

## A cognitive linguistics approach to the rhetoric of damage control: B.P.'s oil spill and the E.P.A.'s strategy of communication

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**Abstract:** Based on a cognitive-rhetorical approach, the author pursues her line of research as defined in past publications, i.e. applying the tools of cognitive linguistics to analyze the main rhetorical devices at work in American environmental policy discourse (BONNEFILLE, 2012, 2011, 2009, 2008). This article undertakes a discourse analysis of four official documents, in order to shed light on the strategies called upon by official sources to keep the American citizens, as well as the rest of the world, informed about the 2010 oil spill in the Gulf of Mexico and its aftermath. An official site, *RestoretheGulf.gov*, was created by the Environmental Protection Agency soon after the catastrophe occurred and three of its postings are analyzed here. The fourth document of the corpus corresponds to a confidential email written in May 2010 by Marcia McNutt, head of the scientific team which was dispatched to the Gulf of Mexico by the Department of Interior to evaluate the damage caused by the 2010 oil spill. The email was obtained under the Freedom of Information Act by Greenpeace and, once publicly released, disclosed to the world that the scientific team had been asked by the White House to underestimate the damage. Analyzing the linguistic data in the selected documents enables us to highlight the mechanisms of representation used both by the E.P.A. and by Marcia McNutt and, more broadly, to describe some aspects of the communication strategies at work in the field of environmental issues.

**Keywords:** cognitive rhetoric, 2010 oil spill, greenwashing.

**Resumo:** Baseada numa abordagem retórico-cognitiva, a autora desenvolve sua linha de pesquisa, tal como definido em publicações anteriores, isto é, aplicando as ferramentas da linguística cognitiva para analisar os principais recursos retóricos que atuam no discurso da política ambiental americana. (BONNEFILLE, 2012, 2011, 2009, 2008). Este artigo realiza uma análise do discurso de quatro documentos oficiais, a fim de esclarecer as estratégias convocadas por fontes oficiais para manter os cidadãos norte-americanos, assim como o restante do mundo, informados sobre o vazamento de petróleo de 2010 no Golfo do México e suas consequências. Um site oficial, *RestoretheGulf.gov*, foi criado pela Agência de Proteção Ambiental<sup>2</sup> logo após a catástrofe e três de suas postagens são analisadas aqui. O quarto documento do corpus corresponde a um e-mail oficial escrito em maio de 2010 por Marcia McNutt, chefe da equipe científica que foi enviada ao Golfo do México pelo Departamento do Interior dos Estados Unidos<sup>3</sup> para avaliar os danos causados pelo vazamento de petróleo de 2010. O e-mail foi obtido sob o Ato de Liberdade de Informação<sup>4</sup> pelo *Greenpeace* e, uma vez liberado publicamente, revelou ao mundo que a equipe científica havia sido encarregada pela Casa Branca de subestimar os danos. Analisar os dados linguísticos nos documentos selecionados nos permite destacar os mecanismos de representação usados tanto pela E.P.A., quanto por Marcia McNutt e, mais amplamente, para descrever alguns aspectos das estratégias de comunicação atuantes no campo das questões ambientais.

**Palavras-chave:** retórico-cognitivo, vazamento de petróleo de 2010, *greenwashing*.

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2 *Environmental Protection Agency (E.P.A.)*

3 *U.S. Department of The Interior*

4 *The Freedom of Information Act (FOIA)*

“The power of the presidency rests in its ability to persuade. And that power of persuasion rests in access to the media and the ability to shape reporting.” (SIBERSTEIN, 2004, p. 3)

## General introduction

At a time when climate change and the degradation of the environment are often cited in the mass media, and in a global context where countries are striving to set up a transition towards clean energy, which would ideally imply a drastic reduction in the consumption of fossil energy, the present paper’s aim is to zoom in on the discourse strategies adopted in the political sphere of environment and pollution.

As a cognitive linguist<sup>5</sup>, we intend to demonstrate that due to a huge number of economic parameters, processes of propaganda and, largely put, greenwashing (Greer & Bruno, 1996) are frequently called upon by political actors to represent environmental issues, hence leading to contradictory political positions which may somewhat confuse the public as to how genuinely the topic of pollution and degradation of the planet is being tackled in 2012. This piece of research’s main interests are therefore (i) to describe how the aftermath of the oil spill is being conceptualized on the part of the Obama Administration as well as (ii) to sketch out the type of multi-faceted discourse analysis a cognitive-rhetorical approach can offer.

### *Contextualizing the data*

On April 20, 2010, B.P.’s Deepwater Horizon oilrig exploded in the Gulf of Mexico, killing 11 workers and unleashing the world’s biggest accidental release of oil into marine waters. Two months later, while the spill was still expanding, President Obama delivered his very first Oval Office speech whose exordium stated that this oil spill was “the worst environmental disaster America has ever faced”<sup>6</sup>.

In January 2012, two years after the explosion, and while the cleanup operation was still being processed, *Mother Jones*<sup>7</sup> came back on a confidential email written in May 2010, and obtained by P.E.E.R. under the Freedom of Information Act a year before. This email was

<sup>5</sup> The author would like to thank her colleagues Prof. Ritaine (Sciences-Po, Bordeaux) and Prof. Grandjeat (Bordeaux 3) for their constant help and support towards this piece of research.

<sup>6</sup> <http://www.whitehouse.gov/the-press-office/remarks-president-nation-bp-oil-spill>

<sup>7</sup> <http://www.motherjones.com/blue-marble/2012/01/report-white-house-pressured-scientists-underestimate-bp-spill-size>

written by Marcia McNutt, who had been appointed head of the scientific team that was dispatched to the Gulf by the White House, in order to assess the damage. It disclosed that the D.O.I. and N.I.C. pressured the Flow Rate Technical Group (and one of its subgroup, the Plume Team led by William Lehr) in charge of evaluating the flow rate, so that they underestimate or “simplify” the collected data related to the B.P. spill size. The discovery of this email was soon to be followed, in January 2011, by P.E.E.R.’s public allegations of scientific misconduct<sup>8</sup> and falsification towards the team, on the behalf of the Administration, so as to misrepresent the damage and therefore lie to the public and to the world. Coincidentally, a couple of months after the catastrophe, the Environmental Protection Agency (E.P.A.), which is under the White House’s control<sup>9</sup>, set up a website whose aim was to inform the public about the cleanup operation under way.

Based on a cognitive-rhetorical approach to discourse analysis and on communication studies, the aim of this paper will be to zoom in on the main discourse strategies set up by the selected speakers involved to tell the public how much oil was spilled and how the Gulf would eventually be «restored», namely Marcia McNutt on the one hand and the E.P.A., via three of its postings on the website <http://www.restorethegulf.gov>, on the other.

#### *A story under the White House’s surveillance*

The corpus was completed manually and, up until recently, the four selected documents could be downloaded from the internet. Yet, it should be noted that over the very last months of the American presidential election of 2012, some of the sites and primary sources consulted to put the facts back into context vanished and certain links redirected the user towards a complete different topic or site. Although this anecdote might look trivial - and because the oil spill was far from being on top of the list in terms of the American voters’ preoccupations in a globalized context of financial crisis - it should be borne in mind that a close connection exists between B.P. and President Obama, as the latter was a notorious contributor to Obama’s first presidential

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<sup>8</sup> PEER is a national non-profit alliance of local, state and federal scientists, law enforcement officers, land managers and other professionals dedicated to upholding environmental laws and values.

<sup>9</sup> The E.P.A. is an Agency of the U.S. federal government, led by an Administrator who is appointed by the President and approved by Congress.

campaign. The power that Greenpeace activists, among others, can have nowadays in the media is yet another parameter to take into account. That is precisely why some of Greenpeace's pages related to the topic of the oil spill aftermath also disappeared from the screen. McNutt's email as well as P.E.E.R.'s public allegations can no longer be retrievable on the internet since Obama's reelection. This is why the two main documents referred to have been securely inserted in the annex.

This article is being revised for submission just a few days after B.P. has agreed, on November 15, 2012, to plead guilty to obstruction for lying to Congress about how much oil was spewing out of the well before it was finally capped<sup>10</sup>. B.P. will actually pay the largest criminal penalty in U.S. history. But will this price be high enough to restore its environmentally friendly image?

### **McNutt's email: how to make the figures talk?**

One of the easiest ways to convince an audience about an issue is for the speaker to rely on official scientific data, and more so on figures. But why would figures be more reliable than words? Why couldn't figures offer a possibility of cognitive distortion the way words can? At the core of this email lies two key terms communication wise: "upper bound" and "lower bound". In other words, the amount of oil spill has to be quantified to then be publicly released. But to damage control the information given by the press, the government decided, via the scientific team and the various officials involved, to define a scale. Not a scientific scale, however, but a scale of acceptable representation strictly going from lower to upper bound. Interestingly, the image schema (Johnson, 1987) of VERTICALITY, which entails an UP-DOWN orientation, is therefore mapped onto the oil spill so as to convey a metaphorical representation (Lakoff & Johnson, 1980) of the catastrophe, thanks to a vertical line that has a bottom, a top and is orientated upwards. This metaphor allows the public mind<sup>11</sup> to follow the endless stages of upscaling and downscaling which find themselves at the core of the informative process. McNutt explains to the scientific

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<sup>10</sup> <http://www.guardian.co.uk/environment/2012/nov/15/bp-record-penalty-deepwater-spill>

<sup>11</sup>We use the term in the same way Chomsky did (22, 2002).

team how difficult it was for her to discuss the concept of “upper/lower bound”:

I cannot tell you what a nightmare the past two days have been dealing with the communications people at the White House, DOI, and the NIC who seem incapable of understanding the concept of lower bound.

She then retraces some of the suggestions she reportedly got from her interlocutors:

From a NIC Admiral: How about just saying that the range of flow rates is 12,000 to 25, 000 barrels per day?

From a White House communications person: How about saying that several lines of evidence suggest that the flow is 12,000 to 19,000 barrels per day but that the rate could be as high as 25,000 barrels per day?

McNutt’s then specifies to the team that she systematically rejected those confidential suggestions on the grounds that “25,000 is a LOWER<sup>12</sup> bound, not an UPPER bound”. But she was apparently asked to “simplify” the data, the verb here becoming synonymous with “lowballing”. She writes: “The press release that went out on our results was misleading and was not reviewed by a scientist for accuracy.”

Marcia McNutt was actually accused by P.E.E.R. of being two-faced, namely telling her team of scientists based in the Gulf that the White House’s “communications people” and officials were at a loss with the complexity of the situation on the one hand, while eventually letting the Administration decide what the upper bound should be on the other. Over the first weeks of the spill, this misleading fuzzy scale of simplifications constituted the primary source of information the media relied on.

### **A mental representation of the catastrophe: how much oil spilled?**

Ideally then, a VERTICAL schema, which integrates a lower and an upper bound, suffices to give the public an accurate representation of the “catastrophe”. But why choose a barrel as the unit to refer to how much oil was spilled in the Gulf? In France, the production of oil amounts to 1% of domestic consumption. Needless to say we are more

<sup>12</sup> She capitalizes.

at ease with the unit of a wine bottle. However, contrary to most of us and because the U.S. produces about 40% of domestic consumption (<sup>13</sup>and plans on being energy independent by 2030), we champion that an American citizen knows how much crude a barrel contains i.e. 160 liters. And since this knowledge is solidly entrenched in the American culture and subconscious, oil is always referred to in terms of barrels in the U.S. Yet, what kind of representation can 50 000 barrels trigger in the American citizens' minds? How would the mind work? Would an accurate image be obtained by closing one's eyes and imagining a huge aircraft hangar, for instance, filled with thousands of barrels? We posit that the reason this unit was kept to refer to the spilling was another aspect of the rhetorical strategy: a barrel probably conveys a clear representation on a daily basis. But for this catastrophe, it no longer does.

To give a more specific account of how much oil was said to be spilled over the 56 days that ran from explosion to cap (the spillage continued after the rig was capped), we shall use the unit of an Olympic-size swimming pool. 50 000 barrels equals 3 swimming pools. With this more explicit scale, let us take a closer look at which figures were released when and by whom. The various figures do not reflect the evolution of the spill that starts with a few barrels and then grows bigger. They mirror how much truth can be disclosed to the public by the team of scientists. The following table<sup>14</sup> sums up the main figures released over the first months by the main sources, namely B.P., the scientific team and PEER<sup>15</sup>.

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13 [http://www.nytimes.com/2012/03/23/business/energy-environment/inching-toward-energy-independence-in-america.html?pagewanted=all&\\_r=0](http://www.nytimes.com/2012/03/23/business/energy-environment/inching-toward-energy-independence-in-america.html?pagewanted=all&_r=0)

14 One barrel equals 0,160 m<sup>3</sup> and an olympic-size swimming pool equals 2,500 m<sup>3</sup>.

15 [http://www.motherjones.com/blue-marble/2010/05/bp-backtracks-spill-estimate-](http://www.motherjones.com/blue-marble/2010/05/bp-backtracks-spill-estimate)  
[http://www.independent.co.uk/environment/bp-oil-spill-disaster-by-numbers-2078396.html-](http://www.independent.co.uk/environment/bp-oil-spill-disaster-by-numbers-2078396.html)  
<http://astro.berkeley.edu/~echiang/bp/WorkingPaper.pdf>

Table 1: Figures released by main sources

<b>Date and source</b>	<b>Barrels spilled per day</b>	<b>Olympic-size swimming pools per day</b>
April 20 and the next days B.P.	1000 then 5000	
April 20 and the next days Plume Team	12, 000 and then from 12 000 to 19 000	$\frac{3}{4}$ of a SW
May 19, 2010 Plume Team	20,000 to 40,000	From 1,3 to 2,5 SW
January 23, 2011 PEER's allegations	50,000 to 60,000	From 3 to 4 SW
July 15, 2010 When wellhead capped	5 Million +/- 10 % total	326 SW (divided by 56: an average of 6/day)

By way of comparison, the oil spill that occurred in Alaska in 1989, and which was already considered a major catastrophe, was much smaller and the cleanup, in the first sense of the term, was never fully completed<sup>16</sup>. But once again, the divergent figures released to the public should be underlined. According to Exxon Valdez oil spill trustee council website<sup>17</sup>, 257 000 barrels were spilled (i.e. 16 olympic-size swimming pools), but according to the site Wikipedia<sup>18</sup>, the figure reached 750 000 barrels, i.e. 48 swimming pools. According to the various sites visited, it turns out that B.P.'s oil spill was almost seven times bigger.

### **The Gulf Coast Restoration Plan: "RestoreTheGulf.gov"**

Out of the numerous site's publications, three postings were selected for this piece of research. The first one was published at the end of September 2010, shortly after the site was created. The next one was posted two years later, and the last one just a few days after President Obama's reelection.

16 <http://www.bbc.co.uk/news/10324021>

17 <http://www.evostc.state.ak.us/facts/details.cfm>

18 [http://en.wikipedia.org/wiki/Exxon\\_Valdez\\_oil\\_spill](http://en.wikipedia.org/wiki/Exxon_Valdez_oil_spill)

The home page describes the main goals this site wants to achieve:

“RestoreTheGulf.gov.” is the official federal portal for the Deep-water BP oil spill response and recovery. This site provides the public with information on the response, current operations, news, updates (...) and links to federal, state and local partners.

The first document describes the White House’s project to help the Gulf recover. The second one shows what the evolution of the information process looks like two years later, and the third document wraps up the four postings of October 2012, regarding the detection of a sheen in September 2012 and how this issue is going to be handled by B.P.

*Posting of September 28, 2012: from illness to recovery*

The following investigation is divided into several subparts which highlight the predominant rhetorical aspects focused on.

*The rhetorical figure of repetition*

The most surprising fact about this first document is that it contains an incredible entanglement of numerous repetitions of words. The document is only 25 lines long and, surprisingly enough, the repetitions do not appear obvious in the course of the first reading, which communication wise constitutes a successful achievement. However, the counting of certain key words unveils the following results:

Table 2: Occurrences of words of first posting

Word	Occurrences	Total (thematic)
Recover	13	15
Restore	2	
Plan	10	14
Project	2	
Process	2	
Environment	7	11
Ecosystem	4	
Health		7

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Spill		4
Oil		4
Effort		4

Obviously then, and as made clear by the name of the site, the process of information regarding the damage caused on the ecosystem is structured by the frame of restoration/recovery, thus by the broader notion of health. The cleanup operation is referred to via many terms which, by definition, imply highly defined chronological steps including a military rigor: "plan", "project", "process". These words share a reassuring dimension i.e. they are analytically construed as having a beginning, a series of stages, and –most importantly- an end. The three last words, "spill", "oil" and "effort" all share the exact same number of occurrences. As a matter of fact, we are tempted to go as far as considering that this is not a random event. The figure of repetition is said to be the most powerful one in rhetoric (Molinié,1992, 291). This claim can be reinforced by underlining that repetition activates short-term memory in the public mind and therefore participates to the cohesive dimension of the document: it shapes it as a consistent and resistant whole.

As for the words which could have been expected, such as "clean", "pollution", "damage", "catastrophe" or "B.P.", none appeared. As Lakoff (2004) would have it, not using these terms is actually a way of avoiding to trigger certain frames in the public mind that could put in the shade the process of recovery the site wants to promote.

#### *4.1.2. The narrative of restoration/recovery as a framing process*

The verb "restore" will usually be called upon for objects that are made to return to their original condition or state, over a certain period of time. "Store" comes from Latin "staurare" which means "stand" or "erect", hence the sense "re-erect", "erect again" or "make stand again". Therefore "restore", like "rebuild", rather applies to objects whereas "recover" is more naturally associated with human beings and the idea of illness, rather than that of material destruction, as indicates the meaning "to become well again, physically and/or emotionally".

A house cannot be made to recover, but it can be restored, or rebuilt, which means that it was rather destroyed than partially

damaged. Obviously then, the verb "rebuild" (rebuildthegulf.gov?) would have been a very bad move communication wise whereas "restore", finding itself halfway on the semantic path between "recover" and "rebuild", stands as the best option of framing. Yet, although the site is called "RestoreTheGulf.gov", the verb "restore" only appears twice, while "recover" is used no less than 13 times in the posting. The New Shorter English Dictionary (2007) indicates that it comes from French "recouvrer" which, combined to "la vue" or "la santé", means "get one's sight or health back". Hence the term enables the site to turn the environment into a person and to therefore activate an identification process since "a person" now lost its original state of health but will eventually get it back.

#### *The Recovery plan*

This plan corresponds to "a response to B.P. spill in the Gulf", to a way "of addressing the issue/the efforts". Inevitably, these two ways of referring to the White House's project trigger a more verbal and performative action than a tangible, concrete help provided to the region. And subsequently, the expression sounds like an understatement. The plan itself is referred to via multiple phrases: "recovery plan", "restoration plan", "project", "program", "process", "operation", as will be discussed further. It is sometimes combined to the adjective "aggressive" in "an aggressive restoration plan", an image which clearly qualifies as an oxymoron. The main aim of this plan is "help strengthen the Gulf region's environment, economy, health following the oil spill". We may wonder about the use of the verb "strengthen" here. This would imply that the Gulf has been weakened, as if by an illness. And B.P. is never cited directly: "parties responsible for the oil spill/responsible parties". But at the other end of the spectrum, namely the helpers, saviors or good guys, we find: "a Gulf Coast Recovery Council", "a Gulf Coast Recovery Fund", "a Gulf Coast Restoration Task Force". Hence, the frame of the illness is activated via different ways: the numerous uses of the verb "recover" although the site's name turns our attention towards a process of "restoration", the notion of strengthening (a body, a psychological state), the use of the PATH schema to represent the evolution that the Gulf Coast will have to go through, as if following a protocol: "on the path to restoration

and recovery". The terms "address" and "response", on the part of the White House, can also make us think of a panel of experts or doctors, discussing and designing a protocol. And finally, the unexpected use of the trendy adjective "resilient" which is associated with the Gulf Coast ecosystems. This combination only makes sense metaphorically thanks to a strategic personification process that enables the posting to turn nature into a sick person who has a psychological dimension and a will to recover. Rhetorically, this personification strengthens the pathos and activates immediate empathy, as the public is now able to "feel for" the environment which is no longer a passive polluted area but a sick patient conveying a sense of courage and who is ready to fight.

#### *4.1.4. A cast of reliable protagonists*

Two protagonists are cited and strongly anchored in the setting. The first one is Lisa P. Jackson, E.P.A. Administrator and chair of the Task Force, who is described by President Obama as having "her roots in the Gulf Coast region". The second political actor is Ray Mabus, the Navy Secretary, who designed the plan and is presented by the President as being "a former governor of Mississippi and a son of the Gulf". The emphasis on the geographical belonging adds much more credibility regarding the depth of the two protagonists' commitment, especially for the victims. In other words, if they are familiar with the place, they can adapt rapidly and are the most qualified officials who can take care of the oil spill aftermath.

#### *4.2. Posting of August 30, 2012: no news is good news*

The second document released at the end of the past summer, is 8 only lines long and its main goal is to specify that the cleanup operation was resumed after the announcement of a hurricane forecast. It means that the cleanup is still being processed. And no information is given about when the cleanup will be completed. Probably because it never will be. As for the rest of the document, it's filled with 8 occurrences of acronyms whose informative function remains questionable: C.A.P.T., U.S.C.G., S.C.A.T., F.O.S.C. As a matter of fact, acronyms are an American verbal tic. But besides going for shorter and therefore faster, do acronyms make a team, a fund, a concept more real? More tangible? Another interesting element is the unfortunate typo found, which looks like a kind of Freudian repetition, as it were: "The Gulf Coast Incident

Management (GCMIT) remains committed to the cleanup..."

Typos are very rare in these postings, which is why this one was worth mentioning, if only for the unintentional emphasis it creates.

*Posting of November 23, 2012: the tale of a scientific investigation*

Before this last posting is analyzed, let's come back on the frequency of the past postings, so as to give a rapid overview of the information released by the E.P.A. Over the month of October 2012, four postings were published about the sheen detected in the area of the explosion. They are summed up in the posting of November. In August and September 2012, two laconic postings were related to Hurricane Isaac. In May 2012, 3 postings were available. And prior to those, we have to go back as early as November 2011, which equals a six-month gap news wise! Consequently, the public was in fact very little kept informed about the details of the cleanup operation over the past 12 months, contrary to what had originally been announced concerning the role of this official website two years earlier.

*The figure of repetition still at work*

This third posting is 16 lines long but once again manages, given the shortness of the document, to display a surprising number of repetitions of terms.

Table 3: Repetition of terms (third posting)

Coast Guard	8
Oil	6
Plan	6
Deepwater Horizon	5
cap/capping	5
approve/approval	5
Sheen	4
BP	4
Incident	3
Wreckage	3

The Coast Guard is used literally, of course, but also has a metonymical dimension as it stands for the Administration, or rather for one military branch of the United States armed forces. The Coast Guard therefore embodies "the doer", as the maritime military service

is trained to act locally and in a tangible way. Besides, the military usually conveys a sense of protection, safety, and high reliability in most American citizens' minds. The "culprit" is named but not presented as such. B.P. and Transocean are now turned into scientific partners, and the original "worst environmental disaster" (as described by President Obama) into a mere "incident" or "wreckage" whose consequences need to be coldly taken care of, or "cleaned up".

#### 4.3.2. *The narrative of a scientific investigation*

The tone used is quite authoritative as the posting openly adopts the problem-solving angle. The predominant lexical field used refers to the narrative of a scientific investigation being conducted, as shown by this selection: "to proceed, investigation, verify, a joint plan, determine, submit, review, inspect, mission, develop of comprehensive arrays of options..." One might argue that these terms are expected in such a context, namely determining the source of the detected sheen. However, they come in abundance to a point where facts are replaced by a storytelling process (Salmon, 2008 and Polletta, 2006), whose power of persuasion rests on a cognitive capacity that Talmy (2000, 419) refers to as our "narrative cognitive system":

(...) we posit that the mental faculty for the generation and experiencing of broadly construed narrative constitutes a specific cognitive system in its own right. This narrative cognitive system would generally function to connect and integrate certain components of conscious content over time into a coherent ideational structure. (This) is a system that ascribes entityhood to some sequential portion of experienced phenomena, that imputes continuity of identity to that entity, that integrates contents associated with that continuing identity into an ideational whole, and that fixes a feeling of attachment to that complex.

On a syntactic level, the main protagonists are very often either located at the end of the clause or obliterated, as the passive construction is recurrently resorted to.

Main active constructions:

<b>Active subject</b>	<b>Verb</b>	<b>Complement or other</b>
Coast Guard	Approves	Plan
BP and Transocean	have received	Approval
The sheen	Persists	in the area
The plan	Calls	for ROV's to

Captain Duke Walker	tasked	BP and Transocean
BP	Undertook	ROV <sup>1</sup> operations
BP	Discovered	the containment dome
the capping (...)	Ports	on the sides
The FOSC	is also releasing	Video
The Gulf Coast Incident Management Team	remains committed	to the cleanup
The FOSC	will continue	response activities

#### Main passive constructions:

<b>Passive subject</b>	<b>Verb</b>	<b>Passive agent</b>
A sheen	was reported	by BP
A sheen	was verified	by satellite imagery
The source of the sheen	was submitted	by the companies (BP and Transocean)
The mission	is scheduled	
A sheen	was also discovered	
Another ROV operation	was conducted	
No further oil emissions	were observed	
The cap and plugs	were successfully put in place	
No further oil emissions	were observed	
The video	can be viewed	

At first sight, it may be paradoxical to find such an important use of the passive voice to convey a sense of action, since the doer no longer occupies the prototypical slot of the agent. And as Greenbaum and Quirk (1990, 45) claim: "In sentences where there is a choice between active and passive, the active is the norm."

Therefore, why turn the active objects into passive subjects and the active subjects into passive agents or simply make them disappear? Clearly, the identity of the agent performing the action is known, as the main protagonists involved are B.P. (which is now cited) and Transocean on the one hand and the Coast Guard on the other. Besides, the alternate use of active and passive voices enables the reader to systematically retrieve the agent, the doer. We thus posit that the passive voice is not used here to downplay the notion of responsibility at stake, but rather to strengthen the scientific tone of the document, as confirmed by Greenbaum and Quirk's observations (1990, 46):

In scientific and technical writing, writers often use the passive to avoid the constant repetition of the subject *I* or *we* and to put the emphasis on processes and experimental procedures. This use of the passive helps to give the writing the objective tone that the writers wish to convey.

#### 4.3.3. "Seeing is Believing": the rhetorical power of a video

The posting also includes two links to a couple of videos released by B.P. They show the successful final capping achieved by R.O.V., hence informing the readers that the sheen is monitored from above the Earth ("satellite imagery") to underwater depths. Due to the highly technical aspect of the slow operation being processed underwater, a mechanical arm endlessly placing unknown items on a hole and twisting them, these videos clearly emphasize that the sheen is scientifically being taken care of. However, they will not make any sense for most viewers who totally ignore how such a leak can be taken care of permanently. But with the posting of these videos, communication aids actively relied on the proverb "seeing is believing". Nonetheless, the detection of several sheens which occurred more than two years after the oil rig explosion, and therefore more than two years after the "cleanup operation" was launched, does look like a bad omen for the "recovery operations", and more specifically for the environment's ability of "resilience" (first posting analyzed), should this personification bear any meaning at all. Thus, by strategically drawing the public's attention on the scientific aspect of the operation, this last posting aims at diverting the public mind from the extended collateral damage caused by B.P.'s oil spill.

### **Concluding remarks on the cognitive-rhetorical approach**

This analysis finds itself at the crossroads of cognitive linguistics, rhetoric, discourse analysis and communication studies. We firmly believe that rhetoric, in the classical sense of the term, should be integrated in such an investigation because cognitive linguistics, broadly put, has made us focus on tropes (metaphor, metonymy, and simile to a lesser extent) to such a point that we, cognitive linguists or cognitive semanticists working in the field of applied linguistics and discourse analysis, have often lost sight of the broader foundations which constrain the genre of political discourse, taken *lato sensu*. In Aristotle's writings, rhetoric is defined as "the art of persuasion" (1991, 82). Consequently

(Gardes-Tamine, 1996, Meyer, 2004, Molinié, 1992), rhetoric enables us to scrutinize the system of representations which is carefully shaped by the speaker's words. The rhetorical processes we came across while analyzing McNutt's email first, and then three postings of the site RestoreTheGulf.gov, encompass conceptual metaphor and metonymy, mapping of image schemas, but also figure of repetition (as said to be the most powerful rhetorical figure), lexical fields (where counting the number of occurrences of certain words turns out to be crucial) which generally unveil the use of particular narratives and framing processes (i.e. the frame of the illness and the narrative of a scientific investigation), distortion of figures thanks to the strategic choice of an inappropriate unit (a barrel vs. an olympic-size swimming-pool), the use of acronyms to hide an empty informative process, the use of the passive voice to reinforce the narrative of a scientific investigation. On a communication studies level, the analysis also highlighted that the communication process regarding the oil spill was clearly under surveillance, as some of the key documents (McNutt's email is one of them) unexpectedly vanished from the web. It also underlined the existing discrepancy between the so-called informative role of this site (as quoted in this article) and the highly irregular frequency of the postings released. And it put to the test the informative use of two "scientific" videos inserted in the last posting analyzed.

All the rhetorical tools called upon in this corpus aim at one specific goal: the setting up of a propaganda which promotes the Administration's efficiency regarding the aftermath of the spill and, more broadly, regarding environmental policies. Via the E.P.A., the Obama Administration poses as friend of the environment to such a point that the whole communication process seems to be mostly ruled by what Greer and Bruno define as a "greenwashing counterstrategy" (1996, p.11):

So as to preserve and expand their markets and while no longer being able to deny their role in environmental degradation, transnational corporations which nowadays largely dominate the world economy have therefore chosen to pose as friends of the environment since the late 1980's.

By promoting this green tale to inform the public about the "cleanup operation", the Obama Administration's damage control

strategy is at least twofold as it helps (i) reassure the American citizens and more so the people who now live on the polluted coasts (ii) draw the eco-friendly community's attention away from the vital link which connects the Administration and the world's biggest oil companies regarding the adopted fossil energy policy in the U.S.A. for the coming years.

The main narratives at work in the selected postings, also referred to as "storytelling" in communication studies (Poletta, 2006 and Salmon, 2008), find their strength in the narrative cognitive system as described by Talmy (2000), Johnson (1987) and Herman (2003). But for some of the receivers who are aware of the narratives at work, the capacity to believe rests on what is known in the domain of literary studies as "the willing suspension of disbelief".

This piece of research once more illustrates that, as long as the public mind's representations are kept under control via the careful use of language, propaganda can grow undisturbed.

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Aceito em 19 de abril de 2013.

**ANNEX 1: McNutt's email**

([http://www.peer.org/assets/docs/noaa/1\\_23\\_12\\_Email\\_WH\\_pressure.pdf](http://www.peer.org/assets/docs/noaa/1_23_12_Email_WH_pressure.pdf))

From: McNutt, Marcia [mailto:marcia@mbari.org]  
Sent: Saturday, May 29, 2010 10:04 AM  
To: rileyj@u.washington.edu; pmbommer@mail.utexas.edu;  
Franklin.Shaffer@NETL.DOE.GOV; pedro.espina@nist.gov;  
aaliseda@u.washington.edu; lasher@ucsd.edu; savas@newton.berkeley.edu;  
pdy@clarkson.edu; ira.leifer@bubbleology.com; Wereley, Steven T.  
Cc: bill.lehr@noaa.gov; vlabson@usgs.gov  
Subject: Pending developments

Dear Plume Team:

First, wanted to say that it is terrific that the team is moving forward with providing an upper bound with the new data. I cannot tell you what a nightmare the past two days have been dealing with the communications people at the White House, DOI, and the NIC who seem incapable of understanding the concept of a lower bound.

The press release that

went out on our results was misleading and was not reviewed by a scientist for accuracy. It was based on a brief report that Bill, Vic, and I had prepared, and the communications people "thought" that it reflected our results, but it didn't because they don't understand what a lower bound is. Bottom line: if you are at a university, do convince some of your best and brightest to go into science communication. Please. Let me give you a flavor of some of the "suggestions" I was getting from the NIC and from the communications people at the White House and DOI as recently as yesterday afternoon as to how to "simplify" our bottom line:

From a NIC Admiral: How about just saying that the range of flow rates is 12,000 to 25,000 barrels per day? (No, because the 25,000 is a LOWER bound, not an UPPER bound....)

From a White House communications person: How about saying that several lines of evidence suggest that the flow is 12,000 to 19,000 barrels per day but that the rate could be as high as 25,000 barrels per day? (No, because the 25,000 is a LOWER bound, not an UPPER bound...)

The message I delivered, with 100 representatives from the media present, was that 3 lines of evidence raised the minimum rate of release to 12,000 barrels per day. Two lines of evidence raised the limit to as high as 19,000 barrels per day. One method determined the rate to be 25,000 barrels per day OR HIGHER. We were still working to improve these estimates and get the upper bound from the flow rate team. This was the least amount of interpretation I could possibly put on the results.

Very few representatives from the media really took the time to understand this. CNN was the best. I want to thank those of you who also took the time to educate the media on the complexity of this situation, and especially to those who did so in a fair and balanced way without trying to cast doubt on the scientific integrity of other groups. We are all after the truth here.

In other news, I worked with a wonderfully resourceful Lieutenant here from the Coast Guard, Joe Kusak, and together we have managed to mobilize the Woods Hole experiment to directly image the plume with 1.8MHz imaging sonar and 1200 kHz ADCP. They are at the airport now awaiting a lift on a Coast Guard chopper to the Neptune Skandi where they will be integrated into an ROV to image the plume. We are also trying to get Ti sampling bottles on the ROV. This requires getting the UNOLS safety standards, which the bottles meet, crosswalked to ABS standards, which the workboat ROVs require. As I was chair of UNOLS when the safety standards were written, I recall that there were words in there that the UNOLS

standards exceed the ABS standards. Just in case, I have Steve Etchemendy from MBARI standing be to interceed. He was an Alvin pilot, so knows the origin of the safety requirements for the Ti bottles, but also worked for Oceaneering, the workboat operators who need to sign off on the gas sampling.

My view is that the flux from the plume will be captured in a few days' time with an LMRP cap. It will be good to have the WHOI equipment calibrated to that flux so that if there ever is another blowout in the OCS, we will have calibrated methods for measuring the release from day 1.

Sorry this email got so long. Have to send from my MBARI account as my USGS computer is in service so I am on a loaner and only have bb access to my USGS mail. But thanks again for your service to the FRTG and I look forward to more results.

Marcia

## **ANNEX 2: PEER's allegations**

([http://www.peer.org/assets/docs/noaa/1\\_23\\_12\\_BP\\_Plume\\_Scientific\\_misconduct\\_complaint.pdf](http://www.peer.org/assets/docs/noaa/1_23_12_BP_Plume_Scientific_misconduct_complaint.pdf))

Office of Deputy Undersecretary for Operations National Oceanic and Atmospheric Administration 1401 Constitution Avenue, NW Washington, DC 20230

January 23, 2011

### **ALLEGATIONS OF SCIENTIFIC AND RESEARCH MISCONDUCT:**

FALSIFICATION OF THE SCIENTIFIC PRODUCT OF THE FLOW RATE TECHNICAL GROUP'S PLUME TEAM IN ORDER TO PRODUCE UNDERESTIMATES OF THE OIL LEAK RATE FROM THE DEEPWATER HORIZON

#### **SUMMARY**

Complainant, the undersigned of Public Employees for Environmental Responsibility (PEER), hereby submits allegations of Scientific and Research Misconduct<sup>1</sup> by NOAA Senior Scientist, Dr. William Lehr, in his capacity as Leader of the Plume Analysis Team (Plume Team) of the National Incident Command's Flow Rate Technical Group (FRTG). Evidence uncovered by PEER shows that Dr Lehr engaged in coercive manipulation of the Plume Team's scientific activities, fabricated<sup>2</sup> and falsified<sup>3</sup> the scientific findings of the Plume Team, and prevented members of the Plume Team with conflicting findings from communicating their findings to key decision makers.

The result of Dr. Lehr's misconduct was a final estimate from the Plume Team that underestimated the oil leak rate by 50%. The 50% underestimate was reported to key decision makers, while other accurate estimates by members of the Plume Team in the range of 50,000 to 60,000 barrels per day (bpd) were withheld from key decision makers.

The Presidential Commission<sup>4</sup> concluded that underestimates of the oil leak rate caused an inadequate response to the oil spill, and contributed to the failure of several attempts to cap the well. In late May, June, and most of July, the government's official estimate of the oil leak rate relied heavily on the underes-

timates supplied by the Plume Team.

PEER believes that Dr. Lehr falsified the Plume Team's findings in order to accommodate the desires of those who commissioned the FRTG, namely, the White House and the National Incident Command. Evidence of pressure from the White House and from the National Incident Command to keep estimates low by falsifying the Plume Team's estimates is found in an email from Marcia McNutt, <http://www.oilspillcommission.gov/final-report>, leader of the FRTG, to the Plume Team on May 29, 2010,<sup>5</sup> which was uncovered by a Freedom of Information Act (FOIA) lawsuit brought by PEER. On May 27, 2010, the Plume Team finished a report in which they estimated the minimum amount of oil leaking. Lehr and McNutt refused to release the report to the public. Instead, McNutt released a "Summary" of the report in which she misrepresented the Plume Team's estimates of the minimum oil leak rate as estimates of the maximum oil leak rate.<sup>6</sup> Emails obtained by PEER show that several members of the Plume Team complained that their findings had been misrepresented and that their report was not being released to the public. In response to the Plume Team's complaints, McNutt explained that she was under pressure from the White House and National Incident Command to misrepresent the minimum leak rate as the maximum. In the May 29 email from McNutt to the Plume Team, McNutt writes:

*"I cannot tell you what a nightmare the past two days have been... »*

1Defined as "fabrication, falsification, or plagiarism in proposing, performing, or reviewing scientific and research activities, or in the products or reporting of these activities" in NOAA Administrative Order § 8.01.

2Fabrication is defined as "Making up data or scientific results and recording or reporting them for the purposes of deception." (Federal Policy on Research Misconduct, 65 FR 76260-76264, December 6, 2000.)

3Falsification is defined as "Manipulating research materials, equipment, or proces; or changing or omitting data or results such that the research is not accurately represented in the research record." (Federal Policy on Research Misconduct, 65 FR 76260-76264, December 6, 2000.)