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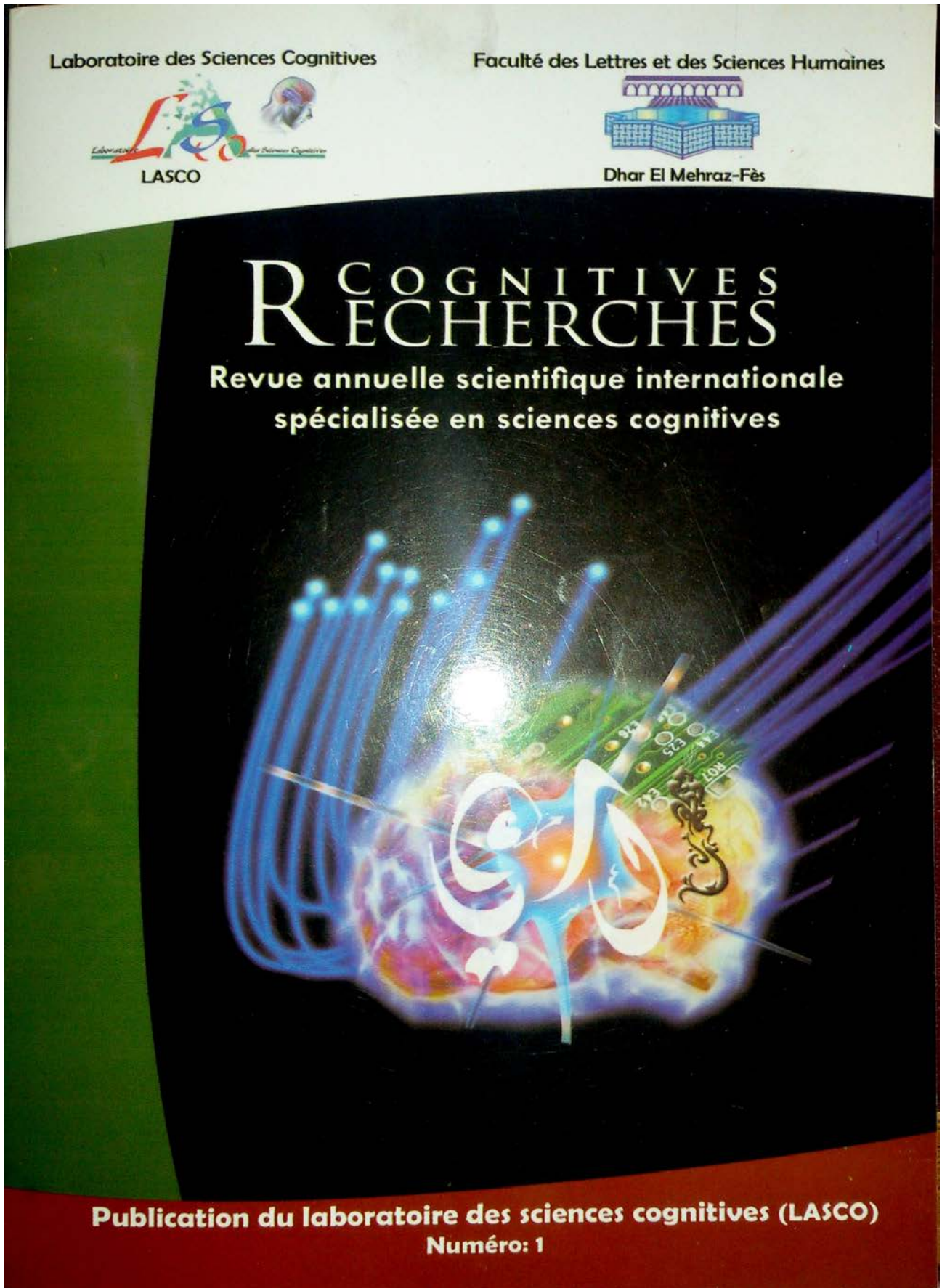




Table de Matières

* The Deepwater Horizon Crisis: A Linguistic and Cognitive Analysis of BP Communicative Strategy Michelangelo Conoscenti (University of Turin, Italy)	3
* The Cultural Dimension in Teaching Arabic as a Foreign Language (TAFL) Fawwaz Al-Abed Al-Haq & Sultan Abu Dalbough (Yarmouk University - Irbid -Jordan)	35
* Prédiction du niveau cognitif de jeunes enfants de cultures différentes de leur réussite à l'apprentissage de la langue écrite Ghazi Chakroun (The National Research Center for Giftedness & Creativity in Al-Hufuf- Saudi Arabia)	81
* Enseignement primaire et prise en charge de la langue parlée à l'école Rabah Keddouri (Université d'Alger 2 - Algerie)	109

The Deepwater Horizon Crisis: A Linguistic and Cognitive Analysis of BP Communicative Strategy¹

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Introduction

This paper discusses the relationship between cognitive science, linguistic analysis and Corporate Public Communication. Recent findings in the fields of cognitive science and neuroscience (Stemmer and Whitaker, 2008; Rabagliati, Marcus and Pylkkänen, 2011; Slingerland, 2008; Boden, 2006; Thagard, 2005; Damasio, 2005, Westen, 2007; Lakoff, 2008; Lakoff and Johnson, 1999) have made available specific knowledge on the emotional aspects of communication that could be useful to communication professionals both in the public and private organizations. The study of how the individual brain responds to audio or video messages and their related language is an area external relations departments should monitor as it offers scientific evidence on the ways press releases should be shaped for their relevant audiences. As such, they are of interest to the linguist who, by means of Multimodal Analysis (Jewitt, 2009; Garzone, Poncini and Catenaccio, 2007; Machin, 2007; Mezaris, Gidaros and Kompatsiaris, 2009; O'Halloran, 2004), can try to unify and “defragment” what Entman (1993) called, referring to the possible fragmentary contributions social sciences can give to the study of communication, the *fractured paradigm*. Furthermore, this approach can foster and foreground the understanding of processes described by Aday and Livingston (2008) not only at state and transnational level during wars, but also along the individual-institution/company (as non state actors)-state continuum in international crises and affairs.

Thus, this study constitutes a case study and a position paper at the same time. As such, it assumes a heterogeneous readership; little or no previous knowledge of cognitive science applied to the field of linguistics is required, so that professional communicators find the background input they need to approach the problems and the solutions addressed here.

This is why, in its first part, the paper outlines the tenets of cognitive science through its most important findings, focusing the attention on those findings that are relevant both for the linguist and the professional communicator. This is achieved by introducing theories and examples

¹ This paper is a result of the PRIN National Research Project: “Tension and change in English domain-specific genres” Fund # 2007JCY9Y9. Some of the ideas discussed here were outlined during the seminar course “Discourse Strategies in Contemporary English”, first semester of the Academic Year 2010-11. The author gratefully acknowledges the comments of students of the “Next Energy” working group and especially Matteo Ballero.

that will explain, in the light of cognitive science, the power of words in crisis situations. Words in fact have the power to create specific mental frames within a short time. The paper briefly outlines the main strategies for effectively creating and managing such frames.

The second part of the study is devoted to crisis communication and the way cognitive science can shape its techniques. The paper attempts to bridge crisis communication, discourse analysis and cognitive science using an empirical case: the so-called Deepwater Horizon oil spill. In April 2010 the American coasts of Louisiana and Mississippi witnessed “*the world’s largest accidental release of oil into marine waters*”². The Deepwater Horizon oil spill was a disaster of enormous proportions and its outcome will affect the Gulf of Mexico and the American Southern coastline for decades.

Parallel to the tragedy of the oil spill, the company in charge of drilling operations, British Petroleum (BP), faced a crisis of its own: part of the political community and large part of the public opinion in the US and worldwide pointed their fingers to the British-based energy giant, which was accused of cutting security costs for profits and of “covering-up” the extent of the spill³. BP, already damaged by the Deepwater Horizon oil spill itself, had to consider how to carefully draft a communication strategy in order to limit the damage to its business in the United States of America and in other parts of the world, by protecting its image and assets, summarised in the well known green and yellow “sunflower” with the payoff: “**Beyond Petroleum**”.

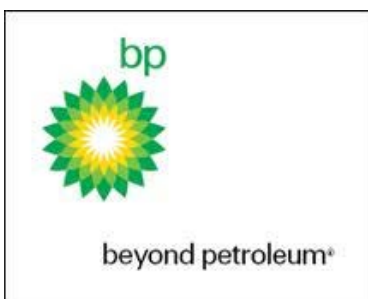


Figure 1 BP Logo with its 2001 pay-off

Finally, the study addresses the implications of such important findings for democracies and the role and responsibility of cognitive science, showing how cognitive science can help improve democracies. Having discussed the role of cognitive science in coping with a crisis, the study, in its conclusion, explicitly addresses its ideal audience: the democratic citizenry, since they should be particularly interested in the work of cognitive scientists and the ways their findings can be used.

² Robertson, C. and C. Krauss, C., *Gulf Spill Is the Largest of Its Kind, Scientists Say*, The New York Times, 2 August 2010.

³ Bigg, M. and J. Pelofsky, *BP Accused of Cover-Up*, Reuters, 20 May 2010.

I. Rewiring our brain

Lighthill (1973) described the state of academic research in the field of Artificial Intelligence. Since then, the paper became known as the “Lighthill report”, and in its commentary the term “cognitive science” was used and defined academically for the first time. Cognitive science was to be classified as “all those sciences which are directly relevant to human thought and perception” (Longuet-Higgins 1973: 36).

Nowadays, cognitive science is regarded as the interdisciplinary field of scientific studies that bring together neuroscientists, psychologists, linguists, anthropologists and sociologists. In fact, all these fields investigate the brain⁴ and the way it interacts with external factors from a particular point of view, trying, as I mentioned above, to “defragment” a fractured paradigm. It could also be referred to as the “science of the process of knowing” or the “science of the process of experiencing the outside world” as it aims at understanding how an individual’s brain changes physically according to the events a person experiences during his/her lifetime.

Since cognitive science is such a complex field of study, technology and money have always played a crucial role in shaping its development and major discoveries⁵. Scientists rarely focused their entire career on cognitive science, either because it was a novel and somewhat obscure subject or because it was time and money-consuming though with limited findings and funding. The use of brain imaging and computer modelling immediately seemed necessary to anyone who wanted to embark in serious research projects. However, the rise of dedicated scientific journals and societies soon came to involve a generation of young scientists deeply involved, dedicated to and with a genuine interest in cognitive science, who pioneered cognitive studies in their respective fields -- among them John Searle, Noam Chomsky, George Lakoff, Steven Pinker, Pascal Boyer, Joseph Henrich, Daniel Dennet and Douglas Hofstadter. In four decades they fundamentally *rewired* the way we think about our brain, leading to major revolutions in different fields, from linguistics to sociology, with a significant impact also on the way politicians rally their electorate and try to achieve consensus.

The understanding of how the brain works as a physical object installed in people’s bodies, the way it interacts with the neurons wired in them and the way external factors can *physically* change the brain itself, is indeed revolutionary. Lakoff believes that a “New Enlightenment” has

⁴ Of course the subject of study is the *human* brain. Whenever I use the word brain this meaning is intended.

⁵ Suffice it to say that fMRI (functional Magnetic Resonance Imaging), an expensive and sophisticated tool to analyse the brain’s physical reactions to stimuli, is a fundamental technology for this kind of research.

followed upon the findings of cognitive scientists, bringing about a new awareness which has deep sociological and political consequences (Lakoff, 2008).

II. The “new brain”

Owing to the work of Austin (Urmson, 1962) and its school, nowadays even the people with no specific background in linguistics recognise that a particular wording can change their perception of reality. By backgrounding A and simultaneously foregrounding B, the listener or reader will draw his/her attention to B rather than A; if the backgrounding is carefully engineered (Conoscenti, 2004) and stressed by transitivity, A will disappear from the reader’s/listener’s cognitive horizon. This is how spin doctors and ghost writers, exploiting linguists findings are now able to evoke different realities. However, since the introduction of scan technologies (CAT and fMRI) became available to the cognitive and linguistics departments, the picture dramatically changed – today, reality appears more variegated, yet more and more unified at the same time.

Through a series of experiments, scientists discovered that reason as theorised by the 18th-century Enlightenment did not exist. With the help of brain scanning and computer modelling, it was proven that 98% of brain activity is unconscious. This kind of discovery matches recent findings in Organic Physics, according to which, (Conforto, 2007: 8): “The Universe communicates with three different kinds of messages. These are the 3 **GEN** fields (**G**ravity, **E**lectroweak and **N**uclear) that link every visible single body to what is visible [...]. The Electroweak Force has two aspects: one is the electromagnetic (em) field that broadcasts images, [...] the other is the weak one, that moves all the nuclei and is responsible for those internal movements that we can perceive as emotions. The first aspect allows us to see only the visible universe (0.5%). The second aspect allows us to feel everything, even non-finite invisible worlds, those that have been named “supernatural”⁶.

The 18th-century version of reason believed – and for some still does persuasively – that people thought was conscious, universal, disembodied, logical, unemotional, value-neutral, interest-based, and literal (Lakoff 2008: 7-8). This understanding of the brain and reasoning was revealed fallacious by four decades of academic research pursued by cognitive scientists. The old Enlightenment vision is constantly replaced, bit by bit, as findings expand our knowledge on the topic, by a new one, in which words like “logical”, “unemotional” and “disembodied” have little meaning. The brain, in fact, works, as we said – 98% of the time – unconsciously. Its way of reasoning is determined and shaped by the connections with the neurons that wire the brain with the

⁶ My translation.

rest of the body. In other words the brain is embodied in the physical person and our thoughts are profoundly shaped by emotions as shown by Westen (2007).

To summarise, we consciously perceive with our brain only 2% of a 0.5% visible world: an interesting point to keep in mind when we try to understand why sometimes, as e.g. in crisis communication, everything seems to go wrong, or at least, not according to our expectations or planned scripts.

In 2005 Damasio proposed the somatic-markers hypothesis, a process that should explain the way emotions shape human behaviours and decision-making patterns. According to him, emotions are neurally linked to areas of the brain where decisions are made. Various experiments have been conducted in order to prove his hypothesis. These involved people with brain damages in the orbital and medial prefrontal cortex, which make them incapable of processing emotions. Faced with a decision-making task, their brain's inability to process emotions was considered the key reason why they were unable to decide consciously and reflectively among a number of choices. Furthermore their decision-making process was constantly changing. It appeared as if these people could not evaluate their same self-interest at different times. For Damasio, this is the proof that emotions are neurally bound to the decision-making process. In brief, he discovered that rationality needs emotions to function (Damasio 2005: 165-202).

Along with the role of emotions, the recent discovery of mirror neurons (Rizzolatti and Craighero, 2004), whose functioning is still largely unknown, is another of those findings that contribute to shape the “new brain”. These are neurons that fire when a person sees another performing an action, suggesting the brain of the former to act as the latter. Mirror neurons, e.g., are responsible for people crying while watching a movie where an actor is crying. It is not an empathic process; strictly speaking, it is a neural process in people's brains that makes them cry. The concept of a “neural mirror” is particularly powerful, since it is a process which is unconscious and automatic, but whose outcome could be determined.

The “new brain” is thus mainly *reflexive*, and not *reflective* as it was previously imagined. This is an important finding for crisis communication. People's actions, thoughts and understandings of reality are hence largely uncontrolled and automatic, but, to an extent, can be managed and programmed⁷. The revolution of the “new brain” is that “[it] makes decisions that you are not consciously aware of” (Lakoff 2008: 9). Ariely, a behavioural economist, calls this process “predictably irrational” (Ariely 2009), suggesting that the old way of understanding rationality is simply wrong. However, there is also another fundamental flaw in the 18th-century understanding of

⁷ Neuro Linguistic Programming has only partially demonstrated the potential (either positive or negative) of these discoveries (cfr. O'Connor and Seymour, 1995).

the brain: the brain was believed to be intact and consistent. Its *reality*, in other words, was considered to be fixed and unmodifiable.

III. Words that change reality, really!⁸

The “new brain” is not only largely unconscious, embodied into its body and emotions, it is also fluid and dynamic. Neuroscientists have in fact recognised that it is not only the perception of reality that changes according to what we hear or see, it is *reality itself*⁹. The brain is *physically* alterable and what people hear and see brings the change. Thus, it is important to understand the psycho-physical structures that the brain uses in order to think and categorise the world. Two of them are particularly relevant: neural binding and framing.

Neural binding is the process that connects one area of the brain with another, hence shaping complex ideas and symbolic images. For example, the brain understands a red cube-shaped box by connecting areas where the colour (red), the shape (cube) and the material (cardboard) are registered. “*Neural binding allows us to bring together neural activation in different parts of the brain to form single integrated wholes*” (Lakoff 2008: 25). Colour, shape and material converge together making red, cube and cardboard into a red cube-shaped box. If a certain neural path recurs often enough, then the binding becomes permanent or easier to form. As linguists discovered and spin doctors have since been practicing every day (Conoscenti, 2004; Luntz, 2007), repetitions are relevant in the process of shaping ideas.

Framing, on the other hand, is used to structure people’s thoughts.

Frames are the mental structures that allow human beings to understand reality—and sometimes to create what we take to be reality. [T]hey structure our ideas and concepts, they shape how we reason, and they even impact how we perceive and how we act. For the most part, our use of frames is unconscious and automatic—we use them without realizing it (Brewer, 2011: 22)

A frame is thus a series of scripts that the brain uses to understand the world. Each frame has characters, relations between them, a scenario in which they act, and a vocabulary. A frame’s vocabulary is called its “semantic field”. Fillmore (1977, 90) explained the concept of semantic fields in a simple way: “*Meanings are relativized to scenes*”, i.e., each word is physically wired to a frame in the brain. Thus, a specific frame activates a specific vocabulary, and vice versa. However, each brain has a different set of frames and a diverse set of semantic fields which depend on the culture and the society in which each person lives¹⁰. Thus, more generally, semantic fields and their respective frames depend on the environment. In fact, a human being is not born with a

⁸ This section’s title was inspired by Luntz’s book (2007) on manipulative language.

⁹ Once again, on this challenging topic cfr. all books by Conforto.

¹⁰ Also referred to as cultural encyclopaedia or encyclopaedic knowledge.



specific set of frames but quickly develops one because it is the tool that his/her brain uses to understand others. Lakoff (1996) has identified two main brain structures/metaphors that shape political public discourse in the U.S.A.. They are linked to the moral vision that informs politics by means of a progressive and a conservative mental structure/metaphor. Each group has a set of frames and semantic fields to which it reacts to and through which it is able to make sense of the world. Each individual is then part of a group and not of the other¹¹ because within her/his brain s/he has developed a specific set of frames which is activated in order to understand a public discourse or a proposed policy. The two structures/metaphors are based on the family frame, which is particularly relevant for politics, but articulated in a different way. While Progressives “enact” the “Nurturant Parent Morality” frame for example, while Conservatives “enact” the “Strict Father Morality” frame. Although stemming from the same basic metaphor, for the two sides “success”, “obedience” and “care” have very different meanings because these words are *relativized* to opposing scenes (Lakoff 2008: 75-94) according to the principle of *contested concepts* (Lakoff, 2008: 177-190).

Frames, semantic fields and neural binding are thus by-products of those brain processes which are responsible for developing ideas, making sense of the world and for taking action. Cognitive scientists have discovered how these processes can change the physical shape of the brain and how they are subsequently affected by a variety of stimuli. These bring change to the structure of the brain and its functioning, acting on synapses and neuron activation. Above all, they have discovered that words are *really* responsible for shaping the brain as if they were a *viral* software installed in such a peculiar hardware. From this tenet originates another interesting branch of investigation, *memetics*¹² (Dawkins, 1976; Blackmore, 1999).

IV. Words as triggers of “unexpected” and “uncontrolled” reactions

In order to physically change and generate frames and semantic fields, the brain needs to be stimulated. Although primary socialisation and education during childhood are vastly responsible for these brain structures, nowadays TV and Internet have a huge impact as well. This is so because these tools are able to endlessly replicate words and master narratives (Westen, 2007: 151-152, 301-305), thus creating frames and new semantic fields of reference within a short time. Furthermore,

¹¹ Nonetheless, Lakoff also acknowledges the existence of biconceptuals: people using a specific set of frames on one issue and its complete opposite on another topic. This is a feature exploited by President Obama in his political discourse which I discuss in Conoscenti (forthcoming).

¹² One of the tenets of memetics is that ideas are “installed” in the brain. Memeticians who consider the risks of an inappropriate use of these findings maintain that spin doctors “infect” and “inoculate” people’s brain with specific meme-complexes (cfr. Asher, 2006). See also note 14.



cognitive linguists have discovered that categorization and metaphors are particularly powerful in the actualization of this process.

Categories can be compared to neural “shortcuts” or “computer sub-routines of the main program” whose goal is to facilitate the brain’s work. These, combined with frames and scripts, quickly make sense of the surrounding world by means of interpretative schemata that together let reality emerge through a number of expected products¹³. The co-occurrence of these activities helps the brain generate ready-to-use sets of data to speed-up interpretation processes linked to specific “framed” situations and consequently deal, efficiently, with reality. This is so because, by developing categories, the brain structures its representation of the physical world by imposing its interpretative grids on it. Hence, categorical perception can be defined as a phenomenon in which “*physical qualities are warped in a nonlinear manner, transforming analogue inputs into quasi-digital, quasi symbolic encoding*” (Goldstone and Hendrickson, 2010: 65).

Thus, by imposing a certain categorization, an institution, a politician or anyone else is able to provide a shortcut interpretation for specific events (Luntz, 2007). While the creation of a category is a parallel process needed to frame an event, a policy proposal or, say, an ecological disaster, framing is the process of shaping and physically creating a reality – the frame itself – in the brain. Once it is appropriately embodied, “installed” or “inoculated” in its physical structure, this frame is hardly removable¹⁴.

An example of this dynamic is the way Neo-cons have framed 9/11 and its aftermath. Today, it is very difficult to escape certain frames and categories, even certain semantic fields, connected to that episode. Above all, “war on terror” has become the distinctive frame and “trademark” of that event, and the terrorists’ action that resulted in the fall of the Twin Towers in New York is called across-the-board an “attack”, even if this should / could be debatable (Westen, 2007: 349-376).

Metaphors are another powerful device to build a frame. A metaphor is usually considered as a figure of speech that constructs an analogy, a way of expressing an idea in terms of another. However, for cognitive linguists a metaphor is, first and foremost, a mental structure. Language is a way of expressing metaphors, yet metaphorical thought is independent of language itself as Lakoff and Johnson (1980) have demonstrated. “*Metaphorical thought is ordinary, and mostly*

¹³ These are the results of isotopic processes (Eco, 1992: 178-179, 1984, 1979).

¹⁴ The film *Inception* develops its screenplay around the concept of extracting and installing ideas in people’s minds. To do so, it quotes several linguistic studies in this area. My favourite one is: “(A) If you can steal an idea from someone’s mind, why can’t you plant one there, instead? B) Okay, here’s me planting an idea in your head. I say to you, ‘Don’t think about elephants.’ What are you thinking about? A) Elephants. B) Right. But it’s not your idea, because you know I gave it to you! The subject’s mind can always trace the genesis of the idea” (*Inception*, 2010, 19’30”-19’47” quoting Lakoff, 2004). As we will see, in the light of the findings discussed, B) is rather optimistic as far as the ability of tracing the genesis of an idea is concerned.

unconscious and automatic” (Lakoff 2008: 82), i.e., it is a process by which different areas of the brain that elaborate different concepts (temperature, direction, quantity, etc.) connect to acknowledge and make sense of a fact. When these areas of the brain fire at the same time, their neurons wire together and create a neural circuit which models, and even physically shapes, an idea in terms of the interested areas. The brain acts like a muscle, reinforced by specific training activities – the use of metaphors in this case – and thus is able to understand quantity in terms of verticality – prices are rising – or affection in terms of temperature – a cold person and so on.

The process of forming a neural metaphor is called “neural recruitment”: when neurons are activated and wire together forming a single circuit, each time the same circuit is at work their synapses grow stronger and stronger. When the circuit is strong enough – strength in neuroscience measures the number of chemical receptors for neurotransmitters at the synapses – it becomes a neural metaphor. By strengthening a certain metaphor, a circuit is reinforced, i.e., a set of neurons constantly fire and link together with ease. As we have seen, a metaphor is a powerful tool in the frame creation process. Moreover, if a set of metaphors is appropriately constructed in the target audience’s brains, a complex and deep frame will be constituted and it will make sure that audience will understand certain events or policies or declarations from the desired point of view (Lakoff and Johnson 1980: 103-114)¹⁵.

The findings from the field of cognitive science so far presented in this study show how their combination with specific linguistic strategies is fundamental to shape any would-be efficient communicative strategy. It should now be clear that, since most of the brain’s activity is unconscious, tapping such a large chunk of neural activity gives an incredible power over a target audience. To highlight these structures, which most people harbour unconsciously, Lakoff and Johnson (1980) showed through their research the most common and yet hidden metaphor: argument-as-war. Although it is used in everyday life, this metaphor is hardly conscious; moreover its effects are rarely grasped. Sentences like “your claim is *indefensible*”, “I *demolished* his argument”, “Do you disagree? Then, *shoot*” are common utterances which let emerge the argument-as-war metaphor. *Losing* an argument is thus interpreted as a sign of weakness, while *winning* an argument means victory over and embarrassment for the *enemy* (Johnson and Lakoff, 1980)¹⁶.

We have seen how neural categorization, neural recruitment, metaphors, semantic fields and frames structure people’s everyday life and their world’s experience in unexpected ways, most of

¹⁵ See, for a practical example,

http://www.alternet.org/economy/150826/thanks_to_decades_of_conservative_spin%2C_americans_are_hopelessly_confused_about_taxes%2C_spending_and_the_deficit/?page=1

¹⁶ A similar observation was made by Terzani (2004), who observed how most of the terminology in cancer therapy is linked to a cure-as-war metaphor.

them unknown to public opinion. Cognitive science aims, ultimately, at making reflective what is reflexive, seeking what is hidden in people's brain activity and generating awareness about these complex unconscious processes. According to Lakoff (2008), Westen (2007) and Brewer (2011) Progressives – either politicians or citizens – should read about these discoveries in order to make sense of the world on their own. On the other hand, communicators should learn from cognitive science how to advance a certain worldview that favour their employers, although an ethical behaviour and awareness on the use of these techniques must be maintained. This important point will be raised here and discussed in the *Conclusions*. The second part of this study uses the Deepwater Horizon oil rig explosion and the BP counter-communicative strategy as a case study.

V. Crisis communication in times of neuroscience

Crisis communication is a sub-area in the profession of public relations and a relatively new field of research¹⁷. A crisis manager is a professional figure who intervenes to protect an individual, a company or an institution from a challenge to its reputation, business or activity. Although crisis communicators are now employed more frequently, given the structure of the modern media system, wherein crisis is a constant feature of journalism, real crises are rare. For the purposes of this study, a crisis will be defined as a situation in which the normal behaviour of an individual, company or institution is in danger. If a politician is involved in an alleged scandal, a crisis communicative strategy should be employed. If a company undergoes a particularly large lawsuit that might threaten its relation with the customer base, a crisis manager should step in. If a public institution is accused of mishandling a certain task, its board of directors might want to employ a crisis communication expert to avoid public outrage.

As mentioned earlier in this study, cognitive science offers crisis managers hints for crafting efficient statements and press releases. By using the right vocabulary, the external relation officer of a company is able to evoke a certain frame in the target audience. This, in turn, could suggest a feeling of trust in the company itself, downplaying what was threatening the company in the first place. Additionally, a certain metaphor could be employed in order to shift the attention of public opinion, effectively shaping its *reality*, i.e., its brain. By understanding how the brain works and develops ideas, the crisis communicator is able to face a scandal, downplay a bad earnings report in front of investors and shareholders, build up confidence where it might lack and structure people's thought the way s/he wants.

¹⁷ For a quick outline of this area of research visit the website of the Institute for Public Relations at <http://www.instituteforpr.org/topics/crisis-management-and-communications/>. Besides plenty of useful hints for a reflection on the problems of crisis communication an interesting annotated bibliography is offered. For further information also visit <http://www.e911.com/monos/A001.html> and <http://www3.niu.edu/newsplace/crisis.html>.

A crisis is by definition something *extraordinary*, something which is not expected, or, in Eco's terms (1992: 178-180; 1984; 1979) a product that is not foreseen by the isotopy at work and thus generates an *emergent* product instead of an *expected* one. The role of the crisis manager is to turn the unexpected / emergent into an expected product and "craft an effective communicative strategy"¹⁸. There are many examples of good crisis management are many, although examples of a mishandled one are even more numerous. The case of the Virgin train crash in the UK in 2007 is a typical case study of how important and relevant a well-shaped strategy for facing a crisis might be. On Friday 23 February 2007, a Virgin train travelling from London to Glasgow crashed near Kendal, Cumbria. The derailling killed one person and injured five. Virgin is a relatively new company which is expanding its transportation business across the world. Its chairman, Sir Richard Branson, has built his world player company in the transportation sector by stressing its technological advancement. The business plan of Virgin "sells" the company, in marketing terms, as technologically advanced and safe. In the UK, a very important market for Virgin, the crash could thus have had a huge impact on the company's future.

Virgin, however, had planned a communicative strategy in advance, should a crisis happen, and knew what to do. Branson immediately came back from his holidays and appeared on the scene of the crash. In his numerous public statements he seemed very emotional and yet positive. He thanked the train driver and described him like a hero, playing the "Hero frame" thus evoking positive feelings in the public (Westen, 2007: 256-282). He also stated that an older train would have injured more people. The crisis turned out to be a "success" for Virgin. Simon Kellner, editor-in-chief of *The Independent*, described Branson's handling of the crisis as "*genius PR. [...] Branson turned a potentially reputation-damaging incident into an example of best practice crisis communications*"¹⁹.

VI. BP: Beyond Petroleum

On 20 April 2010, the Deepwater Horizon oil rig exploded in the Gulf of Mexico killing eleven people and injuring seventeen others. The rig was soon evacuated and started slowly to sink. The explosion was the result of an oil gusher on the sea floor which resulted also in an oil leak at sea floor level. The leak was to be stopped only three months later, when British Petroleum, the leaser of the rig, finally sealed it. American authorities estimate that 4.9 million barrels of oil were

¹⁸ Losada Diaz, J.C., *The Strategic Communication of hijackings: some lessons from how the Spanish government managed the crisis of the Alakran*, International Political Science Association, Research Committee for Political Communication RC22, 4 November 2010.

¹⁹ <http://www.communicatomagazine.co.uk/archive/65-june-2009/326-masters-of-disasters>, 26 June 2009.

leaked into the ocean causing immense damage to the fauna and flora of the Gulf of Mexico and to the coasts of Louisiana and Mississippi.

Before analysing the crisis and its management, I summarise some key-facts about British Petroleum p.l.c., the London-based energy giant and leading actor in the crisis. BP is the third largest oil and gas company in the world and the sixth largest company in terms of revenues. BP is involved in every aspect of the energy sector from exploration to production, from refining and distribution to marketing and trading, and its operations spread across the globe in over eighty countries. BP America, at the time of the oil rig explosion, was the largest division and the biggest producer of oil and gas in the USA. BP is a public listed company and its primary listing is on the London Stock Exchange (LSE).

In 2001, BP adopted the pay-off “Beyond Petroleum” in a communicative move that would soon involve the entire oil industry to advertise itself as more-than-just-an-oil-company. The green movement had become increasingly popular and in the early 2000s scientific proof of greenhouse gas emissions endangering the environment and human health had started to be published on popular newspapers and journals. Oil companies, like BP, and the car industry based on petroleum, were being pressured to invest in clean technologies. BP, like any other major energy company, rebranded itself (Westen 2007: 146, 165, 168, 217) – reframed its image – and started a public campaign to safeguard its reputation.

VII. A crisis and its numbers

A natural disaster is made up of numbers: victims, damage in terms of square meters of burned forest, people made homeless, to name a few. Numbers are an orderly and neat way of expressing something that is extraordinary and chaotic. Figures are essentially a type of categorical thought, they are a neural shortcut for understanding an event, which is so vast and confused that it needs some interpretative grid to be made acceptable to public opinion, and their brains, within a short time. Analyses and qualitative reports are good in the long term, but in the short term people need numbers, a gross figure, to compare what has just happened with what happened before. “It is the strongest earthquake in the last fifty years” is a sentence which is built on numbers and helps people make sense of an earthquake. People could then contextualize what happened with stories of their grandparents or with newspaper articles of that period. Basically, numbers help the brain to store the event in the short term.

The figures²⁰ for the Deepwater Horizon oil rig explosion involve the oil leaked on the seafloor (4.9 million barrels), the number of victims (11) and injured people (17), square meters of ocean involved (180,000), the area for fishing closed by federal authorities (36% of the Gulf of Mexico federal waters). As already stated, this study will focus on the crisis that BP had to face starting from 20 April 2010. The figures above involve those mentioned before, yet they also include those related to the company itself. In just over a fortnight, BP lost £19.5 billion of market capitalization. Its share price, which on the eve of the explosion was trading at £642.50, on 4 May had lost 14% of its value to £558 (see figure 2). By June, BP share price was half of its value before the explosion, a huge financial disaster for the London-based company²¹.



Figure 2 BP Shares value at London Stock Exchange during the period observed in this paper

Not to mention the probability, which on 14 June seemed quite a certainty, that “BP Plc may lose control of its U.S. oil and natural gas wells and be barred from doing business with the federal government as punishment for the worst oil spill in U.S. history”²².

The energy company had to face one of its toughest crisis since its founding in 1909, when it was called the Anglo-Persian Oil Company. When the Deepwater Horizon oil drilling rig, owned by Transocean Ltd., a Swiss company and one of the world’s largest offshore drilling contractors, and leased to BP, exploded, the London-based company fell short, to the public eye, on its promise to move “beyond petroleum”. Thus, this study will focus on the communication response given by BP and it analyses official press releases and statements available on the BP website. The timeframe has been set from April 20th to May 1st, when BP finally started to employ social media in its crisis management²³.

²⁰ The figures quoted here and below are from BP website and/or from the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling under the Oil Spill Commission.

²¹ Financial analysis by the author elaborating Bloomberg and LSE figures.

²² Efsthathiou, J. and J. Plungis, *BP May Lose U.S. Oil Leases, Contracts After Spill*, Bloomberg Businessweek, 14 June 2010, <http://www.businessweek.com/news/2010-06-14/bp-may-lose-u-s-oil-leases-contracts-after-spill-update3-.html>.

²³ For an interesting example of the impact of social media on the specific issue, visit the Environmental Law & Climate Change Law Blog at <http://taberlaw.wordpress.com/newsletters-archive/environmental-and-climate-change-law-newsletter-vol-2-no-17-june-21-2010/>. It also lists the newspaper article quoted in note 21.

VIII. Working Hypothesis and Methodological Procedure

BP is a huge corporation and as such it should be well-prepared to face a crisis which might influence its public image and its business. However, a natural disaster where oil is involved is particularly tough to face and the challenge BP external relations department had to win was paramount. My hypothesis, derived from the observation of the communication enacted by the company in the weeks after the explosion, is that BP's communicative strategy was crafted in order to pursue two main objectives: 1) defending the company's public image by any means necessary; and 2) reassuring the authorities and the financial community on its ability to seal the oil well. This working hypothesis is tested here against the official statements and press releases as reported on the company's website. These are analysed in parallel with and against what *The New York Times* (NYT) and *The Guardian* (TG) reported during the timeframe selected. The two newspapers were selected because they are considered quality press and read by millions of people and they do not have, at least publicly, interests of any kind in BP p.l.c. Furthermore, since TG is a British newspaper, TG articles are analysed as the *local* voice for BP, while the NYT is the *local* one for the crisis.

IX. Missing the chance of being the “good guy”

On 20 April 2010, troubles start underneath the Deepwater Horizon drilling rig when at 10 pm the methane gas is shot up, all the way from the seafloor to the semisubmersible platform, where it ignites and explodes. At this late hour, no reports or statements are filed. No one reports anything until the day after when Transocean, the owner of the drilling rig which is leased to BP, reports that a “fire” has occurred on Deepwater Horizon and “a substantial majority of the 126 crew is safe but some crew members remain unaccounted at this time”²⁴. This statement generates two articles on the NYT and TG. They witness that, while Transocean has already produced a press release and a spokesperson is on the ground to safeguard the Swiss company's reputation, BP is still in a “business as usual” status. The result is that the NYT reports a declaration by Robert MacKenzie, managing director of the energy and natural resources group of FBR Capital Markets, who says that he cannot recall another accident like this one²⁵. The event is already labelled as *extraordinary* in people's brains.

A specific story is always recalled when natural disasters occur, especially those regarding an oil company. People already have a well framed master narrative available based on the Exxon Valdez and the Amoco Cadiz oil spills. These were huge ecological disasters well-remembered by

²⁴ BP press releases and statements quoted in the paper are from its website: www.bp.com.

²⁵ Robertson, C., *Search Continues After Oil Rig Blast*, The New York Times, 21 April 2010.

public opinion. In this specific frame for the master narrative, an oil company plays the enemy, the guilty one, that is responsible for the crisis. BP does not respond immediately to the danger of being framed as the “enemy” and this will have far reaching consequences.

In the same NYT article, BP is indicated several times as the company that has run Deepwater Horizon since 2007, while Transocean is quoted only once when details of the oil rig are spelled out. TG underlines even more directly the role of BP p.l.c., while Transocean is referred to only once at the end of the article. According to the cognitive linguistics principles discussed in the previous sections, the event, a few hours after the explosion, is already framed in people’s brain with a specific “enemy”: British Petroleum.

X. BP’s strategic positioning

The risks of the situation, from a communicative point of view, are quickly realized by BP press office in London that generates a press release trying to reverse the frame imposed by the earlier statement of Transocean and the two articles. The press release titles: “BP offers full support to Transocean after drilling rig fire”. The message is clear: BP tries to state the principle that Transocean is the company actually running the rig and thus they should be called the “enemy”. Furthermore, Anthony Brian “Tony” Hayward, CEO of BP at that time²⁶, states that “[BP’s] concerns and thoughts are with the rig personnel and their families”.

On April 22nd, the sense of what is about to happen is evident at BP. The company fully realises that a catastrophic event, especially concerning oil, is a powerful event in people’s brains. Furthermore, its management is well aware that the first message that was passed onto public opinion was “BP is massively involved”. The company’s reputation and business are at stake. The day after, Leslie Kaufman publishes an article on the front page of the NYT website with an evocative picture of the smoke coming from the platform in the Gulf of Mexico. These kind of images are a typical element of the crisis master narrative as they activate specific semantic fields and reinforce the vocabulary of the frame itself. The article does not mention Transocean, while it refers to BP several times²⁷. BP has to plan a massive and effective communication campaign within a short time, since its first strategy of counter-attacking Transocean and blaming them as responsible for the event has clearly failed.

On April 23rd, the US Coast Guard declares the end of search and rescue operations for the eleven men missing. “Reasonable expectations of survival have passed”. Even worst, the Deepwater Horizon drilling oil rig sinks, and TG states that an environmental disaster is very probable: “The

²⁶ He was replaced by Bob Dudley on 1 October 2010.

²⁷ Kaufman, L., *Search Ends for Missing Oil Rig Workers*, The New York Times, 23 April 2010.

sinking of the Deepwater Horizon could release more than 1,135,600 litres of crude oil a day into the water. The environmental hazards would be greatest if the spill were to reach the Louisiana coast, about 50 miles (80km) away”²⁸. The British newspaper is very dramatic (some might say realistic) in picturing a catastrophic situation “in the making”.

Consequently, the unfolding BP communicative strategy that unfolds focuses on three key-points: 1) be actively present on the ground with high ranking representatives of the company; 2) be very open with the public and the media, answer as many questions as possible, produce as many statements as possible in order to “flood” the newsrooms; 3) focus the media and public attention on the efforts of BP. Nonetheless, the role of the “enemy” is inevitably already stuck on BP. On April 26th BP is called by TG the “bad boy”²⁹. In a short time this attitude will be confirmed by the viral advertisements spread on the web³⁰.



Figure 3 Sample of viral ad depicting BP as the Bad Guy

XI. BP is (almost) everywhere: the first victory of BP

The idea behind BP’s strategy is to be everywhere: everywhere in terms of effort and commitment to stop the oil spill, everywhere in terms of public relations. Tony Hayward declares BP is “determined to do everything in its power to contain this spill and resolve the situation as rapidly, safely and effectively as possible”. The presence of the company’s CEO is especially important throughout the entire crisis: being the public “enemy”, BP wants to reassure the public that is taking public responsibility (not to be confused with legal responsibility in front of a court) and its highest ranking manager is the right person to do this. Unfortunately, this attitude will be interpreted by public opinion as an admission of guilt within the enemy / felon narrative BP has been framed in since the beginning of the crisis.

²⁸ Associated Press, Deepwater Horizon Oil Rig Sinks, Sparking Pollution Fears, Guardian, 23 April 2010.

²⁹ Webb, T., *Oil Rig Sinking Puts “Bad Boy” Industry in Spotlight Again*, The Guardian, 26 April 2010.

³⁰ Viral advertisement refers to marketing techniques that use pre-existing social networks to produce increases in brand awareness or to achieve other marketing objectives (such as product sales) through self-replicating viral processes, analogous to the spread of viruses or computer viruses (http://en.wikipedia.org/wiki/Viral_marketing). In this case net surfers used the principle to convey the idea of the “bad guy” narrative.

The problem is that people are somewhat resistant to messages coming from institutions. The personification of a political party in its leader exemplifies the need for a company's CEO to be "out there" during a crisis: people need to have a person speaking for a company because for the brain is easier to remember a message uttered by a personified entity than from an abstract one in the form of an aseptic press release or an undefined quote in a newspaper article. This is the reason why Tony Hayward is immediately sent to the ground operations, instead of the spokesperson. Unfortunately the personification of an institution is also the mechanism responsible for Hayward's loss of his job as CEO. Since the company was personified through him, his firing creates the message that the company has taken full responsibility. This changes the nature of the crisis itself and reinforces in public opinion the perception of BP being the felon. In fact, not only this specific event would happen on October 1st, too late to repair an erroneous perception, but the CEO's resignation, once again, conveys the wrong message. If the BP spokesperson had been fired, the message would have been "we made a mistake in our communicative strategy". With this move, instead, the message is "We are guilty"³¹. This is a communicative "suicide" soon well interpreted by viral advertisers.



Figure 4 Communication as a weapon against BP's CEO

Besides Tony Hayward's presence, the press office starts to produce a series of lengthy press releases. While the first press release counts 171 tokens, from April 24th onwards the average size is of 500 tokens and each one includes two or more statements by Tony Hayward or members of his staff. By being over-communicative with the public, the company would like to be able to set the agenda and determine the messages that journalists report to their readers. Initially, the strategy seems to work. In fact, both TG and the NYT publish less catastrophic articles. TG accepts the spun version of BP's strategy and publishes an article where every quoted statement about the situation is optimistic: "It doesn't seem to be spreading", "It *could* have the potential to be a major oil spill"³².

³¹ This seems to be a peculiar attitude of British companies. In 2004, as a result of the Hutton Enquiry on the sexed-up dossier on WMDs, Director-General of BBC, Gregory Dike, resigned, while, on the political side, PM Blair remained "untouched" by the enquiry. Alister Campbell, his spin doctor resigned taking responsibility for the event upon himself. I discuss the implications of this affair in Conoscenti, 2004: 207-214.

³² Goldenberg, S., *Deepwater Horizon Clean-Up Workers Fight to Prevent Disaster*, The Guardian, 23 April 2010.



The latter is quoting *verbatim* from a BP press release and it is a declaration of BP's vice president David Raine. The process of reassuring public opinion is central to BP. Its management is probably well-aware of the major impact that the spill is going to have on the Gulf of Mexico. Furthermore, the strategy adopted by BP acknowledges, although in an off-the-record way, the fact that it is going to take some time before the spill is sealed. This is so because BP needs a *quiet* public and wants to avoid a 24/7-type of crisis that could threaten its business and its share price for months. However, although the number of articles at the beginning of the crisis was to be considered normal for an oil spill (one article a day), on April 29th the Coast Guard declares "5,000 barrels a day of oil are spewing in the Gulf of Mexico, that is five times more than previous estimates"³³. A new phase of the crisis is introduced by newspapers: several articles, written by different journalists from different points of view, are published every day. Viral advertisers are also very active and it seems they are able to anticipate, or at least to surf, the information flow and the unfolding events as shown in Figure 5.



Figure 5 Viral ad reframes BP pay-off and statements on the crisis

The 24/7-crisis clearly commences on April 30th when both the NYT and TG start to publish editorials on the crisis and, more generally, on the oil industry. Yet, the crisis starts to be called "the Deepwater Horizon disaster", marking the first success of BP communicative strategy. Given the flow of events it could have been easily labelled "the BP disaster". This will prove to be the only success in the BP communication response to the crisis.

The removal of BP from the name of the crisis is due to the massive amount of details revealed by BP on the oil rig which, as a consequence, becomes part of the vocabulary in the news, shaping reality in a different way. An oil platform is a specific structure in the oil industry and it is very sophisticated. Hence, by detailing its functions, the press office introduces a complex element into the semantic field of the frame. Furthermore, using repetitions, BP reinforces the neural binding between the soon-to-become disaster and "Deepwater Horizon", thus creating a neural label for the crisis: "the Deepwater Horizon disaster". BP also tries a last attempt to blame Transocean

³³ Gabbatt, A., *Gulf Oil Spill "Five Times" Larger Than Estimated*, The Guardian, 29 April 2010.



adding to the label “Transocean”, but that is unsuccessful and quickly dropped out. While the former strategy is evocative, the latter is too generic in cognitive terms.

XII. The war

The disaster became inevitable in the last three days of April 2010, thus forcing BP, once again, to change its communicative strategy. Facts and figures provided by the Coast Guard, by government agencies and local authorities of Mississippi and Louisiana are appalling. At this point the master narrative of the crisis has a clearly identifiable enemy, BP, and a storyline: the explosion of Deepwater Horizon is damaging the environment and endangering the economy of the American coast by pouring thousands of barrels of oil a day into the ocean. BP gets ready for a long war by *going to war*. It starts to use a vocabulary which is not usually adopted in the *natural* crisis related frames, but has been adopted in a rather famous crisis of the last decade: the War on Terror. “Escalation”, “attacking”, “action-plan”, “aggressively move forward”, “deployment”, the press office starts to use terms usually employed by the US government when speaking about Iraq and Afghanistan. BP neurally links itself to these words and suggests a semantic connection between its alleged loyalty and patriotism and the US government’s attack on its behaviour and lack of capacity to solve the problem. The desired outcome, at least theoretically, is to have the company recognised as investing all its efforts *for a better America*³⁴.



Figure 6 White House Website Banner during the Deepwater Horizon Crisis

Using the war-as-argument metaphor also allows BP to pour in its press releases a massive amount of figures (vehicles employed, people involved, etc.) as if they were speaking of a surge that it is going to improve the situation. Numbers are also matched with pictures that make the figures visible, tangible and thus easily remembered by the brain. They also perfectly fit in the choice of frame. At this point, TG and the NYT are covering the event with an endless 24/7-crisis news cycle. Numbers and pictures start to get through journalists’ checks and into their articles. Nevertheless, on April 30th Robert Passikoff, founder of Brand Keys and author of the Customer Loyalty Engagement Index, declares that in just over a week “BP has gone from being No. 1 in its

³⁴ This will be an important element by the end of May, when BP will be able to share the blame with the Obama administration for its handling of the crisis.

category in our brand loyalty index to dead last³⁵: a shock for a customer-based enterprise that goes far beyond its intention of controlling the news flow and well interpreted, once again, by viral advertisers.



Figure 7 When events go further beyond BP's control

XIII. Reasons of a communicative disaster

On May 1st BP finally realizes that social networks are the real threat. BP America owned an account on Twitter even before the crisis. Its use was limited to four messages a month, making it hardly recognizable or noticeable on the map of net surfers. During the first ten days of the spill, the use of Twitter changed slightly and it was not until the beginning of May that BP started to use social networks systematically. Its inability to recognize what was happening beyond traditional media is a key to BP's unsuccessful attempt to reframe the crisis. All the viral images used in this paper were collected from several social networks.

I decided to conclude the present analysis of BP communicative response to "the Deepwater Horizon disaster" at the beginning of May. This is when BP starts to massively use its Twitter account, opens a Facebook page, and increases its overall presence on the web.

This study is meant to investigate the immediate response of BP from a communicative point of view in order to underline the strategies and the problems faced in the early framing of such a sensitive communicative situation. A professional communicator with a background in cognitive linguistics and social networks might have helped BP to craft a better and more efficient response. Indeed, this paper argues that findings in the field of cognitive science are still largely unknown to the public and even to press offices of large companies.

The study also argues that, above all, the concept of framing and its privileged sphere of application, i.e. social networks instead of traditional media, are the most important elements that should have been considered by the press office of the London-based company. This lack of understanding led to a communicative strategy that was badly timed and poorly targeted. Its consequences were clearly spelled out by Robert Passikoff, when he stated BP's position in his

³⁵ Mahoney, S., *BP's Woes Illustrate Risk of Green Branding*, Marketing Daily, 30 April 2010.

Company Loyalty Index, and by the investors' community at large who, by May 4th, had sold BP shares with a loss of market capitalization of £19.5 billion. Once a champion of the green revolution in the oil industry, BP has now to face a steep ride in order to gain back the trust and the confidence of customers and public authorities. A week after the extent of the oil spill was revealed to the press, the branding expert Linda Merriam said: "The much-admired green sun BP brand died this week. [...] This shows [to the public] they are just like any other oil company"³⁶. The "Beyond Petroleum ad" was a reframing strategy adopted by BP early in 2001 in order to gain a larger market share and to better position itself on the stock market where it is traditionally difficult for oil companies to improve their standing. Today BP knows that, in order to reframe the company's perception in the eyes of public opinion, from being the "enemy" in the "Deepwater Horizon disaster", into an acceptable master narrative, it will take a long time and a lot of *cognitive* knowledge.

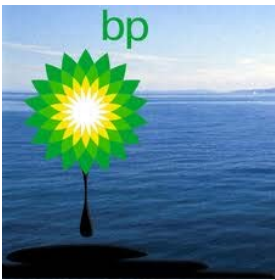


Figure 8 Reframing an antagonist master narrative takes time

CONCLUSION: Cognitive Democracies

This study has briefly described the impact that recent findings in the field of cognitive science could have if applied to the area of crisis communication. The study of people's brains and behaviours is multi-faceted and complex. Cognitive scientists are offering an innovative approach that can help to better understand what happens when we interpret specific events. The implications of a proper understanding of mirror neurons, their link with the semantic fields and neural categorizations, through metaphors and frames, are immense and should be of interest to any person, any professional, any organization, whatsoever. This paper has focused mainly on the implications cognitive science has for business activities and their ability to face a crisis. However, one further aspect deserves to be highlighted. Cognitive science should be of particular interest and concern to the democratic citizenry, as cognitive science unveils the way voters vote, the way consumers consume, the way politicians and businessmen speak to their audiences and the ways audiences respond. A truly democratic life is one in which people are not only able to speak and move freely, but also able to understand on their own world events, as catastrophic as they might

³⁶ Mahoney, S., *BP's Woes Illustrate Risk of Green Branding*, Marketing Daily, 30 April 2010.

be, without being framed by a skilled spokesperson. The cognitive processes discussed in this study are very similar to spinning techniques. These can be said to be the use of language to deceive, especially to avoid political embarrassment or to accomplish underhanded political purposes. Spinning happens to use framing because of how thought is structured and words work. But framing in general entails the use of our mental structures to comprehend the world, to reason, and to form the basis for the use of language. Spinning, on the other hand, is a rhetorical manoeuvre used to conceal the truth. It is used to direct our attention away from key elements or data that the communicator does not want us to see. Spinning could thus be classified as a deceptive action and is about creating a message that appeals to people who might disagree with the speaker's real intentions. The goal is to tell people what they want to hear in a manner that persuades them to agree with you. This often includes being two-faced and saying different things to different people. Drawing from the examples discussed here we can say that, by establishing a frame and the frequent repetition of words or concepts, the communicator is able to focus our attention on a specific topic and distract what we believe to be our rational thinking from other topics. We could say that the first person/actor to speak about a specific issue imposes a frame/narration, i.e. a particular point of view on a given event or topic, and its relevant terminology. Once this cognitive and strategic primacy is established, the others (or opponents), if engaged in a (political) discussion, or competing narration, are unconsciously forced to repeat the same frame, reinforcing it, although they are against it. The only way to get out of this loop is by putting the same concept in a distinctive perspective, i.e. a reframing process. This is what viral advertisers understood at the time of the crisis and that is why they were so successful, since the "enemy" did not realise they were acting on another front: the social networks one.

Many cognitive scientists are devoting their careers to *democratize* the cognitive knowledge, nonetheless many more work for business enterprises and politicians. Thus, it is our duty, as citizens of a democracy, to be informed, to study and to read what cognitive scientists are discovering in order to unveil the hidden messages. Indeed, cognitive science is potentially empowering, because it gives the democratic citizenry a tool to be truly democratic.

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