Abstract

Nowadays more and more people are using computers and the Internet; consequently, they are continually in touch with computing terminology. The study and analysis of such terminology thus seems very important not only from the point of view of a linguist, but from one of an average computer user as well. Polish language for computers and the Internet is in a state of constant change today: new terms, mostly borrowed from English, enter the language all the time. The aim of the present paper is to analyze the origin of the newest lexical borrowings of English, many of which have not been noted in the dictionaries and/or discussed in the literature on the subject, used in Polish language for computers and the Internet. Special attention will be devoted to the morphology of such loans; among other things, special morphological processes will be discussed, such as the formation of diminutives of computer terms. The research is based on a corpus, collected and analyzed by the author of the study. The corpus comprises of texts taken from various Internet message boards devoted to computers and the Internet.

Keywords: lexical loans, semantic loans, loan translations, corpus studies, computing terminology, Internet terminology.

1. Introduction

It is a well-known fact that English heavily influences present-day Polish; such changes are most readily detectable in the area of vocabulary (for more on this, cf. Mańczak-Wohlfeld 2006; SZA 2010¹). Naturally, not all semantic fields in Polish are affected by English to an equal extent. The area of computing and

¹ The abbreviations of the titles of English and Polish dictionaries used in the present study are listed and explained in the final section of the paper.
the Internet appears to be among the richest in the elements borrowed from English (cf. Otwinowska-Kasztelanic 2000; Zabawa 2012, 2014). The aim of the present paper, as the title suggests, will be to describe the newest borrowings of English origin found in the semantic area in question. The article focuses on lexical loans, but selected examples of semantic borrowings and loan translations will also be provided.

It must be noted at the beginning that computing and Internet terminology has a very distinct character when compared to the terminology used in other fields, such as, e.g. physics or chemistry. More and more people are using computers nowadays (Feliksiak 2010), either as a hobby or as a part of their work; consequently, they are continually in touch with IT terminology. As a result, the study and analysis of such terminology seems very important not only from the point of view of a linguist, but from the one of an average computer user as well.

Computing and Internet terminology is developing very quickly. On the one hand, the terms used previously only by IT specialists have now penetrated into general Polish and are used also by non-specialists (cf. e.g. skaner, program antywirusowy “scanner,” “antivirus program/software”). On the other hand, computer terminology borrows words from general Polish and assigns special meanings to them (cf. e.g. plik “file”). The flow of words is thus bidirectional: from general Polish to a more specialized one and from a specialized variety to a general one.

What is more, the language of computers and the Internet is in constant change nowadays: new terms enter the language all the time; they are frequently, albeit not always, borrowed from English. As for examples, cf. the following words noted in SZA (2010) but not in the earlier dictionaries: USJP (2003) and WSWO (2003): clocking, hacking, overclocker or trolling. Furthermore, many of the older terms tend to disappear: for example, one could mention such forms as dysk sztywny (lit. “stiff disk”), dysk staly (lit. “permanent disk”), both now replaced by dysk twardy (lit. “hard disk”) or footer, header, now largely replaced by Polish translations stopka, nagłówek. Consequently, constant research in the field is a necessity.

It would appear that two layers of Polish computing and Internet terminology can be distinguished: (1) the formal, official terminology (used, e.g. in the press dealing with computers, computer games and the Internet, such as, e.g. Chip, PC Format, CD-Action) and (2) the informal, unofficial one (such as, e.g. the one used on the Internet message boards, instant messaging, chat rooms as well as in conversations on computers). The present paper will concentrate on the unofficial variety, i.e. the one used in informal situations. First, however, some general information will be given.

2. Computing terminology and borrowings from English

As was mentioned in the Introduction, computing and Internet terminology, both formal and informal, is one of the richest (in terms of English borrowings) semantic fields in Polish. One of the first semantic classifications of English borrowings in Polish was carried out by Fisiak (1970), who divided the English loans used in Polish into 12 semantic categories; computers were, however, not included as a separate category: only the general class of “science and technology” was introduced. Another scholar,

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2 The terms dysk sztywny, dysk staly, footer, header were discussed in the article by Cudak and Tambor (1995) as regular computing terms used in Polish.

3 Naturally, the same holds true for many other languages apart from Polish; see, e.g. Sosnowski (2000) for the discussion on English borrowings in the sphere of computers in Polish and Italian.
Mańczak-Wohlfeld, was among the first Polish linguists who introduced the semantic field of computers and the Internet as a separate category (in connection with the existence of English borrowings). In her work, she divided the English loans into 45 semantic categories, including computers and (as a separate group) cybernetics (Mańczak-Wohlfeld 1995: 68–73).

It is very difficult, if not impossible, to establish even the approximate number of English borrowings used in the Polish computing and Internet terminology. It is only possible to speculate on their number on the basis of the general (i.e. not intended for specialists) dictionary of Polish (USJP 2003). The dictionary in question includes 374 entries (headwords) marked with the label inform. (informatyczny, “computing”). Out of those 374 entries, 120 are additionally marked with ang. (angielski, i.e. coming from English); consequently, it can be stated that approximately 32% of the computing terms in Polish are of English origin. Additionally, it must be noted that many such terms have numerous variant forms, both at the level of spelling (e.g. driver/drajwer “driver,” interface/interfejs “interface,” bootować/obotować/butować “to boot”) and morphology or syntax, e.g. pokój czatu, pokój czatu, pokoje w czacie, pokoje z czatu (lit. “room chat-gen., “room chat-dat., “rooms in chat-loc., “room from chat-dat.”) (Zabawa 2010: 84). This shows that many of the terms borrowed from English, not necessarily the newest ones (cf. e.g. interfejs, noted already in USJP), are still far from fully assimilated.

3. The corpus

The present study is based on a corpus, collected and analyzed by the author of the study. The corpus comprises of texts taken from the following Internet message boards devoted to computers and the Internet: Forum Bajt (http://forumbajt.pl/forum.php), Forum komputerowe (http://forumkomputerowe.pl/), Forum PC (http://www.forumpc.pl/). All the forums included in the study are intended for non-specialist computer users.

It has been decided to exclude texts published on Usenet groups (such as, e.g. pl.comp.lang.pascal, pl.comp.mail, etc.), since these groups are mostly intended for computer specialists (either professionally or as a hobby) and the language used there does not seem representative of Polish computer users in general.

The topics have been randomly selected from the above-mentioned three Internet forums and included into the corpus. It contains the entries both on computer hardware and software. The material was gathered in February and March 2012. Altogether, the corpus taken into account in the present study comprises 106 721 words.

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4 Even such detailed classification is not complete, however. As Mańczak-Wohlfeld (1995: 73) admits herself, new borrowings are appearing constantly and they may not fit into any of the categories singled out and described before.

5 It must be noted, however, that the number given here (i.e. 374) is only an approximation, as the dictionary also contains terms connected with computers not marked with the label inform.

6 The problem is, however, that the data may be, and most probably is, out-of-date as USJP was published in 2003, which means that the linguistic material must have been gathered and compiled even earlier.

7 USJP lists only the form interfejs (not interface). It must be added here that such re-anglicisation (which can also be termed de-assimilation) is not a new phenomenon: Mańczak-Wohlfeld (1993: 281), for example, notes that the form business is sometimes preferred over biznes or gin over dzyn (cf. also Zabawa 2011: 211).

8 The number of running words has been determined with the help of a computer program TextSTAT.
Numerous new borrowings of English origin have been found in the corpus. Many of them have not been registered in the dictionaries, including the newest dictionary of English borrowings in Polish (SZA 2010). Examples of such terms include: *bady* ("bad sectors"), *bluescreen* ("a type of fatal error leading to crash;" normally a blue screen with the error announcement is displayed, hence the name), *bot* ("a kind of computer program performing automatically various operations, e.g. responding to user's input; sometimes a program designed to mimic human operations"), *crash* ("a state when the computer hangs and no longer works"), *firmware* ("an operating system, programs, etc., implemented permanently into computer's memory by the manufacturer"), *fullscreen* ("a mode of running a program or a game on the entire screen, rather than in a window"), *key* ("a kind of a password used, e.g. to install or run a program, game, etc.") , *lagi* ("delays occurring during, e.g. playing computer games in the multiplayer mode via the Internet"), *rootkit* ("harmful computer programs, a kind of computer viruses"), *setup* ("options of a computer program or a game where a user can configure the program/game to suit his/her needs, e.g. by changing the colours, the resolution, keyboard shortcuts, the level of difficulty, etc."), *shutdown* ("the act of turning off a computer"), *speaker* ("loudspeaker"), *support* ("technical help provided by the manufacturer of a given device, e.g. a printer") , *switch* ("a button for turning the computer on or off"), *toolbar* ("a set of icons in a given computer program, used to navigate the program and choose various functions, located usually in the top part of the window"), *tutorial* ("a mode of using a computer program or playing a computer game, with various kinds of hints and helpful comments displayed on screen, designed for beginner users"). All of the above-mentioned borrowings are thus visible proof of the constant development of Polish computing language.

Moreover, the corpus contains numerous abbreviations and/or acronyms. In fact, the use of acronyms and abbreviations can be seen as one of the most characteristic features of the Internet language. As for examples, the following abbreviations/acronyms have been found, among others: *BSOD/bsod* (Blue Screen of Death), *OC/oc* (overclocking), *OS (operating system)*, *PnP* (Plug and Play), *p* (pixel), *PDF/pdf* (Portable Document Format), *fps* (frames per second), *CPU/cpu* (Central Processing Unit). The frequent use of abbreviations and acronyms facilitates fast keyboarding and reading, thus saving both time and space.

Interestingly enough, most of the English borrowings described in the previous paragraph, despite being relatively new in the language, have already been adapted, especially at the level of morphology, cf. the inflected forms (for the person, number, gender, tense and/or aspect in the case of verbs, the case and/or number in the case of nouns): *bugu* (from *bug*), *tutoriali* (from *tutorial*), *crackująć* (from...

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9 The meanings have been determined by the analysis of the context(s) in which a given word appeared. Moreover, English monolingual dictionaries have been consulted (ODE, OALD) and in some cases (i.e. when the word was used in Polish in exactly the same meaning as described in ODE or OALD for its English counterpart) the definitions have been formed with the help of them.

10 This word is included in SZA, but in a different meaning.

11 This is a feature found across languages, both in Polish and English (cf. e.g. Grzenia 2007: 145–149; Crystal 2006: 89–92).

12 Many of the abbreviations/acronyms found in the corpus have variant graphic forms, i.e. both the forms spelt with capital and small letters have been documented.

13 Some of the base forms listed in the present paragraph have been noted in SZA.
crackować), toolbar (from toolbar), touchpad (from touchpad), backup (from backup), supportu (from support), boxowe14 (from box), and spatchowany (from patch). What is more, they serve as a basis for new derivatives, cf. the following examples taken from the corpus:15 the adjective trialowy (from the noun trial), the form lagowanie (from the noun lag/lagi), the adjective desktopowe (from the noun desktop), the prefixed imperative form wybootuj and the prefixed form zbootować, zabootować (from the verb bootować). What is more, even the proper nouns associated with computers and the Internet can be used as a base for derivatives, cf. the prefixed forms of verb pogooglować and wygogólować (from the proper noun Google). As for abbreviations and/or acronyms, many of them have been adapted morphologically as well, cf. such forms as BSODY/bsody, PDFy/pdfy, fpsy (the plural forms of BSOD, PDF, fps).

Thus, as one can see, the process of morphological adaptation takes place very quickly and usually precedes the adaptation at the level of spelling:16 although the forms are frequently inflected, their spelling usually remains English. Occasionally, however, the assimilation at the level of spelling is also documented, cf. e.g. bootować, used also as butować. Such duality shows that the process of assimilation at the level of spelling has been initiated, but is still far from completed as the form bootować is still more frequent than butować (cf. e.g. the National Corpus of Polish, www.nkjp.pl).17

It is also worth noting that not infrequently English lexical borrowings coexist side by side with the native (or borrowed, but already fully assimilated) counterparts, cf. the following pairs: software – oprogramowanie; hardware – sprzęt (komputerowy); cookies – ciasteczka; key – klucz; link – odnośnik; engine – silnik; patch – lata, latka; screen – zrzut (ekranowy). As one can see, at least some of the Polish counterparts should perhaps be termed quasi-Polish counterparts, as they are frequently loan translations or loan renditions from English. Still, it appears that the English forms are often preferred because of their brevity. Naturally, in some cases the Polish constructions are as short, or even shorter, as their English counterparts; in the majority of cases, however, the English forms are shorter, which makes them well suited for electronic communication. Interestingly enough, in some cases the English borrowings coexist side-by-side with their Polish counterparts and neither form seems to disappear or squeeze out the second one: software and oprogramowanie (or simply programy) is a good illustration of this case.

Apart from new derivatives (cf. the examples given above), the corpus contains also numerous examples of new words formed by means of clipping. This morphological process is quite untypical in Polish: it occurs mainly, or perhaps even exclusively, in the informal variety, e.g. in the language of young people (spoko instead of społojnie “all right; OK; don’t worry,” etc., nara instead of na razie “bye for now,” etc.). The corpus, as was mentioned in the Introduction, is composed of an unofficial variety of computing language, hence the tendency of clipping appearing in the informal variety has been retained.

14 Also spelt as BOXowe and BOXówe.
15 Again, some of the base forms (but not derivatives) listed in the present paragraph have been noted in SZA.
16 Interestingly enough, some borrowings from English never become assimilated at the level of spelling, even though they may be fully assimilated at the level of morphology: weekend is a case in point. The word is an old borrowing; yet, despite being morphologically assimilated (cf. such inflected forms as weekendu, weekendy and derivatives weekendowy, weekendowo), the word is still used with foreign spelling (double e is very un-Polish). Occasionally, one can encounter such forms as hykent or likend, but they are used only humorously as some kind of a linguistic joke.
17 The neologism butować (not noted in USJP at all) functions as a homonym, as it can be used informally as the assimilated variant of the computer form bootować or, also informally, as the verb meaning “to kick somebody,” from the noun but (“shoe”).
As for examples, the following forms have been found, among others: admin (from administrator, “administrator, usually of an Internet forum”), antywir (from antyvirus, i.e. program antywirusowy, “antivirus program/software”), grafa (from grafika, i.e. karta graficzna, “graphic card”), gwara (from gwarancja, “guarantee”), klawa (from klawiatura, “keyboard”), kopa (from komputer, “computer”), mod (from moderator, “moderator”), pen (from pendrive, “memory stick”), proc (from procesor, “processor”), soft (from software), stery (from sterownik, “drivers”), sygna (from sygnatura, “signature, usually used by a given user on, e.g. an Internet forum”), defrag\(^ {18} \) (from defragmentowanie, defragmentator, “[disk] defragmentation,” “defragmenter”), viry (from wirusy, “[computer] viruses,” or directly from the English form viruses), win\(^ {19} \) (from Windows).\(^ {20} \) Most of the instances of clipping, as one can see, can be classified as back clippings (considered as the most frequent type of clipping, cf. Plag 2003: 154).

Furthermore, the clipped forms are often morphologically adapted and, consequently, inflected, cf. the following examples taken from the corpus (the base form is given in brackets): antywira (antywir), grafy (grafa), kompa, kompem (komp), pena (pen), softu (soft), steryów (stery). Such morphological adaptation indicates that the clipped forms are already quite well assimilated and accepted by the community of the users of Internet forums. What is equally important is the fact that such forms have been found in all three forums analyzed in the present study: this indicates that they are already relatively widely diffused and do not seem to be restricted to one community of speakers.

It must be added at this point, however, that it is sometimes unclear whether such forms have been formed (clipped) in Polish or rather borrowed as ready-made units from English. The second hypothesis may be strengthened by the fact that some of the above-discussed forms have been noted in the dictionaries of English. This is the case of comp, defrag and admin, noted in OALD and/or ODE (usually marked additionally with the label informal). Thus the forms admin, defrag and kopa used in Polish may well be lexical borrowings from English. Other forms, nevertheless, such as antywir, grafa or klawa are most probably genuine examples of clipping in Polish.

Furthermore, the corpus contains interesting examples of diminutives, formed usually by means of another word-formation process, or rather by a combination of the two processes: clipping and affixation. Examples of such constructions found in the corpus include: lapek or lapciak (from laptop) and procek (from procesor). Interestingly enough, many such constructions are formed from proper names, usually the names of companies and/or their products, cf. the following examples: xpek\(^ {21} \) (from Windows XP), hapek (i.e. a printer manufactured by HP company), maczek (from Macintosh) and toska (i.e. a laptop manufactured by Toshiba company). Most probably, such forms can be classified as emotionally loaded terms: the authors stress their positive attitude towards the objects.

\(^{18} \) Also appearing in the form defragler.

\(^{19} \) Also appearing in the construction dyski z winem (a play on words, as winem is a homonym here: “hard disks with Windows” and “hard disks with wine”).

\(^{20} \) Additionally, the corpus contains abbreviations of words not specifically connected with computers, cf. e.g. org or oryg (from oryginal, “an original computer game/program”), zdj (from zdjecie, “a photograph”) and info (from information). Info, however, can also be treated as a pure lexical borrowing from English. Apart from those, the corpus contains also examples of abbreviations of a special type, with the vowels dropped, e.g. wgl (w ogóle, “in general”), bd (będę, będzie, “I will, it will”).

\(^{21} \) Also appearing as the inflected form xpka.
5. Semantic innovations

The study focuses mainly on lexical loans; it is interesting to note, nevertheless, that the corpus also contains numerous examples of semantic innovations; while some of them are most probably formed in Polish and can be seen as a result of the internal development of the Polish language, many others are most probably the result of the influence of English in the sphere of semantics.22

As for the former group, i.e. new meanings formed most probably without the influence of English, selected examples include winda (sometimes also capitalized: Winda), lit. “a lift/an elevator,” used to denote the name of the operating system Microsoft Windows (a play on words Windows and winda, which are graphically similar) or twardziel, lit. “a tough man,” used to denote a hard disk (Polish dysk twardy; again a play on words: twardziel is semantically related to twardy, lit. “hard”). As one can see, the constructions used in the new meanings can be seen as examples of linguistic creativity: the new forms can be formed on the basis of semantic similarity (twardziel/twardy) or merely graphical one (Windows/winda).

The latter group, i.e. new meanings formed on the basis of English models, include such words as, e.g. awatar (used on the model of English avatar, i.e. “an icon or figure representing a particular person in computer games, Internet forums, etc.”; ODE), pokój (on the model of English (chat) room, i.e. “an area on the Internet or other computer network where users can communicate, typically one dedicated to a particular topic;” ODE), biblioteka (on the model of English (software) library, i.e. “a collection of programs and software packages made generally available, often loaded and stored on disk for immediate use;” ODE), moderator and its abbreviation mod (on the model of English moderator, i.e. “a person who moderates an Internet message board or chat room;” ODE); for more examples of this kind cf. Zabawa 2010: 80–90 and Zabawa 2012).

6. Loan translations

Apart from lexical and semantic loans, the corpus contains also numerous examples of loan translations modelled on English (i.e. literal translations from English). Some of such constructions are well assimilated and are not felt as foreign, cf. e.g. dysk twardy (on the model of English hard disk), pomoc techniczna (on the model of English technical help or technical support), dysk zewnętrzny (on the model of English external disk).23 Others, however, have been formed relatively recently and can be difficult to understand without the translation into English. Selected examples of this kind of English influence include niebieski ekran (bluescreen), niebieski ekran śmierci (blue screen of death), aktywne/pasywne chłodzenie (active/
passive cooling), *budżetowe konstrukcje* (budget constructions), *złe sektory* (bad sectors), *magiczna partycja* (magic partition), *powierzchnia dysku* (disk surface) and *menedżer dysku* (disk manager). In fact, such constructions can be seen as being on the borderline between loan translations and semantic borrowings. The construction *budżetowe konstrukcje*, for example, can be seen as a pure example of a loan translation from English *budget constructions*, but it may also be discussed from the point of view of semantic changes of the word *budżetowy* in Polish. Traditionally, the word was used in Polish in the meaning of “connected with a budget; relating to a budget” (cf. the definition in USJP, where the word is additionally marked with the label *ekon.*, *i.e.* belonging to the semantic sphere of economics); in the construction in question, however, the word is used in the sense of “inexpensive” on the model of the English adjective *budget*. A similar situation can be detected in the case of the construction *menedżer dysku*: it can be discussed as a typical example of a loan translation; it may, however, also be seen as an example of a semantic borrowing: *menedżer* in Polish (a lexical borrowing from English itself) is used in two meanings: (A) “a person responsible for organization and management of a company” and (B) “a person who organizes the performances of an artist (or artists), sportsman/sportswoman (or sportsmen/sportswomen) and takes care of their financial matters” (cf. USJP). In the construction *menedżer dysku*, however, the word in question clearly does not refer to a person; its use is modelled on English *manager*: one of its uses, marked additionally with the label *Computing*, is defined by ODE as follows: “a program or system that controls or organizes a peripheral device or process.”

7. Conclusions

To sum up, it must be underlined once again that the semantic field of computers is one of the richest in terms of the number of English lexical borrowings. The semantic area in question can also be characterized by constant changes in vocabulary; new terms are not, however, mere additions to a lexicon. In fact, two opposing tendencies can be observed here. On the one hand, English borrowings existing in Polish in the past (mostly in the 1990s) have been replaced to a large extent by the Polish counterparts, usually literal translations from English. Such translations, performed on a relatively large scale, can be seen, among others, as a result of producing Polish versions of computer software, especially the operating system Microsoft Windows and the office program Microsoft Office. Thus *window* was translated as *okno*, *tools* as *narzędzia*, *footer* as *stopka*, *header* as *nagłówek*, etc. On the other hand, new borrowings of English origin are constantly introduced, some examples of which have been discussed in the present article.

Other opposing tendencies that can be noticed in the semantic field in question are connected with morphology and the assimilation of English loanwords. On the one hand, English lexical borrowings in the Polish semantic field of computers and the Internet tend to assimilate very quickly, especially at the level of morphology, as they are inflected (e.g. case endings are added or plural forms are created in the case of nouns) and new derivatives are constantly formed. On the other hand, however, many constructions have variant forms, both at the level of spelling and morphology or syntax. This shows that, despite their quick assimilation, many users are still unsure as to their form, *i.e.* the spelling, and

24 It is worth noting that USJP gives three variant spellings for the same word: *menedżer*, *menadżer* and *manager*. The word is marked with the label *biznes*, *i.e.* relating to the semantic field of business.

25 Semantic borrowings and loan translations are also very frequent.
morphology/syntax, e.g. the preposition that should be used in a given construction. The dictionaries of Polish and/or of foreign terms appear not very useful, as most of the problematic terms are new and, consequently, they are not (yet) included in the dictionaries available on the market.

Most of the lexical borrowings seem necessary, considering the fact that they do not have native counterparts. Some of them are naturally translated into Polish, but such constructions can hardly be termed native equivalents, as they are still of foreign origin (semantic borrowings or loan translations). The dictionaries of Polish, as was mentioned in the previous paragraph, cannot by definition present the newest constructions used in the semantic field in question. Thus, it must be stressed once again that the constant linguistic research in the field of computers and the Internet is a necessity.

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