

Analysing the Digital World and its Metaphoricity: Cybergenres and Cybermetaphors in the 21st Century¹

Analizando el Mundo Digital y su Metaforicidad: Cibergéneros y Cibermetáforas en el siglo XXI

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Artículo recibido el / *Article received*: 2019-06-27
Artículo aceptado el / *Article accepted*: 2019-10-03

ABSTRACT: The Internet has significantly affected the linguistic field since the virtual world has instigated scholars to explore users' interaction with Cybergenres (Girón-García & Navarro i Ferrando, 2014; 2015). In Cognitive Linguistics, some authors have suggested that Idealised Cognitive Models (ICMs) already active in the users' conceptual system may guide online navigation patterns, resulting in new forms of literacy. Accordingly, social networks and webpages tend to display words and expressions, which since the beginning of the Internet era have been used in a new sense, as they represent mental models that have been transferred from traditional domains onto digital domains.

This study aims to describe and analyse how these ICMs give coherence to different types of cybergenres in English - e.g. social networks, MOOC, Cybertask, weblog, and 'marketplace' web pages. In particular, this paper recognises the metaphorical models that are used in the digital context (i.e. Cybergenre), and describes and classifies conceptual connections between the source domain and the target domain.

With that objective in mind, certain social networks and 'marketplace' web pages are analysed to test the hypothesis that metaphorical models give coherence to their organization and structure.

The description and classification of those conceptual projections may unveil a link between the digital world and traditional conceptual representations. Results may help us to understand the connection between the previous cultural representations and the digital environment; as well as helping virtual users to develop their Digital Literacy in this virtual context.

¹ The research conducted in this paper is framed within the Universitat Jaume I research project UJI-B2018-59. Its rationale is also part of Universitat Jaume I Education and Innovation Research Projects: 3622/18, 3620/18.

Keywords: Cybergenre, Digital Literacy, Metaphoricity, Cybermetaphor, ICMs, Domain.

RESUMEN: Internet ha experimentado un gran impacto en los últimos años, afectando significativamente el campo de la Lingüística, ya que el mundo virtual ha alentado a los académicos en ese campo a explorar la interacción de los usuarios con los Cibergéneros (Girón-García y Navarro i Ferrando, 2014; 2015). En el campo de la Lingüística Cognitiva, algunos autores han sugerido que los MCIs ya activos en el sistema conceptual de los usuarios pueden guiar los patrones de navegación en línea, derivando en nuevas formas de alfabetización. En esta misma línea, las redes sociales y las páginas web tienden a mostrar palabras y expresiones que después de la era de Internet se están utilizando en un nuevo sentido, ya que representan modelos mentales que se han transferido de dominios tradicionales a dominios digitales.

El objetivo de este estudio es describir y analizar cómo estos modelos cognitivos anteriores dan coherencia a diferentes tipos de cibergéneros en inglés, por ejemplo, redes sociales, MOOC, Cybertask, weblog, páginas web de "compra y venta". Concretamente, este estudio tiene como objetivo reconocer estos modelos metafóricos que se utilizan en el contexto digital debido a la descripción y clasificación de conexiones conceptuales entre el dominio de origen y el dominio de destino.

Con ese objetivo, se analizan algunas redes sociales y páginas web de 'compra para probar la hipótesis de que algunos modelos metafóricos dan coherencia a su organización y estructura.

La descripción y clasificación de esas proyecciones conceptuales puede revelar un vínculo entre el mundo digital y las representaciones conceptuales tradicionales. Los resultados obtenidos con este análisis pueden ayudar a comprender la conexión entre las representaciones culturales anteriores y el entorno digital; así como ayudar a los usuarios virtuales a desarrollar su alfabetización digital en este contexto virtual.

Palabras clave: Cibergénero, Literacia Digital, Metaforicidad, Cybermetáfora, MCIs, Dominio

1. INTRODUCTION

In present times, the Internet has had a huge impact on most daily activities, especially in the field of communication, through the use of the increasingly common phenomena of social networks, e-mails, and chatrooms, among others. As a result, many areas have been overwhelmed by the abundant and continuous use of Information and Communication Technologies (ICTs) since the 20th century. Nevertheless, the linguistic field deserves special attention, since the virtual world has instigated linguists to explore users' interaction with Cybergenres (Bateman, 2008; Frow, 2015; Seeber, 2015; Shepherd & Watters, 1998). With this technological revolution, reading and writing processes have been transformed significantly from paper formats (e.g. newspapers and notebooks) to digital formats (e.g. web pages and social networks), the latter being the preferred medium of communication in the 21st century and the object of study of the

present paper. Accordingly, the widespread presence of computers and the Internet has suggested important transformations in the way humans perceive the notion of literacy, transferring this concept into the digital context (i.e. 'Digital Literacies').

In this vein, living in a time of digital transformation has altered present-day digital reality, affecting the navigation patterns that guide users' conceptual systems. In recent years, there has been a great deal of research on cognitive models in the digital environment in order to understand the conceptualization of digital genres (i.e. cybergenres) (Navarro i Ferrando et al., 2008; Navarro i Ferrando & Silvestre-López, 2009; Girón-García & Navarro i Ferrando, 2014; 2015). Likewise, these recent studies suggest that metaphorical models guide these online navigation patterns through previous knowledge configurations already active in the users' minds, representing prototypical situations (i.e. 'conceptual frames') referred to the organization of conceptual knowledge that structure human beings' experience (Lakoff & Johnson, 1980; Fillmore, 1982; Langacker, 1987). In the same way, those models play a role in a set of social networks and web pages (i.e. 'Cybermetaphors') like 'Pinterest', 'Facebook', 'Instagram', 'Amazon', etc. Accordingly, special attention is given to presenting the extent to which these virtual sites account for the knowledge configurations integrated into the online users' conceptual systems.

It is not surprising that genre and metaphors have already been analysed in a considerable amount of literature (Caballero, 2017; Casakin, 2019). However, there is no research evidence dealing with Cybergenres (and/or digital literacies) and Cybermetaphors (metaphors that are present in the virtual environment). For this reason, the present study attempts to fill that gap by analysing the most common metaphorical expressions found in several social networks and marketplace web sites.

This study delves into the importance of acknowledging an overlooked area of metaphorical models in the construction of Cybergenres as different from traditional genres, regarding organization and structure. It is in this regard that the aim of this paper is to provide some evidence that Cybermetaphors play a fundamental role in the comprehension and production of digital texts, particularly 'social networks' and 'marketplace' web pages. More specifically, this research examines lexical units and the ICMs they evoke in order to discuss the conceptual phenomenon of metaphor in the Internet (i.e. Metaphoricity). To attain this aim, the following key notions addressed in this study help in the understanding of that concept: (a) 'digital literacies' in the 21st century, (b) different types of knowledge configurations (i.e. ICMs) such as 'frames' and 'cognitive domains', and (c) metaphoricity.

2. CYBERGENRES AND CYBERMETAPHORS

2.1. DIGITAL LITERACIES IN THE 21ST CENTURY

The literature on Cybergenres (Yates & Orlikowski, 1992; Shepherd & Watters, 1998; Caballero, 2008) contributes to the understanding of the digital context. More precisely, Internet genres offer the opportunity to discover significant changes in everyday reading and writing processes, changing the traditional notion of 'literacy' (Kress, 2004). Since the late 20th century, the conceptualization of this notion has been transferred to the virtual environment (i.e. 'Digital Literacy').

According to Summey (2013), the notion of 'Digital Literacies' is understood as "the essential skills for managing information and communication in the rapidly changing and increasingly digital world that is the 21st century" (2013: 3). Thus, digital literacies require online users to learn how to use technological resources (Girón-García & Navarro

i Ferrando, 2014). In this vein, the connection between the knowledge of technical skills and the previous conceptualization of prototypical situations trigger new online reading modes (i.e. ‘New Literacy’) (Girón-García, 2013; Girón-García & Navarro i Ferrando, 2014; 2015). Furthermore, the ability to read digital texts allows for the appearance of a more specific concept known as ‘Spontaneous Digital Literacy’. This notion gives online users the opportunity to interact with online texts without receiving any specific training regarding net navigation to gather information in order to accomplish personal objectives, complete tasks, and solve problems, among others.

Nevertheless, the present technological revolution demands that every online user has a certain degree of technological resource management to cope with the new technical innovations that are constantly arising, as well as the comprehension of the digital environment.

2.2. FRAMES

Since the emergence of Cognitive Semantics, attention has been given to diverse notions to refer to the structural organization of knowledge configurations (e.g. ‘frames’ and ‘domains’). These, in turn, will be used to describe metaphorical expressions derived from conceptual metaphors that help in understanding the coherent structure and organization of the digital environment analysed (e.g. ‘social networks’ and ‘marketplace’ web sites).

As regards framing, while a variety of definitions of the term ‘frame’ (Fillmore & Baker, 2009) have been suggested, this paper will use the definition first suggested by the father of “frame semantics” in linguistics, Charles Fillmore (1982), who saw it as:

Any system of concepts related in such a way that to understand any of them you have to understand the whole structure in which it fits; when one of the things in such a structure is introduced into a text, or into a conversation, all of the others are automatically made available. (1982: 111).

In the same vein, other researchers argue that a frame is “any system of concepts related in such a way that to understand any one concept it is necessary to understand the entire system; introducing any one concept results in all of them becoming available” (Petrucci, 1996: 1). Even then, other linguists like Ruppenhofer et al. (2010) contribute to the literature on framing with a more concrete definition of the concept, looking at a frame as “a script-like conceptual structure that describes a particular type of situation, object or event and the participants and props involved in it” (2010: 5).

Nevertheless, drawing on an extensive range of sources and with the aim of providing a clearer definition of the notion of frame, this paper will use the definition first suggested by the father of “frame semantics” in linguistics, Charles Fillmore (1982). According to Esbrí-Blasco, Girón-García & Renau (2019), a conceptual frame is understood as:

A schematic human knowledge configuration in long-term memory that represents a prototypical situation type, object or single event, where concepts may be more or less central or peripheral and can be characterized either as participants or props where each participant concept has a semantic role, which allows for perspectivization. The meaning of a word cannot be understood –or known at all– without comprehension of the whole semantic frame it evokes, so that the semantic frame is necessary to the meaning of the given lexical unit. In this same line, a lexical unit cannot be understood without evoking previous knowledge configurations that are integrated into the users’ conceptual system (2019: 134).

This study encompasses several implications with regards to the analysis of the configuration of the frames evoked by users’ minds in order to give coherence to the

different virtual ‘social networks’ and ‘marketplace’ web pages examined in this study (i.e. ‘Pinterest’, ‘Facebook’, ‘Instagram’, ‘Amazon, and ‘eBay’). Therefore, another type of ICM (i.e. the ‘cognitive domain’), may entail several frames and even recurrent sequences of frames, (i.e. ‘scripts’).

2.3. COGNITIVE DOMAINS

In recent years, there has been an increasing amount of literature on cognitive domains, and many researchers have tried to provide a clear account of the term (Croft & Cruse, 2004; Kövecses, 2010; Langacker, 1987; Taylor, 1989; 2002; and others). In fact, the generalisability of much published research on this issue is ambiguous.

Taylor (2002) uses the term ‘Cognitive Domain’ to refer to “(a)ny cognitive structure - a novel conceptualization, an established concept, a perceptual experience, or an entire knowledge system...” (2002: 61). More recent studies also extend above the level of generality, in that they conceive cognitive domains as conceptual representations, and/or knowledge referring to experience shared by the community. Most importantly in this regard, Kövecses (2010) points out that those conceptual representations are often called ‘concepts’ (e.g. building and motion). To him, “knowledge involves both the knowledge of basic elements that constitute a domain and knowledge that is rich in detail” (2010: 324). Nevertheless, these descriptions do not attempt to explain the distinction between ‘frame’ and ‘cognitive domain’ with a proper clear-cut point of view. The present study interprets cognitive domains as different configurations from frames. Hence, the concept ‘domain’ refers to conceptual configurations that comprise concepts related to a particular dimension of human experience (i.e. shared knowledge). In turn, cognitive domains include different frames, which refer to different stereotyped situation types that humans share about an area of expertise (i.e. domain); likewise, sequences of frames result in ‘scripts’.

2.4. METAPHORICITY

Some authors (Hampe, 2017; Kövecses, 2015) have mainly been interested in the Conceptual Theory of Metaphor (CMT) (Lakoff & Johnson, 1980; Kövecses, 2006) defining metaphor as a cognitive process that systematically establishes correspondences between two different domains of experience. The source domain, which is generally more concrete, is used in order to understand the target domain, which tends to be more abstract. One of the main distinctions involves the contrast between (a) conceptual metaphors, on the one hand versus (b) metaphorical expressions, on the other. According to Kövecses (2017: 14), a conceptual metaphor is referred to as “a systematic set of correspondences between two domains of experience”. Contrarily, metaphorical expressions are part of the linguistic dimension and are conceived as linguistic realizations of conceptual metaphors. In this vein, expressions might be considered metaphorical as long as there is a correspondence between existing elements from both target and source domains. In this study, the elements belonging to the ‘social networks’ and ‘marketplace’ web pages analysed may be understood in terms of real-life elements. From that view, it is possible to understand the digital environment (e.g. social networks and marketplace web sites) in terms of ‘Metaphoricity’.

CMT not only relies on the main distinction between metaphorical expressions and conceptual metaphors, in conjunction with the target and source domains entailed. As a matter of fact, the connections from the source domain onto the target domain ‘social networks’ and ‘marketplace’ web pages may help to structure and understand the virtual

space in a coherent way; as well as elucidate a possible connection between the digital environment and previous cultural representations.

To conclude, the notions of digital literacy, frames, domains, and metaphoricity are related in the sense that virtual metaphors can be described in terms of frames and domains' correspondences. These online metaphors (i.e. Metaphoricity) help us read and understand the virtual environment in the 21st century.

3. METAPHORICITY IN 'SOCIAL NETWORKS' AND 'MARKETPLACE' WEB PAGES

3.1. METHOD

For the purpose of the present study, the following 'social networks' and 'marketplace' web pages have been analysed: 'Pinterest' (<https://www.pinterest.co.uk/>), 'Facebook' (<https://www.facebook.com/>), 'Instagram' (<https://www.instagram.com/>), 'Amazon' (<https://www.amazon.com/>), 'eBay' (<https://www.ebay.com/>). Subsequently, several common words and/or expressions used by a large number of Internet users have been selected from the aforementioned digital resources. The last stage focuses on identifying the models that are evoked by those words and expressions in order to understand the virtual environment.

The procedure employed in this study follows these stages:

- (1) Look for words and/or expressions in the digital context that evoke previous cognitive domains in order to give coherence and understanding to the target domain (i.e. 'social networks' and 'marketplace' web pages),
- (2) Identify the source domain(s) that are used to characterise the target domain,
- (3) Describe both the source domain and the target domain (e.g. 'Pinterest', 'Facebook', 'Instagram', 'Amazon', 'eBay') in terms of metaphoricity through a process of identification of conceptual connections from the source domain onto the target domain.

By following these steps, it can be determined to what extent 'Cybermetaphors' contribute to giving coherence to the virtual users' conceptualizations, and therefore to their digital literacy. At this point, it should be noted that conceptual projections are an unconscious phenomenon that takes place in human beings' minds, meaning that users are not aware of the particular connections that are activated in their conceptual system (Girón-García & Navarro i Ferrando, 2014). The present study aims to bring to light the difficulty of understanding the 'social network' and 'marketplace' web pages domains and how the source domains (already entrenched in the conceptual system) help to comprehend the target domains that have not been previously experienced (Kövecses, 2015). Therefore, thinking about users' experience with domains, this point could be clearly illustrated in the case of the word 'cart' (e.g. 'Amazon' domain). The action of buying products in Amazon represents an abstract way of acquiring a product, i.e. the product is not physically introduced into a real cart. Hence, the cognitive domains that are previously used in the users' minds help to give better coherence and understanding of the virtual environment.

3.2. RESULTS

This section presents the results obtained from the process described above, and refers to the target domains 'Pinterest' (Table 1), 'Facebook' (Table 2), 'Instagram' (Table 3), 'Amazon' (Table 4), and 'eBay' (Table 5) illustrated in Appendix 1, as well as the models 'board', 'site', 'social relationship', 'exploration', and 'store' that are

activated in order to understand those target domains. Moreover, each column shows words and/or expressions that can be found in the ‘social networks’ and ‘marketplace’ web pages’ target domains.

Users’ interaction with the Internet entails a complex understanding of the virtual environment due to the difficult task of recognising source domains’ words and/or expressions that may be dragged into the target domain (Posteguillo, 2003; Girón-García & Navarro, 2014). Let us illustrate five source domains that map onto the target domain (i.e. ‘social networks’ and ‘marketplace’ web pages). These domains are ‘board’, ‘site’, ‘social relationship’, ‘exploration’, and ‘store’.

3.2.1. The ‘board’ model

The ‘board’ model (Table 1, Appendix 1) is conceived as a flat wide vertical surface, frame or device such as a notice board or blackboard placed upright on a wall on which notices can be *pinned* and used for showing information. Concerning the ‘board’ model, expressions such as *pin*, *board*, and *create board* are found on Pinterest. These expressions clearly activate the ‘board’ model, as they are used to refer to the virtual *board* on which the users (i.e. *pinners*) save pictures and/or notices they are interested in by *pinning* them on the board they have created. If needed, *pinners* can *edit their board* to arrange the *pins* on a board, or even create other boards (i.e. *create a board*) with different topics.

All these actions can be handled from one’s personal account (i.e. profile) by clicking the corresponding button in the options’ section (e.g. *edit a board*, *create a board*, *choose a board*, etc.) at the top of the page. Moreover, other actions such as making changes to the board’s title, description, or category are also possible. It is very important to keep all the changes made by clicking the *save* button.

Other expressions in the ‘board’ model such as *find and follow boards*, *invite friends to a board*, *leave a group board*, *merge boards and sections*, *organise a board*, *request to join a board*, or *secret boards* also reinforce their presence in the digital discourse of Pinterest.

3.2.2. The ‘site’ model

The ‘site’ model (Appendix 1) is understood as an area of ground, spatial location, scene, or place occupied by a structure, such as a city/town, building, park, or forest, among others. At present, the term ‘site’ in English has extended its meaning and it is also used to refer to a ‘website’. Therefore, a metaphorical virtual site or website today is defined as a central location containing several *web pages*; all of them are connected and can be accessed by visiting the main *home page* of the website with the use of a browser. Once the user is located in the home page, s/he can move around the site and get access to any of the web pages located in the website. In addition, in order to open and view a website, the user is required to use a browser, which will give access to open that website. To achieve this, a *URL address* in the *address bar* will be needed in case the user does not know the URL of the specific website s/he wants to *visit*. In those cases, a *search engine* will be at his/her disposal to search for the website on the Web.

In the present study, social networks and ‘marketplace’ web pages incorporate the ‘site’ model, since they use expressions like *sign up*, *sign in*, *log in*, *log out*, and *password*. In this model, the *site* requests virtual users to create an account (i.e. *register*) so that they *sign up/sign in* and create a *password* on the homepage. Once their personal account is activated, users must *log in* and type their password so that access is successfully granted.

After admission has been permitted, virtual users may freely choose their own navigation path. In order to do so, *links* make it possible to activate labels and, therefore, activate different screens.

3.2.3. The ‘social relationship’ model

The ‘social relationship’ model (Table 2, Appendix 1) recalls the recurrent social interaction between two or more people, who might be connected because of friendship, family, work, business, love, etc. This model is a complex domain of experience that is evoked in order to understand the target domain ‘Facebook’. In this sense, Facebook is conceptualised as a virtual location in which people may connect with their *friends*. To do so, they must send a *friend request* to the other Facebook user(s) and when it is *accepted*, their virtual connection is activated. Facebook users can keep up with their friends by *sending messages* and browsing their timeline, where their friends *post* new information. Apart from this, Facebook also allows users to advertise events they host by *creating an event* and sending invitations to their virtual friends. Those invitations, in turn, might be *accepted* or *declined*.

3.2.4. The ‘exploration’ model

The ‘exploration model’ (Table 3, Appendix 1) refers to the experience of searching for or investigating an unfamiliar area in order to learn about it. Thus, it includes people whose aim is to learn about or find something or someone. For this reason, they *search* through the unknown area, *following* previous information/people to make their own discoveries.

One of the best features about Instagram is the ability to *discover people* or find *friends* through Facebook by simply clicking the options button and searching the option ‘Facebook friends’. This is a good mechanism in order to find all your contacts who have an Instagram account. The same process allows for *sharing* to Facebook (either your personal information, images, your Instagram *posts*, or a business page), and decide whether you want to share the picture or not.

Additionally, the main aim of Instagram is to both follow and encourage people to follow your account (i.e. *follow friends* and getting *followers*). All these actions are also activated and related to the ‘social relationship’ model in Facebook. Moreover, Instagram will give you recommendations on who to *follow* (e.g. brands or accounts that Instagram may consider you will like or be interested in, or friends and colleagues). Therefore, you can get to know who of your *followers* are on Instagram and encourage them to follow you. As a result, like other social networks such as Twitter, *followers* will *search* for topics related to their interests. For that reason, *tagging photos* is essential; however, it is not enough to *post* impressive photos without using text.

3.2.5. The ‘store’ model

The ‘store’ model (Tables 4 and 5, Appendix 1) is conceived as a department store in which a wide variety of goods/items can be organised into separate departments. A great number of ‘marketplace’ web pages are known as stores, which instantaneously prompts the ‘store’ cognitive model in the virtual users’ minds, as in Amazon and eBay. Both Amazon and eBay activate this model, since their users might be conceptualised as the *customers* who want to buy different products. Once they check on the *price* and the characteristics of the product by clicking on it, the virtual customers can put it into their

virtual *shopping cart*. In Amazon and eBay users might find daily offers as *today's deals* and, in case of doubts, there is a special department for helping customers, i.e. the *customer service* department, which offers *help* in recurrent situations faced by the customers, such as the *buying* process, *payments*, *returns* and *refunds*, *invoices*, etc.

4. DISCUSSION

The resulting metaphorical models share elements of the website genre, since they give coherence to the architectural structure of a web page. Thus, these models are indicative of Cyberggenres because they provide cognitive instruction in order to understand web pages coherently in discourse. Accordingly, what is interesting in the analysis of this study is that the two 'marketplace' web pages examined (i.e. Amazon and eBay) share the same models, namely the 'store' model and the 'site' model. This might be because both Amazon and eBay are e-commerce platforms, which offer their online customers similar buying options. Hence, the configuration of these two marketplaces employs the 'store' model (to guide users through their buying process) and the 'site' model, so that users can identify themselves with an account they control, making the buying process private and safe.

In the case of the three social networks examined (Pinterest, Facebook and Instagram), they all employ the 'site' model as a way to privatise the actions of their users. In addition, each of them utilises a particular model: Pinterest makes use of the 'board' model to convey the idea of organising pictures; Facebook envisions its users as friends with a given social connection with the 'social relationship' model; and Instagram enables its users to search through a massive amount of visual material, activating the 'exploration' model.

In line with the present results, previous studies have demonstrated (Girón-García & Navarro i Ferrando, 2014; 2015; Navarro i Ferrando & Silvestre-López, 2009) that frames and domains help to organise the structure of the digital environment (i.e. the Internet), since they evoke previous cultural knowledge that is already entrenched in the users' conceptual system in order to understand the digital world. For this same reason, this study has tried to seek words and expressions such as *sign up*, *log in*, *log out*, *help*, *payments*, *customer service*, etc. that belong to the virtual environment (Pinterest, Facebook, Instagram, Amazon, eBay). Currently, these words or expressions activate previous conceptualizations that help Internet users to understand those target domains. Therefore, digital readers make use of their previous knowledge in order to adapt it to the digital media, which demand new reading strategies (i.e. digital literacy) to manage links, menus, etc. (Girón-García & Navarro, 2014). Moreover, in order to use the virtual environment effectively, virtual users must be able to identify the specific characteristics that make multimodal information different from traditional documents (i.e. printed resources).

The identification, description and distinction of the source domains – 'board', 'site', 'social relationship', 'exploration', and 'store' – used to explain the target domain through conceptual projections is a fundamental process where Cybermetaphors are concerned, since those source domains increase their contribution to comprehending the virtual setting. Likewise, the analysis of the previous models in section 3.2 have contributed in adding significant coherence to the words and expressions described in this study by transferring them from a real context (source domain) to a digital environment (target domain).

5. CONCLUSIONS

Since current society is constantly evolving, Web design has also evolved from static hypertext (i.e. printed text) to dynamic digital genres (i.e. cybergenres) that include multimodal elements such as images, sound, videos, and hypertextual links, among others. All these multimodal elements, together with previous knowledge configurations (i.e. ICMs such as frames, and cognitive domains) entrenched in the users' conceptual system enable them to construe the digital genres in the 21st Century.

The main goal of the current study was to describe and analyse how ICMs give coherence to the virtual context, and more specifically to 'social networks' and 'marketplace' web pages. After analysing these Internet sites, it is now possible to state that recognising metaphorical models used in Internet genres (i.e. Cybergenres) confirm that previous knowledge configurations help in giving coherence to the organization and structure of web pages, because they are already ingrained in both users' and designers' minds. Accordingly, the connection of cultural experiential models (which work as source domains) to the virtual world (target domain) help users to navigate the digital context more effectively and comfortably. This mental phenomenon of mapping the real life context (source domain) onto a digital environment (target domain) by activating different frames in the virtual users' minds is understood as 'Metaphorical Transference' (Esbrí-Blasco, Girón-García & Renau, 2019).

Additionally, the identification and description of metaphorical projections in the cybergenre may help clear up the connection between the virtual context and previous cultural representations, guiding Internet users in the development of their digital literacy in that virtual context.

In this vein, new genres in cyberspace – Cybergenres – have changed the way virtual users conceive or understand metaphoricity in this context – Cybermetaphors – evoking previous knowledge configurations so as to give coherence to the emerging virtual genres (i.e. Cybergenres), and therefore to users' digital literacy.

A limitation of the current study is that the words and expressions have only been analysed in English language social networks and web pages. As such, it is not possible to assert that the same models are activated in other languages to the same extent. In future investigations, it might be possible to conduct further research on this topic in other languages and cultures in addition to English to test whether the same models are also present and active in the way they are in the English-speaking world.

REFERENCES

- Bateman, J.A. 2008. *Multimodality and Genre: A Foundation for the Systematic Analysis of Multimodal Documents*. London: Palgrave Macmillan.
- Caballero, M.R. 2008. "Theorizing about genre and cybergenre". *CORELL (Computer Resources for Language Learning)* 2: 14–27.
<http://www.ucam.edu/corell/issues/RCaballero.pdf>.
- . 2017. "Genre and metaphor: use and variation across usage events". In *The Routledge handbook of metaphor and language*, ed. Elena Semino & Zsófia Demjén. Milton Park, Abingdon, Oxon New York, NY: Routledge, pp. 193–205.
- Casakin, H. 2019. "Metaphors as Discourse Interaction Devices in Architectural Design". *Buildings*, 9(52): 1–14.
- Croft, W. & Cruse, D.A. 2004. *Cognitive Linguistics*. Cambridge University Press.
- Esbrí-Blasco, M., Girón-García, C. & Renau, M.L. 2019. *Metaphors in the digital world: The case of metaphorical frames in 'Facebook' and 'Amazon'*. Series:

- Applications of Cognitive Linguistics, n° 39. Mouton de Gruyter.
- Fillmore, C.J. 1982. "Frame semantics". In The Linguistics Society of Korea (Ed.), *Linguistics in the Morning*. Seoul: Hanshin, pp. 111–137.
- Fillmore, C.J. & Baker, C. 2009. "A Frames Approach to Semantic Analysis". In Bernd Heine and Heiko Narrog (ed.) *The Oxford Handbook of Linguistic Analysis*. Oxford University Press, pp. 313–340.
- Frow, J. 2015. *Genre*. London; New York: Routledge, Taylor & Francis Group.
- Girón-García, C. 2013. *Learning Styles and Reading Modes in the Development of Language Learning Autonomy through 'Cybertasks'*. Barcelona: Universitat Jaume I. (<http://hdl.handle.net/10803/125440>).
- Girón-García, C. & Navarro i Ferrando, I. 2014. "Digital literacy and metaphorical models". *Multidisciplinary Journal for Education, Social and Technological Sciences*, Vol. 1, 2: 160–180.
- . 2015. "Metaphorical models, cybergenres and strategic modes in virtual space". *Studia Universitatis Petru Maior. Philologia*, 19: 32–43.
- Hampe, B. (Ed.). 2017. *Metaphor: Embodied Cognition and Discourse*. Cambridge: Cambridge University Press. Doi: 10.1017/9781108182324
- Kövecses, Z. 2006. *Language, Mind and Culture. A Practical Dictionary*. Oxford et al.: Cambridge University Press.
- . 2010. *Metaphor: A Practical Introduction*. (2nd Ed.) New York: Oxford University Press.
- . 2015. *Where metaphors come from. Reconsidering Context in Metaphor*. Oxford, UK: Oxford University Press.
- . 2017. "Levels of metaphor". *Cognitive Linguistics*, 28(2): 321–347.
- Kress, G. 2004. *Literacy in the new media age*. London: Routledge.
- Lakoff, G. & Johnson, M. 1980. *Metaphors We Live By*. Chicago: University of Chicago Press.
- Langacker, R.W. 1987. *Foundations of Cognitive Grammar. Volume I: Theoretical Prerequisites*. Stanford, CA: Stanford University Press.
- Navarro i Ferrando, I. & Silvestre-López, A.J. 2009. "Cybergenre Representation and Metaphorical ICMs of Feature Websites in English". En M. Navarro-Coy (ed.) *Practical Approaches to Foreign Language Teaching and Learning*, Berlin/NY: Peter Lang, pp. 269–292.
- Navarro i Ferrando, I., Villanueva-Alfonso, M.L., Girón-García, C. & Silvestre-López, A.J. 2008. "Cybergenres and Autonomous Language Learning: Pragmatic Strategies and Cognitive Models in the Production and Processing of Digital Genres". *INTED2008 Proceedings*. International Association for Technology, Education and Development, IATED. 1, pp. 777–786.
- Posteguillo, S. 2003. *Netlinguistics: an analytical framework to analyse language, discourse and ideology in Internet*. Castelló de la Plana: Publicacions de la Universitat Jaume I.
- Petruck, M.R.L. 1996. "Frame semantics". In Jef Verschueren, Jan-Ola Östman, Jan Blommaert, and Chris Bulcaen (eds.), *Handbook of Pragmatics*. Philadelphia: John Benjamins, pp. 1–13. Available from: https://www.researchgate.net/publication/228457604_Reframing_framenet_data [last accessed: April 15 2019].
- Ruppenhofer, J., Ellsworth, M., Petruck, Miriam, R.L.J., Christopher R., & Scheffczyk, J. 2010. *FrameNet II: Extended Theory and Practice*. FrameNet Project, September.
- Seeber, K. 2015. "Teaching 'format as a process' in an era of Web-scale discovery".

- Reference Services Review*, 43(1): 19–30.
- Shepherd, M. & Watters, C. 1998. The Evolution of Cybergenres. Proceedings of the Thirty-First Annual Hawaii International Conference on System Sciences-Volume 2, pp. 68–78.
- Summey, D.C. 2013. *Developing Digital Literacies. A Framework for Professional Learning*. London, UK: SAGE Publications Ltd.
- Taylor, J.R. 1989. *Linguistic Categorization. Prototypes in Linguistic Theory*. Oxford: Clarendon (2nd Ed. 1995).
- . 2002. *Cognitive Grammar*. Oxford: Oxford University Press.
- Yates, J. & Orlikowski, W.J. 1992. “Genres of organizational communication: A structurational approach to studying communication and media”. *Academy of Management Review*. 17(2): 299–326.

APPENDIX 1

Table 1. Target domain, source domains, and their words and expressions.
‘Pinterest’

TARGET DOMAIN	‘Pinterest’	
SOURCE DOMAINS	Board	Site
EXPRESSIONS	Pin	Site
	Save (pin)	Links
	Board	Sign up
	Create board	Log in
	Edit board	Log out
	Choose board	Password
	Find and follow boards	
	Invite friends to a board	
	Leave a group board	
	Merge boards and sections	
	Organise a board	
	Request to join a board	
	Secret boards	
	Pinner	

Table 2. Target domain, source domains, and their words and expressions. ‘Facebook’

TARGET DOMAIN	‘Facebook’	
SOURCE DOMAINS	Social relationship	Site
EXPRESSIONS	(Create) Event	Site
	(Send) Message	Links
	Friend	Sign up
	(Accept) Friend request	Log in
	Post	Log out
	(Accept/Decline) Invitation	Password

Table 3. Target domain, source domains, and their words and expressions. ‘Instagram’

TARGET DOMAIN	‘Instagram’	
SOURCE DOMAINS	Exploration	Site
EXPRESSIONS	Discover people	Site
	Follower	Links
	Following	Sign up
	Search	Log in
		Log out
		Password

Table 4. Target domain, source domains, and their words and expressions.
‘Amazon’

TARGET DOMAIN	‘Amazon’	
SOURCE DOMAINS	Store	Site
EXPRESSIONS	Cart	Site
	Department	Links
	Customer service	Sign up
	Help	Log in
	Gift card	Log out
	Customers	Password
	Price	
	Today’s deals	
	Buying	
	Payments	
	Returns	
	Refunds	
	Invoices	

Table 5. Source domains, target domains, and their words and expressions.
‘eBay’

TARGET DOMAINS	‘eBay’	
SOURCE DOMAINS	Store	Site
EXPRESSIONS	Shopping cart	Site
	Customer service	Links
	Help	Register
	Customers	Sign in
	Price	Sign out
	Today’s deals	Password
	Buying	
	Payments	
	Returns	
	Refunds	
	Invoices	