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Metaphorical Internet Terms in English and French

Abstract

This paper examines metaphorical terms that are used in the domain of the Internet. We begin by identifying the principal conceptual and structural characteristics of metaphorical terms in English. Next, we identify the various strategies currently being used to render these terms in French. Finally, we examine a variety of linguistic and extra-linguistic factors that complicate this rendering.

Keywords: Terminology, lexicology, metaphor, translation.

1. Introduction

The subject of this paper is *terminological metaphor*, by which we mean metaphor as manifested in the lexical items (*=terms*) of specialized domains of knowledge. The specialized domain we will focus on is the Internet. Our paper has three objectives: 1) to analyse the conceptual and structural characteristics of English metaphorical Internet terms; 2) to identify the various strategies currently being used to render these terms in French; 3) to analyze the linguistic and extra-linguistic factors that complicate this rendering.

Terminological metaphor is a fairly recent area of investigation. The earliest literature on metaphor, dating back to Aristotle, studied metaphor principally as a *literary device*. Only since the 1970s has metaphor begun to receive focussed attention as a phenomenon of *general language* (e.g. Lakoff 1992). During the same period, but to a lesser degree, it has also been studied within *specialized languages*, first by cognitive scientists (e.g. Ortony 1979, Lakoff and Johnson 1980, Liebert 1994), and more recently by lexicologists and terminologists (e.g. Assal 1995, Knowles 1996, Meyer *et al.* 1997, Pavel 1993, and Thoiron 1994). Very few of these studies, however, have a *cross-linguistic* component, a gap which our paper attempts to fill.

Why do we need to understand the problem of rendering metaphorical terms in other languages? Mainly, to avoid the scenario predicted recently in *The Economist* (21 Dec. 1997), in which future generations use one language (English) for science and technology, and their "traditional" languages for shopping, chatting, and so on. The current widespread practise in high-tech domains, of using English technical terms within the non-English language, is just a first step in this direction. To avoid the "anglicization" of the terminological lexicon worldwide, it is essential that language professionals who are working with non-English languages (e.g. translators, terminologists) know how to create *high-quality non-English terms*. A *high-quality* term is one that not only designates the concept clearly, but that also "catches on" for both linguistic and extra-linguistic reasons.

While various types of terms have cross-linguistic interest, we believe that metaphorical terms deserve particular attention. First, metaphors of all types are notoriously difficult to translate (e.g. Newmark 1973), and they present unique problems in specialized languages, as

we shall see later. Second, metaphors are becoming increasingly frequent in specialized domains because of the tendency towards user-friendliness in everything. Since metaphors express unfamiliar concepts in terms of familiar ones, they play an important role in user-friendly communication, an issue discussed in 1.2 below.

Before getting into the details of how English metaphorical terms are currently being rendered in French, we will begin with an overview of what metaphor is (1.1), and why it is particularly prevalent in computing (1.2).

1.1. What is metaphor?

Functions: Derived from the Greek *metaphora*, meaning 'to carry over', *metaphor* designates a carrying over of elements from a known concept to an unknown one. In the words of Lakoff and Johnson (1980:5), "The essence of metaphor is understanding and experiencing one kind of thing in terms of another".

Clearly, then, metaphors have a cognitive function, which has both conceptual and linguistic dimensions. From a conceptual viewpoint, it is well-known in the philosophy of science (Thagard 1992) that experts intuitively conceive and develop their concepts on the basis of metaphor. Recent cognitive approaches have even investigated ways of supporting experts in using the creative power of metaphor *consciously* (Liebert 1994).

From a linguistic viewpoint, metaphors communicate to various people what the concepts originally meant to their creators. When concepts are still new, metaphorical terms help other experts in the domain understand, critique and develop them. When concepts become more established, metaphorical terms have conceptual value for experts in other domains, since knowledge is becoming increasingly multidisciplinary. By expressing new and perhaps complex concepts in terms of old, familiar ones, metaphorical terms can also be of great conceptual value to laypeople.

Aside from their cognitive function, metaphors also have an aesthetic role, which explains their traditional popularity in literary texts. In juxtaposing two different concepts within a single lexical item, metaphors spark our interest, often surprising and delighting us. Internet metaphors are particularly fascinating, so much so that magazine articles on Internet-related subjects often include some explicit commentary on the terminology. The fascination with Internet metaphors is also illustrated by the fact that they can be the object of puns and other word-play, creating serious translation problems as we shall see later.

Types: Metaphorical terms can be seen as having a life cycle (Ahmad 1995:51). To use the terminology of Newmark (1981:85), an *original* metaphor has been created by a single person for a particular context. A *recent* metaphor has been adopted by persons other than the original creator. A *dead* metaphor has been used so often that people have ceased to be aware of its metaphorical origins.

1.2. Metaphors in the domain of computing

The domain of computing is particularly rich in metaphor, for both cognitive and aesthetic reasons. Regarding the former, many laypeople are confused by technology, and complain of "technostress". Metaphorical terms allow users to associate unfamiliar and perhaps "scary"

concepts with old, "comfortable" ones. Software developers have become keenly interested in exploiting the user-friendly effect of metaphors, as illustrated by the numerous metaphorical terms found in the vocabulary of user interfaces – e.g. *desktop, wallpaper, menu*, to name just a few.

From an aesthetic point of view, metaphor reinforces the general "culture" of computing and the Internet. *Cyberculture*, as it is often called, is driven by young, anti-authoritarian personalities such as Steve Jobs and Bill Gates. This is a culture with a "language" of its own, which avoids heavy, scientific-sounding terms in favour of freshness, informality, even playfulness. Consider *snailmail, cyberpunk*, and *netsurfing* as just a few Internet examples.

1.3. Methodology, terminology, organization

Our analysis is based on a number of English and French books and magazine articles, as well as on-line and published dictionaries and glossaries. The French data included sources from France as well as from Quebec. We should point out that a number of terms did not necessarily *originate* within the Internet. Since this is a highly interdisciplinary domain, many terms were borrowed from elsewhere: *surf*, for example, likely originated in the domain of television, as in *channel-surfing*; *virtual* can be traced back to *virtual reality* and other computing concepts (Meyer *et al.*, in press).

A note on the terminology of this paper: we shall use *metaphorical term* to denote any term that contains metaphorical elements. On the one hand, the entire term may be metaphorical, as in *Web, bookmark*, and *Gopher hole*. On the other hand, it may consist of metaphorical and non-metaphorical components, as in *electronic mail*, where *electronic* is a non-metaphorical modifier of the metaphorical *mail*.

The paper is organized as follows. In Part 2, we sketch out the basic characteristics of metaphorical Internet terms in English. In Part 3, we examine the various strategies that have been used for rendering these terms in French. In Part 4, we examine some linguistic and extra-linguistic factors that facilitate, and that complicate, the rendering of metaphorical terms in French.

2. Metaphorical Internet terms in English

Since virtually all Internet concepts have been lexicalized in English first, it is important to understand their English-language characteristics before examining their French renditions. In 2.1 and 2.2 below, we shall briefly analyze metaphorical Internet terms from a conceptual and a structural point of view, respectively. A more detailed version of this analysis can be found in Meyer *et al.* 1997.

2.1. Conceptual characteristics of English metaphorical terms

The most striking thing about English metaphorical Internet terms, on a conceptual level, is that many of them appear to be clustered around a number of *conceptual themes*. This is consistent with findings on metaphors in other domains of knowledge, e.g., Knowles (1996) for finance, Bies (1996) for library science, Pavel (1993) for artificial intelligence.

The following are the primary conceptual themes we have observed for the Internet:

Transportation: *to navigate/cruise the Internet, Internaut, information/data highway, to ride/travel the Internet, router, ramp, on-ramp, access ramp, Infobahn, road map, traffic, message traffic, traffic jam*. **Mail and postal service**: *e-mail, snailmail, to send/receive/ deliver mail, mailbox, postmaster, Post Office Protocol, packet, envelope*. **Architecture**: *site, under construction, gateway, bridge*. **The printed medium**: *Web page, Web authoring, book-mark, to browse, cybrarian, E-zine, carbon copy*. **Community**: *virtual community, cyber-community, electronic neighbourhood*. **Conversation**: *chat, chat room, talk, Netspeak, shouting*. **Commerce**: *electronic storefront, electronic mall, virtual mall, shopping cart, e-cash*. **The underworld**: *lurk, lurker, Net stalking, agent, kill file, packet sniffer, cracker*. **Fire and explosives**: *flame, flame war, firewall, mail-bomb, mail exploder*.
Animals (burrowers and creepers): *gopher, burrow, spider, ant*.

2.2. Structural characteristics of English metaphorical terms

2.2.1. Term-formation patterns
Metaphorical terms can be classified into two structural types, according to whether all components of the term are metaphorical (*fully metaphorical terms*), or whether just some components are (*partly metaphorical terms*). Fully metaphorical terms can be *simple* or *juxtaposed*. In the former case, just a single metaphor is involved. This metaphor may consist of just one word (e.g. *Web*) or several (e.g. *traffic jam*). In the latter case, two metaphorical terms are juxtaposed (e.g. *home page*). Partly metaphorical terms, the second major type, are subdivided according to whether the metaphor is found in the base (e.g. *electronic mail*, where *mail* is metaphorical) or in the modifier (e.g. *bounce message*, where *bounce* is metaphorical).

2.2.2. Shortening and blending
Shortening and blending are frequent in English metaphorical Internet terms, as the following examples illustrate: *brouter (bridge + router), e-zine (electronic + magazine), netizen (net + citizen), knowbot (knowledge + robot), NetPol (Internet + Police), infobot (information + robot), internaut (Internet + astronaut)*. Sometimes, an element is not only shortened, but rather dropped completely, as in *Internet backbone = backbone, digital signature = signature, information packet = packet*, and so on.

2.2.3. Phonological aspects of Internet metaphors
As mentioned in Section 1, Internet terms can be strongly motivated by aesthetic factors in addition to conceptual ones. Phonology has an important role in the aesthetic appeal of many terms. Take *snailmail*, for example. Conceptually, the SNAIL metaphor highlights the slowness of conventional mail compared with electronic mail. Aesthetically, however, a large part of the "charm" of this word lies in its internal rhyme.

Imitation and analogy also play an important role in the phonological motivation of some metaphorical terms. *Internaut*, for example, was modelled on *astronaut*, while *NetPol* was likely motivated by *Interpol*. Other terms, like *Gopher*, are based on puns. From a strictly conceptual point of view, the BURROWING ANIMAL metaphor is logical here, since Gopher users descend a hierarchical information structure in order to find information. Phonologically, however, this term is a pun based on *go fer*, which is very effective since the purpose of Gopher software is to help users find things (i.e. "go for" them) on the net.

3. Strategies for rendering metaphorical terms in French

Metaphorical terms were found to be rendered in French in three ways: 1) English metaphor rendered by a French metaphor; 2) English metaphor rendered non-metaphorically; 3) English metaphor rendered by a combination of metaphorical and non-metaphorical means. In the examples below, it should be noted that the French equivalent given for a particular English term may not be the *only* equivalent. In effect, numerous others may exist, as the terminology of the Internet is still in flux.

3.1. Metaphorical rendering

We observed four types of metaphorical rendering: 1) French metaphor equivalent to the English; 2) French metaphor significantly different from the English; 3) French metaphor partially equivalent to the English; 4) English term retained or imitated in French.

3.1.1. Originating metaphor replaced by equivalent metaphor
This was by far the most common and popular strategy, as illustrated in the examples *mailbox → boîte aux lettres, host → hôte, address → adresse, internaut → internaute, electronic mail → courrier électronique, traffic jam → embouteillage, bridge → pont*, etc.

3.1.2. Originating metaphor replaced by different metaphor
In a small percentage of cases, the French rendering involved a significantly different metaphor than the English: *gateway → passerelle* (both concepts are consistent with the architectural theme mentioned in 2.1); *thumbnail image → image timbre-poste* (two different images of smallness); *spam → arroser*.

3.1.3. Originating metaphor replaced by partially equivalent metaphor
This category encompasses cases where the conceptual extension of the French metaphor is significantly different from that in English. In some cases, such as *cruise → naviguer* or *rouler* it is narrower. While *cruise* can be applied to both water *and* road travel, *naviguer* and *rouler* are, respectively, limited to one or the other. This is significant in the Internet domain, since the conceptual theme of "travel" discussed earlier includes both water and road metaphors. One therefore finds that French authors use *naviguer* when an ocean metaphor is employed, while *rouler* is preferred when the image of the highway is discussed. Another case where the French term is narrower than the English is *browse → fureter*, the latter term designating the act of *unauthorized* browsing *with a strong intent of finding something*.

3.1.4. Retention or imitation of English term
This strategy is clearly illustrated by the term *Web*, sometimes gallicized in informal language as *ouaibe* or *ouèbe*. *Web* is retained in derivatives like *Webmaster* (which is less commonly expressed as *Webmaître* or *Webmestre*).

3.2. Non-metaphorical rendering

For a variety of reasons, discussed in more detail in Section 4, a metaphorical rendering is sometimes not adopted in French. In such cases, a non-metaphorical term may be used, as in the following: *handshaking → entrée en communication*; *stale link → lien périmé*; *bounce*

message → *avis de non-livraison*; *net stalking* → *harcèlement avec menaces sur réseau* (the latter is more like a paraphrase than a lexical equivalent).

3.3. Combination of metaphorical and non-metaphorical rendering

In some cases a metaphorical element is maintained, but supplemented by a non-metaphorical element such as *électronique, virtuel, or cyber*. This results in terms such as *boîte aux lettres électronique, signature électronique, babillard électronique*. Another interesting example is that of *hypertoile*, sometimes used as the equivalent of *Web*. In this case, the prefix *hyper* indicates that the Web is based on hypertext.

4. Factors complicating the rendering of metaphorical terms

4.1. Form-related factors

It is well known (e.g. Newmark 1988:42) that the greater the importance of a word's *form* to its *meaning*, the more difficult it is to translate. In Section 1, we noted that the effectiveness of Internet metaphors often results as much from their form (i.e. aesthetic appeal) as from their conceptual content.

4.1.1. Phonology

Snailmail is clearly the most striking example of an Internet term whose popularity is due to phonology. Certainly, the term is well-motivated conceptually, as the snail has a connotation of slowness in English. However, the speed with which this term has caught on no doubt results from its appealing internal rhyme, which is impossible to render in French. *Knowbot (knowledge robot)* is a similar example. Imitating the phonological effect of these two terms in French is impossible, and suggested renderings like *courrier escargot* and *logiciel de référence internaute* are cumbersome.

4.1.2. Productivity

Problems occur when a French base form cannot be as structurally productive as the English. Problems can occur with derivation, as well as common prefixes and blends.

Derivation: English Internet terms can be extremely productive derivationally. For example, the noun *flame* has produced *flamage, flaming, flamer*, and the verb *to flame*. In French, however, consider the equivalent *coup de feu* for the noun *flame*, as suggested by the Office de la langue française in Quebec. If one is aiming for consistency among the derivates, the resultant French renderings would be cumbersome phrases (e.g. *contenu d'un coup de feu* for *flamage*, *l'acte de lancer des coups de feu* for *flaming*). To avoid this, in fact, the OLF also suggests *flinguer* or *fusiller* for *to flame*, and *fusillade* or *bataille* for *flame war*.

Common prefixes and blends: A small number of prefixes have become extremely popular in the Internet, in particular *cyber*, *net*, and *e-*. The use of these prefixes can sometimes lead to blends. When a term contains one of these prefixes, French has two choices: to use a structural calque or to come up with a French-sounding creative solution. Examples of structural calques include: for *net*, *netsurfeur* and *netsurfer*; for *cyber*, *cyberart, cybercafé;* for *e-*, *É-zine*. In the last example, note the added accent, as is the case also for *nétiquette*.

As for French-sounding "re-creations", note the case of *inforoutier,* based on *inforoute,* as an alternative to the calque *netsurfeur.* Similar cases include *Internaute* for *netizen, monétique* and *cyberargent* for *digicash/ecash/cybercash,* and *internetais* for Netspeak/cyberspeak.

Blends not involving the most common prefixes are much harder to deal with. An interesting (and funny!) example is the term *brouter* (a blend of *bridge* and *router*). An analogous blend (*pont* plus *routeur*) would be impossible in French, since it would result in *prouteur* (meaning 'someone who farts'). Needless to say, the preferred rendering seems to be *pont-routeur,* though *p-routeur* has also been proposed.

4.1.3. Abbreviated forms
Many English metaphorical terms involve some type of abbreviated form. In most cases, it is impossible to retain a metaphorical component as well as the abbreviation. Hence, abbreviated terms are often transferred intact into French: *POP* (Post Office Protocol), for example, is rendered somewhat redundantly as *protocole POP.*

In some cases, however, a creative solution manages to retain both the abbreviation and metaphorical component, even though the latter may not be the equivalent of the original English metaphor. In Quebec, for example, where a bulletin board is called a *babillard, BBS* is sometimes rendered as *BABEL* (BAbillard ELectronique). Even more interesting, the non-metaphorical *FAQ* (*Frequently Asked Questions*) has been rendered as the metaphorical *FAQ* (*Foire aux questions*), creating a French metaphor where none even existed in English. In other cases, an abbreviation is created where there was none in English, as in *mailbox* being sometimes rendered as *BAL* (*boîte aux lettres*) or *blé,* for *boîte aux lettres électronique.*

4.2. Conceptual factors

Conceptual problems in rendering English metaphorical terms can result from differences in conceptual extension between languages (4.2.1), cultural factors (4.2.2), and the phenomenon of extendedness (4.2.3), a situation where a metaphor is shared by a number of lexical items.

4.2.1. Differences in extension
Because linguistic systems are anisomorphic, the concept evoked by an English metaphor may not have an equivalent in French. In such cases, as we discussed in 3.1.3, the originating metaphor can sometimes be replaced by one that is only partially equivalent, i.e. conceptually narrower or broader in extension. In some cases, however, differences in extension can pose insurmountable problems. A telling example is that of *cobwebsite,* which designates a web site that has not been updated for a long while. The overriding problem here is that *cobweb* does not have an equivalent in French. English, on the one hand, distinguishes between *spiderwebs* and *cobwebs,* the former referring to any web made by a spider, the latter being restricted to *old* spiderwebs, long since abandoned by the spider, and associated with haunted houses, rooms in need of dusting, etc. French, on the other hand, designates any type of spiderweb as a *toile d'araignée.* These conceptual problems, added to the fact that *cobwebsite* is a blend of *cobweb* and *website,* make translation extremely problematic.

4.2.2. Cultural factors
Cultural differences underlying languages are a well-known source of translation problems. A particularly interesting case is that of *spam* (and *spamming*). *Spam* is well known in America and Great Britain as a cheap, canned meat substitute that was commonly served during the

war, when meat was hard to come by. More recently, *spam* was popularized in a Monty Python skit that drew the attention of a younger generation to the negative connotations associated with the product (i.e. that large quantities of *spam* are undesirable), and that likely contributed to the popularity of the term *spam* to refer to copious amounts of unwanted messages. In the French-speaking world, in contrast, neither the canned product nor the Monty Python skit is known by the average person. Hence, *spam* is rendered by terms such as *inondation, arrosage,* and *multi-postage excessif,* or in some cases, the English *spam* accompanied by a short explanation.

4.3. Metaphorical extendedness

A particularly popular metaphorical term may spawn a number of conceptually related metaphors, thereby "extending" the metaphor to other terms. Consider *Gopher*, which derives its meaning from several sources. First, the gopher is the mascot of the University of Minnesota, where the software was invented. Second, Gopher software allows users to search Internet sites in a top-down fashion, analogous to a gopher digging. Third, Gopher is a pun on *go fer*. Because *Gopher* is a proper noun (not to mention the difficulty of translating it), it has been retained in French, hiding the metaphorical origins from many French-language users. The problem of extendedness arises with related words such as *gopher hole, gopherspace* and *to tunnel/burrow*. The first two terms are generally not translated (though sometimes accompanied by an explanation), while the second two may be rendered by *fouiller* and *creuser.*

4.4. Dialectal factors

Our study was limited to French as used in France and Quebec, but even in these two varieties interesting differences exist. Consider *BBS* (bulletin board system), designated by *babillard* in Quebec and *tableau d'affichage* in France. *Babillard* has permitted the creation of the interesting acronym BABEL (BABillard ELectronique), mentioned earlier, which is recommended by various Canadian terminology sources. France, on the other hand, has retained the English *BBS.*

5. Concluding remarks

We have seen that the process of rendering English metaphorical terms in French is fraught with a wide variety of problems, related to linguistic structure as well as conceptual content. Despite these problems, however, the French language seems strongly motivated to use metaphorical terms whenever possible—in some cases (e.g. *FAQ*) even when the original English term contained no metaphorical component. Our observations are consistent with those of Quemada (1978: 1166-1176), who states that metaphorisation is a key process in the formation of technical French words. It will be interesting to see whether this tendency continues as the Internet continues to develop in ways we cannot even yet imagine.

Acknowledgements

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