REVIEW ARTICLE

Traditional methods in specialised lexicography

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Introduction

S.M.H. Collin, Jordi Piqué, Santiago Posteguillo, and Lourdes Melcion, authors of the *Diccionario Bilingüe de Informática inglés-español español-inglés / Spanish Computing Dictionary English–Spanish Spanish–English* (*Spanish Computing Dictionary* from now onwards) aim at filling "a lexicographical gap in the area of computing and internet terminology" (Preface). This review article, which focuses on recent publications in the field of specialised lexicography (Fuertes-Olivera & Velasco-Sacristán, 2001; Bogaards, 2002; Norman, 2002; Temmerman, 2003), will be organised into three different but related parts: describing the dictionary, evaluating its content, and, finally, discussing practical aspects of the use of the *Spanish Computing Dictionary* for reception, production, and learning.

Describing the Dictionary

In its Preface the *Spanish Computing Dictionary* indicates that it offers a comprehensive volume that includes over 35,000 entries, examples and translated terms from the field of computing and internet terminology. This statement must be taken as a kind of selling point and it must be taken in the fashion of American lexicography, perhaps indicating that the dictionary contains a very large number of uses, around 35,000 uses according to information published in the web. The authors also claim that the word list, which is based on the *Dictionary of Computing*,[1] was completed by adding new words relating to the subject field of the dictionary, and that some of the additions found in the Spanish to English side of the dictionary –for example **hardware**, **software**, **buffer**, **bus**, etc.– are loan words and borrowings, which stress the dominance of English in the compilation of the terminology.

Regarding its microstructure, each entry adheres to traditional practices in specialised lexicography (examples 1 and 2):

[1] Example of "**clavija**":

clavija *f sustantivo* **1.** jack *o* jack plug **2.** pin **3.** plug ◇ **tablero de clavijas** *o* **de terminales de conexión** pin board ◇ **utilice un enchufe de tres clavijas para conectar la impresora a la red** use a three-pin plug to connect the printer to the mains

clavija *f* **de alineamiento** *sustantivo* alignment pin

clavija *f* **para módem** *sustantivo* data jack

clavija *f* **para teléfono** *sustantivo* data jack

clavija *f* **tomacorriente polarizada** *sustantivo* polarised plug

[2] Example of "**plug**":

plug *noun* (*connector*) enchufe *m*; clavija *f*; tomacorriente *m* ■ *verb* (*to connect*) enchufar *vt* ◇ **the printer is supplied with a plug** la impresora va provista de un enchufe ◇ **to plug and play** enchufar y usar ◇ **to plug in** (*a machine*) enchufar

plug and play *noun* (*part of the Windows 95 system – where the user plugs a new adapter card into their PC they do not have to configure it or set any switches*) (dispositivo) conectar y listo; Plug and Play ™

plug-compatible *adjective* connectable directamente; con conector compatible ◇ **plug-compatible manufacturer (PCM)** fabricante *m&f* de enchufes conectores ◇ **this new plug-compatible board works much faster than any of its rivals, we can install it by simply plugging it into the expansion port** esta nueva placa de connexión es mucho más rápida que cualquier otra; se instala simplemente enchufándola en el Puerto de extensión

plug-compatible manufacturer *noun* fabricante *mf* de enchufes conectores

plug-in *noun* (*software to enhance a Web browser*) enchufable *m*

plug-in unit /ˈplʌg ɪn ˌjuːnɪt/ *noun* unidad *f*; circuito *m* de extension

As examples [1] and [2] show, each entry contains a headword in bold, followed by the following information:

a) parts of speech. This grammatical information is in italics;
b) some linguistic labels usually as abbreviations: "pl" for plural; "m" for masculine; "f" for feminine; "vt" for transitive verbs; "fpl" for feminine plural; "mpl" for masculine plural; "UK" for British English; "US" for American English; "vi" for intransitive verb; "vr" for reflexive verbs.

c) phonetic pronunciation in the English to the Spanish side. For example /ˈplʌg ɪn ˌjuːnɪt/;
d) contextualisation: this consists in offering examples and glosses which, according to the authors, clarify the exact meaning of the word. These examples are introduced by ◇, a symbol which is also used for introducing phrases, especially if these are not recorded as headwords;
e) meaning discriminators such as numbers which are being used for clarifying different meanings;
f) miscellaneous information, typically including encyclopaedic comments, subject field, and quotations. Regarding quotations (examples 3 and 4) this practice seems unjustified in the dictionary because
   - the boxed quotations are not very useful for encoding;
   - they are unsystematic, which means that users are not told why they have been included;
   - although quotations are a feature of some historical dictionaries, their presence is hardly justified in synchronic dictionaries;

[3] Quotation regarding "**correo**":

"Un asunto polémico tratado por el Parlamento Europeo ha sido el del correo comercial no solicitado. El debate está entre exigir que el cliente acepte expresamente (opt-in) que se le remita este tipo de correo o bien autorizarlo genéricamente salvo que el cliente exprese su deseo (opt-out), inscribiéndose en una lista, de no recibirlo. [*Ciberp@ís*]"

"El correo electrónico puede ser visto como una continuación de forma electrónica de las tradicionales prácticas de correo o mailing. [*PC Plus*]"

[4] Quotation regarding **macro language**:

"Microsoft has released a developer's kit for its Word 6.0 for Windows wordprocessing package. The 900-pages kit explains how to use the Word-Basic macro language supplied with the software. [*Computing*]"

As previously indicated, the *Spanish Computing Dictionary* contains about 35,000 in two lists: the Spanish to English list takes up 199 pages, whilst the English to Spanish one comprises 222 pages: in relative terms, the former list is around 10% smaller than the latter one. This figure may be explained indicating that there are more English words in the field of computing; even some of them do not have a Spanish equivalent. For

example, in the letter "E" of the Spanish to English side, the following English words are recorded as entries: **-edu**, **EISA** (*Electronic Industry Standards Association*), **e-mail**, **enter**, **EPS** (*Encapsulated PostScript*), **EPSF** (*Encapsulated PostScript File*), **Ethernet**, **Ethernet Blue Book**, **EtherTalk**, **Eudora**, **EXIT**, **EXOR** and **Explorer**.

Although the information included is well chosen I think that the *Spanish Computing Dictionary* should also take into consideration recent developments in pedagogical lexicography, aimed at targeting ESP students and translators. What this implies is that the authors should enlarge the information covered in the front and back matter of the dictionary including the following information:

- the meaning of devices such as ■ and ◇;
- more subject field labels;
- an explanation of the phonetic /phonological symbols used;
- more grammatical information, especially discriminating between countable and uncountable nouns.

Evaluation of the content of the Spanish Computing Dictionary

In an era characterised by the importance of computing and the internet, it is difficult to put strict limitations on the words and expressions which should be included in a bilingual computing dictionary. By comparing the word list of the letter "C" of the English to the Spanish side of the *Spanish Computing Dictionary* with that of the *Dictionary of Computing* some interesting factors emerge:

- The entries of both dictionaries are non-homographic, something which is more suitable for productive purposes. For example, **call** has one entry in both dictionaries:

[5]

call *verb* **1.** (*to transfer control to a separate program or routine from a main program*) llamar un programa **2.** (*communicate*) telefonear *vi*; llamar *vt* ◇ **I'll call you at your office tomorrow** le llamaré mañana a su oficina

- The dictionaries adopt different lexicographic policies: the *Spanish Computing Dictionary* uses a denesting word-list, which favours reception, while the *Dictionary of Computing* employs a nesting word-list, something which favours production by foreign learners (examples 6 and 7):

[6] "**Cable**" and "**cabling**" in the *Spanish Computing Dictionary*:

cable /'keɪb(ə)l/ noun cable m ◇ cable television or cable TV (communications system) television por cable or TV por cable ◇ cable TV relay station repetidor m de television por cable
cable connector noun conector m (de cable)
cable matcher *noun* acoplador de impedancia
cable modem *noun* modem *m* de cable
cable plant *noun* cableado *m*
cable tester *noun* verificador *m* de cable
cabling *noun* (*cable as a material*) cableado *m*; cables *mpl*; red *f* cableada □ **cabling costs up to £2 a foot** cada pie (30,5 cms) de cableado cuesta hasta dos libras ◇ **using high-quality cabling will allow the user to achieve very high data transfer rates** el uso de cables de alta calidad permite al usuario alcanzar una velocidad de transferencia de datos muy alta
cabling diagram *noun* diagrama *m* cableado; diagrama *m* de circuito cableado

[7] **Cable** and **cabling** in the *Dictionary of Computing*:

cable *noun* flexible conducting electrical *or* optical link; **the cable has the wrong connector for this printer**
◇ **cabling** *noun* cable (as a material); **using high-quality cabling will allow the user to achieve very high data transfer rates; cabling costs up to £1 a foot**
NOTE: no plural

- Regarding entry selection, the *Spanish Computing Dictionary* offers a larger word-list due to: (i) the lexicographic policy adopted (it adopts a denesting word-list, as previously explained); (ii) the *Spanish Computing Dictionary* tends to include many more phraseological units as examples [6] and [7] show, which are very useful for learners and translators; (iii) it is an up-to-date dictionary. For example, recent coinages such as **e-business** and **e-commerce**, which can be looked up in the *Spanish Computing Dictionary,* are absent from the *Dictionary of Computing*; (iv) the *Spanish Computing Dictionary* offers many more abbreviations. Thus, there are 13 more abbreviated forms in the *Spanish Computing Dictionary* than in the *Dictionary of Computing*. These are the following: **CA** (*cerificate authority*), **CAR** (*current address register*), **CB** (*call back*), **CBR** (*constant bit rate*), **CF** (*compact Flash*), **CHDIR** (*change*

directory), **CIF** (*common intermediate format*), **CIT** (*computer-integrated telephony*), **CIX** (*commercial Internet exchange*), **CLNP** (*connectionless network protocol*), **CONS** (*connection-oriented network services*), and **CS** (*chip select*); (v) in the same vein, the following acronyms are only found in the *Spanish Computing Dictionary*: **C++**, **CAE**, **CAV**, **CCITT**, **CD32**, **CD-I**, **CD-R**, **CDRTOS**, **CD-RW**, **CERN**, **CGI**, **CGM**, **CHCP**, **CHKDSK**, **CIS**, **CLOSE**, **CLS**, **CLV**, **CMIP**, **CMOT**, **CMYK**, **COM1**, **COMMAND.COM**, **CONFIG.SYS**, **CSLIP**, and **CTI**.

- Although both dictionaries have adopted traditional methods and practices, it seems that the *Spanish Computing Dictionary* is more adequate for students, translators and professionals. Traditional specialised dictionaries were characterised by a lack of explicit grammatical information and by the inclusion of "encyclopaedic" content (Norman, 2002). Recent specialised dictionaries, however, have spotted that the number of students and professional translators is constantly increasing, which has lent support to recent claims made in the specialised lexicography literature. These claims may be summarised by indicating that the tenets of pedagogical lexicography must be incorporated into the practice of specialised lexicography, especially to meet the demands of students and professional translators alike. What these user-groups mostly need is explicit grammatical information, explicit cross-referencing of ontologically related terms, and inclusion of pragmatic information, apart from a definition and an equivalent in the target language. Research on the grammatical information which learners" dictionaries should include is summarised by Bogaards and van der Kloot (2001: 102-103), who argue for "ever more information is given in amore direct way." Similarly, professional translators and students need frequency labels and usage labels.

The Use of the Spanish Computing Dictionary

Following Bogaards (1996), I start with the use of the *Spanish Computing Dictionary* for receptive purposes, especially as regards aspects of findability. In order to get a clearer view of the *Spanish Computing Dictionary* coverage of relevant terms, I have examined texts that students, translators, professionals and informed laypeople might have to read. The first text is an except from a brochure describing a Sony product: *TFT LCD Color Computer Display*. The section on "self-diagnosis function," contains around 150 words, some of which are terms and semi-terms: "self-diagnosis function," "monitor," "equipped," "computer," "screen," "go blank," "power

indicator," "disconnect," "video signal," "color bars," "reconnect," "video input," and "monitor failure." Three findings merit an explanation: (i) most of the words are in the dictionary; (ii) although some collocations are lacking they are easily identified, although more than one look up may be needed (for example "color bars"); (iii) as expected, "go blank," "reconnect" and "equipped" are not found in the dictionary, perhaps because they are considered common words. These findings seem to suggest that the *Spanish Computing Dictionary* may be very adequate for translating user's manuals, texts which are so common nowadays.

The second text is taken from *Ciberp@ís*. The information on "Solaris 10 refuerza su tecnología y modifica la política de licencias" contains around 400 words, some of which are terms or semi terms: "licencias," "sistema operativo (multiplataforma)," "versión," "aplicaciones," "Linux," "software abierto," "actualizaciones," "soporte de instalación y configuración," "formación en red," "ampliación," "gestión de memoria," "sistemas de archivos," "bits," "herramientas," "recuperar fallos," and "servidores de misión crítica." Three findings merit an explanation: (i) most of the words are in the dictionary, which lends support to the claim that this dictionary is adequate for students and informed laypeople; (ii) some collocations need more than one look-up, for example "sistema operativo multiplataforma" requires a look up in "sistema operative" and one more in "multiplataforma"; (iii) collocations such as "servidores de misión crítica" may have to be included in the word list because of terminological differences between both languages: for example, the Spanish entry "crítico" and its English equivalence "mission-critical" are included in the word list. In the text, however, we are informed about "servidores de misión crítica," an English loan translation. At this stage I am not sure which form is typical in Spanish, something which can only be found out by using a specialised corpus.

The next text is taken from the Internet web page http://www.computing.net/networking /wwwboard/forum/23156.html. Although it tackles the subject of wireless networking in a very informal and relaxed style, it is adequate for our purposes because it also covers Internet terminology such as "wireless networking," "server," "WAN miniport (nomadic)," "PPoE," "log," "IE," "MSN Messenger," "Task Manager," "HDD," "hang," and "Event Wiewer." As expected, most of the terms are included in the dictionary. The only exceptions are "WAN miniport (nomadic)," and "Event Wiewer," perhaps because they can also be considered common words.

Finally I have examined a scholarly text published in a leading journal referring to computing and the internet. The abstract of the text "Dynamic Delegation and Its Application," for

example, introduces technical terms such as "proxy," "proxy pattern," "dynamic proxy class," "object-oriented programming," "Java," interfaces," "runtime," "implementation," "invocation handler," "reflection package," "abstract classes," and "concrete classes." They are easily found in the *Spanish Computing* Dictionary: (i) some of them are given entry status (for example, "Java"); (ii) some other are nested (for example, "object-oriented programming" are nested in the entry **object**); (iii) some are easily deducted from the information covered (for example "proxy pattern"). In sum, it seems that the dictionary is very adequate for decoding computing texts.

Concerning comprehensibility, the definitions given in the form of equivalents are mostly adequate. They, however, show some deficiencies. Firstly, reversibility is not systematic. For example, both the Spanish and the English word list record **e-mail** as an entry word. On the Spanish to English side **e-mail enriquecido** is nested to **e-mail** whereas its equivalent **rich e-mail** is given entry status in the English to the Spanish side. Secondly, references, particularly cross-referencing should be enhanced. For example, it should be adequate to cross-reference **e-mail** and **rich e-mail.** Thirdly, some traces of carelessness are found. For example, on the English to Spanish side the expression **RGB** (**red, green, blue**) is recorded on the Spanish to English side as **rojo, verde, azul** and as **RGB**. I think that **RGB** should be the only entry on both sides of the dictionary. Fourthly, lexical relations should be upgraded. For example, on the Spanish to English side **chatear** is missing. We have **charlar** but not **chatear** when they are clearly synonyms, although different from a stylistic point of view. As a consequence, English loan words such as **chat group**, **chat room**, etc., which are currently found in Spanish texts are not found on the Spanish to English side. This fact is of some importance if the dictionary is to be used productively by Spanish native speakers.

On the production side, findability is adequate. Users, however, may have difficulty in some occasions. To overcome it three lexicographical practices may help. Firstly, both pragmatic and relational information may be upgraded, either by offering, if possible, frequency and usage labels, or by enhancing cross-referencing. Secondly, although **discursive autonomy**[2] may be achieved by looking up this dictionary, I think that it needs to make more explicit the semantic relationships between terms. For example, terms beginning with **e-** (they refer to some kind of activity being carried out in the Internet) should be grouped, perhaps under an entry "**e-"** which is not recorded in the *Spanish Computing Dictionary*.

As a conclusion I would like to recommend this dictionary since it is suitable for users at the highest level, yet clear enough for those from a non-computing background to use. In

addition, this dictionary is adequate for computing and IT professionals, software localization experts, translators, students, teachers, lecturers and anyone who may need to use or understand complex computing and IT terminology in Spanish and English.

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REFERENCES

Bogaards, P. (1996). "Dictionaries for Learners of English." *International Journal of Lexicography* 9: 277-320.

Bogaards, P. (2002). "DAFA: An Innovative Learners' Dictionary of Business French." *International Journal of Lexicography* 15: 105-116.

Bogaards, P. & W. A. van der Kloot (2001). "The Use of Grammatical Information in Learner's Dictionaries." *International Journal of Lexicography* 14: 97-121.

Collin, S. M. H. (1998). *Dictionary of Computing*, 3rd ed. London: Peter Collin Publishing.

Collin, S. M. H., J. Piqué, S. Posteguillo & L. Melcion (2004). *Diccionario Bilingüe de Informática inglés-español español-inglés / Spanish Computing Dictionary English–Spanish Spanish-English*. London: Bloomsbury.

Fuertes-Olivera P. A. & M. Velasco-Sacristán (2001). "A Critical Comparison of the Macrostructure and Microstructure of Two Bilingual English-Spanish Dictionaries of Economics." *International Journal of Lexicography* 14: 31-55.

Norman, G. (2002). "Description and Prescription in Dictionaries of Scientific Terms." *International Journal of Lexicography* 15: 259-276.

Temmerman, R. (2003). "Innovative Methods in Specialised Lexicography." *Terminology* 9: 117-135.

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NOTES

1. This is a monolingual English dictionary initially published in 1988.

2. Temmerman (2003: 132) claims that translators and students need to have "discursive autonomy," i.e., to grasp the subject matter to the point of being able to explain it in their own words.