# How metaphor scenarios can reveal socio-cultural and linguistic variations of meaning: a cross-linguistic perspective on the "NURTURING PARENT" and the "STRICT FATHER" frames

# Anaïs Augé

**Affiliation:** Department of Language and Communication Studies, University of East Anglia, England

Email address: anais a@outlook.fr / secondary email address: A.Auge@uea.ac.uk

**Main interests:** My research interests focus on the areas of metaphor/ metonymy (interpretation, understanding, production, adaptation). I rely on metaphor scenario and corpus analysis to focus on the functions of metaphors in context. I also focus on the fields of historical linguistics and applied linguistics.

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**ABSTRACT** 

This research investigates the cross-linguistic exploitations of Lakoff's "STRICT FATHER"

and "NURTURING PARENT" frames (2004). The British, American, Spanish, and French

languages show significant variations of meaning of the metaphorical expression "Mother

Earth/ Nature" used in press articles discussing climate change. The shift from conceptual

metaphor theory to metaphor scenarios (Musolff, 2004; 2016) operated in this research

reveals major adjustments to Lakoff's findings (2004) with, notably, the identification of a

"STRICT MOTHER" in our corpus. The cross-linguistic perspective also emphasizes socio-

cultural influence on the metaphorical interpretation and the related metaphorical frames. For

instance, our results highlight linguistic evidences of language-specific and culture-specific

characterizations of the "MOTHER". The reliance on "RELIGION" metaphors in climate

change discourses has been previously documented by researchers. However, we demonstrate

that the reliance on myths has a significant role to play in the characterization of the

"MOTHER" in different languages. The association between the myths and the frames related

to the figure of the "MOTHER" also influences the understanding of the topic of climate

change fulfilling different argumentative stances.

Key words: metaphor scenario; cross-linguistic; climate change; Mother Earth; frame

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#### Introduction

This paper proposes to investigate the impact of mythological narratives on the "Mother Earth/ Nature" metaphor used in news reports from cross-linguistic perspective. Myths have had a significant impact across the world: the myths about mother goddesses of the Earth, which are the focus of this research, illustrate such an influence. These goddesses are regularly referred to in a variety of discourses under the metaphorical expression "Mother Earth/ Mother Nature". The main interest of this research is grounded on the hypothesis that climate change communications have revived these myths in different languages and cultures. We aim at showing that the representation of misunderstood natural events in the press has triggered the reliance on myths, and on several aspects of mother goddesses' stories identified in the particular uses of the "Mother Earth/ Mother Nature" metaphor. For instance, we highlight that several mythological narratives not only rely on the beneficent characteristics attributed to the figure of the "MOTHER" ("NURTURING MOTHER") but also depict the "MOTHER" as a "VICTIM" and as a "STRICT PARENT". These additional characteristics that have not been discussed in existing literature arise from a wide range of circumstances discussed in our paper. In turn, we aim at investigating whether these qualities are also attributed in modern media discourses when journalists extend the meaning of the "Mother Earth/ Nature" metaphor to explain climate change. The explanation of climatic events as being caused by a higher authority has been investigated in a number of research papers which focus on the religious aspect of such an analogical representation in discourse. Here, we supplement these existing findings by directing our attention on the mythological references and by highlighting how these references are adapted in different languages: English (British and American), Spanish, and French. We relate the various adaptations of the "Mother Earth/ Nature" metaphor in each language to particular plots involved in the complex story of the mother goddesses of the Earth.

# How geo-political conflicts shaped the mythological figure(s) of the "MOTHER"

The cross-linguistic perspective on Lakoff's identification of a "STRICT FATHER" and a "NURTURING PARENT" (2004) involves a wide range of possible cultural influences on the use of the "Mother Earth/ Nature" metaphor in the media. Our research on associated myths has established different adaptations and understandings of the stories related to the mother goddesses of the Earth. These stories have interacted with each other following several historical events, such as colonization, which have altered culture-specific beliefs related to "Mother Earth/ Nature".

In the Greek mythology, whose emergence is determined in the 8<sup>th</sup> century BCE (Bremmer, 2008, p.1), the Goddess Gaia represents the figure of a mother who nurtures environmental resources to enable life on the planet. Therefore, one side of the myth refers to her as a benevolent goddess thanks to whom humans can live and sustain themselves (Latour, 2017, p. 61). The other side of the story, however, is much less eulogistic. For instance, Gaia becomes the mother of Pontus (the sea) and Uranus (the sky). She marries the latter with whom she gives birth to the Titans. The myth turns into a story of vehemence when Uranus becomes gradually envious of his children and decides to imprison them by 'pushing them back into Gaia's body' (Ellwood, 2008, p. 47). In response, Gaia requests the help of one of her sons, Cronus, to organize a revenge. She arms her son and Cronos uses Gaia's weapon to castrate Uranus (Grant & Hazel, 2002). Hence, this myth establishes three main facets of Gaia: she is a loving and beloved mother, the victim of her son/ husband's jealousy, and the

revengeful mother.

Following a series of conquests which gave rise to a variety of cultural interactions, the Greek mythological beliefs have crossed geographical boundaries. Meiggs (1972) finds historical evidences that the particularities of these invasions perpetuated by the Greeks gave a significant place to beliefs and rituals as a way to empower the Greek supremacy over the colonies (1972, pp. 291-305). We can acknowledge the invasions perpetuated by Alexander the Great, one of the most famous conquerors, which led to the expansion of these religious and mythological practices as far as in Asia (Encyclopaedia Britannica; Meiggs, 1972, p. 295). These myths have had a significant impact on the evolution of the conquered regions. Later, when Greece was losing control over its colonies, the stories have been adapted for political purposes (e.g., in Italy during the reign of the emperor Constantine) as these myths were perceived as a threat to the new social order (Encyclopaedia Britannica; Trocmé 2001). We can see clues of such a mythological influence in Christian religion where some aspects (the Genesis, in particular) are reported to partly originate in Greek mythology (Bremmer, 2008, pp. 20-57).

The beliefs about mother goddesses of the Earth in America are also of particular interest. Historical details show that American journalists may refer to myths that differ from the myth of Gaia while using the "Mother Earth/Nature" metaphor. For instance, existing literature informs us about two main types of mythological adaptation occurring after Christopher Columbus' arrival on the "New Continent" (Sellers, 2014, p. 196).

On the one hand, the Amerindian communities had existing beliefs that contradicted the religious stories imported by the colonizers. These communities allow a dominant role to the mothers in their culture following specific narratives which give sacred power to the mothers as the "guardians of nature" (Jenkins, 2015, p. 451). Aboriginal beliefs originate in a variety of stories that are

particular to each community. Among these narratives, we can note the story of Sky Woman in the Haudenosaunee community which describes a female sacred entity who, after getting pregnant, falls to earth and gives birth to a daughter with whom she creates lands and all creatures on the planet (Sellers, 2014, p. 197). Pachamama (sometimes explicitly mentioned in the newspapers of our corpus<sup>1</sup>), in the Aymara and Quechua communities, is a female supernatural figure who represents motherhood and the earth. Although there is no narrative associated with this figure, she is acknowledged to be "multifaceted" (Kaijser, 2014, p. 19) as she can either bring fortune or disaster to humans (Kaijser, 2014, p. 17; p. 77). For the Maori community, Papatuanuku (i.e., Mother Earth) and Ranginui (i.e., Sky Father) are identified as the primal parents who gave birth to the first woman: Hineahuone (Connor, 2014, p. 233). All these narratives give a powerful place to women (mothers, in particular) within these communities as women can, for instance, occupy authoritative political functions in society (Sellers, 2014, p. 197). These indigenous views therefore conflicted with the colonizers' beliefs (e.g., God as the creator of the universe; Sellers, 2014, pp. 196-7) which gave rise to another kind of mythological adaptation in aboriginal communities: indigenous communities have gone through "resilience" (Kirmayer, 2011, pp. 85-9; Tabobondung et al., 2014, p. 73). They produced counter-narratives to contradict emerging stories produced to disempower Indigenous women (Lavell-Harvard & Anderson, 2014, pp. 3-5). For instance, the story of Sky Woman mentioned earlier has taken on a more violent turn allowing women of the community to resist the social construction imposed by colonizers (Sellers, 2014, p. 198). Alternatively, the story of Pachamama has been reported to have merged with Judeo-Christian beliefs: the "Mother Earth" gradually became the Virgin Mary in the communal beliefs (Kaijser, 2014, pp. 17-8).

Overall, this variety of beliefs

<sup>1 33</sup> occurrences of "Pachama" in Spanish press; 5 occurrences in American press; 1 occurrence in French press; no occurrence in British press

about the figure identified as "Mother Earth/ Nature" across different cultures shows common patterns regarding her characteristics as a "NURTURING" as well as a "VICTIMIZED" and a "STRICT MOTHER". These characteristics can arise from communal beliefs and social constructions but they can also appear as the consequences of violent interactions between divergent cultures (e.g., the production of counter-narratives). We see in the following discussion that these different facets are all significant to depict climate change as a phenomenon produced by a higher authority, "Mother Earth/ Nature" (Grant & Hazel, 2002; Latour, 2017). The association established in these myths between the figure of the mother and the evolution of nature (i.e., natural resources "grow" thanks to the "mother" who "nurtures" them) provides significant ground for various figurative understandings of climate change across cultures (Comstock, 2018). The reliance on myths in order to explain misunderstood climatic events with the "Mother Earth/ Nature" metaphor is notably explicit in James Lovelock's hypothesis. His work, started in 1972, conceives nature as a system of interactions between species, organisms, and the environment (Donahue, 2010, pp. 55-6). James Lovelock perceives these interactions as forming a single living entity, Gaia, characterized by its indivisibility (Kirchner, 2002, p. 392; Donahue, 2010, p. 52; Ogle, 2010, pp. 275-7). He famously linked his hypothesis to the phenomenon of climate change in his book The Revenge of Gaia (2007). James Lovelock, as a scientist, has thus produced a ground-breaking theory which transgresses deeply-rooted boundaries between science and myths. This theory has been reported to have had a significant impact on scientific work and findings (Donahue, 2010, pp. 53-4; Ogle, 2010, pp. 276-8). For instance, the reference to Gaia as "Mother Earth/ Nature" in climate change communications, is related to his theory (e.g., "He is the scientist known for presenting us with the Gaia theory that says our planet is truly a living, breathing Mother Earth", Investor's Business Daily, April 18, 2017, "Global warming alarmists who say end is near reach mental tipping point", by Kerry Jackson).

# Adjustments to existing findings

The mythological analogies in climate change news reports can be assimilated to the religious concepts observed in such discourses. Indeed, both myth and religion establish an alternative reality which humans can rely on in order to find explanations to misunderstood events. The definition provided by *the Oxford English Dictionary* for the search term "myth" qualifies this concept as:

"A traditional story, typically involving supernatural beings or forces, which embodies or provides an explanation, aetiology, or justification for something such as the early history of a society, a religious belief or ritual, or a natural phenomenon" (definition 1.a., *OED* online version).

The reliance on religious beliefs in climate change discourses has resulted in significant findings in existing literature. Notably, Atanasova and Koteyko (2017) demonstrate the skeptical stance involved in the use of "RELIGION" metaphors in discussions about climate change from the MailOnline's Opinion page. Such metaphors are indeed relied on by journalists in order to highlight the common ground between a belief in an alternative (religious) reality and a belief in scientific findings about climate change which are punctuated by uncertainty. The use of the "RELIGION" metaphor has been noticed by Nerlich (2010) who shows that these particular metaphors have been prevalent in the depiction of science as "untrue". This has led to a division in the population between the "believers" of climate change whose faith is pictured as a form of bigotry and sceptics whose doubts are represented as a "safe option" (2010, pp. 12-6). Nerlich's results are relevant regarding the ideological interpretation pertaining to the use of "RELIGION" metaphors whose source domain can be semantically compared with the mythological aspects involved

in the use of the "Mother Earth/Nature" metaphor. Our paper rather focuses on the influence of the mythological origin of the metaphor across cultures on the transgression of the gender stereotypes attributed by Lakoff (2004) to the "PARENTAL" figures identified in his research.

From a different stance, Deignan, Semino, and Paul (2019) have highlighted the relative misunderstanding of climate change metaphors. They compare the meaning of prevalent metaphors, such as "greenhouse", in scientific papers, educational texts and student talks. They show that, depending on the genre under study, the metaphor users give prevalence to particular aspects of the metaphorical concept depending on their understanding of climate change but also on their individual interests and experiences.

In this paper, we pay particular attention at the metaphorical expression "Mother Earth/ Nature" in press articles produced in a variety of languages. Our aim is therefore not to compare different genres but languages and cultures in order to bring further insight to such a metaphorical adaptation. The focus on a single metaphorical expression, "Mother Earth/Nature", is justified by its mythological and spiritual origin which raises interrogations regarding the significance of ancient myths in nowadays discussions about climate change. Furthermore, the personification suggested by the metaphor allows us to investigate the fluctuating conceptualization of the figure of the "MOTHER". This point relates to Lakoff's identification of metaphorical frames in American political communications (2004). Greco Morasso (2012) pays particular attention at framing in newspapers which is defined as a selection and presentation of facts with reliance on the readers' contextual knowledge to construct the news as part of the journalist's or newspaper's "strategic maneuvering" (2012, pp. 198-200). Lakoff (2004) strikingly distinguishes the frames related to the "PARENTAL FIGURES" to characterize a "STRICT FATHER" and a "NURTURING PARENT" (Lakoff, 2004). In our paper, we aim at questioning this distinction with regards to the characterization related to gender (i.e., "FATHER/ MOTHER"). It should

be added that Lakoff's identification has notably been discussed by Musolff (2004; 2016). Musolff's discussion shows that the analysis of metaphor scenarios establishes relevant variations altering Lakoff's boundaries between each "PARENTAL FIGURES". Following this view, a scenario is defined as "a discourse-based, culturally and historically mediated version of a source domain" (Musolff, 2016, p. 30). For instance, in a corpus of European debates, Musolff identifies various metaphorical conceptualizations of the relationship between European countries which can be represented as different "FAMILY MEMBERS" "GODPARENTS", "ORPHANS") and different (e.g., "FAMILIAL RELATIONSHIPS" (e.g., "MARRIAGE", "DIVORCE", "PARENT-CHILD"; 2004, pp. 14-29; 2016, p. 31). In our paper, we supplement these scenarios and we demonstrate that the topic of climate change gives rise to the figure of the "STRICT MOTHER" with particular characterizations licensed by particular languages and cultures.

## Methodology

This paper looks at the adaptation of a similar metaphorical expression, "Mother Earth/ Nature", across languages in the media. In order to provide a conducive ground for comparison, the corpus we investigate is composed of articles answering analogous criteria and dealing with one main topic: climate change. Our research has required a wide range of methodical steps which we summarize in this section. We explain the relevance of metaphor analysis in a corpus composed of newspaper articles focusing on the topic of climate change. We also establish how we rely on the context and co-text of the metaphorical expression in order to identify particular frames (i.e., "NURTURING/ VICTIMIZED/ STRICT MOTHER").

Finally, we demonstrate our reliance on electronic corpora in order to select the relevant data in our corpus of newspapers.

Relevance of media discourses about climate change

Our main source for relying on empirical data is the Nexis® database which gives access to press articles from a variety of newspapers published across 40 years in a wide range of different countries (e.g., *The Guardian, The Sun, The New York Times, Salt Lake Tribune, La Opinion, La Verdad, Paris-Normandie, Le Monde*). The focus on the journalistic perspective on climate change is justified by our aim to investigate the use of the "*Mother Earth/Nature*" metaphor in order to provide explanations to misunderstood events (in this case, mythological explanations). As opposed to scientists and environmentalists, journalists' communicative skills are oriented towards a readership whose social backgrounds and interests cannot be specifically assessed (Nerlich & Koteyko, 2010, p. 38). Additionally, journalists do not usually have a scientific background which means that science-related issue in the press are not as documented as in scientific papers. Therefore, the articles under study are expected to explain climate change with metaphors whose meanings take into account "lay" people's understanding.

The Nexis® database allows to retrieve press articles involving particular key words. For the purpose of our study, we selected articles with the key words "climate change" OR "global warming", AND "Mother Earth", OR "Mother Nature" (and their equivalents in languages other than English). This focus on particular key words to retrieve metaphorical occurrences in a large corpus has been justified by Deignan & Porter's study aiming at investigating the occurrences of the "ANGER AS HEAT/PRESSURE" metaphor in an electronic corpus. We also rely on the methodology established by Cameron & Deignan (2003) who use search terms in large and small corpora to identify "tuning devices" and

establish their relevance to identify metaphorical expressions in a text. The scope of our comparison about cross-linguistic metaphorical adaptation is restricted to British, American, Spanish, and French newspapers available on Nexis®. Our main period of interest is limited to January 1984 to July 2019 (when our research has started). This research has yielded 493 American articles, 425 Spanish articles, 277 British articles, and 28 French articles. These factors are expected to enable us to provide significant results regarding the adaptation of the metaphorical expression across languages. The existing gap between the numbers of articles available in each language under study has promoted the reliance on frequencies of use of the metaphor. In order to establish relevant comparative results, we refer to differences and similarities observed across languages in terms of the place occupied by a particular interpretation of the metaphor in a single language as opposed to the place occupied by the same interpretation in another language. The specific frames have been identified by paying particular attention at the co-text and at the different words the metaphorical expression collocates with (see Koteyko, Jaspal & Nerlich 2013; Demmen et al. 2015 for metaphor analyses with reliance on collocations), resulting in various metaphor scenarios. We then establish whether these collocations highlight a reliance on a particular frame: the "NURTURING MOTHER", the "VICTIMIZED MOTHER", or the "STRICT MOTHER".

# Identification of frames

The repartition of data among the three specific frames has demanded a closer look at the contextual information provided in the press articles. This repartition raises awareness about the semantic "limits" of the metaphors identified within each frame. Indeed, the exploitation of the source domain "MOTHER" in media discourses gives rise to a plurality of semantic variations which are dependent on the information provided by the co-text. It can thus be inferred that the co-text surrounding each metaphorical occurrence leads to a variety

of different metaphorical meanings. Such a substantial reliance on textual evidences prevents us to establish a well-delineated rule to systematically identify the semantic "limits" of the metaphor, allowing us to categorize every occurrence within a particular frame. However, our focus on "MOTHER"- related frames requires a comprehensive examination of the occurrences of the "Mother Earth/Nature" metaphor in the totality of our corpus. This means that, in order to establish particular frames, we overlooked the singularity of each metaphorical occurrence in order to focus on the main characteristics attributed to the "MOTHER". We then compare these various characteristics to identify the underlying picture of the "MOTHER" that results from the role of particular "+human" qualities attributed to the Earth or nature in the evolution of climate change.

For instance, the extracts assembled within the "NUTURING MOTHER" metaphor in different languages all establish the "MOTHER" figure as helping humans through a wide range of events. These events can include descriptions of the earth or nature as a "FAMILY" figure sharing her beautiful or beneficial attributes (e.g., natural resources) or offering guidance for human actions against climate change (it should be noted that this guidance can take the form of weather events which are interpreted by the journalists as "warning" signs of the danger to come, see below). The "NURTURING MOTHER" can also present characteristics that are specific to her "FAMILIAL" role such as developing emotional bonds with humanity, being pregnant of/ giving birth to natural resources, educating her "CHILDREN" (on gas emission), and saving humanity (by preventing further environmental damages, in descriptions of absorption of carbon by forests, for example). The extracts assembled within the "VICTIMIZED MOTHER" metaphor share a picture of the earth/ nature as being affected by climate change. This can give rise to "DISEASE" related metaphors but also to descriptions of psychological troubles suffered by the "MOTHER" (e.g., depression, disappointment,

The extracts grouped under the "STRICT

addiction).

MOTHER" frame provide an alternative picture of this "FAMILY" figure since they establish climate change events as deliberate actions performed by the "MOTHER" to harm humanity. From a more general perspective, these extracts can also attribute mischievous qualities to the Earth/ nature, identifying these two concepts as detrimental characters (e.g., nature as a "villain" or as a "terrorist").

The depiction of dangerous weather events in the media may often lead to the conclusion that the "MOTHER" is the entity responsible for the damages. However, in our corpus, we notice a significant distinction regarding such descriptions, which is observable in the following extract:

(1) The earthquake and tsunami will clearly have a severe impact on the economic and social activities of the region. Some islands affected by climate change have been hit. Has not the time come to demonstrate on solidarity - not least solidarity in combating and adapting to climate change and global warming? Mother Nature has again given us a sign that that is what we need to do. telegraph.co.uk March 14, 2011 Monday Did 'climate change' cause the Japanese earthquake? BYLINE: By James Delingpole

We can see that the information provided about "earthquake and tsunami" in extract (1) can trigger an unfavorable interpretation of the characteristics attributed to "Mother Earth/Nature". This extract is aimed at showing a major distinction between the frames of the "NURTURING" and the "STRICT MOTHER". While, in some cases, weather events are considered by journalists to be the manifestation of the mischievous personality of the "MOTHER", extract (1) shows that this understanding is more balanced. The "earthquake and tsunami" are explicitly identified as a "sign" sent by "Mother Nature", which leads to the conclusion that such an action performed by the "MOTHER" is here interpreted as a form of prevention. The "MOTHER" is causing these events to warn humans about the danger. Hence, despite the description of detrimental events, this extract rather depicts a

"NURTURING MOTHER" who wants humans to take the right decisions ("what we need to do").

# The reliance on electronic corpora

Additional examinations have been performed with the co-text. In order to overcome any ambiguous interpretation, we pay attention to the titles of the press articles, the abstracts which are sometimes provided by the newspapers, and the paragraphs surrounding the metaphorical occurrences of "Mother Earth/Nature" in the texts. When these additional steps have not been judged sufficient to support particular interpretations, the whole articles were carefully read and supplementary information about the events related in the texts were sought on electronic search engines (e.g., google search).

It should be noted that, in some cases, the co-text can present metaphorical expressions to characterize the "MOTHER" whose meanings raise doubt about their potential association with the "NURTURING/VICTIMIZED/STRICT" frames (e.g., "Mother Earth" as a "midwife"). Hence, in order to justify a particular interpretation displayed by these associated metaphorical expressions, we make use of electronic corpora such as the British National Corpus, Open American National Corpus (written), Opus2 Spanish, and Opus2 French, all accessed from the software SketchEngine (Kilgarriff, 2003). This software has been of particular interest since the functions it provides (e.g., WordSketch, Concordance tool) allow the researcher to rapidly establish a general view on the meaning of a search term across contexts. For example, the word "midwife" has been searched on these electronic corpora. We used the "WordSketch" function which gives access to a list of the most frequent collocates for a search term. Each collocate can, in turn, be investigated more carefully with a range of examples presenting the search term and its collocates in context. These steps allow us to see that the word "midwife" mostly collocates with expressions indicating medical

situations (e.g., "nurse", "doctor", "examine"). The contexts provided by the electronic corpora show that "midwife" refers to a medical profession whose purpose is to care for the patient, with rare descriptions of a "misbehaved/ unhelpful midwife". Therefore, the use of "midwife" as a collocate of "Mother Earth/ Nature" in the press indicates a depiction of a "NURTURING MOTHER".

# Selection of data

It follows that several newspaper extracts displaying occurrences of the "Mother Earth/Nature" metaphor have not been considered for the analysis. These can be categorized into three categories.

The first category of unselected occurrences gathers extracts which do not display any particular extension of the meaning of "*Mother Earth/ Nature*". Instead, they simply make use of this expression in order to personify the Earth or nature but do not attribute additional human characteristics to these concepts. These extracts are similar to the following:

(2) There was a continuous stream of people in midtown Manhattan for more than three hours. Some walked quietly, some chanted and others brought large floats with them, including one that represented <u>Mother Earth</u>. Concordiensis: Union College October 1, 2014 Wednesday Union students march to end climate change BYLINE: Maddie Samuels

In this extract, we can see that the personification is not metaphorically extended. The journalist simply mentions an existing representation of "Mother Earth" performed by protesters but she does not describe the characteristics of the float that allow such an identification. This representation, which relies on the figure of the "Mother Earth/ Nature", certainly indicates an emotional depiction of the Earth (i.e., the Earth as a "FAMILY MEMBER") but this interpretation is only implicitly retrieved from the "Mother" metaphor. None of the collocates can inform us about a specific journalistic scope towards this

extracts which make use of the "Mother Earth/ Nature" metaphor as part of a title, the name of an organization, the name of a book/ play, or a character. For instance, the "International Mother Earth Day" is regularly referred to in the press articles of our corpus. These instances have not been considered for this research as they form a fixed expression whose lexical elements allow the readers to identify the related event. Indeed, this identification does not involve particular implications regarding the characteristics of the "MOTHER".

The third category of unselected occurrences is about quoted discourses in the press that have either been translated in their totality (the quoted speaker and the journalist do not share the same language) or whose source is lacking in the press articles raising questions about the origin of the speeches. These occurrences have been carefully analyzed but the issues related to uncertain journalistic adjustment and misleading interpretation caused by the lack of contextual information have favored the exclusion of these occurrences for the purpose of our research.

The number of occurrences that have not been considered for our research have not been perceived as impacting the significance of the following results. Indeed, these occurrences do not convey any specific information regarding the use of the "MOTHER"-related frames across languages. Their metaphorical interpretations remain at the level of personification of the concepts of "earth" and "nature" without further extension of meaning, like in the case of journalistic references to "International Mother Day" (which is frequently discussed in the Spanish corpus, in particular). Overall, the amount of unselected occurrences of "Mother Earth/ Nature" in our corpus is of 22 occurrences in the French corpus (46.82% of all French occurrences), 67 occurrences in the British corpus (68.37% of all British occurrences), 192 occurrences in the American corpus (59.08% of all American occurrences), and 337 occurrences in the Spanish

corpus (77.83% of all Spanish occurrences). Although these high percentages should be taken into account while discussing the frequency associated with the frames under study, they also establish that the extracts analyzed for this research can all fit particular frames. In other words, when the use of the "Mother Earth/ Nature" metaphor is extended to highlight different human qualities attributed to the "MOTHER" in the press articles, these qualities help the identification of a "NURTURING/ VICTIMIZED/ STRICT MOTHER", in comparison to other potential human qualities which have not been identified in our corpus. These different stages resulted in the selection of 133 occurrences of the "Mother Earth/ Nature" metaphor in the American newspapers, 96 occurrences in the Spanish newspapers, 31 occurrences in the British newspapers, and 25 occurrences in the French newspapers.

This methodology

enables us to provide a well-delineated description of the characteristics presented by the metaphorical occurrences that have been investigated for this paper. These characteristics are helpful to provide specific definitions for the "NURTURING/ VICTIMIZED/ STRICT MOTHER" frames, respectively. Further details about these definitions are discussed in the following sections.

## The "NURTURING MOTHER"

Journalists use the figure of the "NURTURING MOTHER" in order to advocate for the protection of the environment. This figure is part of a eulogistic view on nature which relies on the readership's affection for the "FAMILY". The figure of a benevolent, caring "MOTHER" thus conveys particular attributes to nature associated with the "FAMILY" figure who gives birth to natural resources (and, in alternative versions, to humanity). The personification of the environment is aimed at instigating respect and gratitude to the readers

who is then expected to prevent "HARMFUL" actions on nature.

This particular characterization of "Mother Nature/ Earth" exclusively focuses on the roots of the myths about mother goddesses of the Earth who give birth to humans, creatures and natural resources. In our corpus, British, American, Spanish, and French journalists all conceive this "NURTURING" ability of the "MOTHER" with references to the growth of natural elements presented through their beneficial properties accommodated by humans. Journalists can also link the natural elements of which species can dispose in order to be protected from weather events to the "MOTHER'S" feeling of compassion. In articles aiming at establishing a more explicit relationship between "Mother Earth/Nature" and climate change, the journalists describe the "PROTECTIVE" personality of the "MOTHER" who is expected to help humans stop the phenomenon. It should be noted that, in particular cases, this "PROTECTIVE" personality is perceived as overwhelming for humans: the "PROTECTION" they are offered is identified as one of the detrimental aspects of climate change but not as "MOTHER EARTH/ NATURE'S" wish to harm humans. The "NURTURING" behavior of the "MOTHER" can be identified in extracts such as:

(3) Could Mother Nature be riding, yet again, to our rescue? As reported in yesterday's Telegraph, new American research indicates that the earth's vegetation has been absorbing more carbon dioxide than had been thought, thus lessening global warming and providing us with more time to get it under control. The Daily Telegraph October 15, 2014 Wednesday We cannot rest on Mother Nature's laurels; Plants might do better than we thought at fighting global warming, but they won't stop it BYLINE: GEOFFREY LEAN

In order to establish the relevance of the "NURTURING MOTHER" frame in different cultures, we produce a quantitative comparison of the place occupied by this specific frame in each language. We establish frequency of use focusing on the co-text of each metaphorical occurrence which respects the criteria that enable us to picture a "NURTURING MOTHER" (e.g., caring, compassionate, protective). In extract (3), this interpretation is derived by the depiction of "Mother Nature" as a living entity providing her help to humans in order to

delay climate change (although this help remains limited, as indicated in the title of the press article). The following frequencies thus represent the number of these particular occurrences compared to the totality of the selected occurrences of the "Mother Earth/ Nature" metaphor in one language only (as opposed to the other languages under study).

The quantitative comparison offers significant insight regarding the reliance on the "NURTURING MOTHER" frame in each language. For instance, in British, American, and French press articles the place occupied by this particular frame is pertinent but not prevalent as it represents 32% of the "Mother Earth/ Nature" occurrences in French newspapers, 29.03% of the occurrences in British newspapers, and 21.81% of the occurrences in American newspapers. The Spanish press, however, shows distinctive frequency which raises questions about the Spanish characterization of the "MOTHER": the "NURTURING" quality has only been observed in 5.21% of the occurrences produced in this language.

These results show relevant features regarding the representations of the "MOTHER" in climate change articles. Her "NURTURING" quality is relied on by French, British, and American journalists in order to depict their optimistic view on the resolution of climate change. The image of a "NURTURING MOTHER" is indeed relevant for these journalists because it instigates hope to the readers. However, it may also convince readers that actions are not required because "MOTHER EARTH/ NATURE" is expected to tackle the problem. The main finding concerns the Spanish articles which barely mention this aspect of the "MOTHER". This means that, for the Spanish population, the "NURTURING" quality is not constitutive of the identity of the "MOTHER" as it does not represent an identifying feature.

#### The "VICTIMIZED MOTHER"

The frame of the "NURTURING MOTHER" can be elaborated in specific ways in relation to climate change. Indeed, journalists across countries sometimes use the "Mother Earth/Nature" metaphor with particular views on climate change or pollution which they identify as an "ATTACK ON THE MOTHER". This "ATTACK" consequently affects the "PARENTAL" figure who thus needs protection from humans in order to prevent further damages. This particular variation of the "NURTURING MOTHER" frame aims at instigating pity to the readers by picturing environmental degradations as a "DISEASE" or a "WOUND" inflicted on the "MOTHER'S BODY". This frame here associates the readers' experiential knowledge of body pain and emotional bound to the "MOTHER" figure, which is effective in convincing the readership to protect nature. Within this frame, the "NURTURING" quality of the "MOTHER" is accommodated by journalists who depict the "MOTHER" as a benevolent character whose well-being is profitable for humans. It follows that the impact of climate change on the "MOTHER'S WELL-BEING" results in a call for action to "SAVE THE VICTIMIZED MOTHER".

The characterization of the "NURTURING MOTHER" as a "VICTIMIZED MOTHER" can be associated with a specific shift described in the myths discussed in this research. Indeed, in Greek mythology, Gaia is the victim of her son/husband's jealousy as he imprisons her children (Ellwood, 2008, p.47). In Amerindian cultures, the goddesses' stories have been shaped so that they reflect Amerindian women's oppression following colonization. The mother goddesses of the Earth are thus pictured as the victims of (male) colonizers who are depriving them (women and goddesses) of their lands (Sellers, 2014, p.196). The metaphorical occurrences that have been related to this particular aspect of the stories collocate with words describing the "MOTHER'S" need for help or protection. These collocations also involve the description of climate change or pollution as having detrimental effects on the "MOTHER". It should be noted that these detrimental

effects can also be seen through a psychological basis, with pictures of the "MOTHER" being overwhelmed by environmental damages. The frame of the "VICTIMIZED MOTHER" can be identified in extracts such as:

(4) The science already is indisputable. No chance computerized climate models are flawed. No chance natural, long-term global climate cycles are at work. <u>Mother Earth</u> is in dire peril. Pittsburgh Tribune Review January 15, 2006 Sunday Global warming agitprop BYLINE: Bill Steigerwald

In extract (4), the frame of the "VICTIMIZED MOTHER" has been observed through contextual details that picture the "MOTHER" as suffering from climate change, as it is explicitly indicated by the predicate "is in dire peril" in the last sentence of the extract.

The frequencies obtained with a focus on the place occupied by this specific frame in the newspapers produced in each language show a more homogeneous comparability. For instance, the depiction of "Mother Earth/Nature" as a "VICTIMIZED MOTHER" has been observed in 25.81% of the occurrences in British newspapers, in 24.81% of the occurrences in American newspapers, in 22.92% of the occurrences in Spanish newspapers, and in 12% of the occurrences in French newspapers. Therefore, while the British, American, and Spanish journalists offer a significant (but not prevalent) place in their articles to the identification of the "MOTHER" as a "VICTIM" of climate change, the French population, in comparison, does not seem to favor such a qualification of "Mother Earth/ Nature". This means that, in French, the figure of the "MOTHER" is mostly perceived as a "NURTURING" or as a "STRICT FAMILY MEMBER". The identification of a "VICTIMIZED MOTHER" through the use of the "Mother Earth/ Nature" metaphor in climate change media discourses may not be expected to develop a feeling of empathy to the French readership.

#### The "STRICT MOTHER"

The major mythological adaptation observed in climate change press communications is the identification of a "STRICT MOTHER". On the one hand, this characterization transgresses the boundaries established by Lakoff (2004) who only attributes the "STRICT" personality to the "FATHER". On the other hand, the relationship with Lakoff's findings leads us to notice that climate change communications have revived the metaphorical references to mother goddesses of the Earth and have helped to transgress gender-related characterizations. Indeed, while existing expectations about the representations of the figure of the "MOTHER" are related to her "NURTURING" ability, the particularities of climate change as a newspaper topic have given rise to a new version of the frame, observed through the use of the "Mother Earth/ Nature" metaphor, which focuses on the later stage of the myths.

The "STRICT MOTHER" frame can indeed be linked to the violent shift happening in the goddesses' stories. In Greek mythology, Gaia takes revenge over her son/husband by asking her other son, Cronus, to castrate him (Grant & Hazel, 2002). In Amerindian cultures, after the appropriation of their lands by colonizers, the Haudenosaunee community attributes Sky Woman a violent facet allowing Amerindian women to get involved in the resilience (Sellers, 2014, p.198). Despite the absence of associated narrative, Pachamama has also been described as a "multifaceted" entity (Kaijser 2014, p. 19) who can punish humans for their misbehavior. The reliance in climate change press communications on the revengeful attitude of the "MOTHER" can also find its roots in James Lovelock's theory (2007) which explicitly identifies the phenomenon as a "REVENGE" from Gaia, described through her "STRICT" personality.

In our corpus, British, American, Spanish, and French journalists all discuss the "STRICT" personality of the "MOTHER" with descriptions

of her excessive behavior aimed at punishing humans for their pollution. The "MOTHER" figure is thus pictured as the cause of climate change rather than as a "VICTIM" of the phenomenon or as a "NURTURING" character. The metaphorical instances of "Mother Earth/ Mother Nature" that have been considered to be part of this frame therefore collocate with words which describe a violent, dangerous, and unpredictable behavior of the "MOTHER". The "STRICT MOTHER" frame can be identified in extracts such as:

(5) On sait que l'agriculture s'accommode mal des anomalies météorologiques. Des températures élevées trop longtemps entraîneraient la prolifération d'insectes et de champignons nuisibles aux graines. Et la liste ne s'arrête pas là sur les perturbations engendrées par <u>Mère Nature</u>. L'INDEPENDANT 31 décembre 2015 jeudi Climat : l'hiver doux et humide ne présage rien de bon

*Translation (Author):* We know that the agriculture does not cope well with meteorological anomalies. If temperatures keep rising for too long, this would generate the proliferation of insects and mushrooms which would be damaging the seeds. And the list of the disturbances caused by *Mother Nature* does not end there.

In extract (5), the "STRICT MOTHER" frame has been identified with the journalist's focus on the responsibility of the "MOTHER" for climate change related events. In such case, these events are not interpreted as warning signs sent by the "PARENTAL" figure, they are exclusively perceived through their detrimental effects on the environment and on humans. This interpretation is justified by the use of the passive form in the extract ("engendrées par"/"caused by") which explicitly characterizes the "MOTHER" as the entity responsible for these events. Additionally, the absence of particular reason for such a mischievous behavior in the extract reinforces the "STRICT" personality of the "MOTHER" (as opposed to other extracts which indicate that such behavior is aimed at instigating reactions among humans).

The quantitative comparison of the occurrences of this particular frame in our corpus shows highly relevant findings regarding the use of the "Mother Earth/ Nature" metaphor in each language. For instance, the frequencies obtained demonstrate that the

"STRICT MOTHER" is a major characteristic attributed to the "PARENTAL" figure in the British, American, and French newspapers. This frame represents 52.63% of the occurrences observed in the American articles, 45.16% of the occurrences observed in the British articles, and 40% of the occurrences observed in the French articles. These frequencies mean that in all these geographical areas, the figure of the "MOTHER" is mostly identified as a "STRICT" PARENT". In the case of the American press, we can even infer that this personality is an identifying feature of the "MOTHER" figure because it represents more than half of the descriptions of "Mother Earth/Nature" in the articles that compose our corpus. These high frequencies therefore indicate that the topic of climate change has altered the representation of the "STRICT FATHER" established by Lakoff (2004) because the phenomenon has turned the "NURTURING MOTHER" into a "STRICT MOTHER". In the Spanish press, however, these frequencies show a contradictory interpretative trend: this particular depiction of the "MOTHER" only represents 4.17% of the metaphorical occurrences of "Mother Earth/ Nature" produced in this language. With regards to preceding findings, we can infer that, for the Spanish population, the figure of the "MOTHER" is not expected to be "STRICT" or "NURTURING". This result can be justified with the particularities displayed by the Spanish language when attributing specific qualities to "MOTHER EARTH/ NATURE".

Particular cases: language-specific characterization and linguistic elaboration of the "Mother Earth/Nature" metaphor in Spanish and French

The cross-linguistic perspective on the interpretations of the metaphor "Mother Earth/ Nature" has resulted in significant variations occurring in the Spanish and the French newspapers. For instance, Spanish language shows specific characterizations of the figure of the "MOTHER" in climate change media discourse. While these specific characterizations only represent a few occurrences in the other languages, Spanish articles demonstrate a major identifying feature of the "MOTHER" which can be considered language-specific.

From a very different perspective, the French language highlights the different facets of the "MOTHER" by making use of a different metaphorical expression related to the personification "Mother Earth/ Mother Nature". A closer look at the frequencies established in the articles produced in French shows that the expression "dame nature", which does not rely on the figure of the "MOTHER", is used by French journalists to attribute particular characteristics to the personified version of nature.

# The Spanish characterization of "Mother Nature/ Mother Earth"

The Spanish newspapers show a prevalent qualification of the figure of the "MOTHER" in climate change communications. This qualification constitutes a particular case because of the high frequency observed in these articles conveying such an interpretation while other languages only sporadically rely on these characterizations.

The expression "Madre Tierra/ Naturaleza" ("Mother Earth/ Nature") in Spanish newspapers mostly collocates with "JUSTICE"-related words with particular journalistic focus on "los derechos de la Madre Tierra" ("the rights of Mother Earth"), and "en defensa de la Madre Tierra" ("in defense of Mother Earth"). For instance, we can identify many extracts similar to the following:

(6) Bolivia, que ha invitado a los 192 países miembros de las Naciones Unidas, espera que en esta conferencia se apruebe una declaración universal de <u>derechos de la madre Tierra</u> y se integre un tribunal internacional de justicia climática. Agence France Presse April 7, 2010 Wednesday Presidente de Ecuador va a Bolivia a cita de Pueblos sobre cambio climático

Translation (Author): Bolivia has invited the 192 United Nations member states, expecting an agreement in favour of a universal declaration for <u>the rights of Mother Earth</u> during this conference and the establishment of an international court for climate justice.

Indeed, such collocations represent 67.7% of the occurrences observed in this language. Contrastively, this particular interpretation is absent from the British articles that compose our corpus. The American journalists only refer to the "MOTHER'S RIGHTS" in 0.75% of the newspaper occurrences. The French newspapers show a higher frequency of use with 16% of occurrences conveying such an interpretation in this language. We should add that the occurrences observed in English (UK/US) and French mostly refer to Spanish speaking communities. This point thus constitutes a case of metaphorical translation rather than metaphorical adaptation. Hence, Spanish journalists (and to a lesser extent, French journalists) favor representations of the "MOTHER" as an "OFFENDED" individual whose "RIGHTS" need to be defended or respected. This specific frame can be related to the depiction of "Mother Earth/ Mother Nature" as a "VICTIM". Here, however, the "OFFENSE" is not explicitly identified as an "ATTACK" but as a metaphorical "EXTORTION" which results in the "LOSS OF THE MOTHER'S RIGHTS". This qualification entails the understanding of climate change as a manifestation of events that prove the existence of such a "LOSS". Therefore, our focus on this topic does not only show a transgression of Lakoff's findings (2004) but our cross-linguistic perspective has enabled us to observe additional characteristics attributed to the "PARENTAL" figure, such as the ones conveyed by the frame of the "RIGHTLESS MOTHER". The comparison we have performed for this research is meaningful in terms of cultural representations of the "MOTHER": in this case, we can see that the Spanish population mostly conceives the "MOTHER" as being the "VICTIM" of climate change with additional information regarding the "OFFENSE" she suffers from which is explained by humans' denial of the "MOTHER'S RIGHTS". Hence, the Spanish perspective pictures "Mother Earth/ Nature" as an individual who needs to be defended and climate change as a manifestation of humans' "OFFENSE" towards nature. We can also highlight the relationship between the concept of "JUSTICE"

and the "STRICT" characteristic. In this case, "JUSTICE" can be perceived as a form of socially accepted "REVENGE FROM THE MOTHER" which is, this time, not represented as a "VIOLENT/ STRICT BEHAVIOR" but as a "STRUCTURED AND OFFICIAL COMPLAINT" aiming at giving back nature's "RIGHTS" so that it can regenerate and cancel the effects of climate change.

# The French linguistic elaboration: "dame nature"

We now downplay the relationship between the phrase "Mother Nature/ Earth" and the associated myths in order to explore the metaphorical similarities between this phrase and the French alternative version "dame nature". Indeed, the number of French newspaper articles retrieved from Nexis® shows that neither of the metaphorical expressions constitutes a prevalent identification of nature in this language. However, the occurrences observed in these articles show that the metaphor "dame nature" is used by French journalists to attribute particular characteristics to nature which they are less inclined to attribute to the figure of the "MOTHER". Indeed, a major ground for comparison between these two French metaphorical versions lies in the emotional features promoted by the identification of a "MOTHER" which are not applicable to the figure of a "DAME".

This major distinction between the two female figures is relevant in order to interpret the frequencies of use of the alternative metaphorical expression. In our corpus, we can see that French journalists mainly rely on the conceptualization of nature as a "DAME" when depicting a "STRICT INDIVIDUAL": "dame nature" represents 60% of the occurrences associated with this frame. This high frequency means that Lakoff's conceptualization of the "PARENTAL" figures (2004) may be entrenched in the French culture because French journalists rather attribute the "STRICT" personality to a "DAME" but seem to avoid such a qualification when nature is identified as a "MOTHER". Therefore, the "STRICT PARENT" seems to be mainly identified as the "FATHER". The French journalists rely on semantical

differences between the concepts of "MOTHER" and "DAME" in order to favor a positive picture of the "MOTHER" and a more negative qualification of the "DAME" who does not bear any "PARENTAL" affiliation.

It should however be noted that the reliance on the figure of "Dame Nature" is also prevalent in French articles to picture a "NURTURING INDIVIDUAL". The occurrences of "dame nature" interpreted according to this frame represent 50% of the French occurrences associated with this qualification. Alternatively, the descriptions of "dame nature" in articles which aim at depicting nature as a "VICTIM" are more sporadically observed in our corpus. These descriptions represent 33.34% of the French occurrences displaying such a characterization of nature.

The resulting frequencies show that the "MOTHER" figure is not prevalent in the French newspapers discussing climate change. "Mère Nature/ Terre Mère" ("Mother Nature/ Earth") is mostly identified as a "VICTIM", which means that French journalists emphasize the "FAMILIAL RESPONSIBILITY" that humans bear towards their "MOTHER". Indeed, the emotional features shared by this metaphorical interpretation (i.e., "VICTIMIZED MOTHER") are highlighted in order to convince readers to "SAVE" the planet. Even though the identification of "Dame Nature" is relevant in French newspapers to share the image of nature as a "NURTURING INDIVIDUAL", we can see that such an identification has a meaningful function when the "STRICT PERSONALITY" of nature is emphasized. The linguistic elaboration enables French journalists to downplay the "STRICT BEHAVIOR OF THE MOTHER" by attributing such a personality to the "DAME". Hence, the "STRICT MOTHER" frame is adapted in French following the prevalent understanding of the "MOTHER" concept as referring to a benevolent "PARENTAL" figure.

"Mother Nature" or "Mother Earth"?

An additional interrogation focuses on the differences of interpretation that potentially exist between the metaphorical expressions "Mother Earth" and "Mother Nature" in the languages under study. Unlike the preceding sections, the results we discuss in the following do not aim at distinguishing different personalities attributed to the "MOTHER". Instead, we aim attention at the effect of this personification on the concepts of "earth" and "nature" in the newspapers. We relate the "NURTURING/VICTIMIZED/STRICT MOTHER" frames to these concepts in order to establish whether one of these concepts can be identified with a After processing a supplementary distinction between the totality of particular frame. occurrences in all languages under study which resulted in a division between the occurrences of "Mother Earth" and the occurrences of "Mother Nature", we investigate the cross-linguistic interpretations of these two types of metaphorical occurrences in the media. This step highlights a major finding: the British, American, and Spanish newspapers predominantly use the metaphor "Mother Earth" in the descriptions of a "VICTIMIZED MOTHER". Indeed, within this particular frame, we observe that the occurrences of "Mother Earth" represent 87.5% of the metaphorical expressions that compose this frame in British articles, 86.38% in the Spanish articles, and 57.57% in the American articles. The metaphorical expression "Mother Earth" in the French newspapers is, however, absent from the descriptions of the "VICTIMIZED MOTHER". Regarding this latter finding, the results can be explained by the French linguistic elaboration which does refer to "Dame Nature" but instances of "Dame Terre" ("Dame Earth") have not been observed in our corpus. With attention paid to the high frequencies of "Mother Earth" observed in the other languages to depict a "VICTIMIZED MOTHER", we can assert that the concept of "earth" is mostly identified as the entity that is affected by climate change in the English (UK/US) and Spanish languages. The Earth is thus most likely to be perceived as a "BODY" suffering from a "WOUND/DISEASE" because of climate change. This means that the English-speaking and the Spanish populations tend to identify the climatic damages as happening on the Earth rather than on nature. These findings provide further insight regarding the existing dichotomy between the interpretations of the concepts of "earth" and "nature" in our corpus. Indeed, when focusing on the "STRICT MOTHER" frame, we can observe a well-delineated identification of "Mother Nature" as the specific personification characterized by this type of behavior. For instance, the American journalists use the metaphorical expression "Mother Nature" in 94.28% of the occurrences associated with this frame in their articles, the British journalists use this expression in 92.86% of the occurrences, and the Spanish journalists use this expression in 75% of the occurrences. Hence, nature can be identified as the entity responsible for the damage because of the "STRICT BEHAVIOR" that metaphorically qualifies this concept in these three languages. It should be added that in the French newspapers, the expression "Mère Nature" ("Mother Nature") is also prevalent to describe a "STRICT INDIVIDUAL". However, we should note that the few occurrences of "Mother Earth" used in French newspapers mostly occur within this frame ("Mother Nature" represents 90% of the French occurrences that are part of the "STRICT MOTHER" frame while occurrences of "Mother Earth", representing 10% of these occurrences, have not been observed in the other frames related to a "NURTURING" and "VICTIMIZED MOTHER"). Hence, the distinction between the metaphorical expressions "Mother Earth" and "Mother Nature" highlights an attribution of specific roles within climate change discourses in English (British and American) and Spanish newspapers. While "Mother Earth" is the personality that suffers from the effects of the phenomenon, "Mother *Nature*" is the personality that is responsible for these effects.

Regarding the "NURTURING MOTHER" frame, we can see that this characterization is also mainly attributed to "Mother Nature" in the languages under study. Indeed, the French newspapers exclusively use this metaphorical expression to describe such

a personality, the American newspapers rely on "Mother Nature" in 78.19% of the "NURTURING MOTHER" occurrences, and the British newspapers rely on this expression in 70.97% of the occurrences. The Spanish newspapers, however, show an opposite trend: Spanish journalists use the metaphor "Mother Nature" in only 40% of the occurrences describing a "NURTURING MOTHER" in this language. Hence, the British and American press articles show a paradoxical approach to the characterization of "Mother Nature". On the one hand, they identify "Mother Nature" as a "STRICT" figure responsible for climatic damages and, on the other hand, they also qualify "Mother Nature" as "NURTURING". This finding can be explained by the possible influence of James Lovelock's theory (1972; 2007) which rests on this paradoxical view. According to this theory, Gaia is described as a "NURTURING" entity to whom humans should show gratitude as she enables them to live on the planet. The shift in the theory occurs when the scientist focuses on the effects of human pollution which are perceived as disturbing Gaia and altering her personality. She thus turns into a "REVENGEFUL" entity who causes damaging weather events in response to this excessive pollution (Lovelock, 2007). Similar shifts have been established in Amerindian narratives in response to colonization (Kirmayer, 2011, pp. 85-9; Tabobondung et al., 2014, p. 73). This means that the ambivalent characterization of "Mother Nature" in the British and American newspapers also relies on these scientific and cultural adaptations of the myths in the articles of our corpus. We cannot assume that the frequencies observed in the French newspapers are justified by the same influence because of the general lack of occurrences of the "Mother Earth" metaphor in this language. For the Spanish journalists, however, these findings show that "Mother Nature" is mostly identified as the "STRICT MOTHER" while "Mother Earth" is the figure identified as a "NURTURING MOTHER", "VICTIMIZED" by climatic events.

#### **Discussion**

The present research has fulfilled our expectations regarding the roles of the "NURTURING" and the "STRICT PARENT" in climate change press communications (following Lakoff's frames; 2004). The cross linguistic comparison has indeed resulted in very well-delineated variations of metaphorical meaning. For instance, we have not only established that the "STRICT" personality cannot be restricted to the figure of the "FATHER" but also to the "MOTHER", following the particularities of climate change media discourses and the reliance on the myths associated with mother goddesses of the Earth, we have also showed that Lakoff's distinction between a "STRICT" and a "NURTURING PARENT" (2004) can be further specified with identifications of a "VICTIMIZED PARENT", a "RIGHTLESS PARENT', and a "DAME" who takes on the characteristics that transgress the "PARENTAL BENEVOLENCE". When looking at the details of our analysis of the "Mother Earth/ Nature" metaphor, we can establish the prevalence of particular "MOTHER"-related frames in different languages. For instance, we have observed that the "NURTURING MOTHER" and the "VICTIMIZED MOTHER" frames both share a notable place in the American and British descriptions of climate change. The Spanish and French languages show distinctive features regarding these frames: while the French newspapers allow a significant place to the depiction of a "NURTURING MOTHER", the "VICTIMIZED MOTHER" is sporadically referred to in the press articles relying on the "Mother Earth/ Nature" metaphor. This means that for the French journalists, the "VICTIMIZATION" of nature is not expected to yield a corresponding feeling of empathy to the readership. In the Spanish newspapers, this trend is reversed: Spanish journalists scarcely refer to the "NURTURING MOTHER" while using the "Mother Earth/ Nature" metaphor but allow a notable place in their articles to the descriptions of a "VICTIMIZED MOTHER". Hence, we can infer from these results that Spanish journalists do not conceive the figure of the "MOTHER" as a "NURTURING" individual, which may be related to the specificities of the topic of climate change. Indeed, this topic rather refers to damaging events, especially if we consider the documented eventbased focus of journalists (Weingart, Engels & Pansegrau, 2000; Olausson, 2009; Brown, Budd, Bell & Rendell, 2011). The results discussed in association with the "STRICT" MOTHER" frame notably provide further insight on Lakoff's findings (2004) with regards to gender-related characterizations. Indeed, while Lakoff focuses on American political communications to identify the frames of the "NURTURING PARENT" and the "STRICT FATHER" (2004), our analysis of American press articles about climate change shows a welldelineated trend towards the identification of a "STRICT MOTHER" with the use of the "Mother Earth/ Nature" metaphor. The American newspapers have indeed been identified as the part of our corpus which relies most frequently on this particular frame, compared to the other languages under study (52.63% of the American occurrences). Similarly, the British and the French journalists allow a major place to this characterization of the "MOTHER" in their articles (almost half of the "Mother Earth/ Nature" occurrences in each of the two languages). The Spanish press articles, however, barely rely on the frame of the "STRICT MOTHER". Hence, according to these results, Spanish journalists do not conceptualize the "MOTHER" figure as either "NURTURING" or "STRICT" while using the "Mother Earth/ *Nature*" metaphor. Instead, this specific language relies on novel characterizations to identify the "MOTHER". The Spanish portion of our corpus has indeed highlighted the "RIGHTLESS" qualification that can be attributed to this "PARENTAL" figure. This specific identification can be conceived as language-specific considering the very high frequency of use in the Spanish articles (67.7% of the occurrences of "Mother Earth/ Nature"). This may indicate a cultural representation of the "MOTHER" who, for the Spanish population, may be expected to be a "PARENTAL" figure who relies on her "RIGHTS" in order to fulfil her valuable "PARENTAL FUNCTION". This cultural influence is only hypothetical but the numerous collocations of the concepts of "mother" and "rights" in our corpus of Spanish press articles show an intrinsic link between these two concepts. It should be added that Spanish journalists may have given rise to such a conceptual link as a result of the specificities of climate change which they may identify as a "JUDICIAL" issue.

Particularities have been observed when paying attention to the lexical variations of the metaphorical expression "Mother Earth/ Nature". On the one hand, we have observed that the French linguistic elaboration of the metaphor, "dame nature", is aimed at attributing responsibilities for climate change to a figure who does not bear any "FAMILIAL" attributes. As a result, the French journalists avoid descriptions of a "STRICT MOTHER" which may contradict expectations related to the "NURTURING" ability of this "PARENTAL" figure. Hence, the attribution of the "STRICT" behavior to the figure of the "FATHER" in Lakoff's work (2004) is not contested by our results in the French newspapers. On the other hand, the three other languages under study show a different variation regarding the frequencies of use of "Mother Nature" as opposed to "Mother Earth" metaphors in the press. Indeed, this comparison has highlighted a welldelineated distribution of characteristics in English (American and British) and Spanish. In these languages, we have observed a prevalent story-line that presents "MOTHER EARTH" as an entity which is "VICTIMIZED" by the damaging actions of "MOTHER NATURE". Hence, in these parts of our corpus, we can notice that the journalists conceive the "earth" as the natural element affected by climate change while they conceive "nature" as the element that provokes climate change. Such a distinction has not been observed in the French corpus. Indeed, the study of the lexical aspect of the metaphorical expression has led us to notice that the metaphor "Terre Mère" ("Mother Earth") scarcely occurs in French press communications about climate change. We have justified this finding by mentioning the French linguistic elaboration "dame nature" which, according to our analysis, is not adapted to form an "earth-" compound (\* "dame terre": \* "dame earth"). The absence of personification of the concept of "earth" in this language gives rise to new interrogations. In future research, we aim at investigating a potential phonological reason for this absence. Indeed, in French, the phonology of the expression "Terre Mère" ("Mother Earth") only make use of two phonemes which both rely on highly similar vowel sounds. Therefore, our on-going investigation aims at highlighting the role of phonology in the interpretation and linguistic elaboration of metaphorical expressions.

#### **Declaration of interest:**

The content and submission of this paper has not been restrained by any conflict of interest.

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