# STATISTICAL CONSIDERATIONS ON IT TERMINOLOGY IN ROMANIAN LANGUAGE

Dana Camelia DIACONU<sup>1</sup>

Abstract: Statistical considerations on IT terminology in Romanian language is a review of the specialized terms of Informatics. We thus grouped the IT terms and assessed their percentages in this language section, being permanently concerned with the current Romanian vocabulary. Before drawing up the list of terms that we analysed, we checked the IT definitions of these concepts through a long and difficult operation, by parallel implementation of the "inputs" from at least three large groups from the Romanian literature and from Romanian dictionaries as well as specialized English dictionaries.

Key-words: loans, abbreviations, loan translations, translations.

### **1. Introduction**

Our computer terms' corpus was a systematic work. This kind of work was motivated by the large number of terms borrowed from computer terminology, in Romanian language (over 7500) and, also, by the particularity of our theme, which required their ordering according to certain types of loans (ie. loan translations, loans or translations), to actualize the relations between them. Therefore, the corpus was structured as follows:

1. loans, derivatives and compounds;

- 2. *abbreviations*:
- a. capital abbreviations, acronyms and truncations;
- b. alpha-numeric names;
- c. *lexical ellipses*;
- 3. lexical loan translations;
- 4. semantic loan translations;
- 5. grammatical loan translations (morphological and syntactic);
- 6. phraseological loan translations;

7. translations.

<sup>&</sup>lt;sup>1</sup> Faculty of Humanities, Valahia University of Târgoviște, Lt. Stancu Ion Str., no. 35, ROMANIA, diaconudanacamelia@yahoo.com

# 2. Romanian IT terminology. Statistical considerations.

### 2.1 Sources

This study of Informatics vocabulary was based on examples of IT terms drawn from many sources, which we grouped in certain categories:

- 1. Step-by-step instructions texts of using Windows characteristics for rendering translations, of certain subcategories of terms (examples taken from textbooks for High Schools' computer science and *Windows XP Manual Home Edition*<sup>2</sup>).
- 2. Current Romanian dictionaries: explanatory, spelling, neologisms, synonyms, etc. and from the recent dictionaries of Computer Science, Cybernetics or Electronics.
- 3. We also took some examples from the theoretical works on general problems of IT Romanian vocabulary. Some other examples were selected from the audio-visual field, trying to reflect the state of language in the IT field.

## 2.2 Statistics

The selected corpus that we established as working material for the present research, brought us to the conclusion that the computer language terms reach an impressive number: 7597 lexical units, taking into consideration, as we already said, both simple words and compounds, derivatives, abbreviations, phraseological structures, translations, etc. Among these, we inventoried 1165 recent lexical units, representing loans, derivatives and compounds, 738 units representing abbreviation compounds, 3824 loan translation structures, of which 2646 phraseological loan translations, 612 semantic loan translations, 300 lexical loan translations and 266 morphological loan translation structures. Also, translations reach the remarkable number of 1870 lexical units. As we can see, loan translations represent over half of the lexical units in Romanian computer language, ie 50.33%, followed by translations (24.62%), loans (15.33%) and abbreviations (9, 72%).

Before drawing up the list of terms that we analyzed, we checked the IT definitions of these concepts through a long and difficult operation, by parallel implementation of the "inputs" from at least three large groups from the Romanian literature and from Romanian dictionaries as well as specialized English dictionaries.

<sup>&</sup>lt;sup>2</sup> Manualul tău de Windows XP. Home Edition, Autor David Pogue, Traducere de Radu Andreescu și Florin Moraru, București: Editura Teora, 2006.

#### 2.3 Dictionaries in use

For derived and compound words, but also for loan translations or loans, we primarily referred to specialized Romanian dictionaries: DEX<sup>3</sup>, DCR<sup>4</sup> and DOOM<sup>2 5</sup> and then to Informatics dictionaries: DC<sup>6</sup> and DEIT&C<sup>7</sup>. The lexicographic instruments we used as reference information for translations were *The Trilingual English-French-Romanian Dictionary*<sup>8</sup>, and *Dictionary of Computers*, while for the specialized words, loans or loan translations in English language, the usual lexicographic instruments were *The Macmillan English Dictionary for Advanced Learners*<sup>9</sup> and *The Dictionary of European Anglicisms: A Usage Dictionary of Anglicisms in Sixteen European Languages*<sup>10</sup>.

Given that we did not considered the academic level of computer science, but the textbooks, the instruction aimed on computer knowledge is likely to be part of the general culture of any educated man. The ideal situation was to keep the information from the scientific field within the individual's cultural horizons, respectively, maintaining some specialized terms in the common vocabulary. For all these reasons, we used the relatively familiar dictionaries, common ones, commonly used in the world of IT users, and of young people in general.

# 2.4 DOOM<sup>2</sup> versus MDN

DOOM<sup>2</sup> also provided a valuable reference with respect to IT loans taken over by the Romanian language regarding their spelling and pronunciation. As far as the degree of assimilation is concerned, of the 305 loans of computers language, existing in DOOM<sup>2</sup>, 169 are fully adapted words (phonetically, graphically, morphologically), such as *alphanumeric, assembly, scanning, automatic, butonare, cyber, compiler, compact disk*, etc. Another 60 terms are adapting words, newly introduced in the dictionary (Anglicisms or Americanisms), such as *off-line/offline, zapa, Xerox, surfing, software, web, server, set, scan, scan, replay, chat, copywriter,, CyberCafe, cyberspace, desktop, high-technology, high-fidelity, hacker, gadget*, etc. Finally, 69 units are also recently introduced in DOOM<sup>2</sup> (some created on vernacular grounds

<sup>&</sup>lt;sup>3</sup> *Dicționarul explicativ al limbii române* (DEX), 1998, ediția a II-a, București: Academia Română & Editura Univers Enciclopedic.

<sup>&</sup>lt;sup>4</sup> Dimitrescu, Florica, 1997, *Dicționar de cuvinte recente* (DCR), ediția a II-a, București: Editura Logos (prima ediție - DCR - a apărut în 1980).

<sup>&</sup>lt;sup>5</sup> Dicționar ortografic, ortoepic și morfologic al limbii române, (DOOM<sup>2</sup>), 2005, București: Editura Univers Enciclopedic.

<sup>&</sup>lt;sup>6</sup> Ionescu-Cruțan, Nicolae, 2005, *Dicționar de calculatoare* (DC), București: Editura Niculescu.

<sup>&</sup>lt;sup>7</sup> Florian, Gabriel, 2008, *Dicționar explicativ IT&C*, (DEIT&C), București: Editura All.

<sup>&</sup>lt;sup>8</sup> Marinescu, Viorel (coord.), 1999, *Dicționar informatic trilingv englez-francez-român*, București: Editura ALL.

<sup>&</sup>lt;sup>9</sup> Macmillan English Dictionary for advanced learners, 2002, Oxford: Macmillan Publishers Ltd.

<sup>&</sup>lt;sup>10</sup> Görlach, Manfred, 2005, A Dictionary of European Anglicisms: A Usage Dictionary of Anglicisms in Sixteen European Languages, (DEA), Oxford: University Press.

from foreign basic languages - French or English): *decryption, eject, devirusa, disable, computerize, computerization, surfist, click, chip card, buttons, beep*, etc., and 7 terms are xenisms, representing proper names and common (abbreviations), including: *CD, CD-player, CD-ROM, CD burner* or *BASIC*.

As the *Great Dictionary of Neologisms*<sup>11</sup> (MDN) shows, most existing terms of IT language information in this dictionary are recorded with French etymon, as opposed to all computers specialized dictionaries, showing IT terminology as taking-ups of the words and expressions from American-English.

Thus, in the MDN, 2007, from 176 entries in the informatics field, 130 terms are fully adapted (phonetically, graphically, morphologically) such as: *adaptor*, *analizor*, *automatic*, *automation*, *calculator*, *cibernetic*, *compact-disc*, *compatibil*, *compilator*, etc., and 45 are adapting Anglicisms: *chip*, *chipcard*, *click*, *e-mail*, *fading* / *fading*, *floppy disk*, *flow-chart* / *flău-citizen*, *hackers* / *hécăr*, *hacking* / *hécking*, etc.

# 2.5 Etymology

In terms of etymology, 84 terms in this dictionary are listed as coming from French, 75 are English, 16 - had double etymology (including eight English-French etymology, 2 -German-French etymology: *program, program*atic, 5 - Latin-French etymology: *spațiu, virus, analogic, a simula, vocabular,* 1- Latin-Italian etymology: *salt,* 1 - German-Italian etymology: *tastatură*) and one is of German origin (*fotocopiator*).

#### **3.** Conclusion

Comparing these entries to our total inventory of new terms, we believe that the Romanian computer terminology of English origin represents about 90% of all IT Romanian terminology.

Therefore, most of the Romanian IT vocabulary in current Romanian language comes from English. The circumstances around the broader phenomenon of loans from English to Romanian language in the late nineteenth century, on the one hand, and the overwhelming influence of the English language, on the other hand, had a large impact on our language after the Revolution of 1989, in modernizing the general vocabulary and terminology forming, in many areas of the cultural, political and socio-economic life, of the specialized vocabulary characteristics of several scientific fields, in particular.

<sup>&</sup>lt;sup>11</sup> Marcu, Florin, 2007, *Marele dicționar de neologisme*, (MDN), București: Editura Saeculum Vizual.

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