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The language of information technology: Figurative use of computer terms

The rapidly emerging terminology associated with the Internet and its use result in highly figurative use of the terminology in this domain (the Internet), and its supporting technology (the computers). The present paper takes a look at the figurative use of computer terms from a cognitive linguistics point of view, arguing the vocabulary of the language of information technology is created in a number of ways, including neologisation, derivation, blending, conversion, analogy to general language vocabulary, compression, etc., with metaphor being highly used in the language of information technology. The paper introduces the language of information technology and its accompanying features in the context of Netspeak as a new online medium of communication.

Key words: information technology; metaphor; cognitive linguistics; Netspeak.

1. Introduction

Essentially, the present paper deals with the impact of the Internet on the English language. More specifically, it looks at the figurative use of computer terms from a cognitive linguistics point of view. The paper provides a corpus-based overview of the vocabulary of the language of information technology, which is created in a number of ways, including neologisation, derivation, conversion, blending, analogy to general language vocabulary, etc. Metaphor is highly used in the language of information technology (IT), and this is precisely one of the main hypotheses of this paper.



Following the general introduction to the paper is the theoretical framework, encompassing a number of definitions and approaches to this issue by various authors. Section 2 that follows provides a brief history of the metaphor, in the context of the conceptual framework in the field of IT, with the focus on the definition and understanding of the metaphor as defined by Lakoff and Johnson (2003).

Given that the conceptual framework is based on the classification of words used in IT (computer-related terms), the section provides an overview of the two main categories or themes of metaphors – *computer* and *internet* (Izwaini, 2003: 2). In addressing the three main questions in this study:

- What are the basic features of the language of information technology (LIT)?
- What is the connection between the rapidly emerging terminology associated with the Internet and the figurative use of computer terms?
- In what ways is the vocabulary of the language of information technology created?

general features of LIT vocabulary are presented in Section 2 which is followed by the presentation of the corpus used for the purposes of this study, which incorporates a total of 86 words (computer terms, popularly and most frequently found and used in everyday online communication in English) selected from Crystal's *A Glossary of Netspeak and Textspeak*, in Section 3. The corpus was selected, processed, analysed and the results are presented in the Analysis and Discussion section of this paper (Section 4).

Metaphoric vocabulary was classified based on the two categories or groups of metaphors referred to above. Frequency counts were made of the key words selected for the corpus through Google search engine and the British National Corpus (BNC). For the purposes of this study, a key word is a word that was collected from Crystal's *A Glossary of Netspeak and Textspeak* in view of its LIT properties. The Analysis and Discussion section presents a number of interesting facts, supported by appropriate examples. Finally, the section ends with a list of various manners in which the vocabulary of LIT can be created (including examples), and presents the correspondence between the computer terms selected as the corpus for the present study and the two major domains – the computer and the Internet, and the corresponding conceptual metaphors.



2. Theoretical framework

Computers have quickly become an important new industry and an everyday tool, having such an enormous impact on daily lives of most people that English has had to adapt to this new experience. In fact, rather than simply creating new words for each particular aspect of these discoveries, various existing domains have been mapped onto computers and cyberspace. The following is an illustration of how electronically produced language affects spoken language (Crystal, 2001: 19):

(1) a. *It's my turn to **download** now.*

i.e. I've heard all your gossip, now hear mine; whereas in the IT world this expression means to transfer information from one kind of electronic storage to another, especially from a larger store to a smaller one, such as a file from a network to a personal computer, as in:

(1) b. *You can **download** the new version right now, and it's free!*

c. *I need more **bandwidth** to handle that point.* (i.e. I can't take it all in at once)

d. *She's **multitasking**.* (said of someone doing two or more things at once)

In the IT world, this expression means the running of more than one program simultaneously on a computer, as in:

(1) e. *That operating system is really good at **multitasking** – it's really increased our output.*

f. *Let's go **offline** for a few minutes* (i.e. let's talk in private)

e. *I'll **ping** you later.*

i.e. get in touch to see if you're around; whereas in the IT world this expression is originally a pulse of sound sent to establish the location of something; also, to send such a sound pulse. In computing, a message sent from one computer to another to see if it is active and accessible, as in:

(1) f. *Send a **ping** to the following site.*

g. *He started **flaming** me for no reason at all.*

i.e. shouting at me; whereas in the IT world this term represents an aggressive or inflammatory electronic message (in an email or a chatroom); also, the act of sending such messages, as in:



- h. *Flaming* is one of the curses of the Internet.
- i. Are you *wired?* (i.e. ready to handle this)
- j. He's living in *hypertext*. (i.e. he's got a lot to hide)

The language of information technology (LIT) has made use of items in our surroundings and borrowed them figuratively into its own domain. According to Izwaini (2003), metaphor is generally known as being used in reflecting and developing scientific ideas (see Gross 1990; Rothbart 1984; Hesse 1980), while Dirven (1985) demonstrates the role of metaphor in extending the lexicon, recognising that these can be seen as two sides of the same coin.

Izwaini (2003) continues to argue that the linguistic potential of metaphor has rendered it a very useful tool in providing description and clarification in various scientific domains. When it comes to scientific and technical vocabulary, lexical items of general language are figuratively used to form a special language vocabulary. Therefore, metaphor plays a significant role in scientific discourse and terminology and in transmitting scientific concepts especially in new fields. It is widely used in the field of information technology. It goes without saying that the type of metaphor and the tasks assigned to it in science and technology are fundamentally different from its role in literature. The figurative aspect of metaphor is employed to forward a model to understand scientific facts, theories and concepts. At this point, Izwaini concludes that metaphor in science and technology moves rather into terminology and specialised language.

Metaphor in the world of computers has attracted the attention of researchers in the fields of technical writing and human-computer interaction. According to Izwaini (2003: 1), the first group discussed how metaphor is used to present this field and what the criteria are to choose metaphor (e.g. Chisholm 1986; Johnson 1991; Beck 1991; Mulder 1996). The second group discussed the use and significance of metaphorical representations in the graphical user interface (e.g. Constantine 2001; Coyne 1995; Microsoft 1993; Apple 1987). Other studies investigated the use of metaphor in different fields of information technology from a cognitive/linguistic perspective (e.g. Grevy 1999; Meyer et al. 1997; Öberg 1989).

Chisholm (1986: 198) calls computer terminology used metaphorically *metaphoric terminology*. He maintains that metaphoric terminology is a special kind of metaphor. Johnson (1991) presents metaphors used in computer science as having paradigms: *Agent Paradigm* (the doer metaphor), *Engine Paradigm*, *Traffic Paradigm*, *Structure Paradigm* (e.g. *architecture*), and *Illusion Paradigm* (e.g.



virtual). These are categorised on semantic sets of words used metaphorically in this field.

Meyer et al. (1997) studied metaphors of the Internet from a conceptual and structural point of view. They looked at English books and magazines as well as online and hard copy dictionaries and glossaries. They classify Internet metaphors into two main groups: fully metaphorical and partly metaphorical, where members of the latter have either a metaphorical modifier or a metaphorical base, e.g. *kill file* and *electronic mail* respectively (1997:14). Actually the metaphoric aspect does not lie in one element of these terms but rather from the combination of both. The constituent elements of these metaphorical expressions are not metaphorical when used on their own. Only when combined together do they give rise to the figurative meaning.

Izwaini further argues that metaphoric designations facilitate communication among field experts as well as presenting the components of the fields of computer and the Internet to the ordinary user. Information Technology (IT) makes use of metaphor by having a mental model for the user through linguistic representations. In addition to vocabulary innovation, e.g. *byte*, and derivation, e.g. *computer* and *server*, Izwaini claims (2003: 2) that metaphor is the most used method of creating new vocabulary in the language of information technology (LIT). Instead of trying to create new coinage, language users tend to make use of what is already available in the language by making figurative use of it. Metaphorical designations are said to be based on the correspondence to items that are found in the real world and have some other nature. As most IT entities are of electronic or magnetic nature, this takes us to the basic definition of metaphor: to describe one entity by the qualities of another. The difference in the material and nature of items is the basis on which this metaphor is created.

In the language of information technology (LIT), metaphor is used in single words, e.g. *mouse*, *chip*, *card* (depending on the shape), *file*, *hardware*, *traffic*, *surf*, *page* and *port*, and in compounds, e.g. *search engine*. LIT vocabulary draws its metaphoric character from general language and everyday experience. Izwaini concludes that LIT uses metaphor and assimilates its shaping boundaries in the terminology in that the figurative aspect is no longer felt.

Commenting on what it is like to be a regular citizen of the Internet, a *netizen*, Crystal states that those who already spend appreciable amounts of time online need only self-reflect, while for those who do not, he provides Shawn Wilbur's description of what a 'virtual community' means to him (2001: 5):



For me it is the work of a few hours a day, carved up into minutes and carried on from before dawn until long after dark. I venture out onto the Net when I wake in the night, while coffee water boils, or bath water runs, between manuscript sections or student appointments. Or I keep a network connection open in the background while I do other work. Once or twice a day, I log on for longer periods of time, mostly to engage in more demanding realtime communication, but I find that is not enough. My friends and colleagues express similar needs for frequent connection, either in conversation or through the covetous looks they cast at occupied terminals in the office. Virtual community is this work, this immersion, and also the connection it represents. Sometimes it is realtime communication. More often it is asynchronous and mostly solitary, a sort of textual flirtation that only occasionally aims at any direct confrontation of voices or bodies.

Evidently, the lexical items highlighted in the examples above, which belong to the language of information technology, are used highly figuratively to form a special language vocabulary. Metaphor clearly plays an important role in scientific discourse, including the realm of the cyberspace – the Internet discourse. It is worth highlighting here that the type of metaphor and the tasks assigned to it in science and technology are fundamentally different from its role in literature.

2.1. Conceptual framework in the field of IT

2.1.1. Metaphor - the two approaches

The phenomenon of metaphor has been studied for centuries, resulting in two approaches to it. On one hand, there is the traditional approach, and, on the other, the cognitive approach.

In the early stages of its emergence, metaphor was considered solely as a figure of speech used to enrich the works of literature. This is known as the traditional approach to metaphor. According to Evans and Green (2006), this is how Aristotle and other philosophers perceived the phenomenon of metaphor. Due to the fact that metaphor became more than just a figure of speech, this approach lost on its value.

In addition to the traditional approach, the cognitive approach to metaphor popularised metaphor and provided it with the place in the language it actually deserves. According to this approach, metaphor is not simply a figure of speech, a decorative device, but a part of everyday language. This approach was introduced by George Lakoff and Mark Johnson in their book *Metaphors We Live By* (1980). According to Lakoff and Johnson (2003: 5), metaphor is pervasive in everyday life, not just in language but in thought and action. Our ordinary conceptual system in



terms of which we both think and act is fundamentally metaphoric in nature. The basic idea of conceptual metaphor proposed by Lakoff and Johnson is that concepts structure our entire lives, everything from most simple to most complicated things.

2.1.2. *Metaphor: definition and understanding*

Metaphor is defined by Lakoff and Johnson (2003) as understanding one conceptual domain, being the target domain, in terms of another conceptual domain, the source domain. As Kövecses points out (2002: viii), Lakoff and Johnson's new view of metaphor that challenged all of the aspects of the powerful traditional theory in a coherent and systematic way was a conception that has become known as the "cognitive linguistic view of metaphor". Lakoff and Johnson challenged the traditional view of metaphor by claiming that:

- 1) metaphor is a property of concepts, and not of words
- 2) the function of metaphor is to better understand certain concepts, and not just some artistic or esthetic purpose
- 3) metaphor is often *not* based on similarity
- 4) metaphor is used effortlessly in everyday life by ordinary people, not just by special talented people
- 5) metaphor, far from being a superfluous though pleasing linguistic ornament, is an inevitable process of human thought and reasoning

Kövecses argues (2002: viii) that Lakoff and Johnson showed convincingly that metaphor is pervasive both in thought and everyday language, adding that their insight has been taken up by recent dictionary preparers as well.

Metaphor is used to express different aspects of life and everyday activities in a systematic way. As introduced above, Lakoff and Johnson (1980) present a conceptual account of the metaphoric system and how it is embodied in language. The conceptual framework is based on the classification of words used in IT (computer-related terms), which results in categories or themes of metaphors. If we take two main components of IT, i.e. *the computer* and *the internet*, they can be seen metaphorically by grouping LIT vocabulary in categories with cognitive properties. Words used metaphorically which are now part of LIT are organised in semantic groups that produce conceptual LIT metaphors. The two main categories of *computer* and *internet* are as follows (Izwaini 2003: 2):

The computer

- THE COMPUTER IS A LIVING BEING: *client*, *conflict*, *dialogue* (conversation between



the computer and the user), *generation*, *language*, *memory*, *protocol*, *syntax*, *widow/orphan*, and *virus* and *bug* (it can get ill);

- THE COMPUTER IS A WORKSHOP: *download*, *equipment*, *hardware*, *install*, *load*, *template*, and *tools*;
- THE COMPUTER IS AN OFFICE: *attachment*, *desktop*, *directory*, *document*, *file*, *folder*, *mail*, *trash can*, and *wastebasket*;
- THE COMPUTER IS A BUILDING/PLACE: *architecture*, *library*, *sign in/log in*, *sign out/log out*, *platform*, *port*, *window*, and *workstation*;
- THE COMPUTER IS A SOLDIER: *combat*, *command*, and *instructions*.

The Internet

- THE INTERNET IS IN A STATE OF WAR: *password*, *security*, *war*, and *warfare*;
- THE INTERNET IS A ROAD: *bus*, *highway*, *map*, *path*, and *traffic*;
- THE INTERNET IS A BUILDING/PLACE: *access*, *address*, *firewall*, *gateway*, *sign in/log in*, *sign out/log out*, *site*, *visit*, and *wallpaper*;
- THE INTERNET IS A BOOK: *bookmark*, *browse*, *browser*, and *page*;
- THE INTERNET IS A SEA: *navigate*, *pirates*, and *surf*;
- THE INTERNET IS A MARKETPLACE: *ecommerce*, *emarketing*, and *eshopping*.

2.1.3. General features of LIT vocabulary

The vocabulary of LIT is created in a number of ways, as follows:

- by neologisation: *byte*;
- derivation: *browser*;
- metaphor: *menu*;
- blending: *emoticon* (emotion + icon),
- conversion: *access* and *install*,
- analogy to general language vocabulary: *software*, and
- compression (acronymy and abbreviation): *RAM* and *HTML*.

Some interesting LIT words are created in a special way including abbreviating and compounding: *DbIClick* (double click), and in the case of *applet* (application-



et) abbreviating and suffixing. The later uses the diminutive *-et* suffix to refer to some kind of small programs. Izwaini (2003: 53) argues that LIT uses classic prefixes in somehow different meaning.

For example, *hyper* in *hypertext* and *hyperlink*, means rather 'branched', 'jumper', or 'bridging' roughly (see Marchand, 1969: 167, regarding the original meaning). LIT also introduced new compounds, e.g. *add-in*. Finally, using e-mail messages with one addressee is in the 'cc' field, a verb has been coined from this abbreviation meaning to send a copy of the message to X or Y. Sometimes it is in the *ing* form, for example, *I am ccing Mr. X*.

The linguistic element of the graphical interface, commands, and error messages has assumed a different character than that of the general language. Words are used across classes; verbs function as nouns in LIT, e.g. *click Save*, where 'save' has become an object of the action.

Capitalisation is used in LIT to indicate that these are menu entries and submenus. *Save* is actually not the verb 'save' but rather the entry, heading, button or submenu that appears in the drop menu, dialog box and the like. As *save* has lost the character of a word between inverted commas, and as it occurs next to the verb, a fixed phrase has been generated.

A unique and frequent combination of the two has emerged in the language. Other verbs that are 'objects' of *click* also demonstrate this usage: *Browse*, *Finish*, *Customize*, *Cancel*, *Paste*, *Save* and *Refresh*. Collocates of *box* are also found to be examples of this usage. Verbs have become 'modifiers' in compounds:

(2) *To open the Add dialog box*

Lexicalisation in LIT is exemplified by *readme* which is a whole sentence that is used as noun. The original sentence 'read me' is a special IT formulation on two levels. On one level, it is a sentence which became a compound verb that does not comply with the English word formation rules for compound verbs (see Bauer, 1983). On the second level, it is a verb that became a noun. Both processes occurred simultaneously. Thus LIT introduces a new word formation pattern that comprises verb + pronoun.

3. On the corpus

The corpus in this study incorporates a total of 86 computer terms and computer-related terms collected from Crystal's *A Glossary of Netspeak and Textspeak*. The word-selection criteria were simple: all words need to be either computer terms, or



computer-related terms.

In addition, the intention was to select such words that are used popularly and most frequently found and used in everyday online communication in English.

The words are listed in the alphabetical order and sorted by A-Z categories, as follows:

- A-words: *abort, access, ack, alpha, alpha geek, alt., analog, atto-*
B-words: *background, backspace, bagbiter, bandwidth (brainwidth), bandwidth, hog, bang, barney, batch, beta, bit, bitloss, blog, bogon, bookmark, bot, bounce, braindump, brute force, buffer, buffer overflow, bug*
C-words: *chip, click, client/server, cookie, coredump, crash, crunch, cuspy*
D-words: *dead link, dot, down, download*
E-words: *eye candy*
F-words: *firewall, firmware, flamage, flame, flamebait, flamer, flame war, flaming, flush, four-oh-four (404), fried, front end*
G-words: *geek (geezer), gigabyte (abbreviated in writing as Gb and in colloquial speech as gig), glitch, gronked*
H-words: *hack, handshaking, hardwired, hotlist, hypertext*
L-words: *log on, lose, sometimes loss*
M-words: *menu, multitasking*
N-words: *nano, non-linear, no-op*
O-words: *offline, off-line, online, on-line*
P-words: *ping, poll, protocol*
R-words: *readme, README, reboot, ROM*
S-words: *sanity check, spam, spammer, stack, state*
U-words: *upload*
W-words: *wired*

Frequency counts of these words were produced in two different ways:

- a) through Google search engine
- b) through the British National Corpus (BNC)

This was followed by an analysis and discussion of the linguistic elements, and, subsequently, their presentation, in the following section.



4. Analysis and discussion of the findings

This section presents the results of the analysis of the rapidly emerging terminology associated with the Internet and its use result in highly figurative use of the terminology in this domain (the Internet), and its supporting technology (the computers).

More specifically, it presents the main LIT features, with the supporting examples. The section ends with the summary of the data and the concluding comments.

As introduced already, the two main LIT categories – *computer* and *internet* – yield the two conceptual LIT metaphors stated in Section 2.1.2.

Metaphoric vocabulary was classified within categories based on the above metaphors. In addition, frequency counts were made of the key words selected for the corpus in this part of the present study (collected from Crystal's *A Glossary of Netspeak and Textspeak*, and shown in Table 1 below). Frequency counts were produced in two different ways:

- a) through Google search engine
- b) through the British National Corpus (BNC)

The starting point is the conceptual categories of metaphors in LIT. First, conceptual metaphors are outlined for two fundamental elements in IT: *the computer* and *the Internet*. Words that are used metaphorically in this field to create its terminology are accounted for by using simple statistical methods - producing simple frequency lists of key words. For the purposes of the present study, a key word is a word that was collected from Crystal's *A Glossary of Netspeak and Textspeak* in view of its LIT properties (belonging to the language of computers and the Internet).

Frequency counts produced data for all 86 key words. However, only top 20 and bottom 10 are presented in Table 1 below:

Table 1: Key words frequency, compared (Google vs. British National Corpus)

No.	KEY WORD (Top 20 key words)	Number of Instances (Google)	British National Corpus
1	on-line	4,490,000,000	3
2	online	3,890,000,000	585



3	blog	2,950,000,000	0
4	click	2,670,000,000	619
5	download	1,770,000,000	33
6	down	1,280,000,000	92116
7	state	1,270,000,000	38627
8	menu	1,250,000,000	1560
9	log on	1,230,000,000	47
10	offline, off-line	1,180,000,000	557 (0)
11	access	844,000,000	10789
12	bookmark	792,000,000	45
13	bit	523,000,000	26488
14	alt.	496,000,000	6
15	beta	447,000,000	657
16	upload	442,000,000	6
17	background	379,000,000	6064
18	spam	279,000,000	61
19	ROM	215,000,000	178
20	lose, sometimes loss	195,000,000	11466
	Bottom 10 key words		
77	handshaking	789,000	16
78	flamebait	678,000	0
79	alpha geek	366,000	0
80	bogon	122,000	3
81	bandwidth hog	72,100	0
82	flamage	26,800	0
83	cuspy	26,000	0
84	gronked	9,630	0
85	bagbiter	7,560	0
86	bitloss	571	0



The figures shown in the table above reveal some interesting facts. For instance, the top Google search word *on-line* has only 3 occurrences in the British National Corpus (*On-line catalogues*, *On-line bibliographic searching*, *On-line Online library catalogs*), while the non-hyphenated variant of the same word was found in 585 examples.

Interestingly enough, BNC makes no record of one of the most frequently used and most popular words – (we)blog. While the Google search resulted in almost 3 billion instances, BNC produced none. Following the top 20 Google word search, the word *click*, which also dominates the LIT was found in 619 instances in BNC, including the following examples:

- (3) *Click on UNDO LAST STEP to return to your original design and make any corrections if necessary.*
- (4) *Click on the edge of a cell and you can drag it to its new position.*

Some of the relatively few BNC examples (a total of 33) of the word *download* include the following:

- (5) *A similar process can be used to **download** soft fonts, which means that a bit mapped printer can be programmed to handle any font, including fonts designed by the user.*
- (6) *The adaptors will allow schools equipped with BBC microcomputers — which Acorn also makes — to '**download**' programs provided free via Ceefax.*
- (7) *The debuggers allow users to **download** and debug source code in real-time*

The high figures relating to Google search words ranking 6 and 7 (*down* and *state*, 92,116 and 38,627 respectively) partly have to do with the fact that these two words are commonly used in everyday English. However, some of the LIT-specific examples include:

- (8) *With a parallel interface all eight can be sent together with one bit going **down** each of the eight wires.*
- (9) *The output of IC6 may, when the VCO oscillations cease, settle randomly in either the 'high' or '**low**' state.*

The word *menu*, used figuratively, was found to be used quite frequently in both cases, with one of the BNC examples, closely related to LIT as follows:

- (10) *If a **menu** option is to load a program (such as Phantasm on the Mega Disk) then the file details that you input are turned into a batch file*



Generally speaking, it can be argued that the vocabulary of LIT is created by:

- neologisation: *byte*
- derivation: *browser*
- metaphor: *menu; browse, install, download* (when used metaphorically)
- blending: *emoticon* (emotion + icon)
- conversion: *access, install, click Save* (where *Save* has become the object of an action)
- analogy to general language vocabulary: *software, malware*
- compression (acronymy and abbreviation): *RAM, ROM, HTML*
- innovation: introducing new compounds, e.g. *add-in*
- capitalisation: used to indicate that these are menu entries and submenus
- lexicalisation: *readme*¹, which is a whole sentence used as a noun
- use of verbs: many are used figuratively, e.g. *browse, install, download*

Additionally, some interesting LIT words are created in a special way including abbreviating and compounding: *Db!Click* (double click), and in the case of *applet* (application-et) abbreviating and suffixing.

The following overview presents the correspondence between the computer terms that were selected as the corpus for the present study and the two major domains – the computer and the Internet, and the corresponding conceptual metaphors:

The computer

- THE COMPUTER IS A LIVING BEING: *bagbiter, bandwidth, bandwidth hog, barney, bounce, bounce back, braindump, bug, coredump, cuspy, dead link, down, eye candy, flamebait, geek (geezer), gronked, handshaking, multitasking, protocol, reboot, ROM, sanity check, stack, state, wired*
- THE COMPUTER IS A WORKSHOP: *ack, alpha, alpha geek, analog, beta, bit, bitloss, buffer, buffer overflow, buffer overload, chip, cookie, crunch, download, firmware, fried, glitch, hardwired*
- THE COMPUTER IS AN OFFICE: *background, batch, poll*

¹ According to Dirven (1999), metonymies underlie conversions. *Readme* could also be considered a type of conversion.



- THE COMPUTER IS A BUILDING/PLACE: *hypertext*
- THE COMPUTER IS A SOLDIER: *abort, brute force, flamage, flame, flamer, flush*

The Internet

- THE INTERNET IS IN A STATE OF WAR: *bang*
- THE INTERNET IS A ROAD: *backspace, click, crash, front end, non-linear*
- THE INTERNET IS A BUILDING/PLACE: *access, firewall, hack, hotlist, log on, offline (off-line), online (on-line)*
- THE INTERNET IS A BOOK: *alt., blog, bookmark*
- THE INTERNET IS A SEA: no examples found
- THE INTERNET IS A MARKETPLACE: *spam, spammer*

5. Conclusions

In the preceding sections of this study, I attempted to address the following questions:

- What are the basic LIT features?
- What is the connection between the rapidly emerging terminology associated with the Internet and the figurative use of computer terms?
- In what ways is the vocabulary of the language of information technology created?

Within the broad context of Netspeak as a new online medium of communication, and English as a global language, in examining the figurative use of computer terms, I focused on the terminology associated with the Internet and its use, definitions and examples of the way this terminology has been adopted by young (or young-minded) Internet users and adapted for use in non-Internet settings.

In doing so, I collected the data from David Crystal's *A Glossary of Netspeak and Textspeak* (2004), concentrating primarily on the terms often heard or seen onscreen (in online communication). The examples reflect what was found on the Internet (in search-engine site, such as Google), including frequency counts and examples of use. As stated previously, all of the terms were collected from Crystal's *A Glossary of Netspeak and Textspeak*, as they are closely associated with



two major categories of principal LIT metaphors: *computer* and *internet*.

In terms of LIT, and its main features, it can be concluded overall that the rapidly emerging terminology associated with the Internet and its use result in highly figurative use of the terminology in this domain (the Internet), and its supporting technology (the computers).

Based on the corpus findings analysis, it can be argued that the vocabulary of the language of information technology is created in a number of ways, as follows: neologisation, derivation, metaphor, blending, conversion, analogy to general language vocabulary, compression, innovation, capitalisation, lexicalisation, use of verbs etc.

Additionally, some interesting LIT words are created in a special way including abbreviating and compounding: *DblClick* (double click), and in the case of *applet* (application-et) abbreviating and suffixing.

I wish to conclude this work by quoting David Crystal on the emergence and future of Netspeak (2001: 242):

I see the arrival of Netspeak as similarly enriching the range of communicative options available to us. And the Internet is going to record this linguistic diversity more fully and accurately than was ever possible before. What is truly remarkable is that so many people have learned so quickly to adapt their language to meet the demands of the new situations, and to exploit the potential of the new medium so creatively to form new areas of expression.

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JEZIK INFORMACIJSKIH TEHNOLOGIJA: FIGURATIVNA UPORABA RAČUNALNIH IZRAZA

Velik broj novonastalih termina povezanih s internetom i njihova uporaba rezultiraju izrazito figurativnom uporabom terminologije u ovoj domeni (internet), kao i u samoj tehnologiji koja joj služi kao podloga (računalo). U ovom se radu daje pregled određenog broja računalnih termina i njihove figurativne uporabe iz perspektive kognitivne



lingvistike, gdje se vokabular jezika informacijske tehnologije kreira na više načina, uključujući neologizme, izvedenice, stapanje riječi, konverziju, analogiju s općim jezičnim vokabularom, kompresiju itd., s tim da metaforičko izražavanje zauzima vrlo važnu poziciju u jeziku informacijskih tehnologija. Rad daje uvod u taj jezik i njegova obilježja u kontekstu *Netspeak*-a kao novog medija *online* komunikacije.

Ključne riječi: informacijske tehnologije; metafora; kognitivna lingvistika; *Netspeak*.