

The Image of Climate Crisis in Media: A Conceptual Metaphor Analysis

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Abstract

The climate crisis has now become the world problem and a big environmental issue and has drawn the attention of governments and media. The impact of the crisis can be reflected on how media describe the crisis using metaphors. The way media use the language metaphorically to describe the climate crisis is the focus of this study. Using conceptual metaphor analysis, the researchers aim to identify the source domains of climate crisis metaphor which deliver the sense of urgency message related to climate crisis. The source of data is news articles from The Guardian online news website which discuss the climate crisis. The result shows that various source domains are used to describe the climate crisis in metaphor: Climate Crisis is described as a War, as an Object in Motion, Directionality, a Vehicle, a Destination, a Political Ideology, a Wrestler, a Chemical Substance, and as a Natural Disaster. Although climate crisis is, one of them, described metaphorically as a destination where sooner or later without a drastic action, eventually the world will arrive there, but it implies an unwanted destination that should be avoided or else, turning back or stop towards the destination, and with the highest finding where climate crisis is described as a war to fight and to combat, it shows that climate crisis is a real threat to our world which everyone should take action to fight. This study shows that although the unintended entailments occurred, the source domain of war and destination deliver the sense of urgency of the climate crisis.

Keywords: *climate crisis, metaphor, source domain, media language.*

Introduction

The increasing global temperature has been reported to reach its highest in 2018; on WMO Statement on The State of Climate Change in 2018 (2019), the year 2018 was the fourth warmest on record. On another report released by United Nations Environment Program (UNEP) on its Emission Gap Report 2018 states that in addition to increased temperature, 2018 has experienced numerous other climate-related extremes, including devastating storms, floods, heat waves, and droughts; causing thousands of casualties and huge economic losses for citizens, companies and states. Both of those reports show the high and critical level of urgency for all countries to prevent a worse climate crisis.

The climate crisis and the urgency to handle this global issue have raised attention from international organizations, countries and media to take part in each relevant effort to raise awareness and to have everyone on board to prevent a worse impact, even from the language used to refer to the crisis. The first scientific term used to refer to the change of the climate condition was introduced by Broecker, W.S (1975) which discussed the effect of the carbon dioxide to the change of climate and used global warming, but the political influence has gradually changed it to a softer term 'climate change'. After seeing the impact of the crisis to the change of the climate, various media advocate the urgency of this issue and use the climate crisis, or climate emergency terms instead. Thus, media plays an important role in sharing the information of

how urgent the situation is and to persuade as many readers to take action, and for that, using impactful metaphor to describe the climate crisis will provide that state of urgency. Impactful metaphor refers to the high impact of its vivid description in describing an abstract concept using a more concrete concept. It is also the reason why this paper uses the climate crisis title instead of climate change, to share the urgency of the issue.

This paper focuses on analyzing the way media use the language particularly metaphor to describe the climate crisis. Whereas the aim of this paper is to identify the source domain of metaphor used to describe the climate crisis and to reveal the underlying concept from source domains that are used to compare the climate crisis with.

Metaphor in this paper is defined as the use of an expression from a more concrete field of discourse to speak about an abstract concept to be able to provide a better mental and cognitive picture, for example saying metaphorically

“leave me alone before I erupt”

Will send a clear intended message than just saying :

“leave me alone before I get angry”

The phrase *“before I erupt”* on the first example is a metaphorical expression which delivers a more vivid description of what will happen, and is more impactful than the later to the hearer, since it builds a mental image based on the knowledge of how concrete concept of “erupt” is. In this example, erupt is the source domain and anger is the target domain of the metaphor.

Further elaboration will also be given on the mapping of source domain-target domain to describe image schema of the source domains to see the persuasive impact of particular metaphor and the potential

unintended entailments followed. Thus, the analysis will not only limit to the surface linguistics aspect, but also to reach the conceptual level of the source domain.

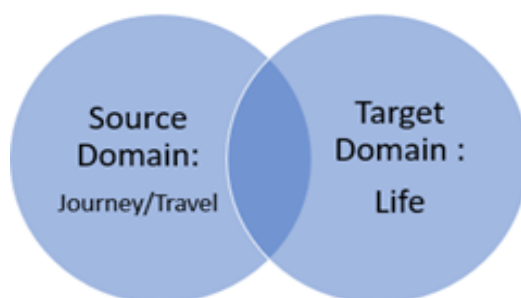
News articles from *The Guardian* news online web site on climate crisis topic were analyzed in this paper, and as identification of metaphor is an important aspect in conceptual metaphor analysis, thus, the Metaphorical Identification Procedure (MIP) introduced by Praglejazz Group (2007) is used which is described in detail in the next section. Then, after the metaphor was identified, the researchers examined the source domain to identify the literal field of discourse.

Further analysis was also conducted to have an in-depth analysis of image-schema mapping behind the conceptual metaphor as well as the unintended entailments of source domains.

Methodology

This paper analyzes the metaphor used to describe climate crisis in media discourse, the conceptual metaphor theory provides a framework to analyze the ideology behind the metaphor used in various discourses. Lakoff and Johnson (1980, p. 6) view that metaphor is not just a matter of language, but beyond that, metaphor is a conceptual cognitive process and it is the result of the mapping of source domain to target domain. Kovecses (2010, p.4) further elaborates on the terms of source domain and the target domain in conceptual metaphor. The source domain is the more concrete domain as a comparison to the target domain which is more abstract. Therefore, by using a more concrete target domain, reader/hearer will easily grasp the abstract concept. Take an example of source domain and target domain mapping *Life is Journey* as shown in figure 1 below.

Figure 1 : *Life is Journey* mapping



Consider the line from Robert Frost's poem below:

...*"Two roads diverged in a wood, and I-
Took the one less traveled by,..."*
(Frost, 1916)

Figure 1 is the illustration of *Life is Journey* metaphor. The mapping can trigger many metaphorical expressions and is extended to pictorial metaphor and other multimodal metaphor. Many inspirational quotes describe a long road, a cross-road, or a winding road picture. One of them is the famous poem by Robert Frost "The Road Not Taken" which describes a choice in life using a journey source domain. Using the conceptual metaphor framework, the identification of target domains that are used to metaphorically speak about the source domain climate crisis can be carried out.

Kövecses (2003) affirms that metaphor is seen as a composition of ten components that interact, namely:

- (1) Experiential basis, which motivates the choice of particular sources to map into particular targets
- (2) Source domain
- (3) Target domain
- (4) Relationship between the source and the target is that a source domain can apply to several targets and a target can attach to several sources
- (5) Metaphorical linguistic expressions are the result of the particular pairings of those domains
- (6) There are basic conceptual correspondences, or mappings, between the source and target domains, source domains often map materials onto the target beyond the

- basic correspondences and these additional mappings and may result
- (7) Entailments or inferences and
- (8) Blends.
- (9) Conceptual metaphors often materialize in nonlinguistic ways, that is, not only in language and thought but in social reality
- (10) Conceptual metaphors converge on, and often produce cultural models, that is, holistically structured conceptual units.

Refers to point 7 above that entailments and inferences are some components that compose the metaphorical expressions, it is therefore unavoidable for the unintended entailments might appear from the mapping of source domain to target domain. These entailments and inferences are also analyzed in the second sub-section of the finding.

To identify metaphor, Metaphor Identification procedure (Pragglejazz Group, 2007) is used as follows:

- (1) Read the entire text-discourse to establish a general understanding of the meaning.
- (2) Determine the lexical units in the text-discourse.
- (3) (a) For each lexical unit in the text, establish its meaning in context, that is, how it applies to an entity, relation, or attribute in the situation evoked by the text (contextual meaning). Take into account what comes before and after the lexical unit.
(b) For each lexical unit, determine if it has a more basic contemporary meaning in other contexts than the one in the given context. Basic meanings tend to be —More concrete; what they

evoke is easier to imagine, see, hear, feel, smell, and taste. Basic meanings are not necessarily the most frequent meanings of the lexical unit.

(c) If the lexical unit has a more basic current-contemporary meaning in other contexts than the given context, decide whether the contextual meaning contrasts with the basic meaning but can be understood in comparison with it.

(4) If yes, mark the lexical unit as metaphorical.

The function of metaphor itself is not only as poetic devices but beyond that, there are many functions of the use of metaphor. Murray and Moon (2003, p.5) agree that metaphor is important not only for poetic devices but also for explaining, clarifying, describing, expressing, evaluating, and entertaining. They affirm that:

There are many reasons why we use metaphors in speech or writing: not least, because there is sometimes no other word to refer to a particular thing. But where we have a choice, we choose metaphors in order to communicate what we think or how we feel about something; to explain what a particular thing is like; to convey a meaning in a more interesting or creative way; or to do all of these....(Murray and Moon, 2005,p.3)

Furthermore, Littlemore and Low (2006,p.9) state that metaphor also serves an evaluative function such as toning down an extreme position, or flagging the irony in a statement. This is also the case in climate crisis metaphor; the intention is to persuade readers to be aware of the impact and to join the action to prevent any worse impacts of climate crisis.

There have been several previous studies on how climate change and climate crisis are described through metaphor. One of them is conducted by Niebert and Gropengiesser (2013) that conclude metaphors “as a bridge between experience and scientific concepts” which is essential to understand climate change and find the conceptions of global warming between students and scientists to have the same schemata.

Whereas Woods, R., Fernández, A., and Coen, S. (2012) analyze 122 British newspaper articles published using a religious metaphor between summer 2003 and 2008 and they conclude that the articles use religion as a source of metaphor to denigrate climate change in two ways:

- (1) undermining its scientific status by presenting it as irrational faith-based religion, and proponents as religious extremists intolerant of criticism;
- (2) mocking climate change using notions of sin, e.g. describing “green” behaviors as atonement or sacrifice.

In another study, Nerlich (2012) discusses how the lexical compound low carbon in general and the metaphor low carbon future in particular came to prominence in policy discourses, especially in the UK, and how they were used to frame expectations of a prosperous low carbon future.

The study of different functions of metaphors in two texts about anthropogenic climate change from different genres is conducted by Deignan (2017) who argues that in the popular text, analyzed metaphors tend to have the function of entertaining and dramatizing, and introducing and concluding, as opposed to their informational (ideational) function in the research article that was analyzed and further finds that the young people’s use of figurative language is compared with that of researchers and educationalists.

Van der Hel, S., Hellsten, I., and Steen, G. (2018) are specific to “tipping point” metaphor of climate crisis, affirm that the term can become a multi-purpose bridge between science and the news media, describing how its meaning and use are diversified in the interaction between these two domains. Within the scientific domain, the metaphor develops from a rhetorical device conveying a warning of drastic, irreversible and dangerous climate change to a theoretical concept driving empirical research. They agree that the tipping point metaphor is a highly versatile concept and expression, allowing it to be used for various communicative purposes by distinct stakeholders in different contexts.

Those previous studies focus on various different aspects of climate crisis source domains. This paper, apart from identifying the source domain and the underlying-concepts of mapping, also discusses the unintended entailments and socio-cultural context inferred from particular source domains found.

Finding and Discussion

The source domains of metaphor describing climate crisis used by media reflect the conceptual way of the image of the crisis in a more concrete term. The source domains are identified by a careful examination of the metaphorical expressions. There are 17 metaphorical expressions of climate crisis with nine source domains as listed in detail in table 1.

Table 1 – The Metaphor of Climate Crisis and its Source Domain

News No.	Source Domain
News 1 Animals failing to adapt to speed of climate crisis, study finds (Watts, 2019)	Object in Motion
News 2 The speed of climate disruption is outstripping many animals' capacity to adapt (Watts, 2019)	Object in Motion
News 3 ..caused by the escalating climate crisis while the rest of the world suffers...(Carrington, 2019)	Directionality/Going Up
News 4 Hundreds of thousands of schoolchildren across the world have gone on strike in protest at the escalating climate crisis. (Taylor, 2019)	Directionality/Going Up
News 5 Added to that, the south Atlantic is a hotbed of geomagnetic activity–something many experts believe is a factor driving the climate emergency. (MacEacheran, 2019)	Vehicle
News 6 “At a time when civilization is accelerating toward disaster, climate silence continues to reign across the bulk of the US news media,” (The Guardian, 2019)	A Destination
News 7 “The 21st century will be characterised by our success or not in wrestling with these huge challenges. If we carry on as we are, I fear biodiversity will continue to decline in this country.” (Watts, 2019)	A wrestler
News 8 “This crisis should be a catalyst for states to fulfil long ignored economic and social rights, including to social security and access to food, healthcare, shelter, and decent work,” the report said. (Carrington, 2019)	A Chemical Substance

News 9 As well as investing billions in reinforcing cities against climate disasters , we should support those feeling its impact right now (Antequisa, 2019)	Other Natural Disasters
News 10 For many people, even a small rise in temperatures will be catastrophic (The Guardian, 2019)	Other Natural Disasters
News 11 The world is increasingly at risk of “ climate apartheid ”, where the rich pay to escape heat and hunger (Carrington, 2019)	A Political Ideology
News 12 The town fighting the climate crisis to stay afloat, one hurricane at time (Graff, 2019)	A War
News 13 The Guardian joins a major media initiative to combat the climate crisis (The Guardian, 2019)	A war
News 14 BHP boss announces \$US400m plan to combat 'indisputable' climate crisis (Australian Associated Press in The Guardian, 2019)	A war
News 15 The chief executive of the world's largest mining company has endorsed drastic action to combat global warming , (Australian Associated Press in The Guardian, 2019)	A War
News 16 it was not enough to combat the looming threat of mass extinctions and major sea rises. (Australian Associated Press in The Guardian, 2019)	A war
News 17 The climate crisis is our third world war . It needs a bold response (Stiglitz, 2019)	A war

There are also same source domains with different linguistics expressions : the source domain Object in Motion, A war, and Natural Disasters which although the source domain is similar, there are differences in the level of linguistics expression. Each of the source domains is discussed in the following detail:

A (Fast) Object in Motion and Directionality (up movement)

The comparison of climate crisis as a fast-moving object creates a sense of urgency which human being needs to race with, as seen from News 1 and News 2:

News 1

“Animals failing to adapt to speed of climate crisis, study finds” (Watts, 2019)

News 2

"The speed of climate disruption is outstripping many animals' capacity to adapt" (Watts, 2019)

The use of the metaphorical expression *speed of climate crisis* in news 1 compares the crisis as a moving entity with a very high speed and will affect how animals adapt to its speed. This metaphor describes vividly the level of climate crisis and presents a perfect conception of the crisis. It also implies that animals and human beings are racing against the climate crisis. The sub-target domain of the metaphor in news 2 refers to the indicators used to measure the climate crisis, which is based on the report of World Meteorological Organization (WMO) (2019), seven state-of-the-climate indicators include surface temperature, ocean heat content, atmospheric carbon dioxide (CO₂), ocean acidification, sea level, glacier mass balance, and Arctic and Antarctic sea ice extent.

Additional indicators are usually assessed to allow a more detailed picture of the changes in the respective domain. These include in particular but are not limited to precipitation, GHGs other than CO₂, snow cover, ice sheet, extreme events and climate impacts. Whereas the sub-target domain of the metaphor above refers to the high rate of increasing temperature, as can be seen from the context following the news story: "Previous academic work has shown that species respond to warming temperatures by earlier timing of biological events" (Watts, 2019)

Specific to news 1, the entailments followed are that humans and animals are racing against the increasing temperature, and the studies show that animals, in particular, seem lost in the race. The conception of the impact of climate crisis as a fast-moving object is an effective metaphor to describe the fast increasing impact or indicators of the change of climate condition. This provides a sense of urgency with an entailment that if the speed is progressing, then humankind and animals will be lost, which can be conceptualized as the exposure to the worse impact of the climate crisis.

Whereas directionality is similar in terms of the movement made, *escalating* implied a fast movement to the upper position, which implied the increase of the rate of climate crisis impact. Nevertheless, the use of *escalating* to collocate directly with the phrase climate crisis provides an image-schema of a fast-changing condition, in this context, the fast-changing climate condition.

News 3

"...caused by the escalating climate crisis while the rest of the world suffers..." (Carrington, 2019)

The metaphor of directionality with up and down image-schema is common source domain to talk about the fluctuation number of a certain thing, where *increasing* is understood as going up with the metaphorical expressions such as *rising*, *soaring*, or *escalating* as seen in news 3 and news 4, whereas *decreasing* is understood as going down which is commonly expressed metaphorically as *dive down* or *fall*.

This type of metaphor is classified by Lakoff and Johnson (1980) as orientational metaphor, which maps that more is up and less is down. Kovecses (2010) also affirms that upward orientation tends to associate with positive evaluation, whereas downward orientation is the opposite. In the metaphor in news 3, although *escalating* suggests an upward orientation but the inference and entailments suggest a negative evaluation since it refers to an impact of climate crisis.

Vehicle and Destination

The use of Vehicle source domain is common to many target domains. The embodied experience of vehicle in terms of a means of transporting from one point to a destination point provides a concrete mental image schema to any abstract concept as target domain. As seen from one metaphorical expression:

News 5

"Added to that, the south Atlantic is a hotbed of geomagnetic activity something many experts believe is a factor driving the climate emergency" (MacEacheran, 2019)

In the metaphor above, the *geomagnetic activity happening in South Atlantic* is understood as a fuel to the climate emergency which is understood as vehicle. This provides a movement process image schema based on our experiential and cognitive concept of vehicle towards a particular direction. Furthermore, the particular verb *driving* used in the metaphorical expressions also implied the same.

Whereas still from the same semantics field which can bring a related image schema is the use of source domain *destination*, as seen from news 6 below:

News 6

"At a time when civilization is accelerating toward disaster, climate silence continues to reign across the bulk of the US news media,"(The Guardian, 2019)

The metaphorical expression above provides conception that the climate crisis disaster is waiting at the end of the line and human being is driving or riding fast toward it, using the verb *accelerating* provides a mental picture that the level of crisis is so high.

Another point to highlight is from the metaphor in news 3, the entailment puts climate crisis as an active agent, different from news 6 above, which puts climate crisis as a passive agent and human being as the active one, which is better since the focus is in the human actions toward climate crisis.

Impact of Climate Crisis as a Wrestler to wrestle against

Sports metaphor is one of the common source domains, which are commonly used in political, economic and other abstract concepts. *Wrestling* is one of the types of sports metaphors. The relevance of sports metaphor in an abstract source domain is, the biggest entailment that could raise from a sports metaphor is the winning or losing, which can also be seen in news 7 which describes the climate crisis as something to wrestle against:

News 7:

"The 21st century will be characterised by our success or not in wrestling with these huge challenges. If we carry on as we are, I fear biodiversity will continue to decline in this country."(Watts, 2019)

The metaphor above shows the use of metaphor to consider the climate crisis as an animate and a living human, particularly a wrestler that needs to wrestle against to be able to maintain the biodiversity; otherwise the decline of the numbers of diversity might happen.

If the climate crisis is the wrestler to be against with, this metaphor entails that the winning of the wrestling game is when human beings or the government is able to prevent a worse impact of climate crisis which eventually can maintain the biodiversity. Whereas the opposite result, losing the wrestling game means the decrease of biodiversity which cause by a worse climate crisis.

Although the news 7 above still entails a winning or losing entailment, *wrestling* has another entailment than just normal sports, as wrestling involves a huge power and a big enemy. Thus, the metaphor implied the need of extra power and energy to prevent a worse climate crisis.

Climate Crisis is a Catalyst

One example of novel metaphor is the use of the word *catalyst* which comes from the chemistry field of discourse. Catalyst is a type of substance and is defined in Webster online dictionary (2019) as "an agent that provokes or speeds significant change or action". The simple explanation from the technical definition is that catalyst acts as an accelerating agent of a process as used in the metaphor below:

News 8:

"This crisis should be a catalyst for states to fulfill long ignored economic and social rights, including to social security and access to food, healthcare, shelter, and decent work"(Carrington, 2019)

The metaphor entails that the climate crisis acts as a reminder to the government to improve and to speed their action in providing a better life for its citizens. There is a sense that climate crisis in this metaphor is viewed conceptually as a benefit for economic and social rights improvement.

Therefore, the characteristics of catalyst in this metaphor entail a counterproductive sense to the action of preventing a further worse impact of the crisis if the characteristic of catalyst as an important agent in a chemical and industrial process is also interpreted by readers. There can also be a misinterpretation to the intended entailments of the metaphor, especially for readers with no previous knowledge of the concept of catalyst.

Climate Crisis is Other Natural Disasters

The metaphors from this source domain are within the same domain *i.e.* *natural disaster*. The climate crisis is described in the language as how other natural disasters are described; this will provide a concrete image on the impact of climate crisis as in news 9 and news 10 below:

News 9

"As well as investing billions in reinforcing cities against climate disasters, we should support those feeling its impact right now"(Antequisa, 2019)

News 10

"For many people, even a small rise in temperatures will be catastrophic" (The Guardian, 2019)

Climate disasters and catastrophic refer to the impact of climate crisis on the environment and human's lives. The conceptual framing from both metaphors entailed such a huge impact which might occur as the impact of climate crisis.

In particular to news 10, which used the metaphor in syntactical form as an adjective in a predicate function, has also brought the importance of the metaphor in the sentence, as it is assigned to directly describe the impact of the rise of the temperatures. The *catastrophe*

as a metaphor itself has been used in media discourse to describe a huge disaster as a result of something, one of the discourse is in the field of finance and economy as studied by Dalalau (2013) who finds business press articles used metaphor to describe the financial crisis with one of them using *catastrophe*.

Political Ideology

The use of particular political ideology *apartheid* to collocate with climate crisis is also an example of novel metaphor, which means that the metaphor is not conventional and is not commonly used. This particular metaphor can be less effective in delivering the climate crisis message, as it will bring unintended entailments which are associated with the apartheid ideology itself.

News 11

"The world is increasingly at risk of "climate apartheid", where the rich pay to escape heat and hunger caused by the escalating climate crisis while the rest of the world suffers,..."(Carrington, 2019)

Although the use of this metaphor is intended to express how climate crisis might make a gap between the rich countries and the poor people in the impact of the crisis due to the different financial resources to handle the crisis; nevertheless, the connotation of the *apartheid* shall bring a negative association to the climate crisis itself, and readers might perceive the crisis as the active agent or the actor.

Under article 7 Statute of the International Criminal Court (ICC) the crime of apartheid is included as a crime committed as part of a widespread or systematic attack directed against any civilian population. An in-depth analysis to news 11, the *climate apartheid* mentioned above is the division between the rich and the poor in facing the climate crisis, it implies that the rich has all of their resources to escape from the risk of the climate crisis impact, whereas the poor countries will be impacted. The socio-political connotation behind the metaphor might be counterproductive to the campaign. The conceptual correspondence between source

domain to target domain lies on the conceptions of the civilian sociological differences and strata, but is not intended to entail any socio-political concept which can be associated with an ideological attack against particular population.

War Source Domain

The use of war as the source domain of climate crisis metaphor has also been highlighted by the study conducted by Flusberg, S. J., Matlock, T., and Thibodeau, P. H. (2017) who study the role of metaphorical framing in shaping attitudes toward climate change. They find that when it comes to choosing a metaphor to talk about climate change, the war metaphor is consistently more impactful than the race metaphor.

The result of this study also finds the concept of a war used as the source domain to speak about the climate crisis and the impact of it. The variations of the words used are fighting as seen in news 12 and combat in news 13 to news 16. Whereas in news 17, 'third world war' is used by Stiglitz (2019) who writes the opinion and uses it as the title of the article as the analogy of climate crisis if no significant and drastic actions are taken. Those variations in lexical level as well as in syntactical level of war metaphor to describe the climate change shows that war metaphor is one of most conventional metaphors to describe the climate crisis.

All of those war metaphors to speak about climate crisis are similar in terms of sending the message that climate crisis is an enemy to fight. Atanasova, D and Kotevko, N (2015) find that *The Guardian Online* employed war metaphors to advance pro-climate change arguments. War metaphors were used to (1) communicate the urgency to act on climate change and (2) conceptualize climate change politics.

Nevertheless, there is an important aspect to consider when using the source domain war to talk about climate crisis. The entailments followed are the climate crisis and its impact is something that is really huge and can only be handled by the power of institution or the power of government with sufficient

resources as if to fight in a real war. This entailment is, of course, unintended, but as Gibbs (2010) affirms that a wide variety of factors influences the cognitive effort and cognitive effects associated with metaphor interpretation.

There are personal, linguistic, and socio-cultural factors that shape the effort put into understanding a metaphor. Thus, for some people in a conflict region, their image-schema to the source domain of war metaphor will be influenced by their experiences, and might eventually perceive the effort to deal with the impact of climate crisis as something painful. The further discussion on these unintended entailments is presented in the next subsection.

Conceptual Mapping and Unintended Entailments of Climate Crisis Metaphor

As previously discussed on the literary framework section that mapping and entailments are two of few components in conceptual metaphor and in order to provide a broader view on how a source domain can be used to speak about the climate crisis, we provide an example of the image schema of source domain-target domain mapping and example of entailments.

Ahrens (2002) defines mapping principle (MP) as image-schemas that map for a certain conceptual metaphor, including the underlying reason why a particular target has selected a particular source domain. The twelve metaphorical expressions above have various impacts of persuasion on the level of delivering the state of urgency of climate crisis in terms of the number of characteristics transferred from the source domain to the target domain.

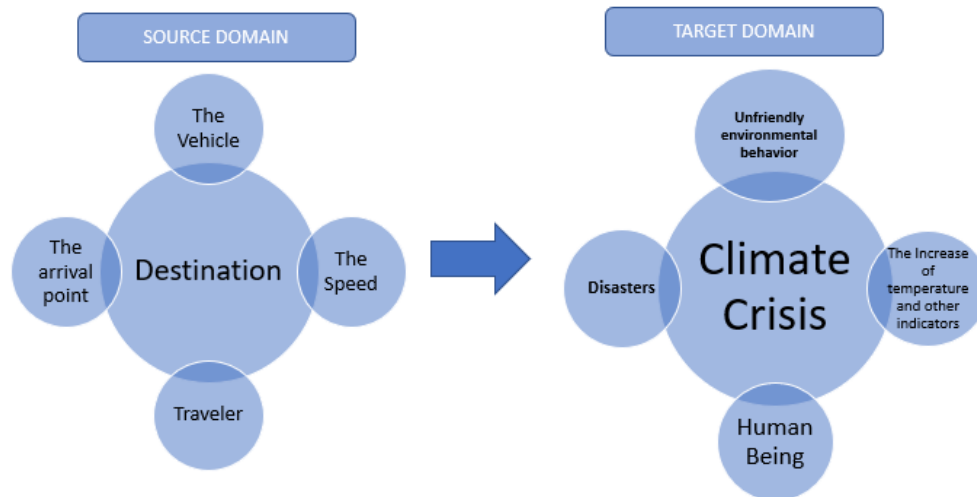
We agree that the more characteristics of source domain are transferred to the target domain, the more persuasive the metaphor and the more impactful in sending message on the urgency of climate crisis. Whereas when the properties of source domain have negative conceptions, it will also affect the interpretation of the climate crisis as target domain.

We present the comparison of all properties transferred from source domain to target domain in Figure 2 below:

News 5

"At a time when civilization is accelerating toward disaster ..."(MacEacheran, 2019)

Figure 2 –Source domain characteristics mapping to target domain



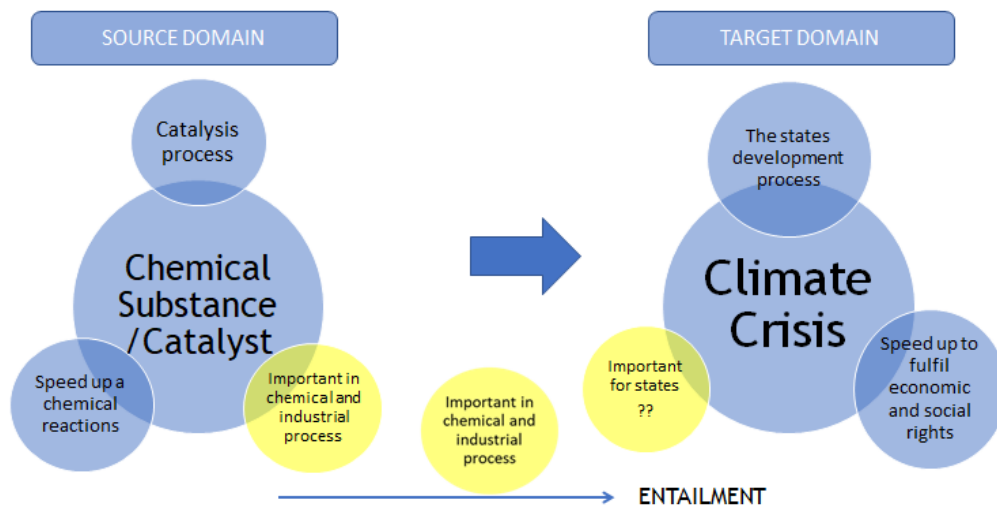
Above is the schematic transfer of source domain destination to target domain climate crisis with sub-target domain impact of climate crisis. From four characteristics or properties of destination, all of them are transferred to the target domain, and the conceptual correspondences mapped are:

1. The disasters which understood as arrival point,
2. The human unfriendly environmentally behavior which is understood as the vehicle,

3. The high increase of all indicators of climate crisis understood as the speed and
4. The human being is understood as the travellers.

Therefore, the metaphorical expression above has successfully carried the message of impact of climate crisis, by mapping as many characteristics from source to target without any unintended entailments.

Whereas in figure 3 below, there is an unintended entailment which may follow:

Figure 3 – Unintended Entailments from Source Domain**News 7**

"This crisis should be a catalyst for states to fulfill long ignored economic and social rights, including to social security and access to food, healthcare, shelter, and decent work," (Watts, 2019)

The source domain *catalyst* can be used to speak metaphorically about climate crisis with the following mapping principle:

Mapping principle: Climate Crisis is understood as catalyst because catalyst is a speed up agent on a chemical process, while the impact of climate crisis on government actions are abstract entities that are might speed up to fulfill economic and social rights.

From the metaphor, there will be an unintended entailment that followed, as the source domain implied the *catalyst* as an important process in chemical and industry, and then this entailment could be mapped onto the target domain. Kovecses (2005, p.128) reaffirms that source domain can potentially lead to a number of metaphorical entailments. This entailment is related to an agent that provokes or speeds significant change or action, therefore, this entailment puts the climate crisis as an active agent instead of the impact of the human's behavior.

This, too, can happen on the News 11 which uses *apartheid* as source domain, by

talking the climate crisis as climate apartheid, in a specific region, with that particular socio-political experience; it is hard to avoid the unintended entailments. Therefore, it is also important to highlight and to focus on the unintended entailments of a metaphor in source domains on the studies of source domain of metaphor particularly when the metaphor is used to advocate an important issue and is intended to persuade people.

From 17 metaphorical expressions on climate crisis discussed in this paper, in majority they have sent a message of urgency and a drastic action should be taken to avoid any worse impact of climate crisis to our world and to human beings. Nevertheless, some findings also show the inevitable unintended entailments from the source domain, especially in a particular socio-political context of readers are also implied. The 17 metaphorical expressions also show that some are novel metaphors, which means creative, where the speaker uses their experiential knowledge to create the metaphors by using their previous knowledge and experience of specific field to correspond the shared conceptual properties of source domain into the target domain of climate crisis.

Conclusion and Suggestion

The image of climate crisis and its impact through the use of metaphor can be seen from

various source domains used by media and strive to show the urgency of the action to prevent any worse condition. The use of metaphor is to persuade readers, particularly the policy makers to take drastic actions.

The various source domains found during the analysis has the same message on giving the image of the high sense of urgency of climate crisis. We conclude that from nine source domains of climate crisis metaphor, the source domain of destination and war give more impactful sense of urgency by using particular metaphorical expressions. Nevertheless, some novel metaphors (non-conventional metaphors) could bring unintended entailments which could be counterproductive to the campaign of climate crisis, especially the source domain of catalyst and apartheid.

We recommend that climate crisis should not be metaphorically expressed as an active agent, but the environmentally unfriendly behavior of mankind should be put on the spotlight and the action done to prevent that should also be promoted more. This is to avoid unintended perception of climate crisis as the subject of the disaster cause, instead of focusing on human's activity as the subject. Therefore, further studies should be conducted to analyze the good metaphor with bad entailments, or the bad metaphor with good entailments particularly the metaphors used to describe climate crisis and other environmental damage.

References

- Ahrens, K. (2002). When love is not digested: Underlying reasons for source to target domain pairing in the Contemporary Theory of Metaphor. In Y. C. Hsiao (Ed.), *Proceedings of the First Cognitive Linguistics Conference* (pp 273–302). Taipei, Taiwan: Cheng-Chi University.
- Antequisa, N (2019, July 23). How should we cope with climate crisis? Ask survivors to take the lead. *The Guardian*. Retrieved from <https://www.theguardian.com/global-development/2019/jul/23/how-should-we-cope-with-climate-crisis-ask-survivors-to-take-the-lead> (Accessed on July, 30 2019).
- Atanasova, D and Kotevko, N (2015) Metaphors in Guardian Online and Mail Online opinion-page content on climate change : war, religion, and politics. *Environmental Communication*, 11 (4). pp. 452-469. ISSN 1752-4040.
- Australian Associated Press in The Guardian (2019, July 23) BHP boss announces \$US400m plan to combat 'indisputable' climate crisis. (2019, July 23). *The Guardian*. Retrieved from <https://www.theguardian.com/business/2019/jul/23/bhp-boss-announces-us400m-plan-to-combat-indisputable-climate-crisis>. (Accessed on August 1, 2019).
- Broecker, W.S. (1975) Climate change: Are we on the brink of a pronounced global warming? *Science* 189: 460–463, retrieved from <https://science.sciencemag.org/content/189/4201/460> (Accessed on July 25, 2019).
- Carrington, D (2019, June 25). 'Climate apartheid': UN expert says human rights may not survive". *The Guardian*. Retrieved from <https://www.theguardian.com/environment/2019/jun/25/climate-apartheid-united-nations-expert-says-human-rights-may-not-survive-crisis> (Accessed July 30, 2019).
- Catalyst (n.d) In *Merriam-Webster online*. Retrieved from <https://www.merriam-webster.com/dictionary/catalyst>. (Accessed on July 22, 2019)
- Dalalau, D. (2013). Metaphors Describing the Economic and Financial Crisis in Business Press Articles. *Studia Universitatis Petru Maior - Philologia*, (15), 167–178. Retrieved from <http://e-resources.perpusnas.go.id:2077/login.aspx?direct=true&db=ufh&AN=93819262&site=eds-live>. (Accessed on July 18, 2019).

- Deignan, A. (2017). Metaphors in texts about climate change. *Ibérica, Revista de la Asociación Europea de Lenguas para Fines Específicos*, (34), 45-65. Retrieved from <https://core.ac.uk/download/pdf/83942130.pdf>. (Accessed on July 19, 2019)
- Flusberg, S. J., Matlock, T., and Thibodeau, P. H. (2017). Metaphors for the War (or Race) against Climate Change. *Environmental Communication*, 11(6), 769–783. Retrieved from : <https://eresources.perpusnas.go.id:2132/10.1080/17524032.2017.1289111>. (Accessed on July 23, 2019)
- Frost, Robert. (1916) *The Road Not Taken*. Retrieved from <https://www.poetryfoundation.org/poems/44272/the-road-not-taken>.
- Gibbs Jr, R.W. (2010). The dynamic complexities of metaphor interpretation As complexidades dinâmicas da interpretação de metáforas. *DELTA: Documentação de Estudos Em Lingüística Teórica e Aplicada*, (spe), 657. <https://eresources.perpusnas.go.id:2132/10.1590/S0102-44502010000300013> Accessed on July 24, 2019)
- Graff, M in Fair Bluff (2019, July 21). *The Guardian*. Retrieved from <https://www.theguardian.com/environment/2019/jul/21/fair-bluff-north-carolina-hurricane-aftermath-climate-crisis>. (Accessed on July 30, 2019)
- Group, P. (2007). MIP: A Method for Identifying Metaphorically Used Words in Discourse. *Metaphor & Symbol*, 22(1), 1–39. https://eresources.perpusnas.go.id:2132/10.1207/s15327868ms2201_1 (Accessed on July 22, 2019)
- Kevin J. O'Brien. (2012). The “War” Against Climate Change and Christian Eco-Justice: Ethical Implications of Martial Rhetoric. *Worldviews*, 16(2), 135. Retrieved from <http://e-resources.perpusnas.go.id:2077/login.aspx?direct=true&db=edsjsr&AN=edsjsr.43809462&site=eds-live>.
- Kövecses, Z. (2003). Language, Figurative Thought, and Cross-Cultural Comparison. *Metaphor & Symbol*, 18(4), 311–320. Retrieved from <http://e-resources.perpusnas.go.id:2077/login.aspx?direct=true&db=hlh&AN=11084958&site=eds-live>. (Accessed on July 20, 2019)
- Kovecses, Z. (2005). *Metaphor in culture. Universality and variation*. New York/Cambridge: Cambridge University Press.
- Kovecses, Z. (2010) *Metaphor – A Practical Introduction*. London: Oxford University Press
- Lakoff, G., and Johnson, M. (1980). *Metaphors we live by*. Chicago, IL: University of Chicago Press.
- Littlemore, J. and Low, G. (2006), *Figurative Thinking and Foreign Language Learning*. New York : Palgrave Macmillan.
- MacEacheran, M (2019, July 26). ‘Rainfall has rocketed’: the remote weathermen charting the climate crisis”. *The Guardian*. Retrieved from <https://www.theguardian.com/uknews/2019/jul/26/rainfall-rocketed-remote-weathermen-charting-climate-crisis>. (Accessed August 1, 2019).
- Murray, K. and Rosamund ,M.(2005), *Introducing Metaphor*, New York : Taylor and Francis
- Nerlich, B. (2012). “Low carbon” metals, markets and metaphors: the creation of economic expectations about climate change mitigation. *Climatic Change*, 110(1/2), 31–51. <https://e-resources.perpusnas.go.id:2132/10.1007/s10584-011-0055-3>. (Accessed on July 19, 2019)
- Niebert, K., and Gropengiesser, H. (2013). Understanding and communicating climate change in metaphors. *Environmental Education Research*, 19(3), 282. Retrieved from <http://e-resources.perpusnas.go.id:2077/login.aspx?direct=true&db=edb&AN=88089513&site=eds-live>. Accessed on July 20 2019

International Criminal Code (ICC) , Retrieved from from :[https://www.google.com/search?q=the+International+Criminal+Court+\(ICC\)%2C+in+Article+7+of+its+1998+Statutes&oq=the+International+Criminal+Court+\(ICC\)%2C+in+Article+7+of+its+1998+Statutes&aqs=chrome..69i57l768j0j8&sourceid=chrome&ie=UTF-8#](https://www.google.com/search?q=the+International+Criminal+Court+(ICC)%2C+in+Article+7+of+its+1998+Statutes&oq=the+International+Criminal+Court+(ICC)%2C+in+Article+7+of+its+1998+Statutes&aqs=chrome..69i57l768j0j8&sourceid=chrome&ie=UTF-8#). Accessed on July 19 2019

Frost, R in Shrestha, R. (2017, Oct 15) "The Road Not Taken by Robert Frost: Summary and Analysis." Bachelor and Master, Retrieved from bachelorandmaster.com/britishandamericanpoetry/the-road-not-taken-summary-and-analysis.html. Accessed on July 19 2019

Stiglitz, J. (2019) The climate crisis is our third world war. It needs a bold response, <https://www.theguardian.com/commentisfree/2019/jun/04/climate-change-world-war-iii-green-new-deal>. (Accessed on July 20, 2019).

Taylor, M (2019, May 24). Schoolchildren go on strike across world over climate crisis. *The Guardian*. Retrieved from <https://www.theguardian.com/environment/2019/may/24/schoolchildren-go-on-strike-across-world-over-climate-crisis> (Accessed on August 1, 2019).

The Guardian joins a major media initiative to combat the climate crisis (2019, July 25). *The Guardian*. Retrieved from <https://www.theguardian.com/environment/2019/jul/25/the-guardian-joins-a-major-media-initiative-to-combat-the-climate-crisis>. (Accessed on August 1, 2019).

The Guardian view on climate breakdown: an emergency for all, but especially the poor (2019, July 31). *The Guardian*. Retrieved from <https://www.theguardian.com/commentisfree/2019/jul/31/the-guardian-view-on-climate-breakdown-an-emergency-for-all-but-especially-the-poor> (Accessed on August 2, 2019).

United Nations Environment Programme (2018). Emissions Gap Report 2018,

downloaded from https://wedocs.unep.org/bitstream/handle/20.500.11822/26895/EGR2018_FullReport_EN.pdf?sequence=1&isAllowed=y. (Accessed on July 21, 2019).

Van der Hel, S., Hellsten, I., & Steen, G. (2018). Tipping Points and Climate Change: Metaphor Between Science and the Media. *Environmental Communication*. 12(5), 605. Retrieved from <http://e-resources.perpusnas.go.id:2077/login.aspx?direct=true&db=edb&AN=130076764&site=eds-live>. (Accessed on July 20, 2019).

Watts, J (2019, July 23). Animals failing to adapt to speed of climate crisis, study finds. *The Guardian*. Retrieved from <https://www.theguardian.com/environment/2019/jul/23/animals-failing-to-adapt-to-speed-of-climate-crisis-study-finds> Accessed August 1, 2019.

Woods, R., Fernández, A., & Coen, S. (2012). The use of religious metaphors by UK newspapers to describe and denigrate climate change. *Public Understanding Of Science* (Bristol, England), 21(3), 323–339. Retrieved from <http://e-resources.perpusnas.go.id:2077/login.aspx?direct=true&db=cmedm&AN=3045884&site=eds-live>. (Accessed on July 20, 2019).

World Meteorological Organization (2019). WMO Statement on the State of the Global Climate in 2018 , retrieved from https://library.wmo.int/doc_num.php?explnum_id=5789. (Accessed on July 19, 2019).