#### METAPHORICAL ICMS IN CYBERGENRE REPRESENTATION

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#### Abstract

In internet sites we often find expressions like "home", "visit", "down-load", "link", and many other which are used in new senses that did not exist before the internet era. Such expressions constitute the manifestation of mental models that are transferred from traditional conceptual domains onto the new domain of the Internet. In addition, new genres have appeared recently in cyberspace, and conceptual metaphors are some of the cognitive models that help in their conceptualisation. This paper aims at describing the metaphorical Idealised Cognitive Models (henceforth ICMs) that build our idea of a particular cybergenre in English – the feature website – and of the way it is configured according to such models. The task here consists in detecting these metaphors as well as describing and classifying their conceptual mappings between domains. With that purpose, a collection of feature websites is analysed to test the hypothesis that such mappings and ICMs guide the user's representation of the genre, as a coherent structure. The results may show different cognitive models for conceptualising the coherence of a web genre. <sup>1</sup>

#### 1. Introduction

This investigation aims at elucidating the role of metaphor in the coherence and mental representation of feature websites as a genre<sup>2</sup>. Advances in Cognitive Linguistics show that metaphorical conceptualisation plays a role in the comprehension and production of texts as context-bound and genre-bound communicative events (Caballero, 2003; Ponterotto, 2000, 2005). In addition, Cognitive Linguistics also offers new views and evidence on how a situated description of metaphor, as used in a particular genre, provides rich detail about its rhetorical potential (Caballero, 2006), or on the role of multimodality in metaphorical conceptualisation (Forceville, 2006). Shepherd & Watters (1998: 98) have pointed out the central role of genre in the evolution of the concept of interface in the Internet. Toms & Campbell (1999: 3) have remarked the need to explore users' interaction with online genres. Accordingly, the study of the production and processing mechanisms that govern interaction with online genres can be fundamental to the teaching and development of autonomous skills for learning languages in hypermedia environments.

I take the notion of genre as a dynamic and flexible organisational scheme of previous linguistic experience that includes both social and individual background. The reader's interpretive process needs generic conventions as important control mechanisms that assign texts a global organisation, a content and a context. Consequently, genres are crucial in the raising of expectations and inferences that underlie textual comprehension processes. My hypothesis is that metaphorical ICMs help the user in the process of genre identification, by contributing cognitively to the delineation of the text macrostructure (Van Dijk & Kintsch 1983) as a knowledge structure.

In addressing a text, users turn to previously known genre comprehension skills. Thus, readers of feature websites resort to their knowledge of feature magazines. However, adaptation to digital media requires supplementary new reading strategies to cope with links, menus, etc. In order to grasp the content, purpose, organisation, and function of a digital document, and consequently use it effectively, users should be able to identify the features that

make it different to other kinds of documents. As Toms & Campbell (1999: 2) suggest, genre can work as an organising metaphor that helps users in both the identification process and the subsequent interaction process. In identifying a genre, the user activates a mental model that brings about a set of expectations and inference pathways which facilitate textual interpretation and use.

This research pursues the characterisation of genre in the Internet medium, given that new technologies make it possible for new generic structures and organisational patterns to appear. As Villanueva et al. (2007) point out, "hypertextual technology offers the possibility of rhizome-based designs for hypermedia texts by providing users/readers with multiple choices through hypertexts. In my view, metaphorical ICMs provide a conceptual guide for readers/users to construct meaning throughout their trajectories across hypertexts. The aim of this paper is to identify the generic nature of some metaphorical ICMs that give coherence to the design and organisation of feature websites.

## 2. Genre representation and ICMs

As mentioned above, my hypothesis is that metaphorical ICMs play a significant rhetorical role in websites interactive discourse. According to Toms & Campbell (1999: 2):

System designers use a metaphor at the point of interaction to teach the user how to manipulate the interface. The user "loads" the metaphor into the working memory [...], and the similarity between the structure of the metaphoric image and the structure of the interface enables the user to exploit prior knowledge to understand the system and work with it.

Prior knowledge about the metaphor source domain is structured into conventional models based on social and individual experience. That shared knowledge is mapped onto the conceptualisation of the interface structure. Conventional models are known as Idealised Cognitive Models (ICMs). An ICM is a cognitive structure, which is idealised for the purpose of understanding and reasoning, and whose function is to represent reality from a certain perspective (Ruiz de Mendoza & Díez-Velasco, 2000: 490).

Lakoff (1988: 68) distinguishes four types of ICMs:

- propositional models, such as "frames" (Fillmore 1982),
- image-schematic models pre-conceptual topological representations -, such as schematic categories like THING in Cognitive Grammar (Langacker, 1987) or image-schemas (Johnson 1987),
- metaphoric mappings sets of correspondences among domains and
- metonymic mappings mappings within a single domain (Lakoff & Johnson, 1980)

Metaphorical linguistic expressions like *bookmark*, *link*, *map* or *visitor*, apart from other kinds of evidence like images, visual layout, page frames, etc. elicit the existence of underlying metaphorical ICMs that provide a scheme for conceptualising, structuring and giving coherence to website discursive organisation.

## 3. Metaphorical ICMs in feature websites

I have looked into 24 websites on Dialects of English. The analytical procedure, being of an inductive character, begins at looking for metaphorical expressions, images, frames, information layout, etc., and goes on identifying these cues with the metaphorical models they are an expression of. Then, such cognitive models are described by means of conceptual mappings from the source domain onto the target domain. The resulting ICMs are seen as facets of the feature website genre, since they contribute to hypertextual coherence and architecture, and they are idiosyncratic of cybergenres.

The metaphorical linguistic expressions that appear recurrently in the feature websites make the conceptual metaphors explicit. As Kövecses (2002: 6) points out, the ways of talking provide evidence of the existence of ways of thinking. The systematic mapping between source and target domain is largely unconscious, and it is only for the purpose of analysis that domain mappings are brought into awareness. In this section, source domains that map onto the target domain "feature website" are identified and characterised. Finally, the entailments of the ICMs for the users' understanding of the target domain are explored.

## 3.1. Source and target domains

It is rather difficult to speak about the domain of feature websites without turning to the usual linguistic expressions –site, link, navigate, home, etc. – which are the manifestation of the metaphorical models that constitute our object of study. However, in order to understand the mapping, we are compelled to build a sort of "literal meta-language" that serves describe the domain as literally as possible. Thus, if we think of a website as what it "literally" is and what we do in order to interact with it, we can get a similar picture to this:

A designer has elaborated a computer software programme and has stored it into a computer server. We are – probably sitting on a chair – at a computer screen. We switch on the computer which is in turn connected to the server by means of a telephonic network. We move the pointer to approach and cover a section on the screen; we press a button of our mouse to activate another screen; a new layout appears where we recognise labels on menus, pictures or photographs, and most probably a written text. We read labels and paragraphs, and see that certain words or expressions are colour marked or underlined. We understand that these marked expressions can be used to activate new screens; we decide which label or marked expression we want to place the pointer on again so as to activate another screen, and if we do that, a new screen appears with yet a different layout, written texts, labels and marked expressions. Thus, we interact physically with the electronic device in our hand that serves the activation of screens, and we also read the linguistic expressions and paragraphs on the screen that a designer has created for us. We do not know what will appear on the screen when we click on a marked expression. The real make up of the material is not available, and we have no physical access to it.

Internet interaction would be rather difficult if our conceptualisation and representation of the process were based only on that kind physical experience. Conceptual metaphors make it possible for us to think about new or previously unknown realities or situations. Conceptual metaphor consists in using known domains to think about and interact with domains that have not been experienced before, or that do not allow for direct physical experience (abstract

domains). The unknown, new or abstract domain that needs to be understood is called Target Domain, whereas the previously known and well understood one is called Source Domain, and provides the conceptual elements used in order to understand the Target Domain.

In website interaction users make decisions as they activate screens, thereby using internet materials and resources. The cognitive tools in that process are constituted by cognitive domains that we draw from previous experience in order to understand and manage computer interaction. In feature websites certain linguistic expressions provide evidence for the existence of four source domains that map onto the abstract domain that we have denominated "feature website", as cybergenre. These domains are: visiting a house, visiting a site, travelling, and reading a book.

In the House Model, the ICM used is that of a *house visited* by people mainly because it *hosts* some social activities, events or objects. Thus, when we *enter* the house we may be required to give a *password*, if access is limited, or *sign in* a reception book so that our visit gets *logged*. There may be someone, the *house master*, who *welcomes visitors* and *invites* them to *come in*. Once in the house we *go around* and may *go back* and forth visiting different *rooms*. Within the rooms we may *browse* among the objects or materials, or even we may be allowed to use diverse devices or appliances, for instance a *toolbox* or a *message board* where people can *post* their messages for other people. Other less central elements may be a *visitors' book*, where people are invited to write down their comments. Further elements may be added as long as one maintains the general logic of the model, for example the existence of special rooms devoted to particular purposes, like a *chat room*.

The Site Model shares many features with the House Model, so that in many occasions either of them may be active. In this model, a *site master* welcomes and invites *visitors* to go around; they can be asked to *sign in* a reception book so that their *visit* gets *logged*, they may *move back* and *forth* a *path*. Visitors arrive at a *site* that may be a rather large area, and therefore they might need a *map* – the site map – and possibly some *directions* to find their way about the site, for instance a panel with "*you are here*" indications. Some sites may have a *shop*, and an *info desk* where visitors get answers to frequently asked questions.

The Travel Model is always present by means of the concept "home", which is the place where a travel begins and ends. The *home* is also the place that indicates the point of departure to any destination. Once *en route* the traveller uses instruments with choice *menus* for *navigation*, i.e. finding their way to a destination. In the travel model the destination is not constrained or determined by the master or maps, but users may find their own way freely in any direction and choose their own course. *Links* make it possible for travellers to go from one place to another. The Book Model is reminiscent of the traditional representation and conceptualisation of the reading process as associated to paper formats. Thus, the website contains *pages* that users may *browse* through. One can go from one page to the *next page* and *back to previous pages*. There is an *index* or a *contents* table, and we can *bookmark* an interesting page. In dictionaries we can *find* lexical entries and in encyclopaedias we can *search* for information. The structural elements in these ICMs are schematised in table I.

### 3.2. Metaphorical expressions

In most cases, the linguistic expressions found in the corpus coincide with the names assigned in Table I to structural elements of the domains, mostly when they just constitute a label on a screen menu. Nevertheless, it is interesting to look at other contexts, because contexts make it apparent that the thinking process is based on the source instead of the target domain. It may also happen that diverse linguistic expressions correspond to the same conceptual element in the domain, which shows that the metaphor is a conceptual mechanism, part of our thought process rather than just an idiom or a single fixed linguistic form.

Table I: Source domains and their structural elements

SITE	HOUSE	TRAVELLING	ВООК
	Logging	Home	
Site	Sign in	Navigation	Bookmark
Map	House	Navigate:	Page
"You are here"	Visit	Navigation menu	Contents
Invitation	Enter	Back to	Index
Signing in	Welcome	Links	Browse
Logging	Come in		Find (dictionary)
Visiting	Message board		Image of a book
Visitors	Back to		
Back to	Visitors' book		
Welcome	Browse		
Visitors' book	Chat room		
	Housemaster		
	Password		

In the case of the Site Model, the most usual expressions are the words "site" and the expression "site map" (alternatively "sitemap"). Another idiosyncratic element is an indication of the course already covered by means of a poster with the sentence "you are here" [19]3. The metaphor is fully deployed in [21], where the master welcomes visitors, and his text unfolds its coherence according to the metaphorical ICM:

(1) You are very <u>welcome</u> to Island Ireland... hope you enjoy your <u>visit!...</u>

We always feel <u>pleasure</u> at <u>visiting</u> a <u>site</u>...

<u>Visitors</u> should feel free to recommend <u>sites</u>...

...we have a special fondness for <u>local sites</u> all <u>around the country</u>...

You're very <u>welcome</u> to the Island Ireland directory for Irish history.

In this extract, several structural elements of the Site Model reinforce its presence in the argumentative discourse. Thus, visitors are welcome and invited to enjoy, they feel the pleasure of their visit, and can recommend the experience to other potential visitors; finally, there is reference to the geographical distribution of sites around the country.

The House Model provides more frequent expressions of structural elements, though some of them are compatible with the Site Model. The expressions "sign in" and "log in" are found in all instances as a label for an activation box, where the user must enter their names for the system to log their usage of the resource. These expressions are only used in those sites that have restricted access to some types of information, or require identification or registration. Website [2] shows a few expressions of this metaphor, like "house", in *Treasure House of Indian Culture and Heritage*, or "enter" as an invitation to activate the site. Most sites show a *back to* command, in order to activate previous screens. An interesting example of metaphorical extension is found in [9] with structural elements like the "chat room" or *Clishmaclaiver*, in:

(2) Mynd that this is a faimlie 'chat room' sae...

Clishmaclaiver is a cantie steid whaur fowk gaithers for tae hae a bit blether, mak new freends, an hae a bit crack wi auld anes.

or the "visitor's book" *Veesitor's Beuk*, which includes 440 entries of people's comments on the house. In turn, [11] incorporates a *toolbox*, as a menu where people can use several *appliances*. In [12], the house master welcomes visitors and develops the metaphor in his introductory text:

(3) Welcome to the Scots Language Centre on line. Please come in and have a look round. The site contains lots of interesting information about Scots, the language spoken throughout Scotland from Shetland to Galloway and Aberdeen to Glasgow. You can read about the history of Scots and find out about the people that speak it today. Almost everything on the site is available in English too. Just move between the two languages if there are Scots words that you don't understand.

In this excerpt we find several expressions of metaphor structural elements, the house master invitation, the conception of a place as a Centre with several dependencies, and the possibility to use two pathways for motion – English or Scots.

The Travel Model appears by means of the expression "home", which refers to the first screen that the user encounters when activating the site. The Home concept implies that the users depart from that point for their travel, and it is also the place where they can get the necessary equipment. The concept of *link* provides for the idea of going from one place to another. In addition to these two pervasive linguistic metaphorical expressions, the expression "navigation" or "navigate" also appears in many of the sites, which allows for the conceptualisation of the users' planning as for the progression from section to section. We see the idea of using some sort of equipment in instances like (4) [9], and the second central structural element is that the users plan their own route, as we see in (5), from [2]:

- (4) Use the pull-down menu to navigate within "Wir Ain Leid!""
- (5) Navigate your way to global business success

The Book Model is frequently brought up in thinking about websites by means of the concept of "page". In interacting with websites we often see labels like "next page" or "previous page" as in [13]. The most frequent expressions found in our set of websites are "Contents" or "Index", predominantly in those that call themselves dictionaries or encyclopaedias. A familiar concept also used in Internet is "bookmark" used in order to mark a page so that we can find it easily in our computer later on, as in [13] and [17]:

- (6) Bookmark this page in my travel planner
- (7) Bookmark us

In example (6) the webmaster uses the denomination "travel planner" for the website, which constitutes another manifestation of the Book metaphor. Browsing is a useful concept in order to refer to casual searching. For example in [14] and [17]:

- (8) Browse A-Z
- (9) Browse and compare

Table II: House Model Mapping

HOUSE	maps onto	FEATURE WEBSITE
House		System
Logging		Activation Record - Log in
Sign in		Registering one's identity
Enter		Activating the system
Visit		Read/use the system
Visitors		Users
Invitation/Welcome		Making the system overtly available
Come in		Begin to use the system
Back to		Activate previous screen
Message board		Screen for communicating with other
		users
Visitors' Book		Screen to record the users opinions
Browse		Casual screen activation
Chat room		Screen for on-line communication
Housemaster		Website designer
Password		Code for activation permission

Table III: Site Model Mapping

SITE	maps onto	FEATURE WEBSITE
Site		System
Map		List and hierarchy of sections
"You are here" panels		List of activated screens
Invitation/Welcome		Making the system overtly available
Signing in		Registering one's identity
Logging		Activation Record - Log in
Visiting		Reading/using the system
Visitors		Users
Back to		Activate previous screen

## 3.3. Partial Mappings

I have shown some examples of linguistic expressions that give evidence of the existence of conceptual metaphors in feature websites. These particular metaphors constitute an idiosyncratic aspect of the genre, since they help the user interact and "read" the (hyper-)texts that occur in that genre. The feature website is a recent conceptual domain in Western culture and users' minds need to import models from previous experience in order to process, structure and reason about the new domain. Conceptual mapping is the mental mechanism that allows for that process. Mappings are projections from a source domain onto a target domain, as far as the topology and the logic of both is guaranteed. However, not the whole structure of the source is mapped onto the target, nor the target adopts its entire structure from a single source domain. Each source domain contributes only certain aspects which are useful for understanding particular aspects of the target.

If we look at the ICMs described here we see that each contributes partially to the conceptual structure of the target, and none of them is fully mapped onto the genre as a whole. Tables II, III, IV and V show the structural correspondences between the domains. Thus, the source domain models contribute structural elements that make it easier for users to conceptualise the target domain, given that they rely on their experience of known models and interaction patterns.

Table IV: Book Model Mapping

		11 8
ВООК	maps onto	FEATURE WEBSITE
Page, Main Page		Screen, Initial Screen
Contents		List of sections
Index		List of sections
Bookmark		Store the screen URL
Browse		Casual screen activation
Find		Retrieve concrete information

**Table V: Travel Model Mapping** 

TRAVEL	maps	FEATURE WEBSITE
	onto	
Home		Initial screen
Navigation		Sequence of screens
Navigate		Select a sequence of screens
Navigation menu		Options offered
Back to		Activate previous screen
Links		Connections to further screens

### 3.4. Metaphorical Entailments

Conceptual mappings provide the cognitive guidelines that let users understand websites as coherent discourse. Consequently, each source model will prompt its own inferential patterns when the users give them pre-eminence in the reading process. Some source domains map onto sequential aspects of website use, for example the Travel Model makes us think in terms of how to reach destinations, define routes and the connections between places. When this Model is more salient for the users, they assume they can go a long way. Possibly the first option may be to click on external links, or try to find out where the site can lead to.

The Book Model maps onto informational aspects, like storing, finding or classifying information. The user could look for concrete information in the site, and presumably would activate the contents table as a first option. The Book Model favours using a page at a time and going from one page to the next.

Finally, the Site and House Models map both onto interactional aspects of websites, so that web systems are seen in terms of a visit to a house or site, which implies interacting (virtually, and therefore cognitively) using the behavioural patterns we are familiar with. If the users prime the House Model, their first decisions might focus on reading the home page in order to become familiar with the webmaster's background and purpose. Probably signing in to become a member would be one of the user's interests, or exploring the interaction tools the page provides.

Some elements of the target domain receive a projection from more than one domain, for instance the list of sections can inherit the features of a site map or a table of contents, depending on the source domain the designer turns to. As a consequence, each source domain will provide a set of entailments for reasoning about the target domain. In fact, we do not think in the same way if we see a map on a poster or a contents table on a book page. The designers' interests and representations can grant more weight to a particular model, depending on what they expect from the website user. Thus, online dictionaries and encyclopaedias may display a higher frequency of Book Model expressions. Conversely, websites with an overt intention to attract and gain fans tend to display the House and Site metaphors more profusely.

### 4. Conclusions

In this paper I have looked into a set of feature websites in search for metaphorical expressions that provide evidence for recurrent conceptual metaphors in the feature website as

a digital genre. My claim is that this set of recurrent conceptual metaphors constitute the prior conceptual knowledge that users need in order to interact with and manage (hyper-)texts belonging to this particular cybergenre. I have shown the structural elements of source domains and how they map onto the target domain. I have also suggested the entailments of these ICMs as for users' interaction with the genre. I contend that these metaphorical ICMs are a part of the users and designers' genre conceptualisation that gives coherence to website discourse. The results of this study show how metaphorical ICMs might guide the users' representation and usage of feature websites, that is, how such cognitive models could help in decision making along the process of meaning construction. Subsequent experimental research may show the ways in which such ICMs guide the reading process. More studies should be conducted in other languages than English to see whether the metaphorical ICMs that give coherence to websites have an intercultural character or, on the contrary, different cultures apply diverse models. In that case, non native users of websites would need cultural training in addition to linguistic training in order to be able to use websites in other languages.

#### 5. References

Caballero, R., 2003, "Metaphor and genre: The presence and role of metaphor in the building review" *Applied Linguistics* Vol. 24 2: 145- 167.

Caballero, R., 2006, Re- Viewing Space: Figurative Language in Architects' Assessment of Built Space, Mouton de Gruyter, Berlin/New York.

Fillmore, C., 1982, "Frame Semantics". *Linguistics in the Morning Calm*. Ed. The Linguistic Society of Korea. Hanshing Publishing Co., Seoul. 111-137.

Forceville, Ch., 2006, "Non- verbal and multimodal metaphor in a cognitivist framework: Agendas for research", Eds. Kristiansen, G.; Achard, M.; Dirven, R.; Ruiz de Mendoza, F. Cognitive Linguistics: Current Applications, Future Orientations, Mouton de Gruyter, Berlin/NY.

Johnson, M., 1987, The Body in the Mind. University of Chicago Press, Chicago.

Kövecses, Z., 2002, Metaphor. A Practical Introduction, Oxford University Press, Oxford.

Lakoff, G., 1987, Women, Fire, and Dangerous Things: What Categories Reveal About the Mind. University of Chicago Press, Chicago.

Lakoff, G. & Johnson, M., 1980, *Metaphors We Live By*. Chicago University Press, Chicago/London.

Ponterotto, D., 2000, "The cohesive role of cognitive metaphor in discourse and conversation", *Metaphor and Metonymy at the Crossroads: A Cognitive Perspective* Ed. A. Barcelona, Mouton de Gruyter, Berlin-New York, 283-298.

2005, "Text, context and cognitive metaphor", Eds. Baicchi, A.; Broccias, C.; Sansò, A. *Modelling Thought and Constructing Meaning. Cognitive Models in Interactions*, Franco Angeli, Milan. 156-169.

Ruiz de Mendoza Ibáñez, F. J., & Díez Velasco, O. I. 2003 "Patterns of Conceptual interaction". *Metaphor and Metonymy in Comparison and Contrast*. Eds. R. Dirven, & R. Pörings. Mouton de Gruyter, Berlin. 489-532.

Shepherd, M., & Watters, C., 1998, "The evolution of cybergenres", *Proceedings of the 31th Hawaii International Conference on System Sciences*. IEEE Press, Maui, Hawaii. 2: 97-109.

Toms, E. G., & Campbell, G., 1999, "Genre as interface metaphor: Exploiting form and functionin digital environments". Proceedings of the 32nd Hawaii International Conference on System Sciences. IEEE Press, Maui, Hawaii.

Van Dijk, T. A. & Kintsch, W., 1983, Strategies of Discourse Comprehension. Academia Press, London.

Villanueva, M. L. et. al., 2007, Understanding cybergenres as semiotic artefacts: meaning and cognition beyond standardized genres, UJI ms.

# **Appendix I:** List of Websites

- 1. http://en.wikipedia.org/wiki/India
- 2. http://www.culturopedia.com/index.html
- 3. http://www.sscnet.ucla.edu/southasia/index.html
- 4. http://www.languageinindia.com/index.html
- 5. http://www.answers.com/topic/boston-accent
- 6. http://www.ic.arizona.edu/~lsp/Northeast/BostonEnglish/bosintro.html
- 7. http://www.boston-online.com/glossary.html
- 8. http://www.eng.umu.se/city/team\_south/default.htm
- 9. http://www.scots-online.org/index.asp
- 10. http://reese.linguist.de/English/scotland.htm
- 11. http://en.wikipedia.org/wiki/Scots language
- 12. http://www.scotslanguage.com/
- 13. http://www.newzealand.com/travel/about-nz/history/history-home.cfm
- 14. http://experts.about.com/e/a/au/Australian\_English.htm
- 15. http://encarta.msn.com/dictionary 1861695776/Australian English.html
- 16. http://fits.depauw.edu/mkfinney/culturaleresumes/australia/language.htm
- 17. http://www.travel-library.com/pacific/australia/stybr-language.html
- 18. http://www.koalanet.com.au/australian-slang.html
- 19. http://www.englisch-hilfen.de/en/vocabulary/australian british english.htm
- 20. http://www.ireland-information.com/
- 21. http://islandireland.com/Pages/res.html
- 22. <a href="http://www.pbs.org/speak/seatosea/americanvarieties/chicano/">http://www.pbs.org/speak/seatosea/americanvarieties/chicano/</a> from http://www.pbs.org/
- 23. http://web.ku.edu/idea/index.htm
- 24. http://www.jahworks.org/travel/patois/speaking\_jamaican.html

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Numbers in square brackets refer to the list of websites in Appendix I