CROSSLINGUISTIC INFLUENCE AS A KEY TO EXTRACTING SECOND LANGUAGE TEACHING MATERIALS FOR MONOLINGUAL CLASSES FROM TRANSLATION CORPORA

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Working with Portuguese learners of English has brought to my attention a considerable number of errors of English which have to do with my students’ prior knowledge of Portuguese. Identifying those errors and interpreting them in the light of contrastive linguistics can help indicating ways in which a Portuguese–English translation corpus can be harnessed to prepare English as a second language teaching materials for native speakers of Portuguese. This paper reports on a few typical examples of Portuguese-English crosslinguistic influence and explains how they can be used as a key to extracting from a Portuguese-English translation corpus comparable facts of linguistic performance which are particularly relevant to Portuguese learners of English.

1. Introduction
An area which has much to gain from computerized analyses of translation corpora is that of second language instruction for learners who share a single first language background. Although the idea of developing second language materials specially designed for specific groups of learners is not novel (Lado, 1957), it has remained unpopular among those who feel languages should be acquired rather than learnt (Krashen and Terrel, 1983) and impracticable in classes where learners have different native languages, as is normally the case in English as a foreign language classes conducted in Britain and the USA. Since it is also from these two countries that the majority of EFL teaching materials originate, it is not surprising that most of such materials have been conceived for language learners in general rather than for learners of a single first language background in particular.

There are, however, several recent studies which suggest that it is important for second language instruction to take specific second language problems into account. Herron & Tomasello (1988), for example, found that prompting learners to identify their own errors when dealing with a new structure helped them learn better than in situations in which they were simply exposed to correct examples of the target structure. In a study involving adverb placement, White (1991) found that corrective feedback seemed to work better than correct input alone.

Of course the problem with feedback remains that learners who come from disparate linguistic and cultural backgrounds don´t have all that many second language difficulties in common, and hence the feedback that is significant to one student may not be relevant to another one. Anyone working with monolingual classes, however, will have noticed that students who share the same native
language tend to experience similar second language problems that can be traced back to the influence of their first language. In these cases, feedback on the second language problems that the students have in common can have an especially important role. Tomasello and Herron (1988, 1989) demonstrated that

a. students learned more when the influence of the native language upon the target language was openly discussed in class than when instruction focused only on the target language;

and that

b. students who were actually led to make transfer errors so that they could then be corrected learned more than students who had simply been warned of areas in which negative transfer was likely to occur.

In view of these findings, it would be a waste for second language teachers working with monolingual classes to limit themselves to the use of general, all-embracing second language teaching materials conceived for multilingual classes. In addition to the excellent multilingual materials currently available in the market, second language teachers working with monolingual classes should not close their eyes to the opportunity of using their students’ first language as a tool for teaching the second language.

It is through this prism that computerized translation corpora become especially important to second language instruction. Because they enable us to carry out detailed and systematic comparisons between languages, it seems to me that they can be a very useful source of raw materials for exercises that will help learners become aware of areas in which the first and the second language tend to get mixed up. Of course, to determine which comparisons between languages might be useful to the language learner – for one must bear in mind that not all that is different between the first and the second language need actually be confusing (Ellis, 1986) - one must first find out, through observation, which parts of the first and the second language do indeed get mixed up1.

2. From Crosslinguistic Influence...
Working with Portuguese learners of English has enabled me to identify a number of ways in which my students’ English is influenced by their knowledge of Portuguese (Frankenberg-Garcia & Pina, 1997)2. This is especially true for areas in which Portuguese and English seem to be similar but are not3. An example of this is the way prepositions are used in the two languages, especially when it comes to their use in complementation of certain verbs and adjectives. A typical error by a Portuguese learner of English is to say

[1]*She is married with a Frenchman.

instead of

[1a] She is married to a Frenchman.
This seems to occur because, in Portuguese, you say *casar com*, i.e., you get married *with* someone instead of to someone. Or, to put it differently, because in most situations the meaning of accompaniment expressed by the Portuguese preposition *com* is equivalent to that of the English preposition *with*. Portuguese learners of English tend to think that whenever they have to use *com* in complementation of Portuguese verbs and adjectives, they can use *with* in complementation of semantically similar English forms. Examples [2] and [3] and their literal translations into Portuguese (in italics) illustrate this point further:

[2] *We were surprised with the news*  
*Ficámos surpresos com a notícia*

[3] *I am worried with my brother*  
*Fiquei preocupado com o meu irmão*

There are many other uses of prepositions which Portuguese learners of English find confusing. Examples [4] to [6] show how learners tend to think that whenever they use *em* in complementation of Portuguese verbs or adjectives they can use *in* in complementation of corresponding English word forms.

[4] *I’m going to vote in the socialists*  
*Vou votar nos [em + os] socialistas*

[5] *I’m good in Maths*  
*Sou bom em matemática*

[6] *I insisted in staying*  
*Insisti em ficar*

The above seems to occur because the Portuguese preposition *em* is very often, but not always, semantically equivalent to the English preposition *in*. Not only that, but in this particular case it is also worth noting that the two prepositions are also phonetically similar.

Examples [7] to [9] below are typical of yet another problem with prepositions:

[7] *Have you read that book of Saramago?*  
*Já leste aquele livro do [de + o] Saramago.*

[8] *Where is the key of that door?*  
*Onde está a chave daquela [de + aquela] porta?*

[9] *He depends of me*  
*Ele depende de mim*
The above errors can be explained by the fact that the unmarked equivalent of the Portuguese preposition de is the English preposition of. Portuguese learners of English therefore tend to think that whenever they have to use de in Portuguese, they can use of in English.

A rather different problem of English that is very common among native speakers of Portuguese is that they tend to use too many nouns when they are writing in English. This often makes their prose sound stilted. For example, it is not uncommon to see them write a sentence like “Technology makes the dissemination of information easier” instead of the far more digestible “Technology enables information to be more easily disseminated”. This probably occurs because written Portuguese seems to require a greater proportion of nouns than written English, where verb, adverb and adjective forms are often preferred. Examples of this stilted, “artificially nominalized” English together with their perfectly plausible literal translations into Portuguese (in italics) are given in [10] to [11] below:

[10] Although she had a photography course, her framing was uneven.
    Apesar de ter curso de fotografia, seus enquadramentos eram irregulares.

[11] The company did not have capacity to recycle aluminium.
    A empresa não tinha capacidade para reciclar alumínio.

There is no room in this short paper for an exhaustive description of the hundreds of other problems of English which native speakers of Portuguese have in common, and it is not my objective to give one. The few examples of Portuguese-English crosslinguistic influence that have just been presented, however, should serve to indicate how this kind of data can be used as a key to extracting from a translation corpus of Portuguese and English, information which can be particularly relevant to Portuguese learners of English.

3. To translation corpora...
Based on an analysis of the English problems presented the previous section, it is possible to predict that:

a. Portuguese learners of English tend to find it confusing when the Portuguese preposition com is not equivalent to the English with (c.f. errors [1] to [3]). A translation corpus can thus help locate all cases in which com is equivalent to a preposition other than with, for example 6:

   A empresa gasta cerca de 520 milhões de dólares por ano com a compra de aproximadamente três quartos da produção angolana.

   The company spends US$ a year on buying some three-quarters of Angola’s output.

   ...a mãe volta a casar-se, desta vez com o cônsul de Portugal em Durban.

   ...his mother remarried, this time to the Portuguese consul in Durban.

   E era com todo o céu que ela sonhava.

   And it was of the entire sky that she dreamed.
Vi isso acontecer com famílias em Cabul. I saw this happening to families in Kabul.

b. Portuguese learners of English tend to make mistakes when the Portuguese preposition *em* is not equivalent to the English *in* (c.f. errors [4] to [6]). A translation corpus can thus help locate all cases in which *em* is equivalent to a preposition other than *in*, for example:

As poucas horas de programação consistem em noticiários.... The few hours of broadcasting consist of news bulletins....

Preocuparam-se apenas em destruir.... All they worried about was destroying....

Dizem que só pensamos em baloiços. They say we only think of swings.

O Reino Unido proibiu a incorporação daquela farinha em rações para o gado. The United Kingdom banned the incorporation of that protein into cattle feed.

c. Portuguese learners of English tend to go wrong when the Portuguese preposition *de* is not equivalent to the English *of* (c.f. errors [7] to [9]). A translation corpus can thus help locate all cases in which *de* is equivalent to a preposition other than *of*, for example:

...as comunidades que dependem dos (de+os) diamantes... ...the communities that depend on the diamonds...

Calcula-se que 300 milhões de pessoas sofrem de perturbações neurológicas. It is estimated that around 300 million people suffer from mental disorders.

d. Portuguese learners of English tend to use too many nouns when writing in English (c.f. examples [10] and [11]). A translation corpus can thus help locate all cases in which Portuguese nouns have been transposed to English verbs, adverbs or adjectives, for example:

O relatório revela o papel dos diamantes no financiamento (N) da guerra civil. The report uncovers the role of diamonds in funding (V) the civil war.

Isso permitiu o rearmamento (N) e a manutenção (N) de reservas da Unita. This has enabled Unita to re-arm (V) and maintain (V) supplies.

Sou um defensor da flexibilidade (N). I believe in being flexible (Adj.)

Sempre deu satisfação (N) ver a complacência racial britânica... It was always mildly satisfying (Adj.) to see British racial complacency...

4. To teaching materials for monolingual classes...
The above information from a translation corpus can then be used to prepare
specific exercises for Portuguese learners of English that will make them aware of discrepancies between **com** and **with**, **em** and **in**, and **de** and **of**, for example:

**FILL IN THE GAPS**

(a) *They associate that music .......... Brazil.*
    *I quarrelled .......... my boyfriend.*
    *She is now married .......... an American actor.*
    *I spend a lot of money .......... books.*
    *But it didn’t happen .......... him.*

(b) *Do you believe .......... life after death?*
    *I‘m interested .......... learning more about this course.*
    *She only thinks .......... money.*
    *The programme consists .......... various pieces.*
    *The exam is divided .......... three parts.*

(c) *He complained .......... the service.*
    *She is tired .......... waiting.*
    *He suffers .......... stress.*
    *Have you read that book .......... Saramago?*
    *It depends .......... the time we have left.*

While the first two sentences of exercises (a), (b) and (c) above require similar prepositions in Portuguese and English, the next three sentences of each exercise are specially prepared bait-sentences (adapted from a corpus search of the type presented in section 3) that will trap Portuguese learners of English into making preposition errors of the kind presented in section 2. Luring the students to go wrong in this way (because it was possible to anticipate the ways in which they were bound to get Portuguese and English prepositions mixed up) then presents teachers with an opportunity to provide meaningful and systematic corrective feedback on the use of prepositions. For a further discussion on the benefits of this kind of error induction, see Tomasello and Herron (1989) and Frankenberg-Garcia (1998).

The corpus data described in section 3, i.e., parallel texts that highlight areas in which Portuguese and English tend to get mixed up, can also be used as data-driven learning exercises[7]. For example, just by looking at authentic translations containing noun to verb, adjective or adverb transpositions, Portuguese learners of English may begin to understand that they must try to use fewer nouns when writing in English.

5. Conclusion

I hope to have been able to demonstrate how crosslinguistic influence can be used as a key to extracting from translation corpora second language teaching materials that are particularly suited to monolingual classes. By observing how language learners who share the same native language get the language they are learning and their native language mixed up, one can use this information to sieve through
a translation corpus so as to locate an enormous quantity of parallel texts containing language contrasts that are likely to be confusing to these learners. Those very same texts can then be turned into exercises that will force the learners in question to focus on their own, native-language specific second language difficulties. As Granger and Tribble (1998:203) put it,

“Exercises of this type should be particularly motivating for learners as they have to do not just with any old grammatical or lexical problem but with their own attested difficulties”

Notes
1. The fact that not all differences between languages are problematic to second language learners is one of the reasons for the downfall of contrastive analysis in the seventies (Ellis, 1986). Nearer to the present date, Granger (1996) draws attention to the fact that, for those interested in second language pedagogy, it is more important to compare learner and target varieties of the same language than to compare L1 and L2.

2. The analysis in Frankenberg-Garcia and Pina (1997) was done manually, over a period of five years of classroom observation. At Louvain (Granger and Tribble, 1998), computerized learner corpora are already being used for a similar purpose, with the advantage that learner problems can be captured in a more systematic and less intuitive way.

3. Several studies indicate that transfer is more likely to occur when there is some degree of similarity between languages. For example, see Kellerman (1987).

4. This and all other examples of crosslinguistic influence presented in this paper were obtained among Portuguese university students pursuing a degree in translation.

5. Selinker (1972) called this phenomenon overgeneralization: learners create rules that have a wider coverage than is sanctioned.

6. The examples in this section were gathered by hand, before I had access to a parallel concordance program. They come from a very limited Portuguese-English translation corpus that was available at the time this paper was written.

7. For further examples of data-driven learning, see the Virtual DDL Library maintained by Tim Johns at http://sun1.bham.ac.uk/johnstf/ddl_lib.htm.

References


