONE CORRESPONDENCE: The use of a connective in the TT is here part of a major reformulation.
(10) IN FACT, 50 years ago, in his classic book Social Theory and Social Structure, the late sociologist Robert K. Merton described the results of a case study of influential people in a typical American town, Rovers, New Jersey.	(10a) Cinquant'anni fa, nel suo saggio (ormai un classico) Teoria e struttura sociale, il sociologo Robert K. Merton descriveva i risultati di uno studio sulle persone influenti di una tipica cittadina americana, Rovers, nel New Jersey.	ONE-TO-ZERO CORRESPONDENCE

Table 2. Selected excerpts from EconPAR with the corresponding source passage and a brief gloss for each excerpt (emphasis added in the excerpts)

features of the target language as a system. According to these scholars, translation is a special communication situation and the choices made by translators may have more to do with aspects and constraints operating in this situation than with the translators' attempts at adhering to conventions and preferred patterns of the target language. Studies of parallel texts tell us more about how translators process and use language in a particular context and how they are influenced by genre, discourse, text and rhetorical purpose. The use of comparable corpora, however, can balance the picture and give support to findings in terms of language systemic features. Our investigation was corpus-driven as we started analysing our corpus and observed a number of patterns that then oriented our research. We worked with the contrasting hypotheses of typologically different rhetorical organisation of STs and TTs, explicitation and implicitation and contextualised our study in LSP translating and more specifically in the translation of popular economics, but compared our data with those of a general language corpus. Our results give some support to the hypothesis that translators who are willing to make intersentential links more explicit do so by favouring a norm of text production observed to be characteristic of the TL. Our interpretation of this is that translators follow an initial norm inspired by "acceptability" (Toury 1995) and that the addition of a connective in Italian TTs is for the most part a stylistic device aimed at making texts more idiomatic. In other words, additions of intersentential connectives are clearly cases of explicitation but, on the basis of our analysis, we hesitate to interpret them exclusively in terms of translation effects and see them as an attempt at conforming to idiomatic uses of text production. With reference to semi-specialised texts as the ones in our corpus, our interpretation follows Cortelazzo's idea that as special languages become more and more internationalised, what remains typically language- or culture-bound is textuality. A relevant feature of textuality in Italian special languages is subordination or at least explicit cohesion between parts of the text that are juxtaposed (Cortelazzo 2000: 33). Our next step will be to reverse the direction of translation and try to find out what happens when Italian popular economics texts are translated into English.

REFERENCES

- Ahmad K. (2007) "Artificial ontologies and real thoughts: Populating the semantic web?", in *AI*IA 2007, LNAI 4733*. Ed. by R Basili and M. T. Pazienza, Berlin/Heidelberg, Springer Verlag, pp. 3-23.
- Bernardini S. & Zanettin F. (2004) "When is a universal not a universal? Some limits of current corpus-based methodologies for the investigation of translation universals", in *Translation Universals: Do they Exist?*. Ed. by A. Mauranen and P. Kuyamaki, Amsterdam, Benjamins, pp. 51-62.
- Blakemore D. (2004) "Discourse markers", in *The Handbook of Pragmatics*. Ed. by L.R. Horn and G. Ward, Oxford, Blackwell, pp. 221-240.
- Castagnoli S. (2008) *Regularities and Variations in Learner Translations: A Corpus-based Study of Conjunctive Explicitation*, unpublished PhD thesis, University of Bologna.
- Chen (2006) *Explication through the Use of Connectives in Translated Chinese: A Corpus-based Study*, PhD Thesis, University of Manchester.

- Chesterman A. (2004) "Hypotheses about translation universals", in *Claims, Changes and Challenges in Translation Studies*. Ed. By G. Hansen, K. Malmkjær and D. Gile, Amsterdam/Philadelphia, Benjamins, pp. 1-13.
- Chesterman A. (2010) "Response and discussion", Paper presented at *MATS 2010 – Methodological Advances in Corpus Based Translation Studies*, Hogeschool Gent, Gent, January 8 and 9, 2010.
- Cortelazzo M.A. (2000) "Le lingue speciali, la dimensione verticale e orizzontale", in *Italiano d'oggi*, Padova, Esedra, pp. 25-36.
- Dardano M. & Trifone P. (1997) *La nuova grammatica italiana*, Bologna, Zanichelli.
- Englund Dimitrova B. (2005) *Expertise and Explicitation in the Translation Process*, Amsterdam/Philadelphia, Benjamins.
- Halverson S. (2004) "Connectives as a translation problem", in *Übersetzung/Translation/Traduction*. Ed. by H. Kittel, A. P. Frank, N. Greiner, T. Hermans, W. Koller, J. Lambert and F. Paul, Berlin, Mouton de Gruyter, pp. 562-572.
- Halliday, M.A.K. & Hasan R. (1976) *Cohesion in English*, London, Longman.
- Hervey S. & Higgins I. (1992) *Thinking Translation. A Course in Translation Method: French to English*, London/New York, Routledge.
- Hyde J. (1996) "The explicit signalling of intersentential relations in authentic texts: An overview", *TRANS*, 1, pp. 74-85.
- Knott A. & Dale R. (1994) "Using linguistic phenomena to motivate a set of coherence relations", *Discourse Processes*, 18 (1), pp. 35-62.
- Malmkjær K. (2008) "Norms and nature in Translation Studies", in *Incorporating Corpora. The Linguist and the Translator*. Ed. By G. Anderman and M. Rogers, Clevedon, Multilingual Matters, pp. 49-59.
- Mason I. (2001) "Translator behaviour and language usage: some constraints on contrastive studies", *Hermes. Journal of Linguistics*, 26, pp. 65-80.
- Merlini Barbaresi L. (1996) "Traduzione e pragmatica del discorso", in *Tradurre i linguaggi settoriali*. A cura di G. Cortese, Torino, Edizioni Libreria Cortina, pp. 73-85.
- Musacchio M. T. & Palumbo G. (2009) "'To connect or not to connect': Game-theory approaches and translators' decisions in specialist translation. A corpus-based study", in *La Ricerca nella Comunicazione Interlinguistica. Modelli Teorici e Metodologici*. A cura di S. Cavagnoli, E. Di Giovanni, R. Merlini, Milano, Franco Angeli, pp. 217-234.
- Nida E. A. (1964) *Toward a Science of Translating: With Special Reference to Principles and Procedures Involved in Bible Translating*, Leiden, E. J. Brill.
- Puurtinen T. (2004) "Explicitation of clausal relations. A corpus-based analysis of clause connectives in translated and non-translated Finnish children's literature", in *Translation Universals: Do they Exist?* Ed. by A. Mauranen and P. Kujamäki, Amsterdam/Philadelphia, Benjamins, pp. 165-176.
- Pym A. (2005) "Explaining Explicitation", in *New Trends in Translation Studies. In Honour of Kinga Klauudy*. Ed. By K. Károly, Budapest, pp. 29-34.
- Rossini Favretti, R. (2000) "Progettazione e costruzione di un corpus di italiano scritto: CORIS/CODIS", in *Linguistica e informatica. Multimedialità, corpora e percorsi di apprendimento*. A cura di R. Rossini Favretti, Roma, Bulzoni, pp. 39-56.
- Salkie R. (2002) "Two types of translation equivalence", in *Lexis in Contrast: Corpus-based approaches*. Ed. by B. Altenberg and S. Granger, Amsterdam/Philadelphia, Benjamins, pp. 51-71.
- Sanders T. & Noordman L. (2000) "The role of coherence relations and their linguistic markers in text processing", *Discourse Processes*, 29, pp. 37-60.
- Scarpa F. (2008) *La traduzione specializzata. Un approccio didattico professionale*, Milano, Hoepli.
- Schiffrrin D. (1988) *Discourse Markers*, Cambridge, Cambridge University Press.
- Snell-Hornby M. (2006) *The Turns of Translation Studies*, Amsterdam/Philadelphia, Benjamins.
- Sperber D. & Wilson D. (1995) *Relevance: Communication and cognition*, 2nd edition, Oxford, Blackwell.
- Touy G. (1995) *Descriptive Translation Studies and beyond*, Amsterdam/Philadelphia, Benjamins.
- Vinay, J.-P. & Darbelnet, J. (1958) *Stylistique comparée du français et de l'anglais. Méthode de traduction*, Paris, Didier.