A Study of Multimodal Metaphors in the Emblems of United Nations Climate Change Conferences

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Abstract: The emblems of the United Nations Climate Change Conferences are business cards for publicity of the conference, which can intuitively highlight the theme and target of each conference. Each emblem of conferences represents meanings through various modalities such as color, graphic, image and written symbol, emphasizing host country's geographical locations, cultures, environmental targets and expectations, which constitutes multimodal metaphors. Whereas the current researches on the emblems mostly focus on its design, aesthetic characteristics, communication functions, etc., few scholars have studied the meaning construction of multimodal metaphor from the perspective of cognitive linguistics in them.

Keywords: conceptual metaphor; multimodal metaphor; cognitive linguistics; the emblems of the United Nations Climate Change Conferences

1. Introduction

United Nations Climate Change Conference is one of the largest international meetings under the auspices of the United Nations in the world now[1]. As the global climate change problem is currently becoming more and more serious, many national governments have called for people to pay more attention to the United Nations Climate Change Conference, in order to let people from their own take care about climate change problems and protect the environment. The interpretation of these emblems is of great significance, because it is an effective way to use the emblems to disseminate the goal and spirit of the conferences to the public and draw people's attention to the conferences[4]. As symbol of conferences, the emblems of the United Nations Climate Change Conference are business cards for publicity of the conference, which can intuitively highlight the theme and target of each conference. Each emblem of conferences represents meanings through various modalities such as color, graphic, image and written symbol, emphasizing host country's geographical locations, cultures, environmental targets and expectations, which constitutes multimodal metaphor.

2. Theoretical Framework

2.1 Conceptual Metaphor

"The basic premise of Conceptual Metaphor Theory is that metaphor is not simply a stylistic feature of language, but that thought itself is fundamentally metaphorical in nature" According to CMT [6], this cognitive mechanism, i.e. conceptual metaphor, is elucidated in this section.

2.2 Multimodal Metaphor

2.2.1 Definitions of Multimodal Metaphor

Monomodal metaphors could be defined as "metaphors whose target domain and source domain are exclusively or predominantly rendered in one mode" (Forceville & Urios-Aparisi 2009: 23). The prototypical monomodal metaphors are verbal metaphors, pictorial metaphors and visual metaphors. "In contrast to monomodal metaphors, multimodal metaphors are metaphors whose target and source are each represented exclusively or predominantly in different modes" (Forceville & Urios-Aparisi 2009: 24).[5]

However, Eggertsson and Forceville (2009: 429) [3] clearly stated that this definition of multimodal metaphor was difficult to be applied in the actual analysis of concrete genres. In fact, multimodal metaphor can be defined in a broad sense and a narrow sense. The definition of multimodal metaphors

mentioned above is explicitly defined in a narrow sense, while in a broad sense, multimodal metaphor can be simply defined as a metaphor constructed by two or more modes (Zhao 2011: 2)[2]. For example, in a verbal-visual metaphor, both source and target domains are presented by pictures and texts (i.e., both of them are the visual mode), but it can still be regarded as a multi-modal metaphor in a broad sense [7]. In this thesis, the definition of multimodal metaphors in the broad sense is adopted.

2.2.2 Characteristics of Multimodal Metaphor

As the conceptual metaphor has distinct characteristics, multimodal metaphor also has its own unique features as what follows.

Firstly, multimodal metaphor is dynamic and narrative. Moreover, multimodal metaphors equip with dynamic and specific scenario with the help of different visual modes, which makes the interpretation of metaphorical meanings vivid and dynamic. Secondly, multimodal metaphor has its originality and creativity. Compared with conceptual metaphor in verbal mode, multimodal metaphors with dynamic and narrative features can show the mapping across two domains and the meaning of metaphor vividly, especially the physical and spatial dimensions of the source domain in visual discourse. Therefore, visual perception can infect receivers more than abstract language, so as to cause people's emotional effect. Finally, multimodal metaphor has the feature of concreteness in multimodal metaphorical mappings. People can perceive one concrete entity in terms of another concrete entity.

3. Chapter Five Metaphors in the Emblems of the United Nations Climate Change Conferences

3.1 Case Analysis

In Table 1, the basic information of the seven emblems of United Nations Climate Change Conferences can be seen. According to the organization states of the conferences, it can be clearly seen that these conferences are organized in a wide range of countries, covering many continents. Among the seven countries organizing the conferences, Europe has the largest proportion of conferences with a total of three. South America, Africa, Oceania and North America held each one conference. All the information about the host countries of the conferences is from the official websites of United Nations Climate Change Conferences.

Table 1: The basic information of the seven emblems

year	session	host country	continent
2005	COP 11	Canada	North America
2011	COP 17	South Africa	Africa
2013	COP 19	Poland	Europe
2015	COP 21	France	Europe
2017	COP 23	Fiji	Oceania
2019	COP 25	Chile	South America
2021	COP 26	UK	Europe

3.1.1 Case 1

The 2005 United Nations Climate Change Conference took place between 28th November and 9th December 2011 in Montreal, Canada. The conference included the 11th Conference of the Parties (COP 11) to the United Nations Framework Convention on Climate Change (UNFCCC) and the first meeting of the Parties to the Kyoto Protocol (CMP 1). The meeting produced an agreement known as "the Montreal Action Plan", which extend the life of the Kyoto Protocol beyond its 2012 expiration date and negotiate deeper cuts in greenhouse gas emissions. The emblem of COP 11 can be seen in Figure 1.

Montréal 2005

Figure 1: The emblem of COP 11

3.1.1.1 Color Metaphor

Based on people's daily experience, it is easy to associate the blue color with the color of the sky and the sea under the theme of environment. Two different shades of blue are used in this emblem to distinguish between the sky and the sea. The conceptual metaphor here is THE FEATURES OF THE SKY AND THE SEA ARE BLUE.

In addition, white is used as a connecting color, which ties together other elements of Montreal and the environment in this emblem. Besides, the white color on the emblem matches the background color of the city flag of Montreal. Therefore, white can be mapped to the target domain of Montreal, which can constitute a conceptual metaphor, that is, MONTREAL IS WHITE.

Thus, the conceptual metaphor mapping of blue color, white color and green color can be seen in Table 2.

Table 2: Conceptual Metaphor Mapping of Color Metaphor about COP 11

Source Domain	Mapping	Target Domain
blue	⟶	the features of the sky and the sea
white	⟶	Montreal
green	⟶	living environment and nature

3.1.1.2 Graphic Metaphor

This circular emblem contains many elements, such as the elements of the sky, the sea, the city and nature. All the elements are integrated harmoniously in one circle. So, the circle represents the unity of elements, that gets all the elements together. Besides, the circle is connected from the beginning to the end. Unlike a square, a circle has no edges and corners. Hence, a circle has a sense of harmony. Therefore, the circle in the emblem of COP 11 as the source domain can be mapped to the target domain of unity and harmony, which constitutes a conceptual metaphor, namely UNITY AND HARMONY ARE CIRCLE.

Thus, the conceptual metaphor mapping of circle and irregular graphic as source can be seen in Table 3

Table 3: Conceptual Metaphor Mapping of Graphic Metaphor about COP 11

Source Domain	Mapping	Target Domain
circle	⟶	unity and harmony

3.1.1.3 Image Metaphor

Firstly, the image of the sky is made up of the shape of white clouds on a light blue background. According to people's daily experience, when people see the sky, they always think of the weather and the air. Therefore, the image of the sky can also imply climate conditions. The conceptual metaphor here is CLIMATE CONDITIONS ARE THE SKY.

Secondly, the image of the sea is made up of white ripples on a dark blue background. Montreal is in the southwest of the province of Quebec. The city covers most of the Island of Montreal at the confluence of the Saint Lawrence and Ottawa Rivers. The port of Montreal lies at one end of the Saint Lawrence Seaway, the river gateway that stretches from the Great Lakes to the Atlantic. Montreal is defined by its location between the Saint Lawrence river to its south and the Rivière des Prairies to its north. Therefore, the image of the sea can be mapped to the target domain of the geographical features of Montreal, which can constitute a conceptual metaphor, that is, THE GEOGRAPHICAL FEATURES OF MONTREAL IS THE SEA.

Thirdly, the green cones in the emblem represent the image of mountains in Montreal. The most famous mountain in Montreal is Mount Royal, which is a landmark in the center of Montreal. Mount Royal is a large intrusive rock hill in Montreal, Canada and it located on the north side of the city center. The word "Montreal" comes from the Middle French "Mont Royal", which means "Mount Royal". Therefore, the emblem used the image of Mount Royal to represent Montreal, that is the host city of the 2005 United Nations Climate Change Conference. The conceptual metaphor here is MONTREAL IS MOUNT ROYAL.

Finally, Mount Royal is located in the center of Montreal and there are more than 10 skyscrapers in

this area, so the image of Mountain and building appear together in the emblem and the image of the building is represented by a large green rectangle in the emblem. Based on people's daily experience, buildings are places where people live and work. Therefore, the emblem used the image of building to represent people's daily living environment. The conceptual metaphor here is PEOPLE'S LIVING ENVIRONMENT IS BUILDING.

So, the conceptual metaphor mapping of the images as source can be seen in Table 4.

Table 4: Conceptual Metaphor Mapping of Image Metaphor about COP 11

Source Domain	Mapping	Target Domain
the sky	⟶	climate conditions
the sea	⟶	the geographical features of Montreal
Mount Royal	⟶	Montreal
building	⟶	people's living environment

3.1.1.4 Written Symbol Metaphor

There is a striking white letter "M" in the middle of the emblem. "M" is the first letter of the word "Montréal" and the letter "M" stands for the city Montreal, which was the host city for this United Nations Climate Change Conference. Here, the conceptual metaphor is MONTREAL IS THE LETTER "M".

In addition, the 2005 United Nations Climate Change Conference was held in Montreal, Canada. French is the official language of Montreal and is the most commonly spoken language in the city with nearly 70% of the population. Montreal was originally a French colony and since then the jurisdiction of this area has changed many times. But in any case, Montreal has always been a place of French speakers. Up to now, the signs in Montreal are still written in French. For people in Montreal, French and French culture are valuable possessions left by their ancestors, as well as their self-cultural identity. Therefore, French words on the official emblem can be mapped to the target domain of the cultural identity of French, which can constitute a conceptual metaphor, that is, FRENCH CULTURAL IDENTITY IS FRENCH WORDS.

Moreover, Arabic numerals 2005 represents in this emblem that the conference was held in 2005. Therefore, Arabic numerals as the source domain can be mapped onto the target domain of the timeliness of the conference. This emblem uses Arabic numerals to construct the conceptual metaphor THE TIMELINESS OF THE CONFERENCE IS ARABIC NUMERALS.

Thus, the conceptual metaphor mapping of the letter "M", French words and Arabic numerals as source can be seen in Table 5.

Table 5: Conceptual Metaphor Mapping of Written Symbol Metaphor about COP 11

Source Domain	Mapping	Target Domain
the letter "M"	⟶	Montreal
French words	⟶	French cultural identity
Arabic numerals	⟶	the timeliness of the conference

3.1.2 Case 2

South Africa hosted the 17th session of the Conference of Parties (COP 17) of the United Nations Framework Convention on Climate Change (UNFCCC) and the seventh Meeting of the Parties (CMP 7) to the Kyoto Protocol (UNFCCC COP 17/ CMP 7 also known as COP 17). This event was held in the City of Durban from 28 November to 9 December 2011 in Durban, South Africa. COP 17 aimed to establish a firm set of commitments among participating countries to reduce country-level carbon emissions and to agree to the mechanisms that were required to achieve carbon emissions reductions as a global effort to contain the disastrous effects of anthropogenic climate change. The emblem of COP 17 can be seen in Figure 2.

Figure 2: The emblem of COP 17

3.1.2.1 Color Metaphor

According to daily experience, green has always been associated with the natural environment. The green color in this emblem is the color of plants reflecting the characteristics of agriculture and forestry. Therefore, the emblem uses green to construct the conceptual metaphor THE CHARACTERISTICS OF AGRICULTURE AND FORESTRY ARE GREEN. Besides, no effort will be spared in this conference to reduce event-related emissions as well as promote the reduced use of natural resources. The call for a low-carbon event has given rise to an overall programme, known as "Greening COP 17". Thus, it can be seen that green is the theme color of this conference. Here, the conceptual metaphor is THE THEME COLOR OF CONFERENCE IS GREEN.

Thus, the conceptual metaphor mapping of green color can be seen in Table 6.

Table 6: Conceptual Metaphor Mapping of Color Metaphor about COP 17

Source Domain	Mapping	Target Domain
green	⟶	the characteristics of agriculture and forestry; the theme color of conference

3.1.2.2 Graphic Metaphor

Firstly, based on people's understanding of the appearance of the Earth, people know that the Earth is a round sphere. When people want to draw the shape of the Earth on papers, they would like to draw a circle to represent the shape of the Earth. Therefore, the circle in the emblem of COP 17 as the source domain can be mapped to the target domain of the shape of the Earth, which constitutes a conceptual metaphor, namely THE PHYSICAL FEATURES OF THE EARTH ARE CIRCLE.

Secondly, the shape of a withered tree represents the fact the natural environment is deteriorating. It is well known that natural resources are limited and if people do not take good care of the environment and only use natural resources blindly, then the natural resources will be used up one day. At that time, people realized that it was too late to protect the natural environment. Therefore, the designer of this emblem uses the shape of a withered tree to warn people about the currently scarcity of natural resources, in order to appeal to people to cherish and save the limited natural resources and take actions to protect the environment. The shape of a withered tree can be mapped to the target domain of the scarcity of natural resources, which can constitute a conceptual metaphor, that is, THE SCARCITY OF NATURAL RESOURCES ARE THE SHAPE OF A WITHERED TREE.

Thus, the conceptual metaphor mapping of circle and irregular graphic as source can be seen in Table 7.

Table 7: Conceptual Metaphor Mapping of Graphic Metaphor about COP 17

Source Domain	Mapping	Target Domain
circle	⟶	the physical features of the Earth
the shape of a withered tree	⟶	the scarcity of natural resources

3.1.2.3 Image Metaphor

The image of a withered tree on the Earth visually illustrates the theme of this conference, which is to get "agriculture in" on the Climate Change agenda. From the emblem, people can see the image of a withered tree, which indicates poor state of agriculture and forestry, is closely connected to the image of

the Earth, which represents the current people's living environment. The whole emblem means that agriculture and forestry are controlled by humans now, and there is a poor relationship between natural resources and human beings. If people on the Earth continue to abuse the natural resources, then the resources on the Earth are becoming scarce and can be used up one day. The ecological cycle will be destroyed and what makes it terrible is that people's living environment will be destroyed. Therefore, the image of a withered tree on the Earth on the emblem can be mapped to the target domain of a poor relationship between natural resources and human beings. The emblem uses this image to construct the conceptual metaphor A POOR RELATIONSHIP BETWEEN NATURAL RESOURCES AND HUMAN BEINGS IS THE IMAGE OF A WITHERED TREE ON THE EARTH.

So, the conceptual metaphor mapping of this image as source can be seen in Table 8.

Table 8: Conceptual Metaphor Mapping of Image Metaphor about COP 17

Source Domain	Mapping	Target Domain
the image of a withered tree on the Earth	⟶	a poor relationship between natural resources and human beings

3.1.2.4 Written Symbol Metaphor

The UN Climate Change Conference (COP 17) was held in Durban, South Africa. South Africa has 11 official languages and each of them has equal status. Due to its diversity of ethnicities and cultures, South Africa is called the "Rainbow Nation". The Constitution of South Africa recognizes 11 official languages. The 2011 census showed that 22.7 percent of South Africans speak isiZulu as their native language, making it the most commonly spoken language. English is the most common language used in parliamentary, state discourse and business. The words at the bottom of the emblem are written in English, which shows that the UN Climate Change Conference is an open and international summit and this conference calls on all member states to work together to protect the environment and the natural resources. Therefore, the conceptual metaphor is OPEN AND INTERNATIONAL COOPERATION IS ENGLISH WORDS.

Besides, Arabic numerals 2011 represents in this emblem that the conference was held in 2011. Therefore, Arabic numerals as the source domain can be mapped onto the target domain of the timeliness of the conference. The emblem uses Arabic numerals to construct the conceptual metaphor THE TIMELIENESS OF THE CONFERENCE IS ARABIC NUMERALS. In addition, the Arabic numerals "17" are written under the emblem to show that it was the 17th yearly session of the Conference of the Parties (COP) to the 1992 United Nations Framework Convention on Climate Change (UNFCCC). Moreover, the Arabic numerals "7" are written next to the "COP 17", which means the seventh session of the Meeting of the Parties (CMP) to the 1997 Kyoto Protocol. Therefore, it is possible to construct a conceptual metaphor HISTORY OF THE CONFERENCE IS ARABIC NUMERALS.

So, the conceptual metaphor mapping of English words and Arabic numerals as source can be seen in Table 9

Table 9: Conceptual Metaphor Mapping of Written Symbol Metaphor about COP 17

Source Domain	Mapping	Target Domain
English words	⟶	open and international cooperation
Arabic numerals	⟶	the timeliness of the conference; history of the conference

4. Conclusion

On the basis of concept metaphor theory and multimodal metaphor theory, Four main types of modalities and multimodal metaphors are found in emblems. In the light of the above case studies, the major findings are as follows:

Firstly, the mainly modalities in the emblems of United Nations Climate Change Conferences are color modality, graphic modality, image modality and written symbol modality. The color modalities mainly include blue, green, gray, white, yellow, black and red. The graphic modalities are mainly included circle, arrow, swirling shape and irregular graphics. The image modalities mainly include plant, building, natural scenery, clock and the Earth, etc. The written symbol modalities are mainly included

the letter, English words, French words, Spanish words and Arabic numerals. The distribution of modalities implies metaphorical meanings conveyed by the host countries of the conferences.

In addition, in the emblems of United Nations Climate Change Conferences, metaphors are divided into color metaphor, graphic metaphor, image metaphors and written symbol metaphors, using modality as the source domain. Through mapping mechanism, metaphor mainly express the environmental targets and expectations, geographical locations, history and national cultures in the emblems of United Nations Climate Change Conferences.

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