Cognitive devices to communicate the economic crisis: An analysis through covers in The Economist

María Enriqueta Cortés de los Ríos Universidad de Almería (Spain) mecortes@ual.es

Abstract

This paper explores how the economic crisis is reported by analysing one of the most common conceptual mappings related to the economy: ECONOMY IS A NATURAL PHENOMENON. More specifically, I analyse the use of natural disasters, weather and apocalyptic metaphors in press covers together with other elements such as metonymies, image schemas, colour and cultural aspects. The aim of this paper is to investigate how all these devices are exploited by journalists to reflect the economic crisis and to influence their readers. A cognitive-axiological approach has been used to analyse seven covers which are closely related to the above metaphors out of 51 published in 2008 in The Economist, the prestigious business and current affairs magazine. The analysis is structured according to the theory of cognitive linguistics outlined over the last three decades (amongst others see Johnson, 1987; Lakoff, 1987 & 1993; Lakoff & Johnson, 1980; Forceville, 1996 & 2006; Ruiz de Mendoza, 2000; Ungerer, 2000; Ruiz de Mendoza & Mairal Usón, 2007), but with some additional findings from other axiological contributions (Krzeszowski, 1993, 1997 & 2004; and Felices Lago, 2006 & 2008).

Keywords: cognitive semantics, metaphors, metonymies, image schemas, axiological linguistics.

Resumen

Mecanismos cognitivos para comunicar la crisis económica: Un análisis a través de las portadas del The Economist

Este artículo analiza cómo se comunica la crisis económica a través de uno de los trazados conceptuales más característicos relacionados con la economía: LA ECONOMÍA ES UN FENÓMENO NATURAL. Más concretamente analizamos el empleo de las metáforas de desastres naturales, climatológicas y apocalípticas mostradas en portadas de revistas junto con otros elementos como metonimias, esquemas de imagen, el color y aspectos culturales. Nuestro propósito es investigar cómo todos estos elementos son explotados por los periodistas para reflejar la crisis económica e influir en sus lectores. Usando un análisis cognitivo-axiológico hemos analizado siete portadas de entre 51 que están estrechamente relacionadas con las metáforas objeto de estudio. Dichas portadas han sido publicadas en The Economist, prestigiosa revista económica. Nuestro análisis se estructura según la teoría de la lingüística cognitiva perfilada durante las tres últimas décadas (Johnson, 1987; Lakoff 1987 y 1993; Lakoff y Johnson, 1980; Forceville, 1996 y 2006; Ruiz de Mendoza, 2000; Ungerer, 2000; Ruiz de Mendoza y Mairal Usón, 2007) añadiendo algunas contribuciones axiológicas (Krzeszowski, 1993, 1997 y 2004; y Felices Lago, 2006 y 2008).

Palabras clave: semántica cognitiva, metáforas, metonimias, esquemas de imágenes, lingüística axiológica.

Introduction

The financial crisis of 2008 was unleashed as a direct result of the burst of the real estate bubble in the USA in 2006, which brought about the crisis of so-called subprime mortgages in October 2007. The repercussions of the mortgage crisis began to become seriously apparent in early 2008, with the knock-on effect to the US financial system first, and subsequently to international finances. Bonis et al. (in Allen & Synder, 2009: 36) state "a financial crisis is generally defined to be a wider range of disturbances, such as sharp declines in asset prices, failures of large financial intermediaries, or disruption in foreign exchange markets".

One of the important notions connected with the crisis is the way it is covered in the press. The texts and images that journalists use frequently turn to metaphor, as reflected by the dominant culture and the values that define it. Metaphor is frequently used in current economic discourse as the following examples from McCloskey (1986) show: ECONOMIES NEED EQUILIBRIUM, OTHERWISE THEY WILL COLLAPSE; PUBLIC DEBT IS A BURDEN; CURRENCIES MAY BE WEAK or CURRENCIES MAY BE STRONG and BUSINESS MOVES IN CYCLES. In fact, White (1996) highlights extensive evidence of the widespread and systematic use of metaphor in press discourse, claiming that it plays a key role in articulating textual cohesion and coherence, which make an essential contribution to the communicative nature of press discourse. Likewise Martin Moore (2008) affirms:

For some reason the current crisis in finance/banking is attracting an astonishing bevy of analogies. Many people have gone for classic weather metaphors (tornadoes, hurricanes whirlwinds), others prefer to up the ante and go for natural disasters (tsunamis, fires) and a few not wanting to be overdone in the over-egging go rather apocalyptic (black holes, doomsday machines).

In this paper I would like to contribute, using a cognitive approach, to the understanding of the above metaphors used in the economic arena together with the metonymies, image schemas, colour and cultural aspects1 which accompany them. More specifically, my aim is to investigate how all these devices are exploited by journalists to report on the economic crisis and to influence their readers

It is widely accepted that metaphor and metonymy are essential tools of conceptualisation of economic problems that are often artfully manipulated to attract the audience's attention, to persuade them and to perform diverse communicative functions. As Cubo de Severino, Israel and Zonana (1988) affirm, metaphors have two very important functions: (1) to manipulate readers' minds through the inference patterns and value judgements generated by metaphors; (2) to give a more concrete representation of the situation at hand, making it clearer. As regards image schemas, these underlie all aspects of meaning and cognition and hence they influence important aspects of how we think, reason, and imagine, and can therefore play a very important role in persuasion (Gibbs & Colston, 2006). As a consequence, it is to be argued that these cognitive devices, together with colour and cultural elements, can also be useful tools to communicate persuasively and reinforce the most significant aspects of a financial situation. Persuasion as a communicative strategy is usually present in everyday situations, for example, in an advertisement, political meeting, etc. Schmidt and Kess (1986: 2) define it as "the process of inducing a voluntary change in someone's attitudes, beliefs or behaviour through the transmission of a message".

The sample of this paper consists of seven of the 51 covers published in *The* Economist in 2008 which clearly dealt with the economic crisis in terms of natural disasters, weather and apocalyptic metaphors. This paper is divided into the following sections. The first one will be devoted to the state of the art of metaphors and Economics, metonymies, image schemas and colour.

Secondly, the sample under analysis and the methodology used will be introduced. This section will act as the basis for the empirical analysis of the cognitive structures, image schemas, colour and cultural aspects in the covers illustrated. The final section will draw some conclusions.

State of the art

Metaphors and Economics

Before analysing some of the most relevant studies of metaphor applied to economic discourse, I believe that it is pertinent to give a brief overview of the main features of magazine covers. Generally speaking, the fundamental characteristic of a magazine cover is that it has a monothematic structure: a background photograph or illustration and a headline that sums up the topic and that may be accompanied by other verbal elements (Guimarães, 2000). However, the magazine cover is not simply a visual and verbal summary of what is considered the most important current topic; it is also an important form of self-advertising. The magazine cover will have to jostle for newsstand shelf-space with countless other publications, and so it must be able to attract the reader's attention. A vast range of colours and fonts can help to highlight the information, hopefully making it stand out, but also acting as a visual magnet, drawing attention to it and away from other publications (Golzio, 2003). Magazine covers offer a vision of the world and of reality, and they present a strong symbolic meaning, seeking the greatest visual impact in order to transmit emotions. Considering magazine covers as self-advertising, as mentioned above, we should bear in mind that as advertising messages are inspired by a great number of metaphors, metonymies and image schemas which seek to differentiate one product or service from the rest (Ungerer, 2000; Cortés de los Ríos, 2001; Rocamora Abellán, 2004; Forceville, 1996 & 2006; Velasco Sacristán & Cortés de los Ríos, 2009; among others), magazine covers also present the same cognitive structures and mental patterns.

If, as Lakoff and Johnson (1980: 5) argue, "the essence of metaphor is understanding and experiencing one kind of thing in terms of another", the possibilities metaphor offers for advertising are obvious. Metaphorical processes can also play a role in advertising images. Forceville (1996) was the first to introduce a comprehensive theory of pictorial metaphor in advertising, which offers a very detailed and useful model for analysis that has been widely adopted by researchers. Metaphors always express an evaluation of the target in terms of good or bad, praise or blame, and so on, which is why they are so useful in persuasive argument. Three general categories of metaphorical realisations can be identified for advertising metaphors: verbal, pictorial and multimodal (Forceville, 1996 & 2006), which can accommodate even more specific subtypes: pictorioverbal, verbopictorial, etc. Forceville (2006: 10) pursues the thesis that if:

(...) conceptual metaphor theory is right in assuming that humans pervasively use verbal metaphor because they largely think metaphorically, then metaphorical thought should manifest itself not just in language, but also via all other modes of communication, such as pictures, music, sounds and gestures.

Advertising is generally based on primary metaphors, but it also gives rise to secondary ones through a creation process. Primary metaphor, according to Lakoff and Johnson (1999), is a way to conceptualize, reason and visualize subjective experience with reference to other domains of experience, mostly sensory motor domains of incoming sensory experiences and our own body movements.

Economics is most probably the discipline in which most research into metaphor has been carried out within the domain of English for Specific Purposes (ESP). Since the irruption of cognitive linguistics in the 1970s different studies have been carried out to show the application of this theory to the field of ESP. Metaphor offers Economics language transparency and specificity and particularly the language of finance is, from the linguistic point of view, one of the most dynamic and interesting fields of business English due to its innovative and popular register (Adams & Cruz, 2007).

Metaphors tell us the perspective of the speaker or how the speaker wishes us to see things. In referring to the "TSUNAMI" caused by the collapse of monetary funds, the "CREDIT DROUGHT" or the "STRENGTH OF THE FINANCIAL HURRICANE", economic phenomena are presented as unleashed forces of nature. In this way their negative consequences are highlighted. The intention is to explain them away as a natural event for which no one in particular can be held responsible. The first rhetorical effect is to eliminate any responsibility. As Jameson (2009) states, rhetoric is just a tool and it can be used for good or ill. A second effect is to instil fear and resignation in the face of what is depicted as inevitable and universal. The use of metaphor is especially visible in communicating crises since they are

often used to transmit strong emotions of hope and fear, even though it is known that every addressee has different interests and reacts in a different way to negative information (Lützenrath, Peppmeier & Schuppener, 2006).

The Metaphor Observatory (2008) introduced a few choice metaphors to express the financial crisis in American crisis. Among others, the many metaphoric perspectives are categorized into:

- Boating: SHIPWRECK;
- Weather: PERFECT STORM, HURRICANE;
- Tectonic: EARTHQUAKE, TSUNAMI, TIDAL WAVE;
- Enemy ambush: TWIN TOWERS, PEARL HARBOUR;
- Habit: ADDICTION, ENABLER;
- Accidental: BLUNDER, CRASH, TRAIN WRECK, RESCUE, BAILOUT:
- Religious: HOLOCAUST, ARMAGEDDON; and
- Health: HEART ATTACK, CANCER.

I shall now go on to review some of the most relevant works dealing with analysis of metaphor in economic discourse.

White (1996 & 2004) studies the use of metaphor in the British press in reference to the monetary crisis of 1992. This linguist analyses the press' systematic, widespread usage of metaphor to deal with the monetary crisis and highlights metaphor's major contribution to the cohesion and coherence of texts.

Boers (1997) pays special attention to a cluster of metaphors related to the notions of health, fitness and racing, for example, LONG TERM SUBSIDIES ARE ADDICTIVE LAGGING or BEHIND COMPETITION.

Fuertes Olivera (1998) defends the cognitive value of metaphor in economic texts, analysing those used by economists to conceptualise the idea of inflation via the metaphors INFLATION IS AN ORGANISM, INFLATION IS A HORSE, INFLATION IS A DISEASE and INFLATION IS AN ENEMY.

Gómez Parra, E et al. (1999) focus on metaphorical expressions in Spanish and English that reflect the metaphor THE STOCK EXCHANGE IS A MOVING OBJECT.

Herrera and White (2000) propose a methodology focused on cognitive semantics to teach the metaphorical uses of GROWTH, as in ECONOMIC GROWTH WILTS UNDER HIGHER TAXATION or STRONG EXPORTS ACCELERATE GROWTH.

Charteris-Black (2000) investigates the theoretical implications of metaphor for the selection and teaching of lexis on ESP courses. Of particular interest is the use of inanimate metaphors to describe economy as animals, for example, inflation as a horse (GALLOPING INFLATION).

Charteris-Black and Ennis (2001) analyse metaphors in financial reporting in English and Spanish based on the market crash in 1997. Their analysis showed that THE ECONOMY IS AN ORGANISM is the metaphor most frequently used in financial reports, followed by MARKET MOVEMENTS ARE PHYSICAL MOVEMENTS and MARKET MOVEMENTS ARE NATURAL DISASTERS.

According to Millar and Beck (2004), as far as the metaphorical aspect of the financial crisis is concerned, two domains dominate, namely CONTAINER and WAR, whereas the third one – DISEASE – is much less popular in crisis rhetoric. The container metaphor is used to convey the fact that inside activities are controlled, whereas outside ones represent negative aspects, such as enemies or potential dangers.

Serón Ordóñez (2005) analyses metaphor in financial texts from the translator's point of view. The semantic fields covered in economics discourse are the following: animated features, health, war, mechanisms, sailing, fluids, plants, meteorological phenomena, sports and animals. Personifications are used in order that non-human entities may be categorised as positive or negative characteristics. The recession is personified by aggression, being defined as an adversary that attacks social measures (such as an instrument that can cut, hit or destroy).

Bielenia-Grajewska (2009) discusses some metaphorical terms in investment banking communication in the following languages: English, German, Spanish and Polish.

Metonymy, image schemas and colour

Metonymy only involves one conceptual domain, that is to say, the mapping occurs within a single domain and not across domains. In metonymy there is a "stand for" relationship since one entity in a schema is taken to stand for

another entity in the same domain or for the domain as a whole. Metonymies are usually represented by the schema X FOR Y, where X represents the source domain and Y symbolizes the target meaning of the metonymic operations. Likewise, metaphor and metonymy may interact in a number of ways (Goossens, 1995; Taylor, 1995; Ruiz de Mendoza Ibáñez, 1999a & 1999b; Ruiz de Mendoza & Díez Velasco, 2003; Geeraerts, 2003; and Hampe, 2005). Their conceptual and semiotic interaction is of significant relevance in advertising (Cortés de los Ríos, 2001; Rocamora Abellán, 2004; Felices Lago & Cortés de los Ríos 2009; amongst others).

As regards image schemas, Turner (1991: 58) points out that:

Image-schemas are extremely skeletal images that we use in cognitive operations. Many of our most important and pervasive image schemas are those underlying our bodily sense of spatiality. They include our imageschema of verticality, of a path leading from a source to its goal, of a forward motion, of a container (or more accurately of a bounded space with an interior and exterior), of contact, and of such orientations as up-down, front-back, and centre-periphery. We have many image-schemas of a partwhole relational structure (...) When we understand a scene, we naturally structure it in terms of such elementary image-schemas.

As mentioned previously, image schemas underlie all aspects of meaning and cognition and hence they motivate important aspects of how we think, reason, and imagine. Nevertheless, in spite of this importance, they have not yet been sufficiently explored. As argued by Gibbs and Colston (2006: 260), "they are a crucial, undervalued dimension of meaning". We believe that image schemas are helpful in attaining the goal of persuading and influencing press readers' opinion. As human beings are always evaluating what can be good or bad for them, researchers fall back on these cognitive structures since the positive or negative value of each image schema is also added to the concept or picture. In this sense, Krzeszowski (1990: 161) pointed out that "many lexical items carry heavy axiological weight, and that weight is semantically relevant". Furthermore, he makes a case for Lakoff's (1987) Idealized Cognitive Models (ICMs) as a starting point for the development of a general theory of values. Accordingly, the level of experience constitutes the first step to configure a hierarchy of values relative to the way people evaluate situations. In addition, Krzeszoswki (1993, 1997 & 2004) argued that the axiological parameter POSITIVE-NEGATIVE lends special dynamism to the use of preconceived schemata in metaphorisation.

It is difficult to find image schemas in isolation. Indeed, linguistic analyses have shown that image schemas can serve as source domains of countless metaphors (Lakoff & Johnson, 1980; Lakoff, 1987; Barcelona Sánchez, (ed.) 2000; Hampe, 2005), metonymies (Díez Velasco, 2001) and metaphormetonymy interaction (Ruiz de Mendoza, 1999a, 1999b & 2000).

Another element to be highlighted due to its persuasive value in magazine covers is colour. The colour system has been a crucial factor in the understanding of embodied language (Feldman, 2006). As it is an integral element of corporate and marketing communications it induces moods and emotions, influences consumers' perceptions and behaviour and helps companies position or differentiate themselves from the competition. As Lakoff and Johnson (1999) state, colours and colour categories are not "out there" in the world but are interactional. Colour concepts and colour-based inferences are thus structured by our bodies and brains. Categories of cognitive colours are capable of "conveying" sensations or concepts to the person observing them. Hence, they do affect how we feel and react to certain covers. Since we do not actively think of colours and the ideas they remind us of, the effect colours have on us is subliminal. Although we are not conscious of it all the time, this affective influence colours have on us is very powerful, as humans have been conditioned to accept colours to represent specific ideas such as the stereotypical black for negative things and white for pure things.

Sample and methodology

In order to carry out the analysis of the sample selected I preferred to follow the lines of the theory of cognitive linguistics outlined over the last three decades (amongst others see Johnson, 1987; Lakoff, 1987 & 1993; Lakoff & Johnson, 1980; Forceville, 1996 & 2006; Ruiz de Mendoza, 2000; Ungerer, 2000; Ruiz de Mendoza & Mairal Usón, 2007), but adding some findings from other axiomatic contributions (Krzeszowski, 1993, 1997 & 2004; and Felices Lago 2006 & 2008). In this paper I analyse the exploitation of nature, weather and apocalyptic metaphors, metonymies and image-schemas in press covers together with colour and cultural aspects and how they are used for communicating economic crisis. I will identify cases of metaphormetonymy interaction and metaphors and metonymies based on image schemas, as well as image schemas standing alone. For the analysis of metaphors I will consider their modality: monomodal (verbal, pictorial) or multimodal (pictorio-verbal, verbo-pictorial). As regards image schemas they will be classified according to Evans and Green's (2006) typology:

- (a) Space: up-down, front-back, left-right, near-far, centre-periphery, path, straight-curved, scale.
- (b) Containment: in-out, full-empty.
- (c) Multiplicity: part-whole, count-mass.
- (d) Balance: axis balance, point balance equilibrium.
- (e) Force: compulsion, blockage, counterforce, diversion, enablement, attraction, resistance.
- (f) Cycle².
- (g) Attribute: heavy-light, dark-bright, big-small, warm-cold, strongweak.

In addition to this classification the motion image-schema forward-backward (Turner, 1991) will be considered. I will incorporate an axiological approach with a view to determining which image schemas journalists use to support the metaphors and metonymies shown on the magazine covers. Are they all negative schemas, or are there also positive ones to convey a slight sense of hope in the face of the economic upheaval and uncertain future?

As for colour, I will analyse whether on the magazine covers studied all the colours are dark due to the negative connotations of the selected metaphors or whether lighter colours also appear to counteract these connotations.

With regard to culture, Kramsch (1998: 127) states that "it is a membership in a discourse community that shares a common social space and history, and a common system of standards for perceiving, believing, evaluating, and action". With this idea in mind, I will analyse cultural aspects that feature in the chosen covers reporting on the financial situation.

The sample of this paper consists of seven of the 51 covers published in *The* Economist in 2008 which clearly dealt with the economic crisis in terms of natural disasters, weather and apocalyptic metaphors. These seven are the only ones that feature the metaphors under study. The one with the apocalyptic metaphor appeared on 6th December; those concerning natural disasters were published on 22nd March, 19th July, 20th September and 22nd November; finally, those concerning weather metaphors appeared on 26th January and 25th October. The above-mentioned metaphors are closely related, as a natural disaster could be caused by a violent storm and give rise to an apocalyptic image. Therefore, all seven metaphors will be analysed without distinguishing between categories.

Our analysis will be based on a table showing the cognitive structures (metaphors and metonymies), metaphor modality (monomodal or multimodal) and image schemas that appear on each cover.

Analysis of the covers

The first cover (see Figure 1 and Table 1) portrays the verbo-pictorial metaphor, MONEY WHICH IS IN A BLACK HOLE IS DOWN. A black hole is an area of space/time brought about by a great mass in its interior which produces a huge increase in density. This causes a gravitational field of such force that no particle can escape it, not even photons. The black hole draws in investors' money to the unchartered depths. This image schematic metonymic-metaphor is based on the image schemas of space (up-down), containment (in-out) and attribute (dark-bright, big-small) in which the negative value is held by "down", "in", "dark" and "big". It can be observed that there is an axiological clash with the value of big as this is prototypically a positive value in image schemas. These image schemas are associated to the metonymy-based metaphor of MORE IS DOWN with money. This metaphor contradicts the universal experience of the piling frame, according to which more quantity means an increase in verticality (i.e. MORE IS UP). In addition MORE IS DOWN is also based on lack of control (i.e. money falling inside the hole). The rapid pace of the financial crisis means it has become very difficult to have an overview of the financial transactions which are taking place.

On the other hand, we can distinguish another classical metonymy, CLOTHES FOR THE PERSON in this case, THE BUSINESS SUIT FOR INVESTORS.

As regards colours the journalist has mainly used dark colours to transmit the negative effects of the crisis such as blue-grey on the ground and the business suit and black for the hole. However, on the left one can see bright blue and green, a little yellow and a red flower, as signs of hope in desperate times. Interestingly, the businessman is not able to see these bright colours as he is in a weak, kneeling position looking into the hole.



Figure 1. Apocalyptic metaphor (6th December, 2008).

	TYPES
COGNITIVE STRUCTURES	Metaphor (MONEY WHICH IS IN A BLACK HOLE IS DOWN) Metonymy (THE BUSINESS SUIT FOR INVESTORS)
METAPHOR MODALITY IMAGE SCHEMAS	Multimodal: Verbo-pictorial Space/containment/attribute: Up-down/in-out/ dark-bright, big-small

Table 1. Analysis of the cover illustrated in Figure 1.

The title of this cover taps a cultural meaning. It comes from the song "All the flowers gone" by Pete Seeger and this interpretation is reinforced by the single flower in the background. The first stanza of the song hints at the idea that the content of the song is related to the current economic situation:

Where have all the flowers gone, long time passing, Where have all the flowers gone, long time ago, Where have all the flowers gone, young girls picked them ev'ryone, When will they ever learn, when will they ever learn?

In the third line the phrase "picked them ev'ryone" could be construed as meaning that capitalism is consuming everything without thinking of the future. The girls picked every flower without thinking that there would soon be none left. We could transfer this scenario to the economy. Those committing bad economic practices consume and waste resources without thinking of the consequences. In the case of the financial crisis this could mean the granting of unlimited loans in various countries e.g. the United States of America. The last line could allude to the frustration and disappointment of the general public. No one believes in a change in the economy. Economists, bankers and politicians have learnt neither from past crises nor from the knowledge of economic theory.



Figure 2. Natural disaster metaphor (22nd March, 2008).

	TYPES
COGNITIVE STRUCTURES	Metaphor (THE ECONOMIC CRISIS IS AN EARTHQUAKE SHAKING WALL STREET)
METAPHOR MODALITY IMAGE SCHEMAS	Metonymy (THE STREET STANDS FOR THE INSTITUTION) Multimodal: Verbo-pictorial Balance

Table 2. Analysis of the cover illustrated in Figure 2.

The second cover under study is shown in Figure 2 and contains the verbopictorial metaphor THE ECONOMIC CRISIS IS AN EARTHQUAKE SHAKING WALL STREET based on the image schema of balance. In this case, economic balance has been lost. The world's economic foundations have been shaken by the earthquake that Wall Street has suffered. This metaphor carries an almost explicit comparison with the fall of the Berlin Wall (Durand, 2008). It is well known that the fall of the Berlin Wall led to a new world order, and this particular crash may well lead to a new world economic order. The negative value lies in the loss of balance.

In addition we can distinguish the following metonymy: THE STREET STANDS FOR THE INSTITUTION.

As regards colour, we should highlight the golden colour of the lettering, intended to associate it with money, on the black background of the wall, again stressing the negative situation of the American economy. The red text is intended to persuade possible readers to buy this edition of *The Economist* as this colour highlights the report on the economic crisis and also transmits the sense of danger for the economy.



Figure 3. Natural disaster metaphor (19th July, 2008).

TYPES
Metaphor (THE ECONOMIC PROBLEMS OF SAVINGS BANKS ARE TWIN TORNADOES)
Multimodal: Verbo-pictorial Attribute/movement: Big-small, dark-bright/ forward-backward Space/containment/attribute: Up-down/in-out/ dark-bright, big-small

Table 3. Analysis of the cover illustrated in Figure 3.

The verbo-pictorial metaphor THE ECONOMIC PROBLEMS OF SAVINGS BANKS ARE TWIN TORNADOES shown in Figure 3 is based on the following image schemas: attribute (big-small, dark-bright) and movement (forward-backward). "Big" interacts with the primary metaphor IMPORTANCE IS SIZE (Grady, 1999). The size of the tornadoes intensifies the economic destruction caused by the crisis which is highlighted by the colour black. The twisters are moving forward, which means that the financial crisis is not over and that it may destroy even more than it already has. We observe that there are axiological clashes with the values of big and forward as those are prototypically positive values in image schemas. As a result, the negative values are introduced by "big", "dark" and "forward".

The headline of this cover, Twin twisters, also alludes to the expression twin sisters. The journalist is personalising the two main economic problems brought about by the crisis (i.e. Fannie Mae and Freddie Mac) as twin sisters in order to stress that the economic problems are similar, on the one hand, and to "humanize" the problem on the other.

As regards colours, dark tones appear not only in the images, but also in the headline. The journalist's intention is to transmit negativity. The red colour is used to convey the two main economic problems faced by the USA in 2008; the colour not only communicates these problems but also acts as a warning about the extreme situation facing the country.

In the fourth cover (see Figure 4) the verbo-pictorial metaphor THE ECONOMIC CRISIS IS A WHIRLPOOL interacts with the space schema (up-down). In this case the direction is downward, and the parameter of control is implicit in the logic of the schema, as it is difficult to control. As a result, this image schema is linked to the primary metaphor BEING SUBJECT TO CONTROL OR FORCE IS DOWN. The whirlpool itself stands for the downward spiral of the global economy that drags everything down. The schema of VERTICALITY suggests a negative axiological loading due to the downward direction.



Figure 4. Natural disaster metaphor (20th September, 2008)

	TYPES
COGNITIVE STRUCTURES	Metaphor (THE ECONOMIC CRISIS IS A WHIRLPOOL) Metonymy (WHIRLPOOL FOR CONTAINED).
METAPHOR MODALITY	Multimodal: Verbo-pictorial
IMAGE SCHEMAS	Space: Up-down

Table 4. Analysis of the cover illustrated in Figure 4.

In the same way, the metaphor, THE ECONOMIC CRISIS IS A WHIRLPOOL offers a case of metonymy within metaphor. The source domain WHIRLPOOL has a metonymic basis. The metonymy corresponds to the type CONTAINER-FOR-CONTAINED metonymy and more particularly WHIRLPOOL FOR CONTAINED. Most famous and economically powerful institutions are being sucked into a container, the whirlpool.

The colours are mainly shades of blue, white and dark colours up to black on some edges. Blue represents depth and power. Depth is associated with the depth of the container (the whirlpool) and the power is related to force. The whole background is held in black which makes it appear more drastic. The title begging the question "What next?" is in large, white letters, which should be interpreted as a sign warning of some economic danger.

As regards the cultural aspects, the bull is a symbol of economic success and a healthy stock-market. This arises from a famous legend in which Californian gold diggers arranged a show-fight between a bull and a bear. The bull tossed up the bear with his horns (increasing stock-market quotations) and the bear fought down the bull (decreasing stock-market quotations). In this image, the bull, a signal of strength and economic power, is being pulled down by the vortex.



Figure 5.Natural disaster metaphor (22nd November, 2008).

	TYPES
COGNITIVE STRUCTURES	Metaphor (THE ECONOMIC CRISIS IS A CREDIT DROUGHT) Metaphor (THE SUN IS MONEY)
	Metonymy (THE BUSINESS SUIT FOR INVESTORS)
	Metonymy (THE COIN FOR MONEY)
METAPHOR MODALITY	Multimodal: 1. Verbo-pictorial
	Verbo-pictorial
IMAGE SCHEMAS	Movement/space: Forward-backward/up-down/near-far

Table 5. Analysis of the cover illustrated in Figure 5.

The verbo-pictorial metaphor THE ECONOMIC CRISIS IS A CREDIT DROUGHT shown in Figure 5 is based on the image schema of movement (forward-backward) which interacts with the primary metaphor PROGRESS IS FORWARD MOVEMENT. The businessman at the bottom is looking for liquid funds which can be equated with a water-seeking man in the desert. The businessman is crawling towards the money which on the one hand has created the economic stranglehold, but on the other hand is his salvation. The businessman thirsts to arrive there because he expects to find fresh cash. The forward movement is valued positively.

The verbo-pictorial metaphor THE SUN IS MONEY is based on the image schema of space (up-down; near-far). The sun is above the man and directs our life. The image of distance is depicted by the near-far schema. The sun, which is the cause of the drought, is also money. It is on the horizon, but no matter how hard we try we can never reach it. Consequently, the negative value is held by far.

On the other hand, we can depict another classical metonymy, CLOTHES FOR THE PERSON in this case, THE BUSINESS SUIT FOR INVESTORS. At the same time, we can conceptualize another metonymy THE COIN FOR MONEY.

The text is very interesting, as we can see the contrast between black and white: white for the better clause "All you need is cash", and black for the worse clause "Managing in the downturn". We should also highlight the blue of the horizon which emphasises the distance.

Regarding cultural aspects, the headline is an imitation of the very famous 1967 song "All you need is love" by "The Beatles", which should be interpreted as an indication of the essential nature of cash as the only thing you need to live. The sun is illustrated as a coin (quarter dollar = 25 US cents) with the image of George Washington so as to highlight the potential strength of the dollar among world economies.

In Figure 6 the verbo-pictorial metaphor ECONOMIC PROBLEMS ARE CLIMATIC CONDITIONS is based on the movement schema (forwardbackward). Here forward is evaluated negatively and positively. The storm is advancing, however, the man is coming towards us and, in spite of the weather, the man continues doing business. The negative value is held by forward in relation to the movement of the storm towards us. We observe that there is an axiological clash with the value of forward as this is prototypically a positive value in image schemas, but at the same time

forward is related to the businessman advancing despite adverse weather conditions, and this is evaluated positively. We should take into account the fact that the image of this cover shows a clearly tropical scenario, the place where the storms can be most intense and destructive. In fact, tropical storms are the most devasting weather phenomena. The intensity of the storm on this cover is what highlights the determination of the businessman.

The pictorial metaphor THE RAY OF LIGHTNING IS THE FALLING PLOTTED LINE OF A GRAPH is based on the image schema of space (up-down) in which the negative value is held by down. The ray of lightning produces maximum damage on touching the earth, and when the stock exchange reaches bottom it has crashed.



Figure 6. Weather metaphor (26th January, 2008).

	TYPES
COGNITIVE STRUCTURES	1.Metaphor (ECONOMIC PROBLEMS ARE CLIMATIC CONDITIONS)
	Metaphor (THE RAY OF LIGHTNING IS THE FALLING PLOTTED LINE OF A GRAPH)
	Metonymy (THE BUSINESS SUIT FOR INVESTORS)
METAPHOR MODALITY	Multimodal: 1. Verbo-pictorial 2. Pictorial
IMAGE SCHEMAS	Movement/space/containment: Forward-backward/up-down/in-out

Table 6. Analysis of the cover illustrated in Figure 6.

On the other hand, we can depict another classical metonymy, CLOTHES FOR THE PERSON in this case, THE BUSINESS SUIT FOR INVESTORS.

We should also highlight the image schema of containment (in-out) which is depicted in the headline ("It's rough out there"). Everyone knows that economic activity is mainly carried out outside a container. It is necessary to go out into the street, in other words outside the container, to do business and make the economy grow. In this case being outside is valued positively, although here the value presented is negative, as illustrated by the expression: "it's rough".

As regards colour, the plot of the graph in red represents the dramatic state of the economy.



Figure 7. Weather metaphor (25th October, 2008).

	TYPES
COGNITIVE STRUCTURES	Metaphor (BUTTERFLIES ARE EMERGING ECONOMIES IN A STORM)
METAPHOR MODALITY IMAGE SCHEMAS	Metonymy (A BUTTERFLY FOR EACH CONTINENT) Multimodal: Verbo-pictorial Space/movement/containment: Up-down/forward-backward/in-out

Table 7. Analysis of the cover illustrated in Figure 7.

The last cover to be analysed (Figure 7) shows the verbo-pictorial metaphor BUTTERFLIES ARE EMERGING ECONOMIES IN A STORM. It is based on the image schemas of space (up-down), movement (forwardbackward) and container (in-out). The butterflies are gaining altitude and advancing. These insects are fragile, like emerging economies, and so they transmit the weakness of the economy. The fact that they are "inside" a storm means that there is a risk of falling and not being able to rise back up. It is a well-known fact that if a butterfly's wings get wet it will not be able to fly. The crisis is so serious that if the group of adult butterflies disappears, then the whole generation will disappear. However, as they attempt to fly above the clouds there remains some hope that the bad economic situation can be overcome. In the real world butterflies do not fly in formation, this underlines the fact that all the emerging economies are linked together. The positive value is held by up and forward and the negative value is held by in.

On the other hand, we can depict the following metonymy: A BUTTERFLY FOR EACH CONTINENT. In the cover we can see six butterflies, each of them representing an economic continent: North America, South America, Europe, Asia, Africa and Oceania. In each of these continents there are diverse emerging economies so the butterflies as a whole stand for all the world's emerging economies.

Dark colours predominate and appear separated by an orange sky to convey the dangerous situation that the world economy is experiencing. The butterflies feature the same colours, which serves to emphasise the shared situation.

Conclusions

We should highlight that extreme natural phenomena are used to capture the magnitude of the economic crisis. Our analysis has proved that most of the metaphors of natural disasters, weather and apocalypse that are used to report on the economic crisis in 2008 interact with metonymies and image schemas. Most of the metaphors are multimodal. In most cases the source domain alludes to natural disasters or climatic conditions as conventional metaphors, although in other cases creative metaphors appear, such as THE SUN IS MONEY or BUTTERFLIES ARE EMERGING ECONOMIES IN A STORM. One cover presents a case of metonymy within metaphor: WHIRLPOOL FOR CONTAINED (see Table 4). In another cover an image schema (DOWN) is part of the source domain. We are referring to the image schematic metonymic-metaphor: MONEY WHICH IS IN A BLACK HOLE IS DOWN (see Table 1).

In addition, the metonymies found in relation to the economic crisis on the magazine covers in question are as follows:

- CONTAINER-FOR-CONTAINED (see Table 4)
- CLOTHES FOR THE PERSON (THE BUSINESS SUIT FOR INVESTORS) (see Tables 1, 5 and 6)
- STREET FOR THE INSTITUTION (see Table 2)
- THE COIN FOR MONEY (see Table 5)
- A BUTTERFLY FOR EACH CONTINENT (see Table 7)

This analysis has also shown that most metaphors and metonymies are based on image schemas to convey the financial crisis and to strengthen its negative nature. In this regard, the metaphors studied always convey a negative evaluation of the financial situation and this is the reason why they are so useful in persuasive argument. However, as regards image schemas, most of them are negative but there are also some positive ones to mitigate the economic situation.

Image schemas that have appeared in this analysis – and in those that have combined metaphor and metonymy – have been those of space (up-down; near-far), containment (in-out), attribute (dark-bright; big-small), balance and movement. On one occasion an image schema appears alone: containment (in-out). In addition, we have found specific emphasis on values in the covers under analysis. Some of the prototypically positive values of some image schemas have often been used with a negative value (e.g. big, forward) thus producing axiological clashes and proving that they are not merely representative of universal experience, but crucially tied to specific socio-cultural cognition. We should also mention that big and forward are used with their prototypical positive value to transmit the idea that despite adversity, an effort is being made to continue with financial dealings.

As for colour, dark colours stand out as a sign of negativity and red as a sign of danger, but at the same time bright colours like green and yellow can also be used to transmit hope.

Regarding cultural aspects, we should highlight the use of song titles such as

"All the flowers gone" by Pete Seeger and "All you need is love" by The Beatles in headlines to report on the economic crisis. These songs are wellknown and help to attract the readers' attention and make them reflect on a given situation. In general titles and covers of the sample analysed characteristically practise underdetermination.3

In short, this work shows that metaphors which are used to convey the idea of economic crisis are backed up by other cognitive devices to persuade and influence the readers' behaviour and lead them to a certain position which the journalist has intended. Metaphors persuade because metaphoric thinking structures and influences the way that an audience reads and reacts to an event. And it is known that people make decisions based on emotion and logic, and metaphors can be powerful in attaching emotional significance to the seemingly ordinary. For example, describing economic crisis as a natural disaster is far more evocative and inspiring than referring to it in literal terms. Journalists often use these resources to achieve their goals of moving their audiences and changing their attitudes. Our analyses have demonstrated that cognitive metaphors, metonymies, image schemas, colours and cultural aspects are used as an overall persuasive strategy in the financial context.

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References

Adams, H. & L. Cruz García (2007). "The advertising of financial products in the press". Ibérica 13: 123-146.

Allen, R.E & D. Synder (2009). "New thinking on the financial crisis". Critical Perspectives on International Business 5: 36-55.

Barcelona Sánchez, A. (ed.) (2000). Metaphor and Metonymy at the Crossroads: A Cognitive Perspective. Berlin: Mouton de Gruyter.

Bielenia-Grajewska, M. (2009). "The role of metaphors in the language of investment banking". Ibérica 17: 139-155.

Boers, F. (1997). "No pain, no gain in a free market rhetoric: A test for cognitive semantics? Metaphor and Symbol 12: 231-241.

Charteris-Black, J. (2000). "Metaphor and vocabulary teaching in ESP economics". English for Specific Purposes 19: 149-165.

Charteris-Black, J. & T. Ennis (2001). "A comparative study of metaphor in Spanish and English financial reporting". English for Specific Purposes 20: 249-266.

Cortés de los Ríos, Mª E. (2001). Nuevas Perspectivas Lingüísticas en la Publicidad Impresa Anglosajona. Almería: Servicio de Publicaciones de la Universidad de Almería.

Cubo de Severino, L., D. Israel & V. Zonana (1988). "Globalisation for beginners in Argentina: A cognitive approach". Language and Ideology II: 215-234.

Díez Velasco, O. (2001). "Metaphor, metonymy and image schemas: An analysis of conceptual interaction patterns". Journal of English Studies 3:

Dirven, R. & R. Pörings (eds.) (2003). Metaphor and Metonymy in Comparison and Contrast. Berlin: Mouton de Gruyter.

Durand, S. (2008). El discurso de la crisis. URL: http://www.comision-economia.com.ar/2008/12/ [07/12/2008].

Evans. V. & M. Green (2006). Cognitive Linguistics: An Introduction. Mahwah, NJ: Lawrence Erlbaum.

Feldman, J. (2006). From Molecule to Metaphor, A Neural Theory of Language. Massachusetts: The MIT Press.

Felices Lago, A. (2006). "La codificación del parámetro axiológico en la terminología financiera y de inversión: el español y el portugués frente a la influencia del inglés" in M.V. Calvi & L. Chierichetti (eds.), Nuevas tendencias en el discurso de especialidad, 203-222. Bern: Peter Lang.

Felices Lago, A. (2008). "Las cualidades demandadas al solicitante de empleo en español frente al inglés: análisis semántico-axiológico de las ofertas de trabajo en la prensa española" in M.V. Calvi, G. Mapelli & J. Santos López (eds.), Lingue, culture, economia. Comunicazione e pratiche discorsive, 95-110. Milan: Franco Angeli.

Felices Lago, A. & Mª E. Cortés de los Ríos (2009). "A cognitive-axiological approach to printeco advertisements in The Economist: The energy sector under scrutiny". Revista de Lingüística y Lenguas Aplicadas 4: 59-78.

Forceville, C. (1996). Pictorial Metaphor in Advertising. London: Routledge.

Forceville, C. (2006). "Non-verbal and multimodal metaphor in a cognitivist framework: Agendas for research" in G. Kristiansen, M. Archand, R. Dirven & F.J. Ruiz de Mendoza Ibáñez (eds.), Cognitive Linguistics: Current Applications and Future Perspectives, 379-402. Berlin: Mouton de Gruyter.

Fuertes Olivera, P.A. (1998). "Metaphor and translation: a case study in the field of economics" in P. Fernández Nistal & J.M. Bravo (eds.), La traducción: orientaciones lingüísticas y culturales, 79-95. Valladolid: Servicio de Publicaciones de la Universidad de Valladolid.

Geeraerts, D. (2003). "The interaction of metaphor and metonymy in composite expressions" in R. Dirven & R. Pörings (eds.), 435-465.

Gibbs, R. & H. Coslton (2006). "The cognitive psychological reality of image schemas and their transfromations" in D. Geraerts (ed.), Cognitive Linguistics, 239-268. Berlin: Mouton de Gruyter.

Golzio, D. (2003). Retratos de Brasil: análisis de las imágenes de portada publicadas em las revistas Veja e Isto É. Unpublished Ph.D. Thesis. Universidad de Salamanca, Spain.

Gómez Parra, E., C.F. Márquez Linares & C. Pérez Hernández (1999). "La metáfora en los clichés del mundo bursátil. Un estudio contrastivo inglés-español". Paremia 8: 237-242.

Goossens, L. (1995). "Metaphtonymy: the interaction of metaphor and metonymy in expressions for linguistic action" in L. Goossens, P. Pauwels, B. Rudzka-Ostyn, A.M. Simon-Vanderbergen & J. Vanparvs (eds.). By Word of Mouth, Metaphor, Metonymy and Linguistic Action in a Cognitive Perspective, 159-174. Amsterdam: John Benjamins.

Grady, J. (1999). "A typology of motivation for conceptual metaphor" in R.W. Gibbs & G.J. Steen (eds.), Metaphor in Cognitive Linguistics, 79-110. Amsterdam: John Benjamins.

Guimarães, L. (2000). A cor como informação: a construção biofísica, lingüística e cultural da simbologia das cores. São Paulo: Annablume.

Hampe, B. (ed.) (2005). From Perception to Meaning. Image Schemas in Cognitive Linguistics. Berlin: Mouton de Gruyter.

Herrera, H. & M. White (2000), "Cognitive linguistics and the language learning process: a case from Economics". Estudios Ingleses de la Universidad Complutense 8: 55-78.

Jameson, D. (2009). "Economic crisis and financial disasters: The role of business communication". Journal of Business Communication 11: 499-509.

Johnson, M. (1987). The Body in the Mind. The Basis of Meaning, Imagination and Reason. Chicago: The University of Chicago Press.

Kramsch, C. (1998). Language and Culture. Oxford: Oxford University Press.

Krzeszowski, T.P. (1990). "The axiological aspect of idealized cognitive models" in J. Tomaszczyk & Lewandowska (eds.), Meaning Lexicography, 135-165. Amsterdam: John Benjamins.

Krzeszowski, T.P. (1993). "The axiological parameter in preconceptual image schemata" in R.A. Geiger & B. Rudzka-Ostyn (eds.), Conceptualizations and Mental Processing in Language, 307-330. Berlin: Mouton de Gruyter.

Krzeszowski, T.P. (1997). Angels and Devils in Hell. Elements of Axiology in Semantics. Warsaw: Energeia.

Krzeszowski, T.P. (2004). "Metaphors of discourse: Between co-operative and oppositional discourses" in A. Duszak & U. Okulska (eds.), Speaking from the Margin. Global English from a European Perspective, 107-116. Frankfurt: Peter Lang.

Lakoff, G. (1987). Women, Fire and Dangerous Things. Chicago: The University of Chicago Press.

Lakoff, G. (1993). "The contemporary theory of metaphor" in A. Ortony (ed.), Metaphor and Thought (2nd ed.), 202-251. Cambridge: Cambridge University Press.

Lakoff, G. & M. Johnson (1980). Metaphors We Live By. Chicago: Chicago University Press.

Lakoff, G. & M. Johnson (1999). Philosophy in the Flesh. The Embodied Mind and Its Challenge to Western Thought. New York: Basic Books.

Lützenrath, Ch., K. Peppmeier & J. Schuppener (2006). Bankstrategien für Unternehmenssanierungen. Gabler: Wiesbaden.

McCloskey, D. (1986). The Rhetoric of Economics. Brighton: Harvester-Wheatsheaf.

Millar, F. & D. Beck (2004). "Metaphors of crisis" in D. Millar & R. Heath (eds), Responding to Crisis: A Rhetorical Approach to Crisis Communication, 153-166. Mahwah, NJ: Lawrence Erlbaum.

Moore, M. (2008). Metaphor meltdown. URL: http://mediastandardstrust.blogspot.com/2008/09/ metaphor-meltdown.html [12/11/09]

The Metaphor Observatory (2008). The Metaphor Observatory. Where living metaphor is explained to death. URL: http://www.metaphorobservatory .com [10/10/09].

Rocamora Abellán, R. (2004). "Cognitive devices throughout different advertising styles: How metaphors sell holidays" in I. Sanz Sainz & A. Felices Lago (eds), Las Nuevas Tendencias de las Lenguas de Especialidad en un Contexto Internacional y Multicultural, 839-847. Granada: Universidad de Granada.

Ruiz de Mendoza Ibáñez, F.J. (1999a). Introducción a la Teoría Cognitiva de la Metonimia. Granada: Método.

Ruiz de Mendoza Ibáñez, F.J. (1999b). "From semantic underdetermination via metaphor and metonymy to conceptual interaction". Laud 492: 1-

Ruiz de Mendoza Ibáñez, F.J. (2000). "The role of mappings and domains in understanding metonymy" in A. Barcelona Sánchez (ed.), 109-

Ruiz de Mendoza Ibáñez, F.J. & O. Díez Velasco (2003). "Patterns of conceptual interaction" in R. Dirven & R. Pörings (eds.), 489-532.

Ruiz de Mendoza Ibáñez, F.J. & R. Mairal Usón (2007). "High-level metaphor and metonymy in meaning construction" in G. Radden, K.-M. Köpcke, T. Berg & P. Siemund (eds.), Aspects of Meaning Construction in Lexicon and Grammar. 33-49. Amsterdam: John Benjamins.

Schmidt, R. & J. Kess (1986). Television Advertising and Televangelism: Analysis of Persuasive Language. Amsterdam: John Benjamins.

Serón Ordóñez, I. (2005). "La traducción de la metáfora en los textos financieros: estudio de caso" in M.G. Torres (ed.), Traducción y cultura: el cultural en la comunicación especializada, 205-250. Málaga: Libros Encasa.

Taylor, J. (1995). Linguistic Cross-categorization. Prototypes in Linguistic Theory. Oxford: Clarendon Paperbacks.

Turner, M. (1991). Reading Minds: The Study of Enalish in the Age of Cognitive Science, Princeton. NJ: Princeton University Press.

Ungerer, F. (2000). "Muted metaphors and the activation of metonimies in advertising" in A. Barcelona Sánchez (ed.), 321-340.

Velasco Sacristán, Mª S. & Mª E. Cortés de los Ríos (2009). "Persuasive nature of image schematic devices in advertising: their use for introducing sexism" in Revista Alicantina de Estudios Ingleses 22: 239-270.

White, M. (1996). La metáfora en el tratamiento de la crisis monetaria en la prensa británica. Madrid: Servicio de publicaciones de la Universidad Complutense de Madrid.

White, M. (2004). "Turbulence and turmoil in the market or the language of a financial crisis". Ibérica 7: 71-86.

Mª Enriqueta Cortés de los Ríos has been dealing with languages for Applied Purposes for the whole of her career, especially in the field of Economic and Business English. She is a lecturer at the Department of English and German Philology, University of Almería (Spain). Her main areas of research interest are cognitive semantics, axiological linguistics,

English for Specific Purposes and didactics applied to languages for specific purposes.

NOTES

^{&#}x27;In this regard we do not aim to analyse culture in figurative language, but rather American and British cultural aspects used in the covers of The Economist.

² A cycle schema is an image schema which involves repetitious events and event series.

³ Semantic underdetermination is related to the distinction between what is said and what is implicated.