

TRANSLATION EQUIVALENCE IN A CORPUS LINGUISTICS FRAMEWORK*

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0. Introduction

This paper will consider from a theoretical and methodological point of view the interface between corpus linguistics and translation. It will not attempt to offer a comprehensive treatment of a translation problem, rather to illustrate a methodology with some examples. It is argued here that the corpus-driven approach adopted allows to analyse in detail and systematically the correspondences between formal features and function in source and target languages and draw parallels between the two. The type of observations made are formal in nature and therefore amenable to automation.

The discussion can be divided into three different stages. First a brief introduction to what is assumed in the process of translation both at the linguistic and the extra-linguistic level will lead us to posit the distinction between units of meaning and units of translation; although the latter are the proper products of translation, in this paper we will only be concerned with piloting a methodology for a database of comparable units of meaning, therefore concentrating on an intermediate stage between the analysis of two distinct linguistic systems at one end and the achievement of a translated outcome at the other end.

Second the rationale behind the proposed approach will be discussed. This will lead us to look in some detail at the contextual theory of meaning proposed by Firth (1957) with a view to identifying the general assumptions behind the position adopted as well as the specific applications to our corpus-driven approach (Tognini-Bonelli in press/b). The discussion will then shift to a more practical note with the aim to illustrate the methodology used to derive

* This paper took shape in the spring of 1994. The framework for TE in a Corpus Linguistic perspective was developed for a series of seminars I gave in Pisa at the invitation of Prof. Lavinia Merlini Barbaresi, while the case study on *real* and its TEs in Italian, *reale*, *vero* and *vero e proprio* was the subject of a presentation at CILTA, Bologna, at the invitation of Prof. Rema Rossini Favretti. This version has very much profited from the helpful discussions with colleagues in Italy in those two occasions.

statements of meaning from formal parameters present in the co-text. Two examples from an Italian corpus will be analysed in some detail; although the analyses will not attempt to be comprehensive they will exemplify two points: 1) the necessary correlation between lexical and grammatical patterns in the creation of units of meaning, 2) the almost inevitable 'extension' of the unit of meaning which follows. It is maintained that these two points are of paramount importance in the process of translation and that discounting them will inevitably cause insensitivity to the patterns of naturalness in language.

Third will follow the report of a case study in translation equivalence using a corpus-linguistic approach: the English adjective *real* will be analysed in its different semantic and pragmatic functions, the formal parameters realising these functions will be identified in English and the same procedure will be then applied to some *prima facie* translation equivalents in the target language, Italian.

1. The Process of Translation

The main — and perhaps the most obvious — point to be made is that, in the course of the process of translation, both the text, encoding meaning, and the context in which the text itself is embedded, vary. Translation, therefore, presupposes what we may call "displaced situationality"¹ in two respects: the purely linguistic context is displaced because it will differ in the source and in the target language, inevitably. The extra-linguistic, situational features will also be changed as the context is bound to refer to, and reflect, a different culture, a different situation and different participants. The change in context would, unless compensated for, put a misleading interpretation on a translated text, however faithfully it had been translated. It is not a matter of adding and subtracting discrete components, either; the two contexts of situation may not be related to each other in any systematic way, and the transposition may require ad hoc adjustments, such as explanatory notes, to fill the gaps.

With respect to extra-linguistic features we should also be aware that the translation process presupposes and accommodates two different levels of interaction: firstly, the original interactive process between Source Writer and his/her Source Audience. Secondly, the interaction between Translator and his/her Target Audience. The translator has the task of 'reproducing', re-creating, the original interaction to a different audience.² The target audience for the

1 The term "displaced situationality" is originally taken from Neubert (1985) but elaborated by Viaggio (1992).

2 This type of interaction is relevant to the written process of translation but not necessarily to the spoken process of interpreting. In this respect Viaggio points

original writer will be different from the target audience for the translator and the translation may even have a different purpose altogether from the one of the original text.

Although both the linguistic and the extra-linguistic level must be taken into account for the translation to be successful, the first step in the translation process must be the identification of two sets of linguistic features: the words and phrases that encode a unit of meaning in a source language and that of other words and phrases, inevitably different from the first set, that will yield a comparable unit of meaning in a target text. This first step aims to locate meaningful correspondences and build up a network of semantic relations across the two languages; however, in the process of comparing and transferring, what is likely to happen is that many mismatches and points of 'non-equivalence' will come to light in the lexical, syntactic and semantic profile of a unit of meaning: these are just as important as the similarities between the two languages and should be noted and recorded in a potential database of translation equivalents, to function as a kind of working bench for the translator.

The second step in the translation process relates to the extra-linguistic features, surrounding the original text on the one hand and the translated text on the other. It will account for the strategies adopted by the translator in order to transfer and report the original interaction to a new target audience. This stage can be seen as a *reporting strategy*,³ whereby the original interactive process has the status of a report within another, new, interactive process. This framework is taken to allow for shifts and changes of purpose between source text and translation, and for specific interventions of the translator vis-a-vis his own target audience, for example.

Given the two stages in the translation process posited above, it is important to understand that we are assuming a difference between a *unit of meaning*, whether in the source or in the target language, and a *unit of translation*: it is

out that while situationality is shared for the interpreter, it is displaced for the translator (1995: 28).

- 3 The view of this second stage in the translation process I am proposing is based on Sinclair's position on the function of *reporting structures* in discourse (1981). Applied to translation, this strategy will account for the role the translator has in (1) assessing his bridging task between source language and target language, source audience (i.e. the audience of the original writer, in the source language) and target audience (his own audience, in the target language), as well as the specific genre and function of the text (narrative, technical; persuading, advertising, etc.); (2) taking into account the correspondences between function and formal realisations across different languages established in stage 1; (3) reporting the original message/1, as negotiated in the interaction between source writer/1 and target audience/1, to his/her (the translator's) own target audience/2.

argued here that while the first is defined *contextually*, the second is defined mainly *strategically* as the result of explicit 'balancing' decisions taken by the translator in order to achieve an equivalent effect or purpose (Nida 1964) to the original. These will be possible (a) once comparable units of meaning have been isolated in the source and the target language, in the light of (b) the perceived role of the translator as 'go-between' linking two cultures and two specific situations, as well as (c) the function of the translation vis-a-vis the new target audience.

2. The Contextual Theory of Meaning and a Methodology for Corpus Linguistics

We come now to exploring some of the key concepts proposed by Firth (1957, and in Palmer 1968); Firth wrote extensively, and sometimes not very systematically, but here I will be quite selective and concentrate mainly on the specific points that I will use directly in setting out a Corpus Linguistics framework for translation equivalence as I see it. Firth puts forward a *contextual* view of meaning, whereby meaning is seen to arise out of relations established between the linguistic item and what appears in the context. What he calls "context of situation" is a group of categories, both verbal and non-verbal, which are considered as interrelated, and involve the participants in an interaction, seen in terms of both their verbal and non-verbal actions, the relevant objects and events as well as the effect of the verbal action. This view of language accommodates well the need for the integration of the linguistic and the extra-linguistic features which is of particular importance in the process of translation.

From the perspective of stage 2 in the translation process, the identification of units of translation will require the translator to negotiate equivalence in the target language at the extra-linguistic level, that is, in Firthian terms, with respect to the relationship between the "relevant participants" (the source writer and his/her audience), the "verbal action" (the original text) and the "effect of the verbal action" (the original purpose) — all this in a different language as well as different social and contextual environments. From the perspective of stage 1 in the translation process, that is at the purely linguistic level, the identification of units of meaning will require the translator to identify the formal co-textual features that create meaning.

2.1 Formal features in the co-text

Firth asserted that a major part of the meaning of an item arises from its relations with its immediate *co-text* as well as the general context of situation. The observation and analysis of the formal features present in the co-text of a linguistic item, therefore, is taken to yield insights into its meaning and function. This is, in my opinion, where the Firthian theory of meaning can be used in the framework of Corpus Linguistics: observations and generalisations drawn from the co-text are inherently tractable, and correspondences with meaning can therefore be consistently drawn.

A series of methodological questions arise: how should we go about analysing the co-text? Can we draw from these observations some empirically based generalisations? Can formal features consistently be related to significant functional parameters? These questions are of particular relevance to a study that starts off by making use of a corpus, i.e. having access to a very large quantity of raw language data in context, on the one hand, and to the computer as a processing device, on the other. The remarkable quantity of data available in a corpus makes it unthinkable to scan the co-text of a given item for anything which is not formalisable in computer terms; and, assuming that the corpus one is working on is representative, the frequency distributions obtainable by the computer, may allow the analyst to make claims which involve the language system as a whole, rather than an individual text.

In order to answer the questions above, and to develop a methodology that allows us to identify relevant formal features in the co-text, we need to consider now two Firthian notions that are of specific importance in this context. These are *collocation*, and the grammatical equivalent of collocation, *colligation*. Collocation is simply and effectively defined by Firth as "the company words keep" and is a direct consequence of the fact that for Firth the meaning of words lies in their use: established usage will recognise words "in familiar and habitual company".⁴

Colligation can be defined as the statement of meaning at the grammatical level, seen as the relationship between word classes and sentence classes. Although collocation and colligation represent respectively the lexical and the grammatical angle, it is important to note that for Firth these two poles are

4 Firth explains: "The habitual collocations in which words under study appear are quite simply the mere word accompaniment, the other word-material in which they are most commonly or most characteristically embedded. It can safely be stated that part of the 'meaning' of *cows* can be indicated by such collocations as *They are milking the cows*, *Cows give milk*. The words *tigresses* or *lionesses* are not so collocated and are already clearly separated in meaning at the collocational level" (in Palmer 1968: 180).

strictly complementary and closely interrelated. The statement at the lexical level has to be correlated with a statement about the relevant grammatical categories:

The study of the collocations in which a word is normally used is to be complemented by a statement of the interrelations of the syntactical categories within collocations (Firth, in Palmer 1968: 23).

As we shall see, this is a very important point which will be consistently confirmed by corpus evidence: the strict interconnection between lexis and grammar seems to be one of the most recurrent observations when one looks at corpus data and should not be overlooked when venturing into the process of translation.

If we consider a concordance, an alphabetised set of citations, the collocates are identifiable formally as the co-occurrence of identical words immediately noticeable in a vertical reading⁵ of the concordance; the only step in abstraction needed to identify collocation is at the *syntagmatic* level and is determined by frequency of occurrence. Provided a context span is set, collocates can be retrieved automatically. On the other hand, the item under consideration as a colligational feature — it could also be a multi-word item — is not accepted in its most immediate dimension, but in terms of its belonging to a class such as adjective, verb or pronoun, for example. The step in abstraction, therefore, has to be based on the *paradigmatic* level, where a word is defined functionally because of its belonging to a certain category.⁶ A tagged or a parsed corpus is needed to retrieve colligational patterns automatically.

By observing collocational and colligational features in the co-text, we should not exclude a third type of formal patterning often identifiable when scanning the vertical axis of the concordances. I am referring here to *lexical sets*, which are lists of collocates that behave in a similar way with respect to the node word (or the node expression). Like colligational features, they are identified functionally, I propose according to two parameters: (1) the fact that they share a similar structural role, (2) the fact that they share a similar semantic

5 In the approach I am adopting, a set of alphabetically-ordered concordances is understood to merge the two dimensions of language, the instance and the codified pattern, in a single set of axes. The vertical axis yields the patterns, the "repeated events" related to the node word, in other words its 'grammar'; the horizontal axis, on the other hand, represents the specific instance, in its own individual and unrepeatable context (see Tognini-Bonelli 1993b: 209-210).

6 Traditionally, constraints at the syntagmatic level are seen as grammatical, while "possibilities" at the paradigmatic level are seen as lexical; this is the so-called "slot-and-filler" approach. What corpus linguistics is proving incontrovertibly, though, is that lexical constraints operate very often at the syntagmatic level, governing both grammatical and other lexical choices (cf. Sinclair 1991).

function. Lexical sets are very important in the framework of translation in that they are likely to reflect different cultural, situational and, sometimes, pragmatic constraints that cannot be ignored if the translator is attempting to reproduce a certain meaning from the source context 1 to a target context 2.

Lexical sets can only be identified through lists, after due analysis on the part of the linguist. But since lists can be automated, they can form part of a machine-based translation routine. This is important in the practical sense, since a computer may have difficulty in recognising the category "human subject", but it will have no difficulty with a list. Together, collocation, colligation and lexical sets will allow the analyst to build up a lexico-grammatical profile of a certain word or expression.

2.2 "Repeated events"

Another key concept in Firth's model, stemming from the fact that the utterances under consideration constitute real language in action, is the notion of "repeated events". Firth, having stressed the importance of studying individuals in their social roles of *personae*, proposes a view of language as the vector of "the continuity of repetitions in the social process" (1957: 183). The assumption is that, linguistically speaking, human beings act systematically; the role of the linguist, therefore, is above all to "abstract the impersonal from the personal by regarding it as typological" (1957: 188). This can be achieved, of course, by observing facts which are "typical, recurrent, and repeatedly observable" (1957: 35).

The concept of "repeated events" and their value as typological statements is therefore of extreme importance in a study adopting the methodology of Corpus Linguistics: we are essentially carrying out a linguistics of *parole* where the cumulative effect of repetitive patterns within individual usages is taken to relate directly to, and in a way constitute, the categories of the system: the ultimate aim, in the light of the evidence from the concordance, is "the formalisation of observations of regularities exhibited" (Tsui 1994: 3).

Both collocational and colligational features, as well as what we have called lexical sets, therefore, will acquire significance if built into a framework that takes frequency of occurrence into account. As the sophistication of the computing improves, more abstract entities may be identified and retrieved; however, the methodology varies only in detail, and the relative position of formal entities and their frequency remains the starting point of any investigation.

2.3 From formal features to meaning and function

By way of a preamble we should note that we are adopting the distinction between form and function as a methodological convenience and, when looking at the formal patterning in the co-text of a word, quite often what we identify is really the meaning or function of the unit. As Halliday ([1961] 1966: 40) points out, the formal analysis of language is itself a study of meaning, but although it is entirely justifiable to demand formal criteria for linguistic categories, the dichotomy between form and meaning is itself a false opposition.

Quite often, therefore, the formal features observable in the co-text of a word or phrase will inevitably be so integrated that this will lead us to question the *unit of meaning*, as the boundaries between text and context, item and environment become more and more difficult to define and form merges with function. Strong collocations, for example, can be seen as one step on a cline towards fixed phrases and idioms, so much so that, if considered at the paradigmatic level, the node word/expression and its formal environment may be selected as a single meaningful choice⁷ as in the case of the much quoted "it's raining cats and dogs". Indeed, when we start to investigate the patterns of meaning surrounding a word, we have to extend the boundaries of the unit, maybe into a phrase, or maybe into a larger unit altogether. This is where meaning has to take "sense" into account.⁸

I would like to illustrate now the way we set about identifying the formal features in a given co-text and correlating them with function and meaning with reference to two examples taken from the Corpus of Italian of the University of Birmingham.⁹ In my first example I will draw a partial profile of the preposition

7 This view of language is put forward by Sinclair (1991) who proposes two, mutually exclusive, principles: the *open choice* and the *idiom principle* to account for language organisation. According to the open choice principle, words are treated as independent items of meaning and separate choices; the idiom principle, in contrast, points to the fact that "a language user has available to him or her a large number of semi-preconstructed phrases that constitute single choices, even though they might appear to be analysable into segments" (1991: 110).

8 Viaggio defines "sense" as "the result of the interaction between the semantic meaning of the utterance and the communication situation" and he goes on to state that "out of situation, and even within a linguistic context, any word, any clause, any sentence, any paragraph, and any speech have a myriad of possible senses; in the specific situation — only one" (1992: 32).

9 The Corpus of Written Italian held by the Department of Italian Studies at the University of Birmingham was offered to the Department by kind permission of Prof. Zampolli of the Istituto di Linguistica Computazionale of the University of Pisa. It is a part of larger holdings created as a joint venture between CNR (Centro

da and, having identified some formal features associated with it, I will derive conclusions concerning some of its meanings, pointing to the fact that the formalisation of regularities exhibited is possible. I will, at the same time, evaluate a standard dictionary definition, often the only tool at the disposal of the translator. In my second example I will consider a form of the modal *dovere* and I will try to show how the formal features in the context indicate an extension of the unit of meaning with obvious consequences on the unit of translation.

2.3.1 The preposition *da* in Italian: the correlation between formal features and meaning

If we consider a normal entry for a word in one of the many standard bilingual dictionaries, we notice that although the different meanings attributed to the word in question may make perfectly good sense to an educated native speaker of the language, very little indication of the formal features that realise the meanings is usually given. This practice is common use with dictionaries which seem to prioritise a process of de-coding rather than encoding.

However, from the point of view of both the translation process in general and for the sake of the average student in particular, we have to look for formal criteria, i.e. observations that can be systematically derived from the co-text of utterances, that allow for reliable meaning attribution and, at the same time, are good guidelines to produce a natural, non-stilted language when applied to the encoding process. The functional tags offered by a typical dictionary entry for the preposition *da* (*agente, provenienza, allontanamento, etc.*) are certainly insufficient for this purpose.

Let us now look at evidence from the corpus in parallel with some dictionary definitions. The entry for meaning 1 in the Collins Italian Pocket Dictionary reads:

1. (*agente*) by; *dipinto da un grande artista* painted by a great artist.

As can be expected, this meaning is consistently associated in the corpus with the pattern Iverb *essere* or *venire* + past participle + *da* + NI. In functional terms, we have therefore the traditional Ipassive + *da* + agentI. This colligational feature, as by now we have come to expect, is associated in the corpus with a lexical feature: the agent, always following *da*, is consistently identified with a lexical set of proper nouns of people, such as:

l'iniziativa è stata presa da Antonio Rive
 magistralmente realizzato da Galay
 come è stato utilizzato da Goubert
 l'operazione conclusa da Murdoch
 sono stato informato da Roma
 le espressioni usate da Virgilio.

Roma is not a proper noun of a person; in this instance, however, it is clear that *Roma* is personalised and does not stand for the city but for the bureaucrats in the Ministry. The evidence from the corpus, if on the one hand seems to confirm the functional tag offered by the dictionary definition (*agente*), on the other points to the fact that the passive in Italian appears almost exclusively with proper nouns of people rather than with noun phrases such as *un grande artista*. Again this is a consideration that a translator or the student will need to take into account.

The entry for meaning 5 in the dictionary reads:

5. (*provenienza, allontanamento*) from; *arrivare/partire* — Milano to arrive/depart from Milan; *scendere dal treno/dalla macchina* to get off the train/out of the car; *si trova a 5 Km* — *qui* it's 5 Km from here.

Again, although the corpus confirms the functional tag offered by the dictionary (*provenienza, allontanamento*) with a lexical set of verbs such as *emergenti, verrà, vengono, venivano, risulta, partirò* in the left co-text of the node, indicating provenance, it also points to a perhaps more unexpected and yet fairly consistent pattern: the provenance is usually an abstract or metaphorical entity (*ambiente sociale, un'indagine, una sorta di paradosso*), rather than a physical one as suggested by the examples in the dictionary. No indication of this is given in the dictionary definition and yet it is certainly a feature that should be taken into account in the process of translation.

What is perhaps the most interesting point shown by the corpus evidence is that the second most prominent meaning of the preposition *da* according to the usage recorded by the corpus is not even mentioned in the dictionary. This is its modal function (accounting for 13% of the total instances in the corpus) as in the following concordance:

reti metalliche e pentole da trasformare in [...]
 alcuni problemi ancora da risolvere
 si chiede i criteri da utilizzare
 la patrimoniale sugli immobili da affiancare a quella [...]
 Lelio mi porse la mano da baciare
 il testo della norma da interpretare
 fascicoli semplici da portare avanti
 quasi un diritto da esercitare.

As we can see, this meaning (which could be glossed as 'that should be/to be transformed, solved, adopted', etc.) is consistently realised by the colligational pattern *da* + infinitive which, in itself, is formalisable and can reliably disambiguate this meaning from the others. In the few examples discussed above, we have seen that in all cases the formal features in the environment of the preposition *da* can be systematically linked with specific meanings. Frequency counts of functions separated from their formal realisations are impossible,¹⁰ but a degree of formalisation is possible if the link between the formal and the functional is established systematically.

A database of such correspondences offers a platform for the linguist and the translator alike, as well as the chance to observe in detail the segmentation of experience (Baker 1992: 18)¹¹ reflected in certain language patterns. Frequency counts of collocational and colligational features will also allow observations of a typological nature which are likely to influence the translator in choosing certain courses of action rather than others. We should always remember that half of the translation process is an encoding activity, and the process I have just illustrated in this section is something that should be carried out both in the source language and in the target language so that the encoding process is possible and successful in two directions. The issue at stake is not grammaticalness but *naturalness* (Sinclair 1984), and the evidence from the corpus points to the fact that without being aware of what lexical choices are associated with given colligational patterning the result is bound to be a stilted, awkward type of language.

2.3.2 The modal *dovere* in Italian: the extension of the unit of meaning

We come now to examine the evidence concerning a specific form of the verb *dovere*. I have chosen the so-called *passato prossimo*, usually associated with a completed action in the recent past, and traditionally confused by foreign students with the *imperfetto*, associated with incompleteness, repetition, description in the past. The difference between the two tenses is not grammatically encoded in English and this is why an accurate lexicogrammatical profile of the unit of meaning is of paramount importance when translating.

10 This is unless a corpus is annotated manually, which of course limits the scope of the analysis on account of the size of the corpus.

11 Baker (1992: 18) defines the segmentation of experience as "the divisions and sub-divisions 'imposed' by a given linguistic community on the continuum of experience".

The *passato prossimo* is realised in Italian by the pattern auxiliary *essere* or *avere* + past participle; what auxiliary is appropriate depends on whether the verb it accompanies is transitive (requiring *avere*) or intransitive (requiring *essere*). When a modal, such as *potere*, *volere* or *dovere* is present, then we are told that the choice of the auxiliary depends on the infinitive following the modal — again *essere* for intransitive verbs and *avere* for transitives — for example:

* ha dovuto interrompere la carriera¹²

* sono dovuta ritornare a casa.

This received wisdom as to what auxiliary is appropriate for the *passato prossimo* of modals is not, however, supported by evidence in the corpus. The *passato prossimo* of *dovere* is almost exclusively associated with the verb *avere*, whether the infinitive following is a transitive or an intransitive verb.¹³ The language is obviously changing and the frequency of the phenomenon seems to have already accorded the stamp of acceptability to usage, even though standard reference books have not yet recorded the change.

But let us continue our observation of the corpus evidence. Considering now the infinitives that follow the *passato prossimo* of *dovere*, we can identify a lexical set related to a negative semantic area and supported by an overall 90% frequency. We find that the type of things we 'have to do' consist of rather unpleasant activities related to struggling, paying a price, giving something up, accepting some kind of defeat, or even 're-dimensioning' oneself (as the opposite process to an ego-trip):

Sting ha dovuto arrabattarsi fin da ragazzo
 alla fine anche il Consorzio ha dovuto aprire il borsellino
 la Apple ha dovuto abbassare il prezzo
 alla fine ha dovuto constatare la realtà
 alla fine ha dovuto cedere
ha dovuto dimettersi per una malattia
 Guido Folloni ha dovuto difendersi dalle critiche
 per farlo ha dovuto interrompere la carriera
 per il momento ha dovuto registrare lo scacco
ha dovuto sostenere anche le spese
ha dovuto darsi una regolata.

12 The asterisk preceding the two examples here marks them as 'made up' in order to explain a point rather than derived from the corpus analysed in this paper.

13 The only exception is when the infinitive in question is a reflexive verb, which then consistently calls for the auxiliary *essere*.

What we are observing here is an extension of the unit of meaning. If we consider the paradigmatic choice involved, the use of the modal not only entails certain syntactic constraints, such as being followed by an infinitive, but is consistently co-selected with a lexical set of infinitives realising specific semantic constraints. A web of syntactic, lexical and semantic choices seem to be triggered by the initial use of the modal in question. The consequences of this strong semantic association between what is usually seen as a syntactic feature, such as a tense, and a lexical one, such as the type of verb following, are again of specific importance for translation.

The issue is complicated further if we consider that the target language as well will have its own semantic preferences, reflecting, no doubt, its own situational as well as linguistic constraints; and these preferences are not likely to be the same as the ones in the source language. The identification of the unit of translation, therefore, will not by any means match the identification of the unit of meaning in the source language nor the one in the target language. Special adjustments will be necessary to make up for the mismatch. Sometimes the translator will intervene explicitly with a translator's note, other times s/he may choose to encode some of the meaning in other ways or not encode it at all. But this, as mentioned above, will be part of stage 2 of the translation process and we are not dealing with this in the context of the present study.

The use of a corpus is indispensable for a reliable description of the language, because no description based on intuition, or even on small collections of authentic examples, selected ad hoc to illustrate given categories or semantic distinctions (in the lexicographic tradition), will offer us the insight into the language system that frequency distribution of "repeated events" will yield. The type of lexical and semantic constraints we have observed in this section and in the preceding one are likely to reflect, as Sinclair (1991: 110) points out, the nature and beliefs of the world around, philosophical concepts very much linked to a specific culture, as well as specific physical objects and activities connected, directly or indirectly, with the language. What Firth called "the context of situation" can be observed to make constant incursions into the co-text of a node word or phrase observed. The cumulative evidence of these incursions is bound to reflect the most hidden parameters of the world in which the language is spoken.

3. *Real* between *reale* and *vero*: a Case Study for Translation Equivalence

3.1 Methodology

I would like now to apply the method illustrated above to the identification of suitable Italian translation equivalents for the English adjective *real*. A first

intuitive translation, which I shall adopt as a starting point, is the adjective *reale*; the decision is totally arbitrary, however, and it will soon become apparent that *reale* does not in fact cover all the different functions that its English parallel term has.

The method I am adopting consists of a series of steps in generalisation and de-generalisation between source and target language: the first step consists in identifying, classifying and attributing a meaning/function to a formal pattern in the source language;¹⁴ the second step involves working the same procedure on a chosen possible equivalent in the target language. While the first step is likely to start from observations of a formal nature in the co-text of a word or phrase to move to the attribution of a function, in the second step, inevitably, the starting point will be a function that will then be de-generalised into its formal patterning:

SOURCE LANGUAGE	TARGET LANGUAGE
<u>Step 1</u>	
formal patterning/1	
→ function/1	
	<u>Step 2</u>
	→ function/2
	→ formal patterning/2

Table 1

It must be emphasised that this second step involves a certain amount of trial and error, and the point of departure in the target language, function/2, is bound to be the first 'intuitive' translation equivalent; and this, although perhaps backed by respected reference works, will inevitably not be empirically tested. Having chosen, for instance, as a possible equivalent of *real*, the Italian adjective *reale*, we will go through the series of steps building up a profile of *reale*, i.e. de-generalising function/2 into its formal features. In the process, however, we are bound to identify other formal features that encode different meanings or functions, pointing to the fact that the profile of *reale* differs from the one of *real*, in spite of several points of matching behaviour. Our aim, taking into account both matches and mismatches, is to construct a network of relations between source and target language, born out by formal correspondences between contextual features and functions. Perhaps the most important point to keep in mind is to avoid the assumption of a one-to-one correspondence between terms.

¹⁴ This procedure is what Johns (1991: 4) refers to as "Identify-Classify-Generalise" and applies to concordance-based learning research (data-driven learning).

Ironically, the translation process would gain if we started from the assumption of non-equivalence.

In a corpus-driven study of the word *real* (Tognini-Bonelli 1993a and in press/a) I identified the different functions of this adjective, both in relation to the noun-group and in relation to a wider context, that is in relation to its pragmatic function in discourse. I will draw now on this particular study and I will try to see if a similar behaviour can be attributed to what I have called the first 'intuitive' translation equivalent, the adjective *reale*. Given the fact that not all of the functions performed by *real* will prove to be applicable to *reale*, I will then consider another possible translation equivalent and go through the same procedure, as outlined in Table 1.

3.2 *Real*

Four functions of *real* can be identified and related consistently to their formal environments. I will deal with these in turn, although not necessarily taking into account frequency of occurrence in this context.

3.2.1 The lexical use of *real*

First of all I will consider what I call "lexical *real*", where the meaning of the adjective can be glossed as defining something "that actually exists and is not imagined, invented, or theoretical" (Cobuild English Language Dictionary). This function of the adjective is realised in connection with three types of formal patterning in the co-text. Firstly, when the adjective is modified by a grading adverb such as *very*, for example:

kept back from people who had a very real need of it
 if the crisis continued there was a very real possibility of a further [...] a Middle-East peace settlement in the area at a time where there is very real danger of another major conflict.

It is interesting to note here that the majority of nouns qualified by *real* build up a lexical set of abstract nouns, as if this emphasised attribution of reality could not apply to the physical world. Other members of this lexical set are words like *optimism, tragedy, suffering*.

The second type of formal patterning associated with the lexical function of *real* is when the adjective is found in a predicative position with respect to the noun, preceded by a certain group of verbs, such as *be, become, appear*:

"That's right" says Howard. "And when one face becomes real all faces become real.."

"Right," says Barbara, "especially the pretty ones."

"The threat against him is real." Officials say a warrant [...].

The third type of formal patterning associated with this function is when we find *real* coupled with, or contraposed to, another adjective as in the case of *real and potential*, *real or imagined*, or *real and justifiable*:

Men's heads were burdened with curled and powdered wigs; women's
with complicated constructions of real and false hair

Their responses often reflect real and justifiable apprehension
about [...].

Having identified the contextual features associated with the lexical function of *real*, let us now move to step 2 and consider the Italian translation equivalent *reale* with the aim of isolating a similar function and its formal realisation. A similar lexical function is indeed present in the Italian corpus, but the formal realisations are different from the English ones.

The modified use of *real*, along the pattern I(indef. article) + modification (usu. *very*) + *real* + NI has got as an Italian equivalent the pattern I(indef. article) + N + *reale*, although not quite a perfect match. Let us consider a couple of examples:

Riteneva che corrispondessero a un bisogno reale, al bisogno di
governare

Interessa solo perché ha una funzione reale nell'educazione (o
diseducazione)

Il sabba era un evento reale: un crimine punibile col rogo.

Although the two patterns are similar and can be associated to equivalent functions, we note certain differences; for instance the fact that no modification is associated with the Italian *reale*. It is also interesting to identify the similarities: the lexical set of the nouns qualified by *reale* is also a set of abstract nouns, very similar to the English ones; we have, for instance, *sviluppo*, *vantaggio*, *contesto*, *influsso*, *riferimento*, *aria*, etc. In the Italian context, we should note that the adjective by default follows the noun, but this is by no means the only position possible. We shall see later that, indeed, *reale*, as some other adjectives in Italian, can also come before the noun, but in that case it will be associated with a different function.

Going on to the second type of patterning associated with the lexical function of *real*, that is the predicative use IN + *become/appear/be* + *real*, we find no equivalent in Italian. This does not mean that the construction would be

ungrammatical; quite simply, though, that it is not used. The translator, in this case, will have to adopt a different strategy to encode this meaning of *real* in the target language.

We come now to the third type of patterning encoded by *lreal + and/or + adjectival* where the adjective is either some kind of antonym (*false, imagined, potential*) or in some respect semantically related to *real* (*justifiable*). This time we do find two parallels in Italian, though, to some extent, with a different pattern: on the one hand we have *lpiù + adjective + che + reale* as in:

Penso che la divergenza sia più apparente che reale
il suo terreno, più potenziale che reale;

on the other, we have *IN + (di) reale + (di) adjectival* (or viceversa), as in:

Inizia quella frattura psicologica e reale nello stesso tempo
Il sogno è qualcosa di reale e di osservabile?

The adjective, in the first case, belongs to a lexical set of potential antonyms of *reale*, for instance *apparente, potenziale*, etc.; in the second case it can be either semantically related to the adjective (as *osservabile*) or again an antonym (*psicologica*).

3.2.2 The financial function of *real*

This is a fairly straightforward function, realised by the presence of a set of financial nouns collocating with *real*. For example:

Other indices showed the real cost of living rose by about 14%
The MP's said the real value of benefits has fallen
It fell by about 5% in real terms.

Other nouns belonging to the same lexical set are *growth levels, cost of production, economy, value*, and of course there is the very common phrase *in real terms*, belonging to the same financial domain where prices, incomes, etc. are considered in terms of purchasing power rather than nominal currency value.

The pattern in Italian is very similar; we have a lexical set of financial terms such as *salario, tassi di interesse, valore, costo, potere d'acquisto, ricchezza* and the adjective *reale* always in post-nominal position: *llexical set of financial Ns + reale* as in:

Gli interessi versati danno luogo a un costo reale per le imprese
almeno dieci volte superiore al valore reale.

The symmetry between the two lexical sets is quite reassuring for the translator; it may be worth noting, however, that while the English pattern is always associated with the definite article, the Italian pattern is sometimes found in the presence of the indefinite article.¹⁵

3.2.3 The selective function of *real*

In order to explain the specific function associated with the adjective *real* in this case, I am going to adopt a distinction posited by Sinclair (1992) between a "selective" and a "focusing" role that adjectives in general may have with respect to the noun to which they refer. I will deal with the focusing function in section 3.2.4 below; here I will consider the selective function and its implications in the specific case of *real*.

According to Sinclair's distinction, a selective adjective, as the term suggests, presupposes a selection from a range of other possible adjectives also available for describing the noun; it therefore characterises the noun by classifying it in some way (hence the term "classifier"). When we talk, for instance, of "the Italian Department", the adjective *Italian* answers the question 'which department?' and classifies the noun accordingly. This is the traditional way of viewing the function of adjectives (cf. Baker 1989: 271; Quirk et al. 1985: 74).

In the case of the adjective *real*, the selective function represents the marked and less frequent choice; it is associated with the formal environment *the* (or possessive) + *real* + N!¹⁶ usually in thematic position. Let us consider a couple of examples:

The British Government believes the real reason for the ban is an attempt to cushion French farmers from competitively priced British products

Chancellor Kohl's stance is bound to upset Moscow, but the real question is what can Moscow do about it?

We notice immediately that here the meaning of *real* has nothing to do with the fact that something exists in reality. In the first example, *the real reason for the ban* is selected against another alleged reason which is implicitly referred to as 'not correct'. Similarly in the second example *the real question* presupposes a

¹⁵ This point is important because when *real* is preceded by an indefinite article in English it changes completely its function (see the focusing use in section 3.2.4 below).

¹⁶ In Tognini-Bonelli 1993a I also describe three specific invalidating features that change the role of selective *real* to focusing, as discussed in section 3.2.4 below.

value judgement about another question (related to the fact that Kohl's stance is going to upset Moscow) which is not explicitly identified as such in the text, but is to be taken as less important. In these instances the existence of another element to make up the contrastive set and the value judgement associated with it are both inferential, since they are not explicitly stated in the text. We can say that the selective function of *real*, therefore, first of all establishes an inferential correlation with another implicit partner; secondly, it evaluates this second element as a lesser term in the correlation. By so doing, we can say that *real* assumes a structural role in discourse: what is being structured by the speaker or writer is the interpretative process to be undergone by the addressee.

It is worth noting in this respect that the correlation between formal contextual features and meaning accounts for a rather extended type of meaning: the reference to the lesser term, as we have seen, could encapsulate unexplicit propositions, perhaps in the form of lengthy statements realised over whole paragraphs in the preceding text. In other words the formal patterning in the context can be shown to account for the pragmatic or inferential function that a certain item may have in discourse where the reference is not a specific linguistic item but a whole proposition.

Let us consider now the possibility of an Italian translation equivalent, an adjective with a similar inferential and pragmatic function in discourse. It soon becomes evident that our 'intuitive' translation equivalent *reale* does in no way perform a similar function in Italian. We may resort again to intuition or to the help of parallel translated corpora to postulate another translation equivalent; either way this needs to be empirically tested. The adjective I will investigate here in order to assess the specific formal correspondences with the selective use of *real* is *vero*.

Indeed one of the functions of *vero* is very much what we are looking for; in Italian the pattern [definite article (or possessive) + *vero* + N] triggers a similar inferential correlation as the one set out by *real*. Consider for instance:

Nessuno aveva mai saputo il vero nome del Gran Masten
 Poi risultò che il vero capo non era Persico ma Jo
 Non riuscivamo a cogliere il vero bandolo della matassa.

In these instances the same type of inferential correlation we have observed with the selective use of *real* is established; again the term qualified by *vero* triggers a value judgement and implicitly refers back to a lesser element. *Il vero nome* is thus contrasted with another name which is not real — a pseudonym or an alias, perhaps. *Il vero capo*, Jo, is set against another "boss", Persico, perhaps officially in charge, but not quite.

The parallels between the English and the Italian structures are quite clear. In Italian, we should note however that the adjective is in pre-nominal position.

What is perhaps not immediately noticeable at the beginning is that the English *real* seems to be found more often in thematic position and to collocate more consistently with "discourse" words such as: *motive, cause, reason, purpose, issue, key, problem, question, extent*, etc. The English evidence therefore points to the specific use of *real* for argumentation purposes, when different points of view are evaluated and adopted, or dismissed, in the process of discourse. The Italian equivalent *vero* does not seem to favour quite as consistently the thematic position and, in terms of collocates, it is associated with words that do not specifically relate to discourse, for example: *nome, sapiente, artista, centro, creatore, padrone, padre, problema, scandalo, viaggio, segreto*. This is an interesting problem for the translator because, although the function of the two adjectives is very similar at the pragmatic level, the "segmentation of experience" in the two cultures, as reflected by the collocates, shows a clear mismatch. Again, we will leave this problem to the translator's chosen strategy in stage 2 of the translating process. Here, suffice to note that any notation for a data-base of translation equivalents will have to take into account these differences which only become apparent in the light of frequency distributions made available by large corpora. A decision to ignore them should only stem from an explicit strategic stand on the part of the translator and not an easy ignorance of the facts.

3.2.4 The focusing function of *real*

We may note that an adjective with a selective function represents a separate choice with respect to the noun to which it refers. This is perhaps the default option in that, off hand, we do not expect adjacent words to repeat each other's meaning. However, when it comes to a focusing adjective as defined by Sinclair, we have to review this position in the light of new observations. The adjective with a focusing function appears co-selected with the noun and, as such, closely linked to the nominal choice rather than a choice in its own right. According to Sinclair, "the necessary correlate of co-selection" is the phenomenon of de-lexicalisation (1992: 16); typical examples of this phenomenon are noun groups such as *physical assault* or *scientific experiment* where the adjective appears de-lexicalised in that it repeats the meaning already built into the noun, rather than select, add to or restrict the noun in any way. Quite often this doubling of the meaning of the noun entails intensification. Let us consider some examples of *real* with a focusing function:

The party of Margaret Thatcher is under real pressure from the
opposition

Unless troops intervene there's a real danger of confrontation

Five people were killed; and there's real fear of an all-out war.

In these instances the meaning of *real* can be glossed as 'proper', 'genuine'. The relationship established with respect to the noun group is inward looking and the adjective emphasises certain characteristics already built into the noun rather than set up a contrast or a correlation with another noun group. Through a process of de-lexicalisation, it comes to emphasise the 'typicality' of the noun, i.e. the consensus-based view that the meaning of it is what we all expect it to be. Here, *real pressure* is genuine pressure, *a real danger* is something we would all agree to call "dangerous",¹⁷ etc.

The formal features associated with this function are usually l(indefinite article) + *real* + NI. Sometimes, however, certain invalidating features turn the 'would-be-selective' function of *real* into focusing. This happens, for example, when *real* is modified by *the first* or *the only* — l*the first/only* + *real* + NI — as in:

However, the first real test for Mr Major may come when [...]

The only real evidence for the cave's existence is [...].

Or when *real* is itself modifying another adjective — l*definite article* + *real* + *adj.* + NI — as in:

The agenda will be broadened to cover the real power-sharing issue

We'll have a better idea of the real clinical utility of this [...].

It is interesting to note that, in this second case, the specific invalidating features are associated with the rhematic position in the sentence, which was indeed very rare when the adjective had a proper selective role. In these instances *real* emphasises the noun group and specifically adds prominence to the other modifying adjective. A third invalidating feature that turns the selective into a focusing function is the presence of a negative verb or word preceding the adjective:

German membership to Nato is no longer the real issue

Mr Delors didn't yet know the real reason for the resignation.

17 In this context, it is interesting to go back and re-consider one of the examples I gave to illustrate the lexical use of *real*, namely when the adjective is modified by a grading adverb such as *very*, for example: *a Middle-East peace settlement in the area at a time where there is very real danger of another major conflict*. Although the noun that collocates with *real* is in both cases *danger*, the lexical use entails a reference to a certain "perception of reality", the fact that the danger is strongly perceived in the real world, while the same adjective with a focusing function appeals to the typicality of the notion and the consensus view that allows us to classify the feeling as danger.

The type of noun associated with *real* with a focusing function is again a lexical set of abstract nouns such as *problem, danger, difficulty, threat, concern, fear, hope, optimism, opportunity, possibility, democracy, negotiations*, etc. almost to imply that reality here does not qualify the 'real world'.

We come now to our target language and we will try to locate a similar focusing function with a similar meaning in the light of the evidence from the Italian corpus. Again the adjective *reale* does not realise at all a similar meaning to the one we have identified and we have to resort to *vero* for a possible parallel to the English adjective. Let us consider some examples:

Tisane, infusi, decotti, sono un vero toccasana contro i dolori
 Non credo che questo sia fare un vero favore a Fernandez
 Sembra che le donne siano dotate di poteri paranormali. Una vera donna capisce al volo.

The function of the adjective *vero* in these instances indeed seems to be the appropriate translation equivalent for the focusing *real*. The meaning can be glossed as 'proper', 'genuine', the function is one of intensification and of implicit reference to a consensus view: *una vera donna* is a woman, as society expects her to be (and we all know that while men are rational, women rely on intuition!).

When we consider the formal patterning associated with this function of *vero* in Italian, we note that again the adjective appears in pre-nominal position, this time, however, preceded by the indefinite, rather than the definite article, as was the case with the selective function — *lun/una*, etc. + *vero/vera* + NI. We will also note that, while in English we had located a lexical set of abstract nouns collocating with *real*, in Italian this is not particularly noticeable and we have examples like *diavolo, filologo, mirmecologo, pubblico, temperamento, trionfo* which cannot really be grouped under the same lexical or semantic label.

From the point of view of frequency, it should be mentioned that while the focusing function of *real* accounts for about 80% of the instances in English, the same cannot be said for Italian, where the focusing function of *vero* is relatively rare (11%). In Italian the most frequent pattern associated with *vero* is the predicative use (*è/non è vero che...*) often acting as a preface at the beginning of a sentence and with an overall frequency of 40%; the English equivalent in this case is not *real* but *true*. As we can see, this is only the beginning of a network — or, perhaps better, a 'web' — of equivalences based on contextual patterning rather than on words as such. Further research is needed in order to identify such networks across languages, but in the context of this paper we will not go further into it.

In Italian there is, however, another pattern that we should briefly mention because it has a very similar formal realisation to the focusing *vero* above,

although it also shows a slightly different function. This involves the phrase *vero e proprio* in the pattern I(indefinite article) + *vero e proprio* + N1. Let us consider some examples:

Non un semplice aggiornamento, dunque, ma un vero e proprio progetto di ristrutturazione

L'eremo, circondato da un muro, è una vera e propria cittadella
[...] turba moltissimo lo scontroso bestione, vero e proprio "orso".

In these instances we detect a very similar function to the focusing *vero* above, the appeal to consensus and typicality: *un vero e proprio progetto di ristrutturazione* ("a real project of restructuring"), thorough and complete, we all know what it is. It is important to note, though, that *vero e proprio* establishes a cohesive link with a preceding element and its function is to re-qualify and in a way emphasise, in the light of typicality, the meaning of the other element. So, *un vero e proprio progetto di ristrutturazione* re-qualifies *un semplice aggiornamento* ("a simple up-dating") and brings it one step further. Similarly, in the second example, *l'eremo* ("a hermitage") becomes *una vera e propria cittadella*, "a small enclosed town in its own right"; and in the third example the beast, already defined *scontroso* ("sullen"), is further qualified as *vero e proprio orso*, where *orso* is the Italian word for "bear", but also the stereotype for anybody totally introverted and antisocial.

In the light of this evidence we can say, therefore, that the pattern involving *vero e proprio* in Italian, although very similar in meaning to the use of focusing *real*, presupposes a cohesive link with another element¹⁸ and serves the purpose of re-qualifying it and emphasising its typicality. The translator will obviously have to be aware of this specific feature when encoding in the target language; equally, a database of translation equivalents will have to develop a system of annotation capable of accounting for these formal and functional differences between source and target language.

4. Conclusion

I would like to make here just a few comments and briefly summarise some of the issues which have emerged in the course of this study. The aim of this study has been to look into a methodology that would reliably identify translation equivalents between two languages, here English and Italian. Our purpose has been to compare rather than to translate, with a view to assessing the feasibility

¹⁸ In this respect the use of *vero e proprio* is very similar to the use of the adjective *actual* in English. I have analysed in detail the different functions of *actual* with specific reference to discourse argumentation in Tognini-Bonelli 1993b.

of a database of comparable units of meaning, a kind of translation workbench that would offer the translator a platform of linguistic facts.

Translation is above all a bridging of two different cultures, two different situations. Having posited the concept of displaced situationality (both linguistic and extra-linguistic) as the assumption behind this bridging, I located in the Firthian contextual theory of meaning the rationale behind this type of work. This theory, to my mind, accommodates well the need for integration between the linguistic and the extra-linguistic and offers a view of text as intrinsically embedded in its social and its linguistic context.

In the present study I have looked specifically at the linguistic context of a given unit, and, assuming that the function of an item in a certain co-text can be systematically correlated with formal features present in such co-text, I have tried to identify the formal patterning that determined certain meanings. Our formal observations have related to three types of contextual features: *collocation*, *colligation* and *lexical sets*. While collocation is the most immediate patterning, simple word co-occurrence, colligation represents a step in abstraction in that it is co-occurrence at the level of word and sentence classes. Lexical sets could be seen as the coming together of grammatical classes and lexical items; they yield specific insights into the segmentation of experience as reflected in language.

Through a series of steps in generalisation and degeneralisation, I have established the beginning of a web of translation equivalents where each meaning and/or function is correlated with its formal realisations in the two languages. The source of our observations has been the concordance, bringing together many instances of a chosen word in the contexts in which they occurred. By scanning the concordance both horizontally and vertically we have observed the patterns consistently associated with a given item. While our inspection of the horizontal axis has brought to light syntagmatic constraints, the vertical axis has shown the paradigms, the choices available in a given place in structure (see Tognini-Bonelli 1995).

In the course of our analysis, certain issues have emerged, challenging some received beliefs concerning the interrelation between lexis and grammar on the one hand and the whole idea of what constitutes a unit of meaning, on the other. Syntagmatic constraints, for example, are traditionally associated with grammatical choices, while paradigmatic choices are seen as lexical items 'slotting into' pre-set structural positions. The view of a clearly set dividing line between the two, however, is not borne out by observations drawn from corpus work: grammatical and lexical choices often merge into one another. At a syntagmatic level, for example, that is on the horizontal axis, we have observed that the choice of a word not only entails a grammatical choice (the modal *dover* is followed by an infinitive, for example) but, more often than not, prospects certain other lexical choices in a paradigm: so, for instance, the preposition *da*,

as an indicator of provenance, prospects the choice from within a set of abstract and metaphorical nouns in Italian. Similarly the *passato prossimo* of *dovere* seems to call on an unpleasant set of actions realising specific semantic constraints. The adjective *real* with a selective function seems to entail the choice of a set of abstract "discourse" nouns, at the syntagmatic level in English, but not in Italian.

These indications of co-selection have brought us to posit, in most cases, an extension in the unit of meaning to include contextual patterning which is regularly associated with the item in question. This extension, we have concluded, is of particular importance and has to be taken into account in the process of translation. Words do not often exist as single choices; they entertain close relationships with other items: because of the cumulative effect of repeated occurrences, they end up carrying a meaning that goes beyond their traditional dictionary definitions. As a consequence, the translator cannot afford to translate single units into a vacuum and, before s/he ventures into translating, will have to be well aware of the relationships words entertain in the source language and their translation equivalents entertain in the target languages. These are bound to be two sets of different relationships and the translator will have to negotiate equivalent effects within different contexts.

Bibliography

- Baker, C.L. (1989): *English Syntax*, Cambridge (Mass.)/London, The MIT Press.
- Baker, M. (1992): *In Other Words: a Coursebook on Translation*, London/New York, Routledge.
- Firth, J.R. (1957): *Papers in Linguistics 1934-1951*, London, Oxford University Press.
- Halliday, M.A.K. ([1961] 1966): "General linguistics and its application to language teaching", *Patterns of Language: Papers in General, Descriptive and Applied Linguistics*. Ed. by A. McIntosh and M.A.K. Halliday. London, Longman, pp. 1-41.
- Johns, T. (1991): "Should you be persuaded? Two samples of data-driven learning materials", *Classroom Concordancing. ELR Journal*, 4, CELS, University of Birmingham, pp. 1-16.
- Neubert, A. (1985): *Text and Translation*, Leipzig, VEB Verlag Enzyklopadie.
- Nida, E. (1964): *Towards a Science of Translating*, Leiden, Brill.
- Palmer, F.R. (1968) (ed.): *Selected Papers of J.R. Firth 1952-59*, London/Harlow, Longman.

- Quirk, R., Greenbaum, S., Leech, G. & Svartvik, J. (1985): *A Comprehensive Grammar of the English Language*, London/New York, Longman.
- Sinclair, J.M. (1981): "Planes of discourse", *The Two-fold Voice: Essays in Honour of Ramesh Mohan*. Ed. by S.N.A. Rizvi. Salzburg, Salzburg University, pp. 70-89.
- Sinclair, J.M. (1984): "Naturalness in language", *Corpus Linguistics. Recent Developments in the Use of Computer Corpora in English Language Research*. Ed. by J. Aarts and W. Meijs. Amsterdam, Rodopi, pp. 203-210.
- Sinclair, J.M. (1991): *Corpus Concordance Collocation*, Oxford, Oxford University Press.
- Sinclair, J.M. (1992): "Trust the text", *Advances in Systemic Linguistics: Recent Theory and Practice*. Ed. by M. Davies and L. Ravelli. London/New York, Pinter, pp. 5-19.
- Tognini-Bonelli, E. (1993a): "From a reliable source: uses and functions of the adjective *real*", *Dialoganalyse IV. Referate der 4. Arbeitstagung Basel 1992*, Tübingen, Max Niemeyer Verlag, pp. 429-436.
- Tognini-Bonelli, E. (1993b): "Interpretative nodes in discourse. *Actual and Actually*", *Text and Technology*. Ed. by M. Baker, G. Francis and E. Tognini-Bonelli. Amsterdam/Philadelphia, Benjamins.
- Tognini-Bonelli, E. (1995): "Italian corpus linguistics: practice and theory", *TEXTUS*, 8, 2, Genova, Tilgher, pp. 391-412.
- Tognini-Bonelli, E. (in press/a): "Appeals to reality in the world of discourse: structuring interpretation", *Le trasformazioni del narrare*. Atti del XVI Convegno A.I.A. (Bari, 1993).
- Tognini Bonelli, E. (in press/b): *Corpus: Theory and Practice*, Birmingham, TWC.
- Tsui, A.B.M. (1994): *English Conversation*, Oxford, Oxford University Press.
- Viaggio, S. (1992): "Contesting Peter Newmark", *Rivista Internazionale di Tecnica della Traduzione*, 0, Udine, Campanotto, pp. 27-58.
- Viaggio, S. (1995): "Translators and interpreters: can they be friends?", *Rivista Internazionale di Tecnica della Traduzione*, 1, Udine, Campanotto, pp. 23-31.