

SURFERS, SERVERS AND BROWSERS: GENERATING AN ACTIVE (ENGLISH-SPANISH/SPANISH-ENGLISH) DICTIONARY OF COMPUTING AND IT

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We live in a computerized society and gradually the knowledge of computing terminology has become a must for everyone today. New terms are labeled each year to define the different computer-related devices. This is particularly true in English, which seems to offer less constraints than other languages when it comes to adopting a new word or expression, often transformed into a cryptic acronym. Translators are consequently faced with the problem of coming to grips with these often self-describing terms and expressions. This paper aims at unraveling and analyzing this issue especially related to problems with computer terminology and available specialized dictionaries in the market.

Need of specialized dictionaries

There are just a few bilingual Spanish-English English-Spanish dictionaries in computing and information technology, namely McGraw-Hill, Oxford, Olivetti, Prentice-Hall, etc., as well as several on-line websites where similar dictionaries and glossaries can be found (for instance, Glosario de Informática, by Rafael Fernández Calvo, <http://www.ati.es/novatica>, also glossaries about common mistakes in translation and common language use, such as Ángel Álvarez's 'Basic Computer Spanglish Pitfalls', <http://maja.dit.upm.es/~aalvarez/pitfalls/index>). On top of this, numerous chats and newsgroups have been established in which terminology is being discussed on a regular basis. In other specialities, many dictionaries have appeared, such as the well-known dictionary by Tamames and Gallego (1998) on economy and finances, and particularly useful are the series of dictionaries on law, business, tourism, etc., published by translators at the Universitat d'Alacant, led by Enrique Alcaraz (see References).

The above-mentioned dictionaries, however, present several drawbacks, namely few and often irrelevant entries, lack of grammatical information, and an undeveloped Spanish-English section. The combination of these limitations makes of these dictionaries a tool which is being flawed from the onset, especially because they are of little use to both professionals and translators alike.

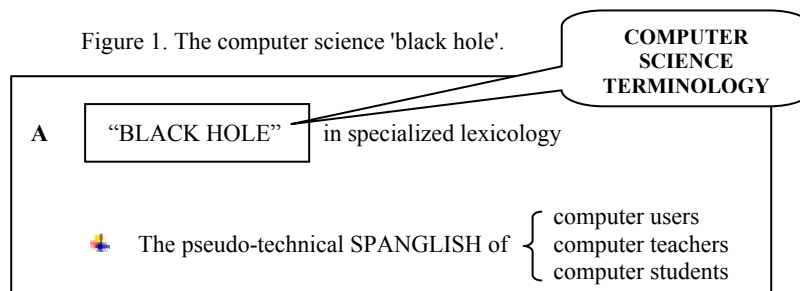
In recent years, the issue of grammatical information in dictionaries has been the focus of growing interest among lexicographers and linguists. Although this has been done in some monolingual dictionaries, the issue of bilingual metalinguistic activity has lagged very far behind, doing no more than touch the surface of the topic. Two exceptions: Marelló's *Dizionario bilingui* (1989) and the volume by Béjoint and Thoiron (1996). But first, let us take a look at some of the existing dictionaries in the area of computer science which unfortunately has lagged behind other scientific fields. The following table will exemplify this assertion:

Table 1. Available dictionaries in Computer Science: Comparison.

	Number of entries	Technical Information	Grammatical Information	Collocations	Examples	Internet Terminology	Quotes	Fully-developed Spanish section
Oxford	approx. 4,000	√						
McGraw-Hill	approx. 4,000	√						
Prentice-Hall	approx. 4,000	√				√		
Glossaries	less than 1,000	may or may not				may or may not		
On-line glossaries	less than 1,000	may or may not				may or may not		
G. Aguado	approx. 2,500	tech. & ling.info	√	√	√		√	√
PCP*	approx. 35,000	√	√	√	√	√	√	√

(*P. Collin et al., forthcoming)

Obviously we can speak of a notorious "black holes" in specialized lexicography, particularly when it comes to resources for computer terminology users in general, whether students, teachers, translators, etc. This in turn has created a pseudo-technical 'Spanglish', as exemplified in the following figure.



This gap ('black hole') is all the more surprising when one considers that "the emphasis given to concepts such as that of the 'active' dictionary has made clear the basic importance of grammatical information for correct text production in the foreign language, for creative writing, and above all for translation into the L2" (Salerno, 1999: 209).

Grammatical information is essential and, consequently, good bilingual dictionaries are necessary for translation into L2. This therefore means that this sort of ideal dictionary should have, at least,

- word categories
- gender information
- word compounds/clusters
- collocates
- often full sentences (syntax information)
- often technical (encyclopedic) information

In this respect, Kroman et al. (1991: 2722-2723) insist on the need to have the necessary grammatical information not only on the part of the translators, but also in the tools used by them. They write:

Much grammatical knowledge is necessary for translation. In recent years it has also been shown that the need for grammatical information in dictionaries, including bilingual dictionaries, is greater than one might immediately assume.

Passive vs. active dictionaries

Following Shcherba (1940/1995), but more recently Kromann et al. (1984), Marelllo (1989), and Gak (1992), a distinction is commonly drawn between:

- (a) 'passive' bilingual dictionary, designed to assist translation from a less to a more familiar language, and
- (b) the 'active' bilingual dictionary, intended to support translation in the opposite direction.

It has further been argued, again following Shcherba, that because of the "different nature of the reference needs associated with the receptive and productive skills, it is more convenient for users to have two sets of monodirectional dictionaries (four parts in all) than two bidirectional ones" (quoted by Tomaszczyk, 1988: 289-290).

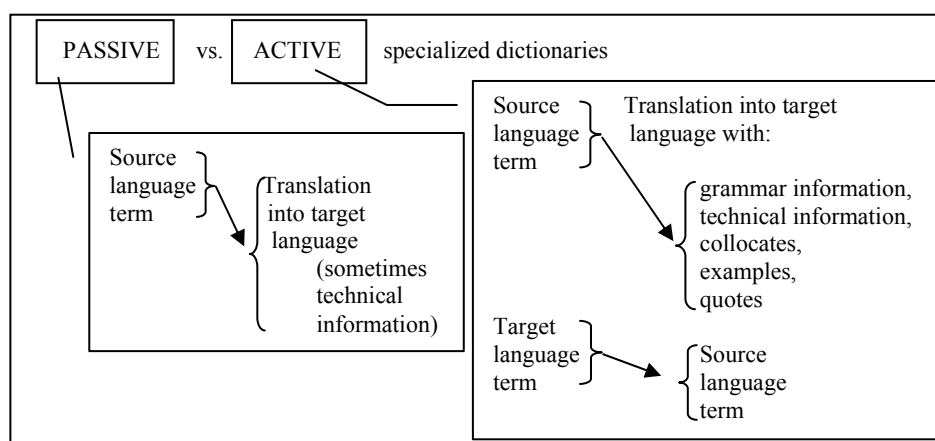
From professional and academic English to active dictionaries

Salerno (1999: 210-211) further insists that "it is desirable to observe certain basic principles of arrangement, even where we have two bidirectional volumes. These are:

- In a **passive dictionary** (or a bidirectional volume, one of whose functions is support for decoding), there is a need for some grammatical information to be placed close to the headword.
- In an **active dictionary** (or a bidirectional volume, one of whose functions is support for encoding) 'it is first and foremost the equivalent which should be supplied with the morphological and syntactic information the user requires in the translation situation' (Kromann et al., 1984: 212).

In a nutshell, it can be said that from passive to active dictionaries should be the tendency of newly produced materials, particularly for today's demands in a modern society. Figure 2 shows the comparison between both types of dictionaries.

Figure 2. Active vs. passive dictionaries.



Conclusion

Lexicology is subjected to a continuous growth, just as a dictionary should be. Language in general keeps accepting new terms at the same rate that society and technology advance. Computer science is, of course, no exception, since it has become one of the fastest moving specialities not only in reference to today's scientific world, but also in the homes. This necessarily effects the introduction of new terms, first in English as the undeniable *lingua franca* in the world of technology, then in the translator's target language, and of course in our daily speech.

A dictionary, therefore, is bound to collect words that had no meaning to our grandparents, such as *chip*, *software* and *hardware*. In a recent paper, Posteguillo and Gallench (1999) classified terms into three categories: integrated borrowings (i.e., terms that have been included in the DRAE, 1992), like *bit*, *escáner*, *interfaz* or *robot*; non-integrated borrowings (i.e., terms which appeared in more than five of the articles analyzed or terms included in *Nuevo diccionario de anglicismos* by Rodríguez and Lillo, 1997) such as *bitmap*, *bookmark*, *e-mail*, or *chat*, and code-switches, or terms that appeared in less than five of the 17 articles analyzed, and not found in either of the two dictionaries mentioned), terms, however, that are being used nonetheless by both computer professionals as well as computer users. Therefore, it is not surprising to see recommendations being made, in the case of Spanish professionals, to the Real Academia de la Lengua for a reconsideration of terms that have either not been included or for modification of some of their definitions (Camaño Puig & Piqué, 1999); also at the end of their dictionary, Tamames and Gallego (1998) include a list of words and expressions that they submit to the Real Academia Española de la Lengua to consider them for inclusion in its *Diccionario*, an initiative that, based on our experience, we applaud.

To conclude, the problem is not only the enormous speed at which new terms are incorporated into English, but the careless introduction of a large number of disguised English terms into Spanish. This generates a constantly increasing gap between computer science texts and computer users who will have to struggle through often uncomprehensible Spanish texts in which the so-called *Spanglish* has sneaked in. We should indeed come to grips with and come as close as possible to new and unrecognizable terminology. And when we encounter words that could somehow be classified as 'unfindable' –to use Newmark's (1988) terminology– we will have in the end to accept that the world is changing and that not all languages have the same level of flexibility. Perhaps it is about time we made our own language a bit more flexible. It is indeed inevitable that words such as 'página web' for *web page* will sneak into our daily conversation and gradually be accepted in publications, but we should not incorporate *link* or *firewall program* when in Spanish we can use 'enlace' and 'programa cortafuegos' which are easily understood by computer professionals.

References

- Aguado de Cea, G. (1996). *Diccionario comentado de terminología informática*. Madrid: Paraninfo.
- Alcaraz, E. and B. Hughes (1993). *Diccionario de términos jurídicos. Inglés-Español, Spanish-English*. Barcelona: Ariel.
- Alcaraz, E. and B. Hughes (1996). *Diccionario de términos económicos, financieros y comerciales. Inglés-Español, Spanish-English*. Barcelona: Ariel.
- Alcaraz, E. and B. Hugues (1999). *Diccionario de términos de marketing, publicidad y medios de comunicación, Inglés-Español, Spanish-English*. Barcelona: Ariel.
- Alcaraz, E. et al. (2000). *Diccionario del turismo, la restauración y el ocio*. Barcelona: Ariel.

- Béjoint, H. & Thoiron, P. (eds.) (1996). *Les dictionnaires bilingues*. Louvain-la-Neuve: Duculot. Universités francophones.
- Camaño Puig, R. and J. Piqué. "Concepto de Enfermería: Un análisis semántico". *Revista de Enfermería Rol* 22 (1999): 539-543.
- Collin, P., J. Piqué, S. Posteguillo and L. Melcion (forthcoming). *The Computing and Information Technology Spanish Dictionary*. London: Peter Collin Publishing.
- DRAE (1992). *Diccionario de la Real Academia Española de la Lengua*. Madrid.
- Gak, V. G. (1992). "De la langue système à la réalisation discursive dans un dictionnaire bilingue 'de type actif'," in H. Tommola et al. (eds.), *Euralex '92 Proceedings* (2 vols.). Tampere: Tampereen Yliopisto, 329-335.
- Kroman, H.-P., Riiber, T., & Rosbach, P. (1984). "'Active' and 'Passive' bilingual dictionaries: the Scerba concept revisited" in R. R. Hartmann (ed.), *LEXeter '83 Proceedings*. (Lexicographica, Series Maior 1.) Tübingen: Max Niemeyer Verlag, 207-215.
- Kromann, H.-P., Riiber, T., & Rosback, P. (1991). "Principles of bilingual lexicography," in F. J. Jhausmann et al. (eds) (1989-1991). *Wörterbücher. Dictionnaires. Ein internationales Handbuch zur Lexikographie. International Encyclopedia of Lexicography. Encyclopédie Internationale de Lexicographie*. (3 vols.) Berlin and New York: De Gruyter, vol. III, 2711-2728.
- Marello, C. (1989). *Dizionario bilingui, con schede sui dizionari italiani per francese, inglese, spagnolo, tedesco*. Bologna: Zanichelli.
- McGraw-Hill (1993). Freedman, A. *Diccionario de Computación Inglés-Español Español-Inglés*. Madrid: McGraw-Hill.
- Newmark, P. (1988). *A Textbook of Translation*. New York: Prentice Hall.
- Oxford (1983). *Diccionario Oxford de informática. Inglés-español/español-inglés*. Madrid: Ediciones Díaz de Santos.
- Posteguillo, S. and L. Gallench (1999). "English code-switches and borrowings in specialized computer discourse." *Actas del XVII Congreso de la Asociación Española de Lingüística Aplicada*. Alcalá de Henares: Universidad de Alcalá de Henares.
- Prentice-Hall: Pfaffenberger, B. (1999). *Diccionario de términos de computación*. México: Prentice-Hall.
- Rodríguez, F. and A. Lillo (1997). *Nuevo diccionario de anglicismos*. Madrid: Gredos.
- Salerno, L. (1999). "Grammatical information in the bilingual dictionary. A study of five Italian-French dictionaries." *International Journal of Lexicography* 12/3: 209-222.
- Shcherba, L. V. (1940). "Opyt obshchei teorii leksikografii." *Izvestiia Akademii Nauk SSSR, Otdelenie literatury i iazyka* 3: 89-117. (Translated by D. M. T. Cr. Farina [1995] as "Towards a General Theory of Lexicography." *International Journal of Lexicography* 8,4: 314-350.)
- Tamames, R. and S. Gallego (1998). *Diccionario de economía y finanzas*, 2nd ed. Madrid: Alianza Editorial.