

**CLIMATE- CHANGE DISCOURSE: A
CORPUS-BASED ECOCRITICAL STUDY OF
THE UN CLIMATE ACTION SUMMIT
SPEECHES**

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NATIONAL UNIVERSITY OF MODERN LANGUAGES

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Candidate of **Master of Philosophy** at the National University of Modern Languages do hereby declare that the thesis **Climate-Change Discourse: A Corpus-Based Ecocritical Study of the UN Climate Action Summit Speeches** submitted by me in partial fulfillment of MPhil degree, is my original work, and has not been submitted or published earlier. I also solemnly declare that it shall not, in future, be submitted by me for obtaining any other degree from this or any other university or institution.

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ABSTRACT

Title: Climate-Change Discourse: A Corpus-Based Ecocritical Study of the UN Climate Action Summit Speeches

Ecolinguistics applies linguistic models to environmental texts to unveil the hidden ideologies or the stories. Stories are the mental models that influence human's behaviour. People are unaware of these stories due to the implicit nature of the stories. There is a little research which analyses global climate change discourse by taking into account the stances of different political and non-political leaders and organizations using a thorough framework. This research unveils the hidden stories in the discourse of climate change. For this reason, 88 speeches and statements that were delivered in the UN Climate Action Summit 2019 were selected to compile corpus for the study. Stibbe's (2015) eight story framework, which he describes in *Ecolinguistics: Language, ecology and the stories we live by*, has been used as a model to investigate different types of stories in the corpus. This study uncovers the stories in two steps; first a detailed lexical analysis of the corpus is done to identify the stories, then the stories are judged according to an ecosophy. Ecosophy of this study, that is used to evaluate the stories, is designed by following Stibbe's (2015) ecosophy. The study found the stories of identity, metaphor, frame, conviction, evaluation, erasure and salience. Different linguistic features like trigger words, pun words, nominalizations and abstractions have been used in the construction of the stories. Trigger words have been frequently used in the construction of different stories. The stories are largely destructive and ambivalent in nature. The story of salience, which describes climate change vividly, is a beneficial story. The study calls for encouraging the beneficial stories and resisting the destructive stories and the destructive aspect of ambivalent stories by raising awareness about the harmful impacts of the destructive stories on ecosystem.

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CHAPTER 1

INTRODUCTION

The eco-linguistic paradigm explores three kinds of relations, the intra-relations, inter-relation, the extra- relations and the combination of these three types of relations. Edward Sapir was the first person who related language to the environment, both physical and societal environment. Social constraints play a vital role in the individual's choice of language. In eco-linguistic perspective, three types of dimensions are involved; the ideological dimension, which focuses on human mental, psychological and cognitive aspects, the sociological dimension, which involves whole society, with its social structures and biological aspects that shed light on the existence of humans with other species (Bundsgaard & Steffenson, 2000).

Ecolinguistics applies linguistic models to environmental texts to unveil the hidden ideologies or the “stories we live by” (Stibbe, 2015, p.3). These are the stories that exist between the lines, these are mental images that exist with in the minds of the individuals and in the societies we live in. Van Dijk (2008) asserts that these stories do not exist in individual's mind only but also across the societies in social cognition. These stories can be termed as beneficial, ambivalent or destructive stories, depending on their impacts on ecosystem. To provide solution to the ecological problems, the destructive stories need to be identified and resisted. Unlike the traditional stories that are explicit and we are aware that they are stories by their structure and context and just a one possible interpretation of the world (Stibbe, 2015), the stories we live by are unconscious mental images. It is difficult to be aware of them and resist them to bring change due to their implicit nature. In this research the word, ‘story’ is used for hidden ideology that is embedded in the deep structure of the text and that conditions the individual's mind to behave in a certain way towards the ecosystem. As the hidden ideologies (stories) are perpetuated mostly through language, linguistic analysis is helpful in unveiling these hidden ideologies.

The ‘linguistics of Ecolinguistics’ is the application of linguistic techniques to uncover the cognitive images or stories and the analysis of these stories according to the environmental point of view, as Stibbe (2015) says, “The ‘linguistics’ of ecolinguistics is

simply the use of the techniques of linguistic analysis to reveal the stories-we-live-by, opening them up to question and challenge from an ecological perspective” (p.9). The framework that is helpful in revealing the implicit ideologies include Critical Discourse Analysis (CDA) by Fairclough (2003), Frame theory by Lacoff (2012), Metaphor theory by Muller, Appraisal theory, Identity theory, Fact construction and the theories of salience and erasure. All these theories employ variety of techniques to reveal the stories. In these stories certain elements are mapped on to backward and certain elements are considered forward for example in progress theory, technological progress is considered forward whereas its opposite- the lack in technological advancement or being close to nature, is considered backward (Stibbe, 2015, p.9). The structure of stories has an impact on human mind, which determines human’s actions and behaviors towards certain things. As the stories are mental or cognitive images, they cannot be directly analyzed, but by observing and analyzing the use of language (Zhdanova et al, 2021). Although stories can be revealed through other modes like analysis of visual images but language is mostly analyzed because it is through language that different stories are transmitted across cultures and generations.

Language is an important tool for the communication of the stories and guiding the individual’s response towards the certain issue. Stibbe (2015) says, “It is through language that natural world is reduced to objects and resources to be conquered and it is through language that people can be encouraged to respect and care for the systems that support life” (p.2). Applied to the Climate Change discourse, certain stories are enacted in the minds of the people through the rhetoric of climate change. These stories condition the minds of people to act and behave in a specific way towards the ecological problems. The stories can be judged according to an ecosophy to know whether they encourage environmental friendly practices and discourage environmentally destructive practices or vice versa. Many researchers conducted research on climate change discourse that is produced in different contexts using different frameworks e.g. Hasbun (2017) discussed climate discourse in the context of Chile, Centeno (2020) studied climate documents that are produced by international organizations by qualitative method. Researchers classify climate change discourses as, macro discourses, where climate change is discussed as a large, single discourse. For example Cohen et.al (1998) discuss climate change as a unified, macro discourse by comparing it with other discourse (that of sustainable development); micro discourses, in this type of discourse, specific aspect (deforestation)

of climate change is investigated. Grove (1994), Endfield and Nash (2002) discuss the discourse of deforestation-desiccation. Multiple Approach, discusses multiple discourses within a discourse of climate change for example Lindseth and Hovden (2004) discuss the discourses of ‘national action’ and ‘thinking globally’ within the climate change discourse to show the interrelatedness of these discourses, which cannot be ignored. This research takes on a multiple approach to analyze the climate change discourse and to show how different stories can be constructed within in the framework of a single discourse.

There is a little research (e.g. Centeno, 2020) which analyses global climate change discourse by taking into account the stances of different political and non-political leaders and organizations, using a thorough framework. This is a gap in the knowledge which this study aims to address. The UN Climate Action Summit 2019 was held in New York. Sixty countries were expected to announce the steps to reduce the global temperature and support the population that is most affected by the climate crisis. Therefore, the UN Climate Action Summit 2019 is helpful in analyzing the global discourse of climate change. There are very few studies which employ Stibbe’s ecolinguistics approach of identifying stories and then comparing them with the ecosophy (Zhdanova *et al.*, 2021). This research is going to analyze the speeches and statements of the UN Climate Action Summit 2019 by employing Stibbe’s Story framework (2015) to expose the underlying frames and ideologies and to make the implication of these frames and ideologies explicit to the readers by judging these stories according to the ecosophy of the study (the concept of ecosophy is explained in the methodology section, under the sub-heading of ‘ecosophy’).

1.1 STATEMENT OF THE PROBLEM

Every text has a dual structure; the surface structure and a deep structure. Different kinds of stories are embedded in deep structure of the text that conditions the minds of the individuals. The stories that lie at the core of every text enable people to understand the reality of the world and to act towards ecological problems accordingly. Stories can be classified as beneficial stories, ambivalent stories and destructive stories depending on the implication of these stories on ecosystem. However, people are unaware of the stories due to the lack of the awareness; they are unable to resist ecologically destructive

stories and come up with new eco- friendly stories to bring a positive change in the world. In the similar fashion, it is difficult for people to understand and change the destructive discourses of the climate change and to encourage the beneficial discourses. The macro discourse of climate change that is produced in the Conference of parties (COP), under the UN framework is presumably environmental friendly. However, the destructive and ambivalent stories exist in the climate change discourse that is produced at the forum of highest level. Hence, the current study aims at exposing the hidden stories of the climate change discourse, so that people become aware of different types of stories to resist environmentally destructive stories and promote beneficial stories through language.

1.2 RESEARCH OBJECTIVES

The aims of this research are:

- 1- To unveil the hidden stories in the discourse of the UN Climate Action Summit 2019.
- 2- To examine the ways these stories are constructed in the discourse of above mentioned summit.

1.3 RESEARCH QUESTIONS

- 3- What types of stories (mental or cognitive structures) are enacted through the language of the UN Climate Action Summit 2019?
- 4- How are different frames and ideologies constructed through the language of the above mentioned Summit?

1.4 SIGNIFICANCE OF THE STUDY

At present, the role of anthropogenic activities in enhancing ecological problems (climate change, estrangement from nature etc.) cannot be undermined (IPCC, 1996, 2001). The discourse is the prime site for the construction of ideologies through which humans understand the world and perceive the ecological problems accordingly. According to Stibbe (2015), it is through language that different ideologies and frames (which he refers 'the Stories') are created in the minds of people which enable them to

perceive the reality of world. The constructed perception regarding the climate change needs to be analyzed to bring betterment in the world; the betterment that do not take into account the interests of humans only but the whole ecosystem.

In order to change the world, we need to change the “stories we live by” (Stibbe, 2015). The discourse concerning climate change that is produced at macro level is supposed to be environmental friendly but the fact that the destructive and ambivalent stories are found in the narrative that is formed at the forum of highest level is ironical and worth exploring. This research seeks to examine, analyze and explore the frames and ideologies (Stories) that underlie the discourse of climate change and to judge the underlying stories according to the ecosophy of the study. This research is significant in a way that it aims to explore the eco-friendly as well as environmentally destructive ideologies and puts a strong case in favor of resisting and changing the stories that are destructive for ecosystem whereas by identifying the eco-friendly stories, this study encourages the use of such stories in eco discourses.

1.5 DELIMITATION

This research examines, explores and analyses the hidden stories in the discourse of the UN Climate Action Summit 2019. Moreover, only English speeches from the summit are taken into account for analysis. This research only unveils the different types of hidden stories in climate change discourse and judges them according to the ecosophy of the study. It does not come up with alternative beneficial frames that would replace the destructive frames of the climate change. A very little research is done where climate change discourse, at macro level, is thoroughly analyzed using a thorough framework. The current study is using Stibbe’s story framework to unveil the underlying stories in the climate change discourse. However, Stibbe’s framework is limited to only eight types of the stories; there can be other types of stories as well. Moreover, an already set ecosophy is used to judge the implications of the identified stories on ecosystem, whereas different analysts can develop their own ecosophies for judgment.

CHAPTER 2

LITERATURE REVIEW

The aim of the current review is to address the ways language shapes the understanding of the individuals towards the ecological issues especially climate change and determine their behavior accordingly. It also focuses on the underlying ideologies or different types of the stories and the linguistic means by which these stories are constructed with in a discourse. The current review offers a valuable insight into the concepts of discourse, stories and the way ecolinguistics is helpful in revealing the hidden ideologies or stories in different types of discourses.

2.1 CLIMATE CHANGE AND DISCOURSE

Climate change has become a global issue. It is affecting humans and other organisms equally. However, some countries suffer more due to lack of resources (Adger et al., 2003; Hovden & Lindseth, 2004; Thomas & Twyman, 2005). Dreher and Voyer (2015) also talk about social inequalities regarding climate change. They say that the developed countries (global north) emit large quantity of hazardous gases (GHGs) that are responsible for the climate change, whereas developing countries (global south) are more vulnerable to the changes in climate due to poor resources (p. 58). The way people perceive climate change is dependent on the discursive practices (Hovden & Lindseth, 2004, p.78). So, the understanding of the people and the way they perceive the climate change is shaped by the discourse (Lindseth, 2006, p.8; Antilla, 2010, p.2). Burr (2003) also asserts that discourse not only determine the way the individuals perceive the problem but it also causes humans to act and behave in a particular way towards certain issue(pp. 2-5).Through discourse, the climate change is presented as a complex issue which need to be addressed in a specific way (Lindseth, 2004, p.327).

The complexity that is associated with the climate change contributes to the inaction on the part of the individuals to bring eco -friendly practices in their actions and behaviors. So, the ways, through which environmental issues are presented, need to be analyzed. Many studies investigated the relation of climate change and the language (Bundsgaard & Bang, 2019; Poole, 2006; Franz, 2018). Bundsgaard and Bang (2019)

analyzed the language of Greta Thunberg's speech to know how she framed climate crisis through language. They found that Greta Thunberg (a youth activist) used metaphors, deixis and modality to put responsibility of climate crisis on policy makers and people who hold some kind of power. Flottum (2020) discussed climate narrative in the context of climate change discourse. He asserted that climate narratives are the stories that portray climate change as some sort of problem and an action is suggested to solve this problem. He analyzed two texts (IPCC and ACCESS) and concluded that both texts contain the components of problem and solution in the form of action. He further said that there is an information deficit regarding climate change- the relation of political and scientific knowledge is vague in discussing climate change. The complexity is the main force behind the shaping of climate narrative. He made a call for the analysis of language and discourse to understand the climate narratives (p.14).

2.1.1 TYPES OF DISCOURSE

Discourse is the way, a particular society uses the language in writing, speaking or in other modes of representation. Discourse can be of three types, depending upon its implication on the ecosystem. The three types of the discourses are; Destructive discourses, Beneficial discourses and Ambivalent discourses. Destructive discourses are of particular interest to the eco linguists as this type of discourse effects the ecosystem negatively, it need to be identified and resisted (Stibbe, 2015, p. 24). Gare (2002), while talking about dominant discourses in different ages, asserts that in middle ages the discourse of theology prevailed whereas science was the dominant discourse in the modern era and the economic discourse is prevalent in the contemporary era (p.132). Gare (1996) further says that in contemporary era economics provide concepts to the people to interpret their links with nature, with other humans and with the society (p.144). Chawla (2011) also talks about the pervasiveness of economic discourse. He states that economic discourses condition the individuals to think in term of quantity. People think that they can only attain highest satisfaction by material gains. The happiness is linked to the quantity of the goods by the economic discourses. This quantified approach of economic discourses direct and channelize all human efforts towards getting more material things and locked them up in a never- ending production-consumption process. The materialistic approach instead of providing inner satisfaction to the people creates unrest and dissatisfaction (pp. 119- 120). Halliday (2001) talks about the way language is

used to promote economic growth. According to him, the economic growth is portrayed as a basic aim of society by linguistic practices. This type of economic promotion is negative. It leads individuals to use/ exploit more resources when these resources are finite. The practice of achieving highest economic growth by resource exploitation jeopardizes the ecosystem.

Goatly (2000) also criticizes the linguistic practices that promote the economic growth by equating growth with the cancer in the developed countries like Japan and Singapore (p. 278). Industrial agricultural discourse is also a destructive discourse as it perpetuates the ideologies that frame animals as a resource that can be exploited. Different terms (like 'beef cows') are used for living animals that portray them as a food for humans (Glen, 2004, p. 65). Fairlie (2010) asserts that factory farming pollutes the environment, risks the life of animals and consumes large amount of resources. Stibbe (2015) talks about different discourses that are destructive in nature due to their negative implications on the ecosystem. He labels the discourses of agricultural industry, economics and consumerism as destructive discourses. These destructive discourses need to be resisted. This resistance can be provided by creating awareness about different types of the stories that are promoted through language and the destructive stories need to be changed (p.28). Taylor (2020) also talks about changing the existing stories and coming up with new stories that consider the whole ecosystem, 'we should stitch a new garment that fits all humanity and nature' (Taylor, 2020). Within the macro discourse of climate-change, produced in the UN Climate Action summit, different types of discourses like economic discourse and discourse of global action are found which can be judged according to an ecosophy to know their implications on the ecosystem.

Like destructive discourse, ambivalent discourse is also a type of discourse which lies between destructive and beneficial discourses. The term 'ambivalent' refers to those discourses that contain some elements of destructive discourses as well as some elements of beneficial discourses. In other words, some aspects of these discourses go in accordance with the ecosophy of the analyst whereas other aspects of these discourses negate the ecosophy. Different eco linguists identify various kinds of ambivalent discourses. These include the discourses of zoo, sustainability, environmentalism and natural resources. The term "Green Speak" is used for ambivalent discourses. The Green Speak discourses are criticized for their portrayal of nature as a commodity. The

ambivalent discourses propose the solution to the ecological problems through activities like recycling that do not affect the consumption in the society. In “Green Speak”, the agency is masked by employing different linguistic devices such as agent deletion, nominalization, passivation and agency shift to guard the interests of those who are responsible for the ecological destruction (Stibbe, 2015, pp. 28- 29). The discourse of zoo marginalizes animals by separating them from their actual location. The zoo discourse calls for the protection of animal; this is a positive aspect of this discourse but the practice of marginalizing and othering of animals by caging needs to change. The zoo discourse should talk about the role of government policies in the extinction of species (Milstein,2009, p. 164).

The goal of Ecolinguistics is to search for new ideologies that encourage people to save the system on which all life depends. This type of discourse (The discourse which encourages people to save life support system) is termed as beneficial discourse as it promotes the stories or ideologies that call for environmental friendly practices to the people. Nature poetry is labeled as a beneficial discourse as it develops a harmonious relationship between humans and nature where equal emphasis is given to all the parts of the ecosystem. Rather than using the umbrella terms of flora and fauna, different species are called by their names and equal worth is assigned to all the species like humans (Stibbe, 2012, p. 145). Indigenous cultures can be a good source for finding positive discourses as they exist in harmony with the nature for a long time without contributing to the destruction of the ecosystem (Chawla, 2001, p. 115). As destructive discourses need to be resisted, in the same way the beneficial discourses should be promoted. Promotion of beneficial discourse does not employ that specific texts should be promoted but it talks about the promotion of specific linguistic features (grammatical structures, pronoun usage, participant placement etc.) that create a useful story in the minds of the individuals. The useful story is the ideology that is beneficial for the whole system that supports life. The beneficial story rather than focusing on the means of production and consumption focuses on the wellbeing of the all species. Beneficial stories can only have useful impact when these stories are employed in dominant discourses that condition the thinking of the individuals towards different areas of life (Stibbe, 2015, p.33).

Martin (2004) uses *Positive Discourse Analysis* (PDA) for the analysis of beneficial stories. PDA is about encouraging the stories that are positive rather than

discouraging the negative stories. Martin's use of PDA for analysis of positive discourse is criticized by Wodak. He asserted that critical does not mean being negative but being critical means to raise awareness about the negative and to call for positive. Wodak's explanation of 'being critical' is echoed in Tramp's scope of Ecolinguistics. He says that Ecolinguistics investigates and criticizes the anthropogenic view of world- propagated through language and promotes a more bio-centric view which emphasizes all life and ascribes inherent worth to all life forms (Tramp, 2008, p. 52). Unlike Martin's (2004) use of PDA, the present study echoes Tramp and Wodak's approaches to Ecolinguistics. It explores destructive as well as beneficial and ambivalent discourses in the Climate Change discourse that is produced at macro-level and criticizes the negative or destructive discourses and encourages the positive or beneficial discourses.

2.1.2 CRITICAL ANALYSIS OF DISCOURSE

In doing the critical analysis of discourse, various linguistic features are focused. These linguistic features include, the grammatical patterns (nominalization, active voice, passive voice etc.), vocabulary (use of modal verbs, use of pronouns, different meaning of words etc.), representation of participants, figurative devices (pun, irony, metaphor etc.), clause structures, genres of the texts, lexical relations (antonymy, synonymy etc.) presuppositions and intertextuality (van Dijk, 2011, Machin & Martin, 2012). Gerbig (1993, 1996) investigated collocate patterns in the debate of ozone depletion. She noted a huge difference in frequency of collocations used by the groups of opposing interests. She also investigated the agency suppression by the use of passive voice (p.63). Agency can also be suppressed by deleting the responsible agent, shifting the agent or by nominalization (Alexander, 1996, p.137; Goatly, 1996, p. 555).

Goatly (1996) explains nominalization as the conversion of verb into noun by omitting the agency (the human or the institution) that is responsible for the action. For example environmental problems- habitat loss, and species extinction, are presented without the responsible agent. According to Goatly (1996) nominalizations have positive aspect that is they shift the attention from human as a nature destroyer as humans are also affected by these environmental problems (p.558). Humans exploit nature but all humans are not responsible for exploitation and destruction. For Goatly, diffusing responsibility to all humans is a misinterpretation. The environmental issues revolve around the human institutions for example industrialization. He calls for an alternative

CDA which uncovers the specific institution or human that is responsible for the destruction (p.556).

Mahllausler and Harre (1994) proposed two ways to analyze the discourse of environment. One way is to investigate how far the language is utilized effectively according to the demands of community; other way is to investigate how far the language constructs the reality of the environment. In this way language serves dual functions- constitution and representation. Through lexical analysis of 'greenspeak', they discuss lexical items including- pollution, waste, fertilizers, pest, waste, acid- rain and disposable. They came up with conclusion that the language is vague, undifferentiated and misleading for addressing nature. They also recognized that nature talk is dominated by the group of specialists – biologists, policy - makers and engine. Stibbe (2015) while discussing the methods of discourse analysis asserts that first step in discourse analysis is the analysis of linguistic features, after linguistic analysis of the texts; the underlying ideologies are unveiled to examine their implications on the ecosystem. The hidden ideologies that are unmasked through the discourse analysis are labeled as beneficial or destructive, by comparing these ideologies with the ecosophy of the analyst. If the ideologies align with the ecosophy, they are termed as beneficial and if these ideologies do not comply with the ecosophy, they are termed as destructive ideologies that need resistance through language. The last step in the analysis of the discourse is to determine its type, whether it is beneficial (aligns with the ecosophy), ambivalent (it has both negative and positive aspects), or destructive (it opposes the ecosophy). The positive or beneficial discourses need to be encouraged and promoted, the ambivalent discourse needs to be improved and the destructive discourse should be discouraged and resisted (Stibbe, 2015, p.35).

Stibbe (2014, 2015) says that the norms and values (philosophy) against which a judgment is made regarding the implication of the discourse on the ecosystem should be explained explicitly (p. 11). Stibbe (2015) uses the word 'ecosophy' to refer to the philosophy of ecology. The term 'ecosophy' was first used by Naess (1973). Ecosophy is not a fixed concept. Each analyst has his/her own philosophy of Ecology and the ecosophy keeps on changing as the analysts are exposed to new ideas and experiences (Stibbe, 2015, p.24). No one can determine whether the ecosophy is good or bad as different eco linguists employ different ecosophies to the environmental texts (Huang &

Chen, 2016). The ecosophy that promotes environmental friendly practices is considered good whereas the ecosophy that encourages ecologically destructive practices is considered bad. Each eco linguist can have his own philosophy to analyze the stories, based on his own values, assumptions and ideologies but the common feature in all the philosophies related to the ecosystem is the human- environment relationship or the human's relationship with different organisms (Stibbe, 2015, pp.11-12). Naess (1995) also talks about ecological sustainability and says that different eco linguists have different philosophies of ecology not because the problems differ but due to their value preferences (p.8).

There are different philosophical perspectives that can be helpful in developing an ecosophy. The philosophy of 'corn utopianism' (e.g. Lomborg & Kidley, 2001) talks about solving the ecological problems by the use of advanced technology. It justifies the rapid technical and industrial growth for the human benefit. The philosophy of 'social ecology' (e.g. Bookchin, 2005) asserts that the cause of all the ecological problems lies in the social injustices. As long as the humans continue to suppress one another, they will continue suppressing the nature as well. Ecofeminism (e.g Pandey, 2011) asserts that woman is equated with the nature and the terms like 'mother land', 'mother nature', and reproduction are used for the description of nature. Both women and nature are dominated and manipulated by the patriarchal practices of the society. Basically both ecofeminism and social ecology relate ecological problems with the domination of humans (Stibbe, 2015, p.12).

Glotfelty (2014) while talking about ecocriticism, asserts that the subject, of critical studies from ecological perspective, is the interrelation of culture (especially, language & literature) and nature. The motivation behind ecocritical studies is the awareness that humans have exploited environmental resources to that limit which endangered the whole ecosystem. The current study is also ecocritical in nature as it critically evaluates the stories according to an ecosophy, after the identification of stories by a detailed lexical analysis of the corpus. Similar to all ecocritical studies (as mentioned by Glotfelty), the motivation behind this study is also the awareness that humans (those who hold some kind of power like politicians) are manipulating the nature through the language. The idea of manipulation through language is perpetuated by many authors (e.g. Jung, 1996; Kahn, 1992). Jung says humans exploit their environment

through linguistic practices (Jung, 1996). The politicians and policy-makers instead of sincerely addressing the environmental issues like climate change and global warming are deceiving and manipulating public (Kahn, 1992), to achieve their goals of material success or profit-maximization. As the public awareness regarding the environmental issues depends on a specialist group like politicians, scientists or policy-makers, the specialist group foregrounds certain stories which suits to its interests and backgrounds the other stories that can play an important part in tackling environmental issues.

2.2 ECOLINGUISTICS: A BRIEF OVERVIEW

In 1970, Haugen used the term ‘ecology of the language’ to refer to the study of inter-relation of languages with in the minds of the individuals as well as in the communities where more than one language is spoken (bilingual & multilingual communities). Later on the scope and range of the ecology in linguistics broadened. Ecological parameters like diversity and environment are found useful in different branches of linguistics such as pragmatics, anthropological linguistics and discourse analysis. In 1990’s Ecolinguistics as a discipline was established. It unified all the diverse approaches that link ecology and language in any way (Fill & Mahlhausler, 2001, p.1). Haugen (1972) rejected the biological and instrumental views (biological model views language as a living entity just like humans or animals; the instrumental model views language as a ‘tool’) of language by asserting that languages do not possess soul like living beings and unlike ‘tool’, the language cannot be redesigned to improve its efficiency. The life of a language depends upon its users (p. 325). He further added that language is both an activity and a product. Just like human behaviour, it is shown outwards (action) whereas at the same time it also exists in the minds (potential) which carries the potential of action. Haugen (1972) defined ecology as the interrelations of humans, animals, plants and their environments. Blackledge (2008) asserts that Haugen not only investigated the effect of language on environment – both social as well as psychological but he also examined the effect of environment on the language (p.27).

The ecosystem can be defined as the system where living organisms live in their environment, interact with one another and their environment. The various types of interactions in the ecosystem take place through language. The linguistic environment can be of three types; the natural environment (In this view of environment the language is seen as a ‘network of interactions’), the cognitive environment (in this view, the

human mind is considered as an environment of the language), the social environment which includes society where language is used (Haugen, 1972, p.325). Door and Bang (1996) also talk about the three types of linguistic environment as sociological environment, the ideological environment and the biological environment (p. 23). The environment of the language should not be limited to symbolic, social or physical environment. It should include all types of symbolic, cognitive, physical, and social features where activity takes place (Van Lier, 2004). Muhlhausler's (1996, 2003) approaches to Ecolinguistics make a connection between the language ecology and the linguistic practices that cause environmental degradation. He links natural ecology to the symbolic ecology and asserts that any transformation in the symbolic ecology leads to the use and misuse of the environment by its inhabitants.

While discussing cultural ecology, Fink (1996) asserts that culture is born from nature and the source of cultural is natural. Culture depends on environment, production, consumption and destruction. Cultural ecosystem is the system of mind rather than natural ecosystem that is material ecosystem. Humans more rationally deal with cultural ecosystem than natural ecosystem. Cultural ecosystem can be redesigned or transformed for achieving the goals. These goals are not necessarily based on good but these goals can be that of destruction. Unlike natural ecosystems, humans have tendency to change cultural ecosystems.

Fink (1996) explains the cultural ecosystem by giving the examples of the language, politics and science. Science is an example of cultural ecosystem which is based on the principles of the search for truth, production and consumption. However, humans reduced its scope to power, administration and economics. The reforms are needed in science. Fink mocks this idea that humans have better understanding of the environment than the understanding of their 'selves' (their existence). This gap can be bridged by the development of cultural ecology – that is related to mind. Fink further asserts that most of our problems are created by science and politics and we seek solution of these problems in the science or politics. The reforms in science and politics are necessary. He also talks about the erroneous believe that only experts are needed to solve the environmental problems. This practice helps to maintain status quo. It is important to change cultural ecosystems of science, language and politics to bring stability in natural ecosystem.

Halliday (2001) argues that the eco- destructive ideas are not only present in the texts about environment but also in the grammar of the language as the resources like air, soil and water are interpreted in ‘inexhaustible’ terms despite of the fact that these resources are finite . He further adds that grammar of the language is born from the action and in turns it guides the action (p.194 - 195). Halliday (2001) also talks about the use of linguistic research to solve the ecological problems. This is the reason for analyzing the language of the environmental texts to find out different linguistic practices that results in human action. This study follows Halliday’s approach to critically analyze the summit of the UN Climate action 2019. Halliday’s approach is basically concerned with the ecosystem- the life supporting system and the influence of the language on ecosystem.

Apart from text-oriented approach, there is also a discourse- oriented approach to study environmental issues. For example Alexander (2000) critically analyzed Browne’s 1997 speech (Browne was the CEO of British Petroleum). He provided evidences that on surface level Browne is talking about the issue of climate change altruistically (p. 175), but on the deep level he is promoting marketization (Alexander, 2000, p.185). The unveiling of ‘the discursive framing’ is an important focus of the eco linguists. Metaphors play an important role in the critical analysis of the frames. For example Stibbe and Zunino (2008) analyzed the metaphors of the ‘biodiversity’ to examine the way these metaphors are socially constructed in the environmental discourse.

Ecolinguistics also critically examines the texts that represent language system for example Trampe (1991, 2002) showed the link between the masking of the facts, euphemism and ecological crisis by critically investigating the vocabulary of the ‘industrial agriculture’. Alexander (2018) analyzed purr words, nominalization, future tense usage and the euphemisms in Coca-Cola report. Heuberger (2003, 2007) investigated the human-centered practices of the dictionaries where the animals are described in terms of their effectiveness to humans (Steffenson & Fill, 2014, p.11). An ecological approach (Alexander & Stibbe, 2013) to discourse analyses not only analyses discourse but it aims at providing the explanations (that are ‘ethnographically informed’) regarding the integration of the symbolic structures (discourses, linguistic patterns, meaning-making resources) in human’s lives.

Human behaviour is affected by the environmental discourses because humans

are linked to the ecosystem they inhabit. The discourse- nature relationship can only be understood from the perspective of the human interactivity (Steffenson & Fill, 2014, p. 20). Alexander and Stibbe (2014) describe that Ecolinguistics is not limited only to the analysis of environmental discourse but any type of discourse can be analyzed in Ecolinguistics (p.104). It explores the relationship between humans, non-humans and their environment. Ecolinguistics includes all the activities and the processes that are employed by the humans at various levels to exploit their environment and the limits of these activities and the processes i-e their capacity to support a sound existence of the humans and non-humans (Steffenson & Fill, 2014, p.21).

2.2.1. MANIPULATION OF ENVIRONMENT THROUGH LANGUAGE

Chawla (1992) asserted that language and philosophy have a powerful influence on the way we treat the natural environment. He talked about the two dimensions of human's relation with nature; an objective dimension which includes natural environment like water, forests, oceans, climate etc., and a cognitive dimension which is human's perception and ideas. Humans use their perception to change natural environment. The perception is modified by the use of language. Language brings images and complex ideas to the mind. In this way language shapes our perceptions. In this era of technology and industrialization, the ideas of consumerism are propagated through economic discourses and a perception is shaped in individual's minds that profit-maximization and consumption provides ultimate happiness or the maximum satisfaction can be achieved only by material goods. These destructive practices can only be curbed by reforming these kinds of linguistic practices that encourage anthropocentric view of world (pp. 73-253).

Qasim (2020) explored the manipulation through the language of Covid- 19 advertorials in her study. She found that language in the Covid-19 advertorials was manipulated to create fear and xenophobia. Jung (1996) also talked about the manipulation of environment through lexical choices. He asserted that words are chosen for manipulation. In 'Language and natural environment', Schultz (1992) talked about the manipulation or exploitation through the language of environmental protection. He describes three linguistic devices that are employed for 'commercial use of environment'. The first linguistic device is the use of neutral words that favours exploitation of environment. 'Human Resource' is a neutral word that favours

exploitation. Specific resource should be mentioned with the word that, whether it is forest, people, river or ocean. The manipulation of some neutral words can be stopped by adding the adjectives for example the addition of 'malignant' with the growth.

Schultz (1992) identified euphemism as the second linguistic device that is used by industries to portray the positive impact of their activities on ecosystem. The euphemistic expressions, identified by Schultz include 'Improving on nature', value-adding, improving, clearing, clear-felling, normal forest, controlled and prescribed burning, authorized burning, fuel reduction, harvest, green-house effect, global warming (p.121). These and other euphemistic expressions related to ecosystem are of particular interest of this study as the positive sounded words and expressions bring a particular frame in the minds of the individuals that effect their behaviour towards environment and they address the ecological problems as per their perception of the reality. Kahn (1992) asserted that the scientists, politicians and bureaucrats make use of euphemisms to guard themselves from the responsibility (p.153). The third linguistic device is calling pleasant or good things related to natural environment with pejoratives for example to use the word 'litter' for tree material on earth's floor that can be otherwise called the food of insects. Humans have the tendency of downplaying or degrading the humans/things which is manifested by the 'use of pejoratives' (Fill & Muhlhausler, 2001, p.112).

Muhlhausler and Fill (2001) in *The Ecolinguistics Reader* discussed various grammatical aspects of language (Nominalization, pronoun, abstract nouns, counterfactuals, and passives and so on) to show that some perspectives are more privileged, due to the specific grammatical nature of a certain languages especially European languages. This argument sheds light on the way agency is suppressed through nominalization, passivation and the use of other grammatical patterns (Erasure, salience etc. as indicated by Stibbe, 2015) to portray the perspective on climate change as objective and privileged which need to be respected without any challenge. However, this research seeks to decipher the language of climate change to reveal the hidden stories.

Rubin (1979) asserted that attention should be given to the fact that there is a wide gap between the technical language and the language of common standards. Efforts should be made to convert the technical language into understandable language for the concerned group and communities (p.3). Industrial revolution enhanced human's

capacity to alter the environment and public becomes more interested in the awareness of environmental issues that are caused by technological advancements (Muhlhausler,p.3).

Muhlhausler (2001) also talked about the deficiencies that are inherent in language especially English language. He further added that English language is insufficient to address environmental issues effectively for example the word ‘resource’ has negative evaluations as from the prefix ‘re’, it seems that it can regenerate. Another term ‘economic growth’ paints the picture of the natural process in the minds of the readers.He further explained two kinds of criticisms apart from ‘semantic vagueness’ that is the criticism of the terms like resources, pollution etc. that are mentioned above. Second type of criticism is ‘semantic un differentiation’, which means that a term is used which covers a range of phenomena for example the term ‘economic growth’ is used without differentiation that whether the growth is a natural process, man-made process or any other type of growth. Third type of criticism is ‘misleading encoding’. It occurs when language is allowed to develop uncontrolled for example the use of the term fertilizers when in fact it makes soil infertile. Some terms are deliberately adopted and created for example the recent frequent use of the term ‘waste water’ instead of sewage (p. 32). Through the use of euphemisms the humble can be amplified and the horrible can be changed (Bolinger, 1980. p. 5). The criticism of those terms that do not exist in the language is another type of criticism for example the absence of the word (in the English language) that means ‘ not biodegradeable’ or the absence of the word that can be used for the person who do not recycle things (p.34).

The question that arises from the criticism of the language from the ecological viewpoint is that whether the aim of the criticism is to change the language or to create the awareness regarding the linguistic patterns that are criticized (Fill & Muhlhausler, 2001, p. 49). Fill (1993) argued that the aim of criticism is not to change the language system but to create awareness. Goatly (1996) asserted that language users will change their languages themselves over a period of time. ‘Deep ecologization’ will occur as a counter process to ‘surface ecologization’. This evolutionary process of ‘deep ecologization’ will hinder environmental degradation (p.552).

2.3 STORIES: DEFINITIONS, TYPES AND THEIR IMPLICATION

Stories are the cognitive structures or the mental models that exist in the minds of

the individuals. These stories are difficult to recognize because they are not like the traditional stories. We are aware of the traditional stories that they are stories as they follow a pattern or structure and we are aware of their context whereas the ‘stories we live by’ (p. 3) differ markedly. They surround us everywhere, in advertisement, news, textbooks or in weather reports. They are present in politics, in science and in media without declaration that these are just stories that can be changed. In shorts, they are just one of many assumptions or perspective of the world. They can be questioned but for questioning or challenging the set patterns of stories, one needs the awareness of these stories (Stibbe, 2018). According to Midgley (2011) the stories are the myths; they are imaginative patterns that enable us to perceive the world (p.1). Stories play a vital role in the way we perceive the world. If we want to change the world, we need to change the stories (Okri, 1996, p.21).

Korten (2006, p.248) described four stories which have important ecological implications; Prosperity theory, which promotes material acquisition, Biblical story, which emphasizes on the life hereafter , Security story, which talks about security departments like police, military etc. to safeguard the country, ‘Secular meaning story’ which interpret life on the basis of matter. These stories lead to environmental destruction. Ecological problems like climate change and loss of biodiversity question the existing stories and demand new stories that bring harmony of humans and nature in the world (Stibbe, 2015, p. 3).

Bowers (2014) talked about the ecologically destructive nature of existing stories. At the core of these stories, different assumptions lie that lead towards unsustainable culture. Kingsnorth and Hine (2009) asserted that the story of anthropocentrism is the destructive story that needs to be changed. This story of human primacy is dangerous for nature. Humans think that they are at the center so, everything, that is different from humans, should be treated as a resource to be exploited. Scientific enquiry at present also talks about the human- centered practices (deforestation, transport, heating and other use of resources) that are responsible for climate change (IPCC, 1996; 2001). Glotfelty (2014), while describing ecocriticism, asserted that ecocriticism explores the relationship of humans with the environment. It is the study of connection of nature to the culture (especially language & literature). The awareness, of the fact that anthropogenic activities are destroying the support system for life, is the

driving force behind most of the ecological criticisms. Ecolinguistics provides tools that are helpful in unveiling the stories that are destructive in nature and that need to be resisted (Stibbe, 2015, p.6). Verhagen (2008) asserted that unmasking, the hidden assumptions, ideologies and myths, is one of the important functions of Ecolinguistics and the assumptions are mostly communicated through metaphors- a linguistic device (p. 1).

2.3.1 METAPHORS AND FRAMES

Metaphor is a linguistic device that describes a thing as if it is something else. It functions in the similar way as frame (Stibbe, 2015, p. 63). Russill (2010) described various metaphors that are employed in the description of climate change. The metaphors like green houses, hot houses, speeding rollercoasters, bungee jumpers, conveyor, flipped switches, time bomb, an ornery, angry beast and the model of climate change is described as a drunk model which becomes static when left unattended and moves wildly upon action (p. 115). These metaphors are used to bring an abstract rather vague concept of climate change in the minds of the individuals.

The source domain from where these metaphors are taken is concrete area which is used to materialize the less familiar ecological issue of climate change. In the domain ecolinguistics, it is more important to identify whether these metaphors are destructive, ambivalent or beneficial. Two steps are involved in studying metaphors; identifying the source domain (the area from where the metaphor is taken) and the target domain (the area where the metaphor is mapped) and then analyzing the metaphors according to the analyst's ecosophy. Larson talked about some destructive metaphors that portray nature as a machine, war, struggle, competition or battle. He emphasized on resisting these destructive metaphors of nature. He further asserted that the aim of an ecologist is not to find a sustained ecosystem where no human exists but to find a socio-ecological harmony where the humans co-exist with the natural world. Hence, we need to see whether the metaphors echo 'socioecological sustainability' or not (Larson, 2011, p.17).

Ecolinguistics provides tools for unmasking different types of metaphors (destructive metaphors, ambivalent metaphors and beneficial metaphors), resisting destructive metaphors and encouraging beneficial metaphors by replacing old frames with the new environmental friendly frames in the minds of individuals. Verhagen (2008) asserted that the metaphor is used to communicate most of the ideologies and

assumptions (p.1). A metaphor is a type of story which creates a link between seemingly different things. The concepts from a concrete area of life is taken and mapped into target domain to explain the less- defined or the abstract area of the life (Martin, 2014, p.78; Chilton & Schaffner, 2011, p.320). Metaphors play a very crucial role in the understanding of the world. The role of metaphors in our lives is so encompassing that the wrong choice of metaphors may lead towards the extinction of the species (Romaine, 1996, p.192; Nerlich & Jaspal, 2012, p. 143).

As all the stories are mental structures which enable the people to perceive reality or what they consider reality, frame is also one type of story through which people try to comprehend the ecological problems and the reality of the world around them (Lakoff, 2006, p.25). Nerlich et al. (2002) used the term “frames and metaphors” to show the construction of FMD (Foot-Mouth disease) (p.93). Frames are closely linked to the metaphors as the area from where the concepts are taken in metaphors (source domain) is also constituted of frames (Sullivan, 2013. P.23). so, frame and metaphors can be analyzed in similar ways. Holmes (2009) talked about different types of frames regarding climate change that demand different types of responses from different stratum of society. For example the frame of climate change as market failure calls economists, entrepreneurs and businessmen for action whereas the frame of climate change as a global problem calls response from very different agents (p.266). In simple words different frames narrate different stories and evoke responses from different actors.

The concept of framing holds a prime importance in Ecolinguistics as the Ecolinguists who are interested in bringing a positive social change need to identify the old frames that are inefficient or incapable of bringing sustainable development in society by mobilizing concerned actors, and to reframe the stories for the betterment of society. Blackmore and Holmes (2013) outlined some guidelines which are helpful in studying frames. First analyst should examine the value that the frame employs, then/he should ask whether a response is necessary or not and if response is necessary, what are the ways through which response can be channeled and a new frame can be created (p.42). The creation of the new desired frames or reframing is done by choosing the words that trigger a frame in the minds of the individuals that is different from the existing frame (Lakoff, 2010, p.73). Like discourse, a frame can also be analyzed and judged according to an

ecosophy to know its implications on ecosystem.

Christmas et al. (2013) analyzed different frames of biodiversity and came up with four stories regarding nature and humanity. They described each story and then provided a critique of each story. For example they investigated the story that humanity can survive without an aid from nature and then asserted that this frame of alienation of humanity from the nature should be challenged and reframed in the biodiversity communication (p. 9). While talking about the framing of the climate change, Crompton said that the campaigns on climate change motivate people by extrinsic values such as increase in social status, economic growth and money saving. These frames, based on extrinsic values, may further enhance the destruction of the ecosystem. So, these frames need to be replaced by new frames that are based on intrinsic values (the values that are not self-centered but altruistic) (Crompton, 2010, p.20). By using the new frame an area of life can be presented differently from its earlier presentation.

Climate change is mostly framed as a problem and it is seen from a problem – solution approach. It applies that climate change is the problem and its solution lies in reducing carbon emission or the reduction of fossil fuel burning and once the solution is achieved, the problem will stop existing. These problem- solution approaches forgo the philosophy of resilience, which is one of the important concepts in the ecosophy. The construction of the resilient societies that can cope with the hazardous effects of climate change is back grounded in this approach. Climate change can be reframed as a condition which requires immediate response. The effective response can lessen the harmful effects that surround the climate change but the condition will remain. The predicament- response frame will evoke different response from the people than the problem- solution framing of the climate change (Stibbe, 2015, p.51).

Grundmann and Krishnamurthy (2010) discussed the climate change framing in different countries (France, Germany, UK, US) by looking at collocation pattern in the corpus. They concluded that climate change is framed differently in different countries. In the US and UK, the dominant frame is scientific whereas in Germany and France the climate change is morally framed. France and Germany take the issue more seriously than the US and UK (p. 144). Russill (2010) talked about the metaphorical framing of the climate change. He asserted that climate change is metaphorically framed as an ‘angry beast’, ‘rollercoasters’, ‘green houses’, ‘blankets’, ‘switches’ etc. This type of

metaphorical framing of the climate change triggers a specific frame in the individuals' mind which is clearly-defined (p. 115). A reasoning- pattern is made through the use of metaphors (Johnson, 1983; Martin, 2014, p. 78). For example the use of the metaphor of 'bomb' for the climate change sets up a reasoning pattern that the climate change is effecting large number of population and like 'bomb', it needs an immediate action to solve it and once the bomb will be diffused or the problem of climate change will be solved, just like diffused bomb, it will be unable to create harm again (Stibbe, 2015, pp.66- 67).

Keulartz (2007) talked about the way nature is framed as a resource. The frame from where the words are taken to describe nature (source frame) is a resource frame. The words from the resource frame like assets, commodity, capital etc. are taken and target frame is created which triggers the frame of nature as a commodity in the minds of the individuals. This framing of nature establishes a relation of master- slave between the humans and the nature. Humans are assigned the position of masters to exploit nature as their asset. The only worth assigned to the nature is that of its usefulness to the humans (p.31). Raymond et al. (2013) talked about 'multiple metaphors'. They asserted that multiple metaphors should be considered and out of multiple metaphors only those metaphors should be used that have positive implications on the ecosystem (p.542). The current study seeks to analyze the frame of climate change, with the help of trigger words and then the findings are judged according to the ecosophy of this study to know whether a particular frame need a response or not.

2.3.2 IDENTITY

It is a common thought that people do not respond to environmental issues due to the deficiency of information. However, this notion is just an erroneous assumption. The reason of people's inaction towards environmental issues like climate change lies deep in the minds of the people. A lay man thinks that an expertise is needed to respond towards the environmental issues and to come up with an effective response. This destructive aspect of their identities needs to be changed (Moser & Dilling, 2011, p.164) Identity is reflected in the individual's ability to understand himself (his existence) and to keep his understanding of the self, consistent with his understanding of the phenomena of the world (Giddens, 1994, p.54). There are certain ideologies that a person attaches to his understanding of the self and these ideologies have an influential impact on the person's

behaviour. The ideologies, which lead to ecologically destructive behaviour or inaction on the part of the individual, need to be transformed through language (Crompton & Kasser, 2009, p.25).

Chawla (1991) talked about bringing reforms at the level of language to resist the destructive perceptions and practices. He asserted that the industrial world view encourages individuals to see world as fragmented where everybody is an object which requires material goods to satisfy each component of the object. For example the perception that cosmetics are needed to satisfy face- that is one component of the whole body. It is not necessary that by applying cosmetics, one will achieve inner satisfaction. However, this perception built a consumerist identity of an individual whose happiness depends on more consumption. This consumerist identity is destructive as the production of cosmetics in industries pollutes natural environment.

Individuals establish their identities based on their differences from others and they feel pride in considering *ingroups* superior to *outgroups* (Oktar, 2001). From inner unconscious mind to outer power structures, there are various factors that play a crucial role in the construction of identity. However, people possess the ability to strip off their previous identities and assume new identities when they are exposed to new ideas and beliefs or when their understanding of self, conflicts with their understanding of the world. Some identities are destructive in nature for example the identity of the insatiable consumer whereas some identities are beneficial ecologically for example the identity of protector of nature. People act and behave according to the identity they conform to. Discourse plays an important role in defining the characteristics of particular kind of identity. For example the discourse of neo economics may define the identity of an owner as profit maximizing (Stibbe, 2015, pp.107-110).

Fink (1996) talked about the cultural identities. He said that the reason for the destruction of natural ecosystem lies in our cultural identities. We should enhance our understanding of cultural identities to solve problems, rather than developing a better understanding of environment around. In this way experts are not needed to solve the ecological problem but everyone can reform his/ her cultural identities. As language plays a vital role in identity construction, Ecolinguistics helps in identifying the destructive aspects of identity and calls to resist those identities by encouraging the alternate eco- friendly identities.

2.3.3 EVALUATION AND APPRAISAL

The thinking of an individual towards an area is conditioned by the appraisal patterns. Appraisal patterns are the patterns of language where an area of life is constantly described as good or bad. If something is considered as good or bad by the individuals, the type of story that causes individuals to think in terms of negative and positive terms is Evaluation (Stibbe, 2015, p. 84). Appraisals are created through the grammar and vocabulary of the language (Martin & Rose, 2003, p.58). The uncovering of the appraisal patterns subjects evaluations to question and change.

Halliday (2001) showed that things are constantly projected as good or bad for example it is projected that big, large, more, grow, up are better than their opposites like small, less, shrink, down etc. without realization that in pursuit of more growth and many resources, humans are exploiting the environmental conditions that are necessary for life (p.92). Alexander (2009) asserted that Shiva's lecture subverts the valued notions of many discourses and assigns worth to those notions that are widely devalued. Shiva projects 'small' as a good by using different collocations of farmers, cottage, local, insects, plants etc. (p.124).

Stibbe (2015) talked about explicit appraising patterns (bad, good, right and wrong), implicit appraisal patterns (natural, fresh, smart), marked words that have mostly negative connotations (untidy, unhappy, unappreciated, disillusioned, inconvenient, inconsiderate) and unmarked words that are considered positive (happy, convenient) contrasting words also trigger the negative/ positive (more/less, low/high, tall/short, big/small, up/down, behind/ahead, forward backward) (p.84). When positive words come together, they are known as purr-words. Appraisal patterns are formed with the help of purr-words (Alexander, 2009, p.140).

Ecolinguistics is helpful in analyzing the negative evaluations that are destructive from an ecological perspective and resisting the destructive evaluations by the use of language. The evaluations can be examined by applying the appraisal theory (Martin & Rose, 2003; White, 2004; Martin & White, 2005; Salvi & Turnbull, 2010). Appraisal theory talks about the way the writer projects certain things or phenomena whether the things are approved or disapproved, loved or hated, criticized or appreciated by the writer and the ways writers employ to establish relations to their readers to pursue them

to act accordingly (Martin & White, 2005. p.1). Readers or listeners (audience) can resist the evaluations, established through texts by critically analyzing these evaluations.

White (2004) described some of the ways by which appraisal is conveyed. One way to convey appraisal is through the use of “attitudinal terms”. These are the terms that carry negative or positive evaluations and if these terms are removed from the context, they can still convey negative or positive evaluations, that they carry (p.231). Another way of constructing the appraisal is through the portrayal of the ‘affect’. If the effect of certain things is described as positive, it will have a positive evaluation which will encourage people to participate in the described activity or to attach positive emotions to the described entity. For example the effect of emotions is registered as a positive (Martin & White, 2005, p.42). Appraisal is also constructed through ‘verticality metaphor’ (Lakoff & Welhing, 2012, p.131). However, if the audience is novice, it is more likely to be prone to writer’s convictions.

2.3.4 ERASURE AND SALIENCE

In social science, the concept of ‘erasure’ is used in many contexts for example Ferber (2007) argued that gender is erased in whiteness studies (p.265); Namaste (2000) claimed that the third gender is erased from the texts and two genders (men, women) are represented in texts as if no other gender exists in the world (p.52). Plumwood (2008) surveyed the ecological writings that are based on dwellings or places. She noticed that shadow places are erased from the writings and a reminding is needed for these places. Erasure refers to the ‘marginalization’ or ‘exclusion’ of an agent from texts or discourse (Baker & Ellece, 2011, p.40). An agent can be excluded from the text entirely or it can be excluded from any part of the text or discourse (Leeuwen, 2008, p.29). Everett and Neu (2000) argue that the ecological modernization discourse talk about the solution of all ecological problems through the advancement in modern technology regardless of the social injustices or the unequal distribution of resources in the society. In this way ecological modernization maintains status quo in the society by erasing the social relations (p.5).

There are many ways by which things are made less important in the discourse; abstraction is one of the way which makes thing less important for example the use of umbrella terms, ‘species’, ‘extinction rate’, instead of naming the species as elephant,

fish etc. is unable to bring a proper frame in the minds of individuals (Stibbe, 2015, p. 164- 167). Animals are erased from the environmental discourse and a world without animals is presented. Through language, animals are objectified and it is through objectification that erasure takes place (Berger, 2009, p. 21; Kahn, 2001, p.243, Durham & Merskin, 2009, p.245). Pierson (2005) argues that animals are not objectified but anthropomorphized in natural discourses. The representation of animals strengthens the dominant discourse of human centrality (p.771). In nominalization (a linguistic technique of erasure), the actors that cause damage to environment are erased by converting verbs into nouns for example instead of mentioning 'X destroys Y', through nominalization, it is presented as 'the destruction of X'. By erasing the actors that are responsible for the action in the eco-discourse, the solution to the environmental problems cannot be sought (Schleppegrell, 1997, p.55).

Stibbe (2015) discussed different types of erasure. He referred complete absence of 'something important' from the text as the void, if the distorted version of something is presented, it is the mask. If some of its aspects are presented and some are erased, it is the trace (p. 149). Passivation is another way by which environment is pushed into background. The issues related to environment are described as mere objects which are acted upon and they do not need to be taken care of. Ecolinguistics talks about those aspects of nature that are distorted or erased from the writings. By describing the areas of life vividly, a story is created in people's mind about certain areas of life as important and worthy of protection. Saliency, the story that makes certain area of life worthy and important in people's mind, is created through saliency patterns. These are the patterns in language that depict things in a clear and concrete way. Saliency can be revealed through an analysis of linguistic features like abstractions, transitivity, metaphor and vitality. If the things are described in abstract terms, the saliency will be less.

The abstract term is unlikely to print a clear picture in the mind. A vivid picture can be created by using the basic word, for example the use of word 'elephant' instead of abstractions like animals or species. By reading or hearing the word 'species', people cannot think of any specific animal or plant. However, when the name of specific element is mentioned, people can immediately think of the mentioned component. Saliency is also created through individualization. The naming of plants, animals or other natural elements, instead of using the mass terms- ecosystem, flora, fauna, organisms,

can foreground and makes the described element more prominent (Stibbe,2015).

Berry (in Foltz, 2013) claimed that we are defacing and dismembering the world by using the abstractions. We talk about protecting the world when we are not even describing it properly. We mention world as ‘ecosystem’, ‘organism’, ‘mechanism’, and ‘environment’. The spiritless and defaced abstract terms should be changed, if we really want to ‘save’ world (p. 21). The terms that are linked to bodily experience- soil, forest etc. are more imaginable than the abstract terms- environment, ecosystem etc. (Lakoff & Wehling, 2012, p. 42). Similarly, the word ‘earth’ is more likely to be imagined and to invoke a response than the term ‘planet’ which is a general term and has universal rules (Abram, 1996, p. 268). Saliency is also built through activation. An element can be foregrounded by assigning it the status of an active agent, who says, experiences, acts, give, behave, instead of being put at the position of the object or more passive position, where it is described merely as the receiver of the actions (Leeuwen, 2008, p.33).

2.4 CURRENT RELATED STUDIES

Gong (2019) conducted a study on environmental reports using corpus linguistic method. He employed Stibbe’s (2015) story framework in his study, to identify different types of stories and to evaluate the identified stories according to the ecosophy. He found the stories of frame, metaphor, identity, evaluation, erasure and saliency in the environmental reports of China Three Gorges Corporation. He found the story of saliency beneficial, which give prominence to nonhuman whereas he labeled the stories of identity (exclusive identities), erasure (of agent responsible for pollution), and evaluation (positive evaluation of energy) as a destructive discourse. He also found six metaphors; four metaphors were destructive whereas two were ambivalent. Similarly, he identified two ambivalent frames; the sustainable development frame and the green development frame. Zhdanova et al. (2021) also used Stibbe’s Story framework to analyze vegan campaign. They analyzed the vegan campaign using Stibbe’s story framework and multimodal analysis. They analyzed 27 posters of the campaign and found three stories (ideology, conviction, and saliency) and a trace of fourth story that is erasure, in the data. They labeled all stories beneficial because the stories align with their ecosophy of vegan campaign. Grundmann and Krishnamurthy (2010) used corpus linguistics-based approach to study the framing of climate change in the US, UK, France and Germany. They found the political framing of climate change in France, Germany

and the UK. They also found that salience is given to climate change in France and Germany compared to the US and UK. The US framing of climate change is dominated by scientific frame.

Alhussaini (2019) studied scientific and political perspectives of climate change using Critical Discourse Analysis. He analyzed the speeches of Chinese president Xi Jinping and Scientist Curry regarding climate change. He found that climate change is presented differently in both speeches. The president used pronoun 'we' to establish solidarity with the audience whereas the scientist used pronoun 'I' to show her commitment to the work. Similarly, the president employed intertextuality to talk about the need of global action whereas the scientists refer to other sources to establish the credibility of her work. He also found deviations in the president's speech from the climate change genre whereas Curry's speech remained within the genre of climate change.

Stuart (2017) conducted a study on climate change and ideology. The study draws from 154 semi-structured interviews from the US farmers about their beliefs regarding climate change. It was found that farmers have growing consciousness regarding climate change but they feel constraint in the current socio-economic system. In order to participate in climate mitigation, the farmers need a transition in the current system and an alternative of the current policies and economics where climate mitigation should be priority rather than production and consumption.

Centeno (2020) also analyzed the discourse of climate change. He investigated the socio-political construction of climate change. He analyzed the documents that were produced by international organizations (UNFCCC, COP, and IPCC) regarding climate change. He found that climate policy formulation is informed by anthropocentric, market-based and technocratic approaches to the social and ecological relations. Climate policy aimed at maintaining the status quo. He called for the justice approach in formulating a climate policy. Hasbun (2017) investigated the framing of climate change in Chile. He qualitatively analyzed the news from four digital media. He found that media favors the discursive stance of elite. The media is moving the climate action away from local level by the insufficient dissemination of relevant information. Similar study was also conducted by Jaworska (2018) regarding the discursive construction of climate change. The study combined quantitative corpus linguistic and qualitative discourse

analysis to show the construction of climate change in corporates report. It was found that through the use of linguistic devices (hedges, metaphors etc.), the corporate reports obscure the sector's large contribution to environmental degradation and set a narrative that they are actively engage in climate mitigation.

Ferguson et.al (2016) analyzed climate change discourse in CSR reports by 24 largest companies using content analysis technique. The analysis pointed out two linguistic strategies in the reports; rationalization and differentiation. Rationalization sees climate change as a business opportunity whereas differentiation shifts the responsibility of climate adaptations to the stakeholders. The authors argued that reports reinforce the market-based solutions to the climate change that have disastrous effects on many people.

Bundsgaard and Bang (2019) analyzed the language of Greta Thunberg's speech to know how she framed climate crisis through language. They found that Greta Thunberg (a youth activist) used metaphors, deixis and modality to put responsibility of climate crisis on policy makers and people who hold some kind of power. Flottum (2020) discussed climate narrative in the context of climate change discourse. He asserted that climate narratives are the stories that portray climate change as some sort of problem and an action is suggested to solve this problem. He analyzed two texts (IPCC and ACCESS) and concluded that both texts contain the components of problem and solution in the form of action. He further stated that there is an information deficit regarding climate change- the relation of political and scientific knowledge is vague in discussing climate change. The complexity is the main force behind the shaping of climate narrative. He calls for the analysis of language and discourse to understand the climate narratives (p.14).

2.5 CONCLUSION

The literature has offered a variety of perspectives to understand different types of discourses and the embedded stories or the ideologies that underlie these discourses. It also provided insights into the concept of ecosophy and different linguistic ways by which stories can be unveiled and evaluated in any discourse. Different types of stories are embedded in the climate change discourse that condition the individual's mind to behave in a certain way towards the ecological problems (Lindseth, 2004; Stibbe, 2015;

Franz, 2018; Bundsgaard & Bang, 2019). The stories can have negative as well as positive implications on ecosystem, so the negative or destructive stories need to be identified and resisted and the positive or beneficial stories need to be encouraged. There is a very little work which analysed global climate change discourse, by taking into account the stances of different political, non-political, governmental and non-governmental leaders and organizations using a thorough framework (Zhdanova et al., 2021). The remainder of this thesis will identify and analyse different types of stories in the climate change discourse that is produced in the UN climate action summit 2019, then, these stories will be judged according to an ecosophy to examine whether they are beneficial, destructive or ambivalent regarding their implications on the ecosystem.

CHAPTER 3

RESEARCH METHODOLOGY

This section discusses the Research design, the methods of data collection, data analysis, Theoretical Framework, Ecosophy and the linguistic features of each story - that are taken into account in this research.

3.1 RESEARCH DESIGN

The study is exploratory as well as descriptive in nature. First different types of stories are explored in the climate change discourse with the help of eight story framework given by Arran Stubbe (2015) in his book *Ecolinguistics: Language, Ecology and the Stories We Live* and then the stories are analyzed and described according to the ecosophy of the study. Both quantitative and qualitative approaches are used in this study. Corpus analysis tool (Ant Conc. 3.5.7) is used to get the frequency of the trigger words, First person pronouns, pun-words and Abstract words whereas the implications of the stories on the ecosystem are analyzed and described qualitatively by comparing the results with the ecosophy of the study. After the analysis of data by corpus tool, the type of discourse, whether it is destructive discourse, ambivalent discourse or beneficial discourse is determined according to the ecosophy of this study. So, the research design constitutes both the quantitative analysis and the qualitative analysis of the data of climate change to unveil the hidden stories and make the implication of stories of climate change explicit to the readers.

3.2 THEORETICAL FRAMEWORK

Stubbe (2015) in *Ecolinguistics: language, ecology and the stories we live by*, puts forward the theoretical framework that consists of eight stories and the linguistic features that signal towards each story.

Types of Stories and their linguistic manifestations

Story	Form	Linguistic Manifestation
1- Ideology	Perception of world among the group of the people.	Cluster of linguistic features
2- Framing	A story that uses frame to structure another area of life.	Trigger words that bring a frame in themind.
3- Metaphor	A story that uses a frame to structure different area of life.	Trigger words that bring a specific frame in the mind.
4- Evaluation	Judgment about certain area of life; whether it is good or bad.	Appraisal pattern that represent certain area of life as good or bad.
5- Identity	A story about what it meant to be particular kind of person.	A language form which determines particular characteristics of a certain kind of person.
6- Conviction	A story which tells that particular description of the world is certain, uncertain, true or false	Facticity patterns; the patterns of language which establish or undermine the facticity of a particular description.

7- Erasure	A story form which establishes certain area of life as unimportant or unworthy of attention.	Linguistic patterns that distort or background the certain area of life.
8- Saliience	A story that certain area of life is important and it is worthy of attention.	Linguistic patterns which foreground or give prominence to certain area of life.

(Stibbe, 2015, p.17)

First type of story is Ideology. Ideologies make perceptions of the world and construct reality in the minds of the people. People are mostly unaware of the ideologies or the stories that are concealed in the discourses (Stibbe, 2015, pp. 21-24). Stibbe (2015) classifies discourses on the basis of the ideologies they convey. The discourses that promote negative ideologies for example the discourses of progress or technological advancement, economics, advertising etc. that are against the ecosophy and leads towards ecological destruction is termed as destructive discourses whereas the discourses that promotes environmental- friendly ideologies are termed as beneficial discourses. Stibbe (2015) says that negative discourses should be discouraged and resisted and beneficial discourses need to be encouraged and promoted. Stibbe (2015) also discusses ambivalent discourses. Ambivalent discourses are those discourses that contain some aspects of beneficial discourses but at the same time echo other aspects of destructive discourses (Stibbe, 2015, p. 29). As discourse is the ‘characteristic way of speaking’, it includes grammatical choices, vocabulary and other linguistic patterns to convey ideologies and make perception about the reality of the world (Stibbe, 2015,p.22).

Framing is the second story type in Stibbe’s framework (2015) that assists humans in understanding the world. Frames are the cognitive structures that help people in understanding the reality about the world (Lakoff, 2006, p.25). The stories about the world for example the story about the climate change can be framed using certain trigger words that create a mental image on the minds of the people. By using the technique of

reframing, the perceptions of the people regarding certain ecological problem or phenomena can be changed. Frames can be analysed from the ecological perspective to examine whether they are in harmony with the ecosophy or they are opposing it. If the frames are not environmental friendly they should be reframed that encourage people towards more environmental friendly practices (Stibbe, 2015, pp. 49-50). In this writing, I am interested in examining the trigger words that bring a particular frame of climate change in the minds of the people. I shall also be looking for the ways that are employed in reframing the story of climate change, if any.

Metaphor is the third type of story. Metaphors are taken from the source domain and mapped into the target domain to enhance the understanding of the world. Stibbe (2015) uses the similar framework to analyse metaphors as that of frames. Specific trigger words are used to make the perception of the world. Metaphors can be analysed by examining the elements of source frame that are put into target domain. Then the implications of the metaphors can be judged according to the ecosophy. Only beneficial metaphors (environmental friendly) need to be encouraged whereas metaphors that are ecologically destructive need to be changed (Stibbe, 2015, pp. 66- 67).

The fourth type of story in Stibbe's story framework (2015) is Evaluation. Evaluations are the concepts that exist in the mind of the people, according to which people judge whether the certain area of life is good or bad. Evaluations can be identified by analysing the appraisal patterns- the linguistic features that highlight certain aspects or areas of life either positive or negative (Stibbe, 2015, p.84). Appraisal items can be explicit items, implicit items, marked and unmarked expressions (marked words mostly have negative evaluation whereas unmarked words have positive evaluation) and grammatical structures (Stibbe, 2015, p.84). Purr-words are also used for the realization of evaluation story. Purr- words are cluster of positive words (Alexandar, 2009). In this research I shall be focusing on different appraisal items used in climate action summit 2019 to unveil the evaluation story.

The fifth type of story is Identity. It is the story in one's mind about his/her existence. Identity is constructed with the help of language and it determines an individual's behaviour towards other individuals and towards environment (Stibbe, 2015, p.114). Crompton and Kasser (2009) argue that change in identity of people can change their attitudes towards environmental problems. Identity can be constructed and

resisted through language (p.25). An important way to recognize ecological identity in a text is to examine the construction of in groups and out groups; whether the in groups apart from humans also include non-human participants or not (Stibbe, 2015, p.115). Different ways by which identities in the texts are constructed include the use of hyponymy, pronouns like we, our and semantic expressions (Stibbe, 2015, pp.125-126). I will be analyzing out groups and in groups in this research to examine how the climate change is treated.

The sixth type of story is Conviction. It is cognitive story which makes people believe that certain description of a phenomenon is true, uncertain, false or certain. The pattern of language which is used to create conviction story in the individual's mind is facticity pattern (Stibbe, 2015, p.129). Facticity can be built through the use of modal verbs, quantifiers, asking from authority, hedges, and presuppositions (p. 138).

Erasure is the seventh type of story. Language is used in such a way that it shows certain area of life is unworthy, so it is back grounded and erased through the process of erasure (Stibbe, 2015, p. 146). Different ways of erasure include, the void (the complete absence of something in the text), the mask (the entity is masked by its distorted version), the trace (partial erasure of an entity) (Stibbe, 2015, p.158). Erasure can take place through the use of nominalizations (erasure of the actor). It can also take place through the use of passive voice, hyponymy, metaphor etc. (Stibbe, 2015, p.149). Saliency is the last type of story. This story reminds people that certain area of life need to be protected and it demands attention. Linguistic features that are helpful in analysing saliency include focus, metaphor and transitivity, vitality and abstraction levels (Stibbe, 2015, p.171).

3.3 DATA COLLECTION AND CORPUS

In this research, 88 statements and speeches by different political, non-political and government leaders and organization, delivered at the UN Climate Action Summit 2019, have been taken. The statements and speeches were downloaded from the website of UNFCCC¹. Only English speeches and statements from the summit were taken and a corpus of 61125 words was compiled. Two steps were involved in the corpus

¹ <http://unfccc.int/process-and-meetings/conferences/un-climate-change-conference-december-2019/speeches-and-statements-at-cop-2>

construction. First all the speeches were downloaded from the UN website in pdf format, and then the pdf files were manually annotated into TXT format to be searchable and editable, so that they can be used for general study.

3.4 DATA ANALYSIS TOOL AND PROCEDURE

This research utilized corpus linguistics method for data analysis. From 88 statements and speeches of the UN summit 2019, a corpus was compiled. Ant Conc 3.5.7, corpus linguistic software, has been used for data analysis. It was used for Concordance and Collocation analysis. The frequency of the words was also determined by using this software. Frequency data is the list of words and their frequencies. Baker (2006) says that if a person is using a word more frequently than the other words, it can reveal the person's ideological position (p.53). The linguistic features were identified by using collocate analysis. Collocations are the words that frequently occur together. After the identification of collocate words by Ant Conc. 3.5.7, Concordance lines (A Key Words in Context (KWIC) Technique) were used to analyse the context of the words. Ant Conc. was used for following reasons; first, CDA can be improved by the quantitative method of corpus linguistics (Alexander, 2018). Second, it offers an objectivity which is not possible in manual analysis (Hunt, 2015, p. 266). Third, certain ideologies are reflected through the frequent use of some trigger words. Through, Ant Conc. it is a less chance of missing the lexical repetitions (Baker & Levon, 2015, p.230).

The study is a corpus- based study as it uses the corpus data to explore different kind of stories and evaluate these stories from ecological point of view. Tognini- Bonelli (2001) explains that corpus- based studies use corpus data to explore a theory, validate it or refute it. In the current study, after the compilation of the corpus, by downloading the speeches from the UN website, converting them into TXT format and making a separate folder of 88 speeches and statements, the corpus data is attached to the corpus analysis tool Antconc. The wordlist feature of antconc. generated the complete wordlist along with the frequencies of the words.

After the careful study of wordlist, all the words that trigger any kind of frame or metaphor, are selected and through the concordance and collocate features of antconc. are studied thoroughly to explain their implications on ecosystem. Similarly for all other stories, mentioned in the theoretical framework (convictions, erasure, salience etc.), the

wordlist is studied again and again to explore the stories with the help of the linguistic features given in Stibbe's story framework. After the selection of the words (trigger words, purr words, abstractions etc.), for each story, their contexts are studied with the help of concordance feature of the antconc. The collocations of more frequently used words that trigger different kinds of the frame are studied through collocation analysis feature of antconc., to narrow down the study for further analysis. For example the word development trigger development frame but development is used in different contexts like economic development, sustainable development, industrial development etc. It was not possible to study the context of the word 'development', every time it is used in corpus (nearly 800 times). Hence, through collocation analysis, the words that most frequently collocate with development like the 'sustainable' are selected for detailed study.

3.5 ECOSOPHY

The ecosophy of this study follows the ecosophy of Stibbe (2015). Stibbe's (2015) concept of ecosophy is based on the concepts from; Dark Mountain Project (as it takes into account the environmental changes and calls for the reduction of exploitation of resources on global level), Social Ecology (It talks about the redistribution of resources among the individuals to promote social equality), Deep Ecology (It is ecocentric in its approach. It gives equal emphasis to nature and humans). So, the ecosophy of this research, that is used to judge different stories of climate change, is based on the redistribution of resources among the individuals or the well-being of individuals, limit the use of environmental resources, to care for present, past and future generations and not only focuses on the well-being of human but other species as well, which includes the whole ecosystem that life depends on.

3.6 LINGUISTIC FEATURES OF EACH TYPE OF STORY

With the assistance of corpus tool, linguistic features of each story that are present in the data are identified. The study analysed the trigger words, nominalization, abstraction, First person pronouns (our and we), purr words, abstract words and the use of passive voice. Trigger words bring a frame in the minds of the individuals. So, trigger words have been used for the analysis of frames. Moreover, metaphors have also been analysed by trigger words as metaphors are also mapped by trigger words. For analysing

metaphors, first metaphors are identified, then both, source domain and target domain of metaphors are analysed. After that the implication of metaphors from ecological point of view is discussed.

Purr words are used to analyse the story of evaluation. Purr words are the words that sound positive and when they occur in groups that create a positive image of the things that are described by these words. It is seen what purr words are used frequently to describe the impacts of climate change and the responsibility of humans towards ecosystem. Many researchers (For example Hyland, 2005; Wales 1996) investigated identity with the help of personal pronouns. So, Identity story have been analysed with the help of first person pronouns usage. It is seen how frequently these pronouns occurs and what is the role they play in constructing ecological identity. Whether they include whole ecosystem (both humans and non-humans) or they exclude the species other than humans. Conviction story is analysed with the help of modals, hedges, quantifiers and drawing on authoritative source. For erasure nominalization, abstraction and passive voice have been analysed. The words like nature, humans, protection, degradation, climate, pollute and growth are taken and their various manifestation whether they are used as verbs, nouns, adverbs or adjectives, are seen. The frequency of these words is also analysed to know whether these concepts are foregrounded or back grounded. Saliency is analysed with the help of vivid descriptions, activation and foregrounding. Stibbe (2015) asserts that more vivid images are used to foreground an image in the mind of readers whereas abstract words are employed to make something less salient or to background something. Hence the most frequent collocations have been examined to explore saliency. Ideology is an umbrella term which covers the rest of 7 stories in the framework, so the story of ideology is not analysed separately.

3.7 CONCLUSION

The research methodology section discussed the data collection and analysis procedure. A corpus, of 61125 words, has been compiled. To analyse the data, Stibbe's story framework has been used. Moreover, corpus analysis tool AntConc. 3.5.7 has been used for frequency and concordance analysis. The concept of ecosophy is also discussed in this section. After the identification of stories, the stories have been evaluated by comparing them with the set ecosophy. The next section will discuss the results and discussion in detail.

CHAPTER 4

RESULTS AND DISCUSSION

This section discusses how different linguistic features manifest different types of stories and the type of discourse (destructive, beneficial or ambivalent) these stories belong to, according to the ecosophy of the study.

4.1 THEME OF THE SPEECHES

To determine the subject matter of the speeches, a list of content words and the way these words collocate are examined. I have carefully examined the list of words that was generated by Ant Conc. 3.5.7, and selected more frequently used 30 content words. 50 was considered a cut-off point in the selection of content words based on frequency.

Table 1: Frequency of top 30 content words

Ran k	Token	Frequency	Rank	Token	Frequency
1	Climate	825	16	Future	88
2	Change	427	17	Level	88
3	Action	242	18	Efforts	88
4	Global	177	19	Finance	86
5	Countries	264	20	Impact	83
6	Agreement	222	21	Mitigation	76
7	Energy	121	22	Green	73
8	Adaptation	152	23	Gas	71
9	Developme nt	152	24	Water	70

10	Emission	145	25	Vulnerable	64
11	Carbon	133	26	Developed	63
12	Developing	111	27	Economic	62
13	Sustainable	102	28	Fund	62
14	Implementat ion	97	29	Framework	61
15	Actions	86	30	Environme nt	59

Table1 shows that the subject of speeches is climate change that demands a global action from all countries, as the frequency list shows the most frequently used words are Climate (825), change (427), Action (242), Global (177), Countries (264).

In order to better comprehend the theme of the speeches, the collocation of the frequently used content word in the given corpus is examined. The frequently used word ‘climate’ collocates more often with change (408), ‘action’ (130), adaptation (27), address (27), agreement (17) and impacts (61). Table 2 shows different collocations of ‘climate’.

Table 2: Salient collocations of climate in corpus

-
- 1- Climate change
 - 2- Climate action
 - 3- Climate adaptation
 - 4- Address climate
 - 5- Climate agreement
-

The theme can be better understood by looking at salient collocations in the corpus (Gong, 2019). By looking at salient collocations, it is clear that the theme of the speeches is climate change that has an impact and it requires a climate action and agreement for climate adaptation. Now when we have an idea that the corpus is about adaptation strategies for impacts of climate change, we can move on to analyse different types of stories that surround the climate change.

4.2 STORIES IN CLIMATE CHANGE CORPUS

Detailed lexical analysis of the corpus is done to determine the type of stories. Each type of story (Frame, Metaphor, Identity, Evaluation, Conviction, Erasure and Saliency) is discussed separately. The linguistic features of the stories are further studied by collocate analysis. Moreover, the Concordances of the lexical items (trigger words and words) are also studied to further develop the understanding of the ways these stories are contextualized in the corpus.

4.2.1 IDENTITY

The differentiation between humans and non-humans are created by using pronouns. Stibbe (2015) says that the pronouns, ‘us’ and ‘them’ are mostly used to talk about ingroups and outgroups. By using inclusive ‘we’ and ‘our’, the non-humans can be included in ingroup. Identity is analysed through a close reading of the context of ‘we’ and ‘our’. The frequency of these pronouns (we, our) is shown in table 3;

Table 3: ‘We’ and ‘Our’ Frequency

Rank	Frequency	Token
1	We	992
2	Our	732

Through KWIC, It is found that ‘we’ and ‘our’ are frequently used to refer to only humans and their activities. Non-humans (outgroups) like animals, birds, nature etc. that are affected equally by climate change are not included in these pronouns. (*see ‘we’ and ‘our’ concordance*). These pronouns refer only to the speakers and the organisations,

excluding all other than humans such as trees, aquatic animals etc. that play a crucial role in environmental protection. Alhussaini (2019) in his analysis of the speech of Chinese president Xi Jinping also found that ‘we’ and ‘our’ are used to include the other speaker of the conference. Humans portray themselves as the sole protectors of the planet earth.

- “we can *transform* our world” (St-Lucia),
- “we can *help* to solve challenges”(New Zealand),
- “We can *win* the battle” (Suriname),
- ‘we can *provide* the certainty’ (Canada).
- We are living in the same planet and it is our common responsibility to *protect* our planet, our home (DPR Korea).
- We should *protect*, ‘our oceans’, ‘our planet’, ‘nature’, ‘mountains’, ‘biodiversity’, ‘climate’, ‘environment’ (FBO, GWPO, Estonia, Thailand, Belize).

By assuming the identity of the protector of environment, the speakers are clearly marginalizing non-humans by placing them in a subordinate position where the non-humans cannot survive by their own and need human assistance to thrive.

The words, we agreed, we achieved, we acknowledge, we adopted, we act, we aim etc. are used to tell people what they (the speakers in the summit) have done and what they are aiming to do. Further, have is used to talk about the steps that are already taken and will is used for the steps that they are going to take in near future.

Table 4: Collocations of personal pronoun “we”

Rank	Tokens	Frequency
1	We have	144
2	We need	119

3	We must	86
4	We will	65
5	We know	42

‘We’ most frequently collocates with ‘have’ and ‘will’. ‘We have’ is used 144 times and we will is used 65 times. The number shows that the speakers establish their identity as an environmental protector and manager where they have done most of the work in past and are still on the way to protect environment through their planning, actions and management.

- 1- We have already achieved good results in important areas like capacity building and will continue to work towards a successful outcome on the GenderAction Plan.

The above example shows the way the speakers are convincing people that they have achieved success in important areas and are on right path to get success in other areas as well. By using the collective pronoun ‘we’, politicians identify them as a group (Bramley, 2001; Alhussaini, 2019) and an identity of global community is established where the organizations and agents that are responsible for environmental destruction and play a crucial role in massive climate change are clearly masked (2) and the solution is directed at a wrong level where the stability in climate change can be achieved through small activities like growing trees, recycling etc. without any check on the agents of destruction (Stibbe, 2015).

- 2- Either we should stop addiction of the coal or all our efforts to climate change will be doomed (UN Secretary General).

In above extract, the countries who are consuming more coal are not mentioned clearly but their identities are masked under the collective ‘we’. The agency is masked to convince people that they are working for the climate mitigation (Jaworska, 2018). The global identity or collective identity (Bramley, 2001) is also established by using ‘our’.

The concordance of ‘our’ is shown in table 5;

Table 5: The extract of ‘Our’ concordance

All rest to some degree on	our	Ability to manage water
We strongly believe that	our	Accumulated experience
We must take stock of	our	Achievements in reaching
crops, our industries and	our	Air conditioners are thirstier
And collapse of our world	our	Children are in the streets

The above table shows that the speakers are using the pronoun ‘our’ to talk about their *children*, their *air conditioners*, their *achievements and ability*. It does not include non-humans in the ingroup. The use of collective ‘we’ and ‘our’ that only includes humans in the community, a distance is created between humans and non-humans (Stibbe, 2015). Instead of differentiation, more similarities should be highlighted between both (Cook, 2014). The similarity approach will evoke humans’ sentiments of compassion, respect and care for nonhumans.

It should be considered that by using exclusive pronouns, ‘we’ and ‘our’ that only include humans, non-humans are marginalized. Non-humans should also be considered as a group to bring stability (Stibbe, 2015). The excessive use of these pronouns also mask the responsible agents and create a false hope in people by projecting the speakers as the protectors and operators who work to protect and save all non-humans and humans from the impacts of climate change. So, according to the ecosophy of this study, these identities are considered as a destructive discourse. Gong (2019) also identified the identity story in the corpus of environmental reports by looking at the concordance and collocation of pronouns ‘we’ and ‘our’. The finding of exclusive ‘we’ and ‘our’ in the current study is similar to the use of pronouns in environmental reports, analysed by Gong.

4.2.2 FRAMING

Framing is a story that uses a frame to structure another area of life (Stibbe, 2015, p.17). Frames can be analysed critically according to an ecosophy for better understanding of the ways these frames affect the environment. Words are employed to activate a frame in the individual's minds (Lakoff, 2010, p.73). Through a close reading of the word list, generated by AntConc., all the words that trigger any kind of frame in the minds of the readers are identified and analysed by looking at the context of the words using concordance lines and KWIC feature of the software. Development frame is a commonly analysed frame in eco discourses (e.g. Manji & Coill, 2002; Sachs, 2009). As previous researches suggested that development frame is frequently analyzed in the discourses related to environment, the first frame that is identified in the current study is developmental frame. To examine the context of the development, the most frequent collocations of the development are analyzed.

Table 6: Top 5 Collocations of 'development' (on left)

Rank	Frequency	collocation
1	48	Sustainable development
2	10	the development
3	7	Low carbon development
4	7	Economic development
5	3	Climate-resilient development

From top 5 'development' collocations, the frequent collocation is the 'sustainable development' (48) and it is worthy of analysis as it is closely linked to the environmental issues (Gong, 2019).

4.2.2.1 SUSTAINABLE DEVELOPMENT FRAME

The Concordance of ‘sustainable development’ can be seen in table 7.

Table 7: Extract of sustainable development concordance lines

The only way to achieve	<i>Sustainable development</i>	is by considering the
Our efforts to achieve	<i>Sustainable development</i>	and by reversing hard-
Our right to	<i>Sustainable development</i>	is best safeguarded
The pursuit of	<i>Sustainable development</i>	by developing countries
To pursue	<i>Sustainable development</i>	And provide equal op-
Recognise that	<i>Sustainable development</i>	And free trade can be
provide new opportunities for	<i>Sustainable development</i>	The European Union is
That directly undermine	<i>Sustainable development</i>	Efforts. For instance

Table5 shows that the words that are linked to the sustainable development are verbs like *achieve*, *pursue*, *pursuit*, *provide* and *undermine*. All these words are action verbs which show that sustainable development is an aim or a goal that speakers in UNFCCC are trying to achieve. Sustainable development is a development that lasts long (Stibbe, 2015). It not only cares for present generations but it also cares for the wellbeing of future generations. In 3, hydropower is considered as a clean and

sustainable development, the president of Singapore, further links sustainable development with limiting finance, innovation and technology(4), the Zambian government says that sustainable development can be achieved by maintaining environment sound and healthy (5).

- 3- “It is important that the further development of hydropower based on renewable energy resources is a priority for Tajikistan, Moreover, Tajikistan is developing long-term plans to provide clean energy....which are an important component of sustainable development.”
- 4- “We must.... recognise that sustainable development and free trade can be enablers for climate action, particularly if we harness the power of finance, technology and innovation.”
- 5- “It is mind full of the need to maintain a healthy environment in order to achieve sustainable development.”

The above extracts from the speeches show that sustainable development has many positive aspects associated with it. For instance respecting the environment and care for it, to have a check on technological advancements. However, sustainable development is portrayed as unlimited whereas environmental resources are not unlimited. For example Gas Exporting Countries Forum (GECF) insists on using natural gas as a reliable way to achieve sustainable development whereas natural gas is limited. Development itself is damaging for environment if left unchecked. In sustainable development, the root word development is modified by using ‘sustainable’, which is not sustainable at all. So, sustainable development should also be limited as hydropower development is considered as sustainable development when it has many disadvantages as well for example it can cause harm to aquatic species like fish. Similarly, wind power stations are considered to be sustainable when they can harm birds with their blades and create noise pollution (Jaber, 2014). Hence, sustainable development frame can be considered among ambivalent discourses. Gong (2019) in the analysis of environmental reports also analysed the sustainable development frame and labeled it as ambivalent considering both the negative and positive aspects of using the sustainable development frame in the environmental reports. He suggested that use of word ‘limited’ with the sustainable development as no development can be completely sustainable.

4.2.2.2 TRANSACTIONAL FRAME

The transactional framing of climate change is worthy of analysis as it has deep impact on environment. Words that trigger a transactional frame in the minds of the people, in this corpus include *Market(s), Business, Economic, Transfer, Cost, Supply, investment, Dollars, Share* etc. Through a close reading of the word list, generated by AntConc. 3.5.7, all the words, related to transaction were selected and their concordances were studied to know the context in which these words are used. Table8 shows the frequency of the trigger words that indicate the transactional framing of the climate action.

Table 8: Words that trigger a transactional frame regarding climate action

Rank	Token	Frequency
1	Market (s)	49
2	Investment	22
3	Billion	56
4	Outcome (s)	38
5	Investments	23
6	Share	22
7	Cost (s)	30
8	Business	14
9	Transfer	13
10	Delivered	14
11	Dollars	17
12	Supply	10
13	Provide	37

In transactional framing of the climate change, the source frame is commercial frame whereas the target frame is the conservation of environment and sustainable development. This transactional framing of environmental conservation reinforces the consumerist frame which forms a destructive discourse (Blackmore & Holmes, 2013, p.15). The term “Business” is used 14 times. Solving the climate crisis is seen as an opportunity to avail and strengthen the economy of the country (6). It is seen as a call for adaptations in usual business (7) and it is a shift towards “sustainable business” (8). Ferguson et al. (2016) in their study of the climate related discourses in reports by 24 large companies also found that the reports used the linguistic strategy of rationalization to portray climate action as a business opportunity which has disastrous effects on people.

- 6- “It is a business opportunity, as evidenced through the attractiveness of e.g. solar and wind energy for investors” (Taalas-WMO Secretary general).
- 7- “To discourage business as usual we need the right system that puts a reasonable price on carbon” (Korean Republic).
- 8- “We see some incremental steps towards sustainable business models, but nowhere near the scope and scale required” (UN secretary remarks).

This commercial-transactional framing of climate change is against the ecosophy of this study, which talks about the redistribution of resources among people to reduce consumption of natural resources. Business can provide rich with more luxuries but it cannot provide wealth to the needy people. So, this transactional frame of climate change is a form of destructive discourse. Centeno (2020) analysed the documents produced by UNFCCC, IPCC, and COP regarding climate change and found that climate policy is not formulated by considering equal rights of the people but it is formulated at maintaining status quo. This social inequality that is found by Centeno (2020) is also seen in the transactional framing of the climate change in the current corpus.

4.2.2.3 PROBLEM- SOLUTION FRAME

Another frame that is identified in the corpus is problem-solution frame. Climate

change is portrayed as a problem and different solutions are proposed to solve this problem (Stibbe, 2015). Flottum (2020) discusses climate narrative in the context of climate change discourse. He asserts that climate narratives are the stories that portray climate change as some sort of problem and an action is suggested to solve this problem. He analyses two texts (IPCC and ACCESS) and concludes that both texts contain the components of problem and solution in the form of action. In this regard the finding of problem-solution frame in this study is similar to Flottum's (2020) study. The following extracts from the corpus show the problem-solution frame of climate change;

9- "The calls for climate emergency result from the finding that climate change is not a problem of the future generations – they are current **problem**". (Portugal)

10- "The only equitable and effective way to finance losses and damages is for the countries and co-operations that have caused the **problem** and benefitted from the use of carbon to accumulate capital to compensate countries that suffer the consequences of climate change without having caused it" (Nicaragua).

11- "Bulgaria, not only recognizes the seriousness of the **problem** but are also working actively....."

In above extracts climate change is framed as a problem and a solution is proposed, which is visible in the examples below;

12- "The **solution** of existing problem in the field of reducing the negative effects of climate change in the context of global development require us to carry out collective efforts and implement urgent and long-term measures"(Tajikistan).

13- "Natural gas is a balanced **solution** that contribute to reduce carbon intensity..."(GECF)

14- "The cost-effective implementation of the nature-based **solution** option is preferably supported" (Mongolia).

This framing of climate change as a problem is against the ecosophy of this study

which talks about resilience and the well-being of future generations. Climate change is framed as a problem, and solutions like reducing carbon emissions and adapting more environmental friendly approaches, are proposed. It means that once solution is achieved the problem will stop existing. So, there is no need of climate-resilient societies and measures (Stibbe, 2015). However, climate change has already caused its adverse effects and is still constantly damage. It is a constant condition, which we are facing and we need to response through a variety of actions. This problem-solution frame forms a destructive discourse.

4.2.2.4 SECURITY FRAME

Climate change is framed as a security threat that demands immediate action in all domains. The concordance of climate change as a threat is shown in table 9. Moreover, the words, ‘risks’ (19 times), “insecure future” and ‘unexpected’ are used which frame climate change as a threat.

15- “Rising seas, apocalyptic storms, prolonged droughts, scorching temperatures, rampant wildfires, disappearing biodiversity on land and in oceans - sadly I can go on. These are impacts that no one, no country can escape. These threaten global security and stability and jeopardize the prosperity of all peoples” (Belize).

The above extract shows that climate change is a threat to the security of the ecosystem. It is endangering the biodiversity and the threat is so pervasive that no specie either marine or territorial can surpass the threat of climate change. It not only threatens the prosperity of the ecosystem but it is threatening the very existence of the ecosystem.

Table 9: Extract of ‘Threat’ concordance

Climate change is both a	threat	and an opportunity
Climate change is a	threat	multiplier for peace
To address climate change	threat	this was a feat of -
Is a serious and imminent	threat	that will not leave anyone

Response to avert this threat? Nations of the world

By looking at the concordance of the word ‘threat’, it is seen that Climate change is framed as an ‘imminent threat’, which needs an immediate response in the form of climate action. The security frame is a beneficial discourse (Stibbe, 2015), as it calls for an immediate and urgent response from all spheres of life whether it is economic, political or social.

4.2.2.5 ECONOMIC FRAME

Economic discourse is the most prevalent discourse in contemporary era (Gare, 2002). The discourse of Climate change is framed as an economic discourse by using the words *economy*, *economies*, *finance*, *options*, *consumption* and *share*. The frequencies of these words are given below;

Table 10 Words that trigger an economic frame of climate change

Rank	Token	Frequency
1	Finance	86
2	Economy (ies)	64
3	Economic	62
4	Share	22
5	Option (s)	17
6	Consumption	11

The trigger words that are mentioned in the above table are selected on the basis of their frequencies. 5 is taken as a cutoff frequency for selection. By looking at the contexts of most frequently used words *finance*, *economic* and *economies*, it is observed that some countries (Pakistan, Nicaragua, DPRK etc.) talk about economic and social

injustice in COP 25. It is said that most of the developed countries emit large amount of hazardous gases (16) which results in climate changes and all countries have to face the consequences.

Climate change does not affect every country equally but the developing countries suffer more due to poor economic resources (Edgar et al., 2003; Thomas & Twyman, 2005). Although the contribution of developing countries and states in the emission of Greenhouse gases is negligible, yet they are taking effective measures (lessen the carbon use, reforestation, energy conversion and so on).

16- “We contribute less than 1% of the global greenhouse gas emissions but yet, every year, we keep on climbing up the ladder of climate vulnerability” (Pakistan).

The above extract from the speech of the Pakistani Prime Minister shows that the developing countries like Pakistan are suffering from climate change when their contribution in greenhouse gas emissions, which is one of the major causes of global warming, is negligible. The more gas- emitting countries, instead of reducing their emissions, propose small activities (*recycling, forestation, renewable energy* etc.) to counter climate change (Stibbe, 2015). Consider the following examples;

17- “We are bitterly disappointed by the failure of many governments, especially the biggest emitters, to embrace sufficient climate action needed to stabilize temperatures” (FBO).

18- “One wonders whether some parties are here to join us find ambitious and effective solutions to address climate change or simply to stifle progress to protect their vested national interests” (SAMOA).

19- “Our children are in the streets marching while leaders of big nations are dithering and retreating from their responsibilities” (Belize).

The above extracts from the speeches show the lack of seriousness towards the climate action on the part of the ‘biggest emitters’ to protect their economies- ‘their vested national interests’. In order to keep the voice of most climate- effected countries silent, the responsible countries and organizations talk about providing climate finance

to the vulnerable countries (this conviction is based on the observation that Japan talks about providing the climate fund of 3 billion dollars, whereas Japan is severely criticized for its coal policy), by utilizing the opportunity of climate change.

Climate change is referred to as an ‘enemy’ of economy and business and the response to climate change is taken as a ‘*business opportunity*’ (Ferguson, 2016). If everything is concerned with business and economy, then the people are encouraged to maximize their shares and profits (Bowman, 2009), instead of doing their best to neutralize climate change and to develop the resilient societies. In order to boost their economies, most of the countries tend to exploit nature (in the form of over consumption of resources).

20- ‘In several regions of the world, coal power plants continue to be planned and built in large numbers’ (UN secretary).

The above remark of the UN secretary emphasizes the lack of seriousness and responsibility of ‘some countries’ towards climate mitigation and adaptation for the sake of extrinsic motives of capitalization and money-making (Jaworska, 2018). Considering the aspects of resource consumption and environmental degradation, the economic framing of climate change is termed as a destructive frame.

4.2.2.6 GLOBAL FRAME

Climate change is framed as a global problem/ predicament which require solution/ response globally (Stibbe, 2015; Centeno, 2020). The words that trigger the global frame include *common, international, and global*. By looking at the collocations of the term global, it is observed that the term global frequently collates with efforts, actions, goal and response, which is inviting everyone to participate in climate mitigation and adaptation. The important collocations of ‘global’ are shown in table 11.

Table 11: Collocations of ‘Global’

Rank	Collocation	Frequency
1	Global Warming	22

2	Global Temperature	14
3	Global Climate	16
4	Global Emissions	15
5	Global Efforts	6
6	Global Community	6
7	Global Average	4
8	Global Response	4
9	Global Goal	3
10	Global Action	3

Table 11 shows that the cause of climate change and warming of earth is due to the emissions of gases which are globally emitted in bulk. To lower the earth's temperature and reduce the average emission of gases a global response/ action is needed from a global community.

In the global perspective the responsibility, of drastic changes in climate, is diffused to all humans by using the pronoun ‘We’. The concordance of we indicates that speakers are using the pronoun to refer to themselves collectively. Table 12 shows the extract from the ‘we’ concordance. The concordance shows that, it is proposed that we all should act (1) and work (2) as we all destroying the ecosystem (7). However, it is unclear that who should do what? and who is specifically destroying the life- support system? Who is not acting according to the demands? (8). The vague use of ‘we’ masks the responsibility of particular country or countries who is/ are responsible for highest emissions and who are not fulfilling the set targets of lowering earth’s temperature.

Table 12: Extract of ‘We’ concordance

1-	polarized and uncertain world	we	all need to do our
2-	be tantamount to saying that	we	all participated eq-
3-	Can do it alone if But if	we	all work together
4-	climate catastrophe at all. Yes,	we	are all concerned
5-	and uncontrollably eviscerating	we	are already experiencing
6-	We all have gathered here because	we	are aware of the urgency
7-	climate goal- each confirms that	we	are knowingly destroy-
8-	Show that emissions continue to rise	we	are not acting quickly
9-	By our actions and every day	we	have a moral obligation to
10-	Is closely interwoven in the way resources	we	use and manage our

6- “In several regions of the world, coal power plants continue to be planned and built in large numbers. Either we stop this addiction to coal or all our efforts to tackle climate change will be doomed” (UN Secretary).

The above extract from the UN Secretary’s remarks shows that all countries are not making equal efforts to neutralize climate by reducing carbon emission but some countries are still trying to maximize their profits from coal usage. However, the use of facticity term ‘some’ to create uncertainty in the readers regarding the troublemakers, instead of mentioning the name/ names of the country/ countries who is/are not reducing the use of coal, masks the agency of the responsible country. Furthermore, the use of

‘we’ is diffusing responsibility to all countries- a global responsibility. Obviously all countries are not planning to increase the use of coal.

Hence, the global framing of climate change is an ambivalent frame. It talks about the equal responsibility of all countries to bring adaptations to reduce emissions of GHGs and come up with other efficient responses to minimize the effects of climate change. It puts more pressure on developing states and countries to bring reforms when their GHGs emissions are negligible but these state and countries have to manage finance to control the damage caused by climate change. However, those countries who emit hazardous gases in bulk are guised under the inclusive pronoun ‘we’.

4.2.3 METAPHORS

Metaphor is a story that uses a frame to structure different area of life (Stibbe, 2015, p.17). Through a close reading, following 8 metaphors are identified in the corpus. CLIMATE CHANGE IS A WAR, ORGANIZATIONS ARE HUMAN, NATURE IS A PERSON, RESOURCE EXTRACTION IS VIOLENCE, HUMANS ARE THE PROTECTOR OF NATURE, NATURE IS A MONEY- MAKING TOOL, NATURE IS A MACHINE, and CLIMATE CHANGE IS AN OPPRESSOR. All the words and phrases that are employed by the speakers to describe the ecosystem and climate change metaphorically are identified through a careful reading of the word list and the context of the concerned words, regardless of their frequency. Even if the word occurs once for example the word ‘vehicle’, it is also selected due to its effect on the listeners. However, it is mentioned that the words that occurs more frequently have different impact on the listeners than the words having single occurrences in the discourse.

4.2.3.1 CLIMATE CHANGE IS A WAR

The words and phrases that trigger the metaphor, ‘CLIMATE CHANGE IS A WAR’ are *combat, combating, retreating, demise, apocalyptic storms, destruction, emergency, warpath, battle, and fight*. The words ‘combat’ and ‘combating’ are frequently used than the other words.

Table 13: concordance of ‘Combat’ and ‘Combating’

Urgent need for immediate action to combat climate change
--

alarminglly

All hands on deck as we **combat** climate change and its

For long term predictable financing to **combat** multi climate change

Efforts globally and nationally to combat coming climate change

Pioneer innovative solutions to protect biodiversity and **combat** change

Our country from added value of **combating** emergency climate change and enhancing

Portugal commitment to **combating** change and enhance-

Like the words ‘combat’ and ‘combating’, the word ‘fight’ is also frequently (19 times) used, which strengthens the metaphor of war for climate change. This war metaphor demands drastic and urgent solutions (Gong, 2019). Although war demands urgency in solutions, but it does not necessarily care for wellbeing of whole ecosystem. Considering these aspects, the metaphor of war for climate change is considered as an ambivalent metaphor.

4.2.3.2 ORGANIZATIONS ARE HUMAN

The organizations and corporations that are described as a human in the corpus include South Asia Co-operative Environment Programme (SACEP) and African Centre of Meteorological Applications for Development (ACMAD). SACEP is described as a most active programmer having human-like capabilities like *working, identifying, capacity building, leveraging etc.* This is an example of metonymy where SACEP stands for the owners or the directors of programme. The words *determined, build, reduce, monitors, provides, watches, develops, adapts, forecasts, planning, supporting, helping,* and *monitoring* are used for ACMAD (14). Koller analysed that the characteristics of respect, trust, responsibility, excellence, growth, fairness, innovation, transparency,

creativity, integrity etc. are associated with the corporations (2009, p.52). In the similar way, the attributes of growth, creativity, and innovations are assigned to the organizations like SACEP and ACMAD.

21- “The centre is more than ever determined to leverage on the strengths of partnerships to serve member states supporting resilience to disasters and adaptation to climate change across Africa helping to realize the AU agenda 2063”.

The use of person metaphor for corporation is a destructive discourse as this metaphor shift the agency of the humans to the corporations. The anthropomorphic characterization of the corporations masks the identity of those individuals in the corporations whose decisions and practices create ecological problems (Jaworska, 2018). By associating the commendable human qualities with the corporations, the ideology of trust and loyalty is perpetuated among the people that these corporations are providing the most reliable responses to the environmental issues and these corporations, as being loyal and fair, cannot contribute to the ecological damage.

4.2.3.3 NATURE IS A PERSON

The metaphor of person is used for nature. First nature is described as a living being, having distinct body with organs. The words like ‘lungs’ and ‘life’ are used to describe the anthropomorphic character of nature. Then, nature is described as a female, having a feminine tone. Moreover, the metaphor of mother for nature is also explicitly used (22). Nature is also describes as a person having nurturing qualities, who is able to take care of humans (23).

22- “Our forests are the lungs of our mother earth, and they bring life, balance and teachings....We believe the voice of the earth is feminine....we will continue to protect our mother” (IPO).

23- “If we take better care of nature, Nature will take better care of us” (IUCN).

The concordance of Mother Nature and Mother Earth is shown in table 14.

Table 14: The use of ‘mother’ metaphor for nature

We will continue to protect our	Mother.	
The Nabgwana Pachamama	Mother earth	And it is from the
Resource extraction is destroying Our	Mother earth	And poisoning our
Our forests are the lungs of our	Mother earth	And they bring life,
Because we love	Mother earth	And we are concern
Their rights and the rights of	Mother earth	For centuries, to the
System in order to safeguard	Mother earth	Their future and the
Been one clear message from	Mother Nature	This past year

By looking at the context of the mother metaphor, it is observed that the mother metaphor is used for earth and nature. In the metaphor NATURE IS A PERSON, the source frame is a person and the targetframe is the nature. This source frame of a person for a nature is a beneficial discourse. The personification of nature places intrinsic values in the nature, which is worthy of existence (Verhagen, 2008, p, 8). However, the metaphor of woman for nature is criticized as it parallels the patriarchal domination of woman and the oppression of land by humans. Hence, the metaphor of mother for nature is an ambivalent discourse.

4.2.3.4 RESOURCE EXTRACTION IS A VIOLENCE

The land is compared to the person and the extraction of resources is considered as an abuse and the violence against the land. As the violence harms the person, in the similar way resource extraction harms the earth. The source domain is the violence and the target domain is the extraction of resources (16). The words that trigger this metaphor of violence for resource extraction are, *destroying, poisoning, violating, extracting, cutting, rising temperature* etc. The extract below shows the way words are

employed to make the infliction of pain clear to the listeners, which is caused by resource extraction to the earth.

24- ‘Resource extraction is destroying our mother Earth, poisoning our waters.... Our forests are being destroyed by fossil fuel extraction, clear cutting and increase in forest fires due to rising temperatures. ... resource extraction is extracting our humanity, violating our right to live sustainably on the land’ (IPO).

The metaphor of violence for extraction of resources is considered as a beneficial discourse as it calls for the end of resource extraction by describing its negative impacts on the nature. It not only cares for the future of nature but also for the future generations of humans by creating a parallel between the extraction of resources and the extraction of humanity.

4.2.3.5 HUMANS ARE THE PROTECTOR OF NATURE

The words that trigger the metaphor of humans as the protector of nature are *protection, protect, care* and, *save*. The frequency of trigger words is given in the table 12.

**Table 15: Frequency of Trigger words for the metaphor of
*humans as the protector of nature***

Rank	Token	Frequency
1	Protection	24
2	Protect	22
3	Care	10
4	Save	8

The concordance of ‘protect’ is given in table 16;

Table 16: Extract from the concordance of ‘protect’

1- The loss of biodiversity and to	Protect	and restore nature.
2- Of green jobs. In order to	Protect	our oceans we need to
3- Protect our oceans we need to	Protect	our climate
4- A single mission which is to	Protect	our planet for the
5- Our responsibility to	Protect	our planet, our home
6- Sanitation for our people, to	Protect	our shorelines against
7- The international goal to	Protect	the global environment
8- Current negative trends and	Protect	the health of our oceans

Table 16 shows the way humans are projecting their identities as the protector of the nature. The metaphor of ‘HUMAN IS A PROTECTOR OF NATURE’ is an ambivalent metaphor. It talks about protecting the *climate, shorelines, planet, oceans, environment, and nature*. However, this metaphor positions nature in a subordinate position where nature is described as a passive agent, devoid of any agency.

4.2.3.6 NATURE IS A MONEY MAKING TOOL

The word that triggers the metaphor NATURE IS A MONEY- MAKING TOOL is *income*. Consider the following extract where fish is described as a source of income and decline in salmon will result in decline in income.

25- In British Columbia, my home, we see it in what’s happening to wild Pacific salmon stocks. Each year yields less, meaning less food for Indigenous communities, less income for fishers, and less biodiversity in our ecosystem.

The economic description of nature as a source of *food*, *income* and a *stock*, is a destructive discourse. This view of fish attaches extrinsic values of income and food to the life of fish and encourages the resource consumption by considering salmon a resource.

4.2.3.7 NATURE IS A MACHINE

The word that triggers machine metaphor for nature is ‘vehicle’.

26- Food security will be threatened as a result of a worsening climate and increased competition for land, arising from the need to use land as a **vehicle** for mitigation options.

In above extract, the land is described as a tool or a vehicle to be used for climate mitigation. The machine metaphor for nature is a destructive discourse. If land, forests, oceans etc. are treated as a vehicle to neutralize climate change, then the speaker compromises the intrinsic values of these crucial agents of ecosystem. Moreover, by referring machine to land, the speakers assume the identity of operator where they can operate the land according to their wish (Stibbe, 2015). If humans have the motives of making money or increasing wealth, they can operate land to achieve their aims without considering the ecological health of land.

4.2.3.8 CLIMATE CHANGE IS AN OPRESSOR

The words that trigger the metaphor of oppressor for climate change include, *violation*, *risk*, *victims*, and *force*,

27- Climate change crosses borders by force and uninvited and does not discriminate by size or might, and will impact every country, though some more extensively than others, like SIDS because of their unique vulnerabilities (SAMOA).

The metaphor CLIMATE CHANGE IS AN OPPRESSOR is an ambivalent metaphor. Although this metaphor makes a vivid description of the negative effects of climate change that causes humans to think and act towards climate neutrality, yet by giving the ultimate power to the climate change in the face of an oppressor, this metaphor shifts the attention of the people from those agents who are responsible for

climate change.

4.2.4 EVALUATIONS

Evaluations are the cognitive concepts which enable people to judge whether the certain area of life is positive or negative. Appraisal patterns are helpful in revealing the evaluations (Stibbe, 2015). The appraisal patterns of Climate Change and the actions that are proposed as a response to climate change, for example the transition in development, energy, and growth ,are analysed to know whether they are evaluated good or bad by the speakers and the impact of these evaluations as per ecosophy of the study is also examined.

The items that are used to describe climate change include *negative, fight, combat, combating, risks, confront, horrific disasters, unavoidable impacts, adverse effects, devastating impacts, struggle, unfolding disaster, fight against* etc. These all are appraising items that evaluate climate change negatively. Moreover, the grammatical structure, “The threats of climate change” is also used which is a negative evaluation of climate change. The negative evaluation of Climate change calls for immediate action to resist its negative impacts by coming up with urgent responses. Considering this aspect, this evaluation of climate change is a beneficial discourse. It is also interesting to know how the growth that is effected by climate change is evaluated in the corpus.

Table 17: Salient Collocations of ‘growth’

-
- 1- Economic Growth
 - 2- Green Growth
 - 3- Balanced Growth
 - 4- Sustainable Growth
 - 5- Inclusive Growth
 - 6- Industrial Growth
-

The words *green, balanced, sustainable, inclusive* are all purr words that are used to describe the growth. Purr words are the words that sound positive and when they occur in groups that create a positive image of the things that are described by these words (Stibbe, 2015). The speakers are using purr words for growth to evaluate growth positively. Growth is mostly associated with material success, reputation, and wealth etc., this commercial aspect of growth increases consumption and creates dissatisfaction. The discourse of considering growth good, especially economic growth and industrial growth is a destructive discourse as per ecosophy of the study. Economic growth contributes to the destruction of nature for example trees cannot contribute to economic growth until they are sold as a timber by cutting down. So, economic growth beyond certain limits does not remain economic.

Another important story that is frequently used is the development story. The word development is used 152 times. The development collocations are shown in table 18.

Table 18: Salient Collocations of Development

- 1- Climate- resilient development
- 2- Socio-economic development
- 3- Compatible development
- 4- Sustainable development
- 5- Technology development
- 6- Capacity development
- 7- Rural development
- 8- Macroeconomic development

9- International development

10- Strategy development

Development is evaluated positively by using positive appraising items like *Climate- resilient, compatible, and sustainable*. Development is considered positive when it remains within environmental limits. However, the words *sustainable* and *climate- resilient* portray development as long-term, unlimited and positive, which shifts the attention of the people from the negative impacts of development. The positive evaluation of development is considered as an ambivalent discourse.

Energy is considered as an important parameter in economic growth. Since the economic growth is appraised positively, the appraisal of energy is also worthy of analysis. The collocation of energy is shown table 19.

Table 19: Collocations of Energy and their frequency

Rank	Frequency	collocations
1	30	Renewable energy
2	20	Energy efficiency
3	10	Energy Transition
4	8	Clean energy
5	5	Solar energy
6	3	Sustainable energy
7	2	Reliable energy
8	1	Green energy
9	1	Carbon -free energy
10	1	New energy

Energy is appraised by using words, *renewable, clean, sustainable, reliable, green, carbon-free* and *new*. These are the purr words that are used by the representatives of different countries and organizations to convince people that the energy these countries and organizations produce or going to produce is clean, green, reliable, renewable and sustainable. If energy possesses these attributes, then there is no room left for people to resist consuming such a wonderful energy (Gong, 2019). This amplified positive evaluation of energy leads to over-consumption. As, the ecosophy of this study talks about reducing consumption and enhancing redistribution of resources, this positive evaluation of energy is considered as an ambivalent discourse.

4.2.5 CONVICTIONS

Conviction is the story which tells that certain description is true or false, certain or uncertain (Stibbe, 2015). To analyse convictions in the corpus, facticity patterns regarding climate change are examined through a thorough reading of the texts. Climate change is described with high facticity drawing on empiricist repertoire. The words *estimated, show, predicted* are used to build facticity about climate change. It is also built by using the facts from the authoritative sources. In this corpus, Facticity is analyzed by investigating the use of modals, hedges, quantifiers and call on authoritative sources.

Table 20: Facticity Patterns regarding Climate Change

Modals	Must	134
	Should	46
Hedges	Many	47
	Some	30
Quantifiers	believe	25
	Think	4

Consider some of the examples where strong conviction is built by using ‘must’;

- “We must achieve climate neutrality...” (UN secretary)
- “We must act ...”(Portugal, Belize, PIFS, FBO, Norway)
- “We must act on science and facts” (Sweden)
- “Our efforts must be in line with the scientific consensus” (Slovenia)
- “Parties must reduce emissions....and achieve climate neutrality”

(DPR Korea)

Above examples indicate that a strong facticity is used to convince people that climate action is urgently needed and it should be based on the scientific facts. To convince listeners about the truth of their description of climate change, the speakers are relying on authority of IPCC and science. Consider some of the examples (of many), where the facts about the climate change are presented by referring to authority of other institutions and organizations and a response to climate change is proposed that should be based on science and technology.

29- “The rate of climate change has increased dramatically with more severe impacts on our ecosystems, livelihood and economies. The recent IPCC Special Reports clearly outline these negative effects” (Austria).

30- “The recent IPCC findings on oceans and cryosphere highlight the devastating impacts that climate change is having and will have on the seas, including our very own Baltic Sea” (Estonia).

31- “I am optimistic about technology’s potential to make deep cuts to carbon emissions, carve new paths to prosperity, and create jobs” (Canada).

The technical and objective approach of climate change built a strong facticity about the conviction ‘Environmental issues like climate change can be tackled by science and technology’ (Lomborg & Kidley, 2001). To neutralize the climate devastations finance is mobilized. However, the facticity of this mobilization of finance is undermined by using the words *fraud*, *myth* etc.

32- “If the US\$100 billion annual commitment in 2020 is broken, this could be

termed the Fraud of the Century. In reality, much more is needed and US\$100billion has to be just a starting point. The US\$100 billion myth has the aggravating factor that it reduced climate change spending and action in the critical decade of 2010 to date, and now we are suffering the consequences” (Nicaragua).

33- A higher facticity is made, regarding the conviction ‘the UNFCCC assures the financial assistance to climate-vulnerable countries without any discrimination’. “We must make sure that the most vulnerable are supported in their efforts that they are empowered and have the capacity to deal with the changes and find new and sustainable ways forward. We cannot afford to leave anyone behind”(EU).

The frequently used conviction ‘provision of finance fund for all vulnerable countries without bias, is challenged and a high certainty is built regarding the conviction, ‘Finance mobilization is a political activity’(31) and the UN is working to maintain a ‘*Status quo*’(See the speeches of ENGO CAN , ENGO CJN). In this way the truth of ‘finance without discrimination’ conviction is challenged by making the higher certainty regarding the conviction of politicization of finance fund.

34- “Second, international entities related to climate change **should** keep the principle of **equity** and **justice** in providing financial and technical support.... Never, ever **politicization** should be allowed in resource allocation and implementation of climate change related projects of developing countries” (DPRK).

The demand of apolitical resource allocation, with justice in above example implies that the provision of finance is not a philanthropic activity but it has some political benefits attached to it, which should be removed.

The concordance of ‘some’ is worth analyzing. By a detailed reading of the context of “some”, it is observed that when the speakers talk about the country or ecosystem that is most vulnerable to climate change, the facticity goes to lowest possible level by the use of hedges. The facticity also reduced to minimum when the speakers talk about the countries that are responsible for highest emissions of gases or the countries that fail to implement effective strategies to reduce the carbon emission. When the

speakers address the gaps in climate action implementation or the specific actions in achieving climate-resilient societies, the certainty goes to the end of the spectrum. Table 21 shows the concordance of ‘some’.

Table 21: Extract of ‘some’ concordance

We are still waiting for	some	Of the biggest emitters
-manding on its promise	some	Work still remains. You
Countries and corporations	some	People think this is
Against the backsliding by	some	Governments. We stand
rise and ocean warming	some	Key ecosystems becom-

As compared to the highest certainty regarding the destructions of climate change and the fact based responses, the facticity becomes the lower and the lowest when the speakers talk about the human agents responsible for climate change (Stuart, 2017). Consider the example below

29- “Some people think this is a very radical proposal, but it is not. The concept that whoever causes damage to another must then compensate the other for the damage caused is called tort in common law” (Nicaragua).

The facticity reduced (some people) when the speaker puts responsibility on humans to bring drastic climate changes, the facticity even reduced more when it is naming the responsible person or country (whoever). The uncertainty that is shown above regarding the gaps in climate action, the steps needed for climate neutrality, the vulnerable countries and ecosystems and the countries responsible for drastic changes in climate undermine the facticity of the conviction, ‘climate changes are human-induced’. The uncertainty regarding the most susceptible nations and ecosystems also refute the speaker’s frequent assertion that the speakers really care for vulnerable ecosystems. All that speakers are trying to convince people through strong facticity patterns is that carbon-emissions are responsible for climate changes that should be replaced by transitions in economy and growth and that science and technology are really needed for

this smooth transition to ‘*sustainable economy, energy, growth and development*’.

The technocratic approach to the issue of climate change pushed the description of those people who consider climate change an inescapable reality and a moral, social and cultural issue, to the periphery. The conviction that the actions against climate change can be proposed solely by relying on science and that the growth in technology can be helpful in providing climate neutrality (Everett & Neu, 2000), direct the actions in uni-direction whereas climate change is a perpetual condition which demands urgent responses from all spheres not only scientists or technicians (Stibbe, 2015).

Hence, considering the welfare of all species not just humans, the conviction that is only based on science and technology is considered as an ambivalent discourse. The conviction regarding the distribution of resources (as in case of finance fund for climate change) has a beneficial aspect as per ecosophy but the certainty of this conviction (financial assistance to every climate effected country apolitically) is also undermined by highlighting political aspects of the finance fund. Centeno (2020) analysed the climate change discourse in the documents produced by IPCC, UNFCCC and COP. His findings were similar to the findings of the conviction story in this study. He also found that climate policy is informed by anthropocentric and technocratic approaches. It aimed at maintaining the current system of injustice and inequality. Climate policy should be formulated from a justice approach which takes care of socio-political rights of all nations.

4.2.6 ERASURE

Erasure is the story which establishes that certain area of life is unimportant or unworthy of attention (Stibbe, 2015). The focus of COP25 (Conference of Parties) is oceans, biodiversity, the economy, renewable energy etc. (as mentioned by Canadian Minister of Environment and climate change). It is worthy of analysis how environmental issues like pollution, nature degradation and the non-human agents like forests, rivers, plants and animals are represented in the texts. Different forms and frequency of ‘degrade’ and ‘pollute’ are given in the table below;

Table 22: Forms and Frequency of ‘degrade’ and ‘pollute’

Nominal	Pollution	10
	Degradation	3
Verb	Pollute	0
	Pollutes	0
	Polluting	2
	Polluted	0
	Degrade	0
	Degrades	0
	Degrading	0
	Degraded	0
Adjective	Polluted	1
	Degraded	6

Table 22, shows the verb ‘pollute’ exists frequently (10) as a Noun. The agents that are responsible for creating environmental problems like the degradation of nature or pollution are erased from the texts by using the nominalization of the verbs (degrade, pollute). Consider the concordance of ‘pollute’ in its adjective and verb forms below;

Table 23: Concordance of ‘Polluted’ and ‘Polluting’

-
- 1- Mining and thereby restoring *polluted* water bodies
 - 2- The polluters propose to keep *polluting* and plundering
 - 3- Decided to shift away from *polluting* transport by farming
-

In 2 the verb form *polluting* can be seen but the agent who is responsible for pollution is masked by using the more abstract term ‘polluters’. In 3 ‘polluting’ is used as a Gerund. Similarly, the verb *degrade* exists in two forms Noun (degradation) and Adjective (degraded). The collocations of degradation and degraded are shown in table 24. The agents who degrade farm, forest, land or environment are completely erased by converting the verb *degrade* into noun (degradation) and adjective (Degraded).

Table 24: Collocations of ‘Degradation’ and ‘Degraded’

-
- 1- Degraded Farm
 - 2- Degraded land
 - 3- Forest degradation
 - 4- Land degradation
 - 5- Environmental degradation
-

Moreover, passive voice is also used to erase the responsible agent;

36- “Lands are being degraded. Forests, ecosystems and biodiversity are being lost. Our oceans are facing pollution, acidification and loss of coastal habitats” (President UN General Secretary Remarks).

The conversion of verb form into noun (nominalisation) is an important technique of erasure (Schlepppegrell, 1997). The nominalisation of *pollute* and *degrade*, erase those persons, corporations or industries that are responsible for polluting environment and degrading nature, so they mislead the decision- makers regarding climate action and the action regarding climate neutrality is proposed in small activities like forestation, recycling materials etc. instead of targeting those who are continuously polluting and degrading environment through their profit- maximizing activities.

The erasure of plants, animals and the physical environment from environmental discourse is among the frequently analysed topics in ecolinguistics (e.g Berger, 2009, Kahn, 2001, Durham & Merskin, 2009). It is important to examine how the texts that are under scrutiny in the current study erase these non-human agents. There are many

linguistic ways and techniques by which non humans are erased from the discourse (Stibbe, 2015). Through a careful reading of the word list generated by Ant Conc. 3.5.7, it is observed that following ecological elements are represented in the data.

Table 25: Frequency list of non-humans in the corpus

Rank	Token	Frequency
1	Water	70
2	Environment	58
3	Planet	50
4	Environmental	48
5	Land	47
6	Ecosystem(s)	45
7	Life	31
8	Forest	28
9	Oceans	27
10	Sea	27
11	Biodiversity	26
12	Mountains	07
13	Water	04

Table 25 clearly shows that some elements of ecosystem (forests, oceans, lands, etc.) are presented whereas other elements of ecosystem like animals, birds and plants are erased from the discourse. One of the linguistic techniques that are used to erase the names of reptiles, plants, animals and birds is the use of the superordinate terms biodiversity, ecosystem, natural components and species as a substitute of their names. Instead of the word ‘earth’, which brings a specific image to the mind, the more abstract term ‘planet’ is used. Similarly, the use of the term ‘environment’ does not bring a vivid image of any particular area as compared to water, forests, soil etc. The abstract terms that are used as a substitute for the names of plants, birds, animals, physical environment etc. fail to trigger any specific image in the minds of people (Lakoff & Welhing, 2012). In contrast the words finance (86), Fund (s) (72), resources (49), Production (17), and Consumption (11) are frequently used that weave an intricate image of economic system that is devoid of natural world (Bowman, 2009). In the term ‘fisheries industries’ (Maldives), there is just a trace of fish. The term fisheries is used 10 times in the corpus, whereas the term fish is completely erased from the discourse.

The use of modifier Salmon in the term Salmon stock is another technique of erasure where Salmon is modifying the term stock. First fish is vividly represented by mentioning its specific name but then it is represented as a stock, a source of food and income for humans (in the speech of Canadian minister), and the extinction of salmon stocks is considered a great loss to the fishers. This anthropocentric approach to non-humans erases the intrinsic value of fish as a living entity, worthy of existence and assigns an extrinsic worth of having valuable only in regard to the services provided to the humans. The consideration of fish as a resource to consume is against the ecosophy of this study for two reasons; first it does not talk about respecting all life to maintain a sound ecosystem but it only focuses on anthropocentric concerns, second if all species are not considered worthy of existence and the value is only attached to them if they are useful to humans, this malpractice results in over-consumption. Table 26 shows the use of ‘land’ as a modifier;

Table 26: Erasure of land by modification

Land use, Land transport, Land resources, Land scarcity,

Land management, Land degradation, Land Constraints

In above mentioned table, the word *land* is not given prominence but it is just used as a trace. In this way the essence of land is erased by using it as a modifier of other words like *use, management* etc. The resources are limited and the over-consumption leads to environmental degradation but irrespective of negative impacts of the production-consumption process, the economic discourse clearly erases the natural world. The world is defaced by the excessive use of abstract terms like ecosystem, planet, environment etc., (Berry in Foltz, 2013), it is described as a collection of elements- a mere stock.

Hence, considering the negative aspects, the nominalisation of degrade, pollute and the deliberate erasure of natural word from the economic discourse are termed as destructive discourses according to the ecosophy of this study. Gong (2019) analysed the environmental reports by using corpus analysis tools. He also found the erasure of agents responsible for environmental pollution, from the environmental reports. He also termed the erasure of responsible agent a destructive story.

4.2.7 SALIENCE

Salience is the story which tells that certain area of life is important and worthy of attention (Stibbe, 2015). This section investigates the linguistic ways by which salience is created regarding the climate change through vivid and concrete descriptions. The important collocations of climate are shown in the table below;

Table 27: Top 5 collocations of climate

Frequency	Collocation
394	Climate change
99	Climate action
32	Climate finance
25	Climate emergency
11	Climate ambition

The frequency of *Climate change* shows that this is the most salient theme of the COP25. The concordance of frequently used collocate of climate, *Climate change* is examined carefully to investigate the salience pattern.

Table 28: Extract of Climate change concordance

1- A misguided notion to portray	Climate change	as a small island
2- An unfolding disaster.	Climate change	as viewed from
3- meeting takes place today.	Climate change	as we all know
4- ladies, and gentlemen	Climate change	brings tremendous
5- can be further from the truth.	Climate change	crosses borders
6- national budget- because	Climate change	cut across all
7- policies without social justice.	Climate change	impacts inequalities
8- adapt to the new circumstance	Climate change	is both a threat
9- prosperity and development.	Climate change	is compounding
10- taken during this forum.	Climate change	is a serious and
11- not leave anyone unaffected.	Climate change	is a threat multiplier
12- arctic and northern animals.	Climate change	is a defining issue
13- level of adaptation potential.	Climate change	is already having
14- as a priority issue. But	Climate change	is already visible
15- shown to all delegates.	Climate change	is an unprecedented
16- important in world politics.	Climate change	is one of the driver
17- presidency for leadership.	Climate change	is running and

18- under any mitigation scenario.	Climate Change	poses a significant
19- still live in extreme poverty.	Climate change	threatens our
20- events. Both confirm that	Climate change	will continue to

In the extract above, salience is created through the activation (Leeuwen, 2008) of climate change. In all the instances in the extract the syntax is designed in a way that climate change holds the position of subject- an active agent who actively participates, who act and who can pose a threat like enemy. Climate change is not a passive condition but it is presented as a dynamic force which is *unprecedented* and which brings *changes*.

Another important linguistic mean which foregrounds climate change and enhances its prominence is the use of metaphors. The metaphor of the person is used for climate change. Like a person, climate change is a *driver*, *‘running, compounding, tramps, cut across, crosses, poses, threatens and brings changes*. Through personification climate change is foregrounded and a vivid image of climate change is created by taking source frame from imaginable concrete area that is of person and more abstract term *climate change* is described concretely and vividly. Sense Image is another linguistic technique which is used to create salience of climate change (Stibbe, 2015). Climate change is not objectively described but it is actively described by using foregrounding, personification, activation and metaphors. The use of the words, *crosses, running, compounding and tramps* brings a clear image to the senses as if people who are listening to the details are experiencing the impacts of climate change.

Climate change is described mostly as a complex issue (Lindseth, 2004; Fleming et al,2014) and the complexity that is often associated with it leads to inaction on the part of individuals. However the salient description of climate change as an enemy and a dynamic agent, who needs to be countered effectively and urgently not only by the policy makers and the scientists but also by common people as it effects everyone without any *discrimination*, is a beneficial discourse according to the ecosophy. Zdanava et al (2021) analysed 27 posters of vegan campaign and found that vegan campaign give prominence to nonhumans and the prominence is achieved through images. They called

the salience of the nonhumans a beneficial story. Although the method and subject of the salience in this study differs from Zdanava et al (2021) study in a way that it investigates the salience of climate change through linguistic analysis. However, in both the analysis (of vegan campaign in their study and the analysis of climate change in this study), salience is termed as a beneficial story considering its positive aspects on ecosystem.

CHAPTER 5

CONCLUSION

5.1 FINDINGS

The specific findings of the study include;

- 1- The stories of Identity, Frame, Metaphor, Conviction, Evaluation, Erasure and Salience are found in the corpus.
- 2- Trigger words, pun words, nominalisations and abstractions are used in the corpus to trigger a specific story in the minds of the individuals.
- 3- Trigger words are frequently used in the construction of stories.
- 4- It is also found that the corpus contains three types of stories (ambivalent, beneficial and destructive) according to the implications of the stories on ecosystem.
- 5- This study found six frames. The destructive frames are problem-solution frame and transactional frame; the ambivalent frames found are sustainable development frame, economic frame and global frame. The beneficial frame found is a security frame.
- 6- Eight metaphors are found in this study. The destructive metaphors are the metaphors of money making-tool and machine for nature. The metaphor of person for organisations is also a destructive frame. The ambivalent metaphors are NATURE IS A PERSON, CLIMATE CHANGE IS A WAR, HUMANS ARE THE PROTECTOR OF NATURE, and CLIMATE CHANGE IS AN OPPRESSOR. The beneficial metaphor found is RESOURCE EXTRACTION IS A VIOLENCE.
- 7- It is found that climate change is negatively evaluated whereas growth, energy and development are positively evaluated. The negative evaluation of climate change is a beneficial story. The amplified positive evaluations of growth, energy and development are ambivalent stories

- 8- The evaluations found are, ‘Provision of funds for vulnerable countries without discrimination’, ‘Climate action is urgently needed which should be based on scientific facts’, and ‘Environmental issues like climate change can be tackled by relying on science and technology’. The first conviction is termed as beneficial whereas later two convictions are ambivalent stories.
- 9- It is found that nominalizations are used to erase the agents who are responsible for environmental pollution and degradation.

5.2 CONCLUSION

The current study analyzed the corpus of climate change. The corpus consists of 88 English speeches that were delivered in the Conference of Parties (COP 25) in the UN Climate Action Summit 2019. Different types of stories are identified in the corpus using Ant Con 3.5.7. Moreover, Stibbe’s (2015) story framework is used as a model to investigate stories. The stories are labeled as destructive, beneficial and ambivalent, by comparing the stories with the ecosophy. The ecosophy of this study is based on four principles that are resilience, exploitation reduction or consumption reduction, social equality, and equal emphasis on non-humans and humans.

First research question dealt with the types of stories. The story type is determined by lexical analysis. The stories found are, Frame, Metaphor, Identity, Evaluation, Conviction, Erasure and Salience. Stories are the mental structures that condition the individuals to act and behave in a specific way. These stories are perpetuated through the language used in different discourse types.

Second research question dealt with the ways the stories are constructed in the corpus. To answer second question, different linguistic techniques like the use of trigger words, pun words, nominalisation, and abstractions etc. that trigger a specific story in the minds of the people are investigated in this study. Ideology, the first story in the framework, is not investigated separately as ideology is an umbrella term which covers remaining 7 stories in the framework. Regarding **Frames**, the trigger words are analysed and 6 frames that are investigated in the discourse of climate change are; Sustainable Development frame, Transactional frame, Economic frame, Problem- Solution frame, Global Frame and Security Frame. For the frame of sustainable development, the context

of frequently used word ‘development’ (152 times in corpus) is analysed and it is observed that ‘development’ more frequently (48 times) collocates with the word ‘sustainable’. Then the concordance of sustainable development is seen to examine the effects of this frame on ecosystem. The words that trigger a transactional frame include *Market, Business, Outcome, Transfer, Investment, Share, transfer, supply, Billion and Dollars*. The trigger words for economic frame include *Finance, Economy, Economic, Consumption, Options, and consumption*. The words *problem* and *solution* trigger the problem-solution framing of climate change discourse. The words *Global, Common* and *international* are used for a global framing of climate change. Security Frame is analysed with the help of trigger words; *threat* and *unexpected*.

Regarding Metaphors, 8 metaphors are analysed with the help of trigger words. The metaphors include; CLIMATE CHANGE IS A WAR, HUMANS ARE THE PROTECTOR OF NATURE, NATURE IS A MONEY-MAKING TOOL, CLIMATE-CHANGE IS AN OPRESSOR, ORGANISATIONS ARE HUMAN, NATURE IS A PERSON, RESOURCE EXTRACTION IS A VIOLENCE and NATURE IS A MACHINE. The trigger words that are helpful in analysing war metaphor for climate change included *Combat, Combating, Retreating, apocalyptic storms, demise, warpath, emergency, battle* and *fight*. The words that trigger the metaphor of protector of nature for the humans included, *protect, care* and *save*. The trigger words for the metaphor NATURE IS A MONEY-MAKING TOOL are *income, stocks, and food*. The words that reflect the metaphor of oppressor for climate change are *violations, force, victims* and *risks*. Human-like qualities of working, identifying, copying, capacity building, supporting, planning, monitoring, helping, leveraging, determined, built, reduce, monitors, adapts, watches are attributed to the organisations and corporations. The use of these words reflected the metaphor ORGANISATIONS ARE HUMAN. The person metaphor for nature is reflected by the use of words, *lungs* (for forests), *life, mother earth* and the use of the word ‘*feminine*’ for earth. The use of the term ‘*vehicle*’ for land reflected the metaphor of machine for nature. As violence harms the body, similarly resource extraction harms the earth by *poisoning, violating, extracting, cutting, and rising temperatures*. So, these words trigger the metaphor RESOURCE EXTRACTION IS A VIOLENCE.

Regarding Identity, the pronouns ‘we’, and ‘our’, are analysed. The context of

these pronouns is investigated to know whether these pronouns also include non-humans along with humans in the group or they only talk about human's activities and welfare. It is observed that the pronouns 'we' and 'our' are used to talk about the human's ambitions, loss, damage, responses and actions. These pronouns do not consider non-human agents as an ingroup to talk about their loss or damage inclusively. 'We' collocates frequently with 'have' (110 times) and 'will' (43). The speakers use 'We have' to talk about those actions that they have taken already to preserve nature and humans from climate change and 'we will' to talk about the steps they are going to take regarding climate change. By looking at the context of 'we have' and 'we will', it is observed that, the speakers are portraying their identities as the protector of nature who care for the ecosystem and who have done most of the work to counter climate change and who are still ambitious to work in future. In this way, they are establishing the identities of loyal and efficient ecological agents, which is a false notion based on the fact that the speakers are actually erasing the agency of humans responsible for destruction and degradation of nature.

Regarding Evaluations, appraisal patterns are examined to know how the speakers evaluate the climate change, development, energy and growth as these words are the most frequently used words in the corpus. The items that are used to evaluate climate change are all negative description for example *Combat, combating, risks, confront, fight, negative impacts, horrific disasters, adverse effects* etc. By using negative descriptions, climate change is evaluated negatively. To unfold the evaluations of development, energy and growth, collocation analysis is done. The purr words that are used to describe growth are green, balanced, sustainable and inclusive. Similarly, Development is also evaluated positively by the use of purr words; *Climate- resilient, compatible, and sustainable*. The purr words that are used to evaluate energy positively are, *Carbon-free, New, Green, reliable, efficient, clean, and reliable*.

Regarding Convictions, facticity patterns are examined. It is seen that the facticity is created by employing number of linguistic techniques. It included the use of hedges, quantifiers, modals, drawing on science and authority. High facticity is seen regarding the convictions, '*climate action is urgently needed and the action should be based on scientific facts*', '*Environmental issues like climate change can be tackled through science and technology*', and '*provision of funds for all vulnerable countries without any*

bias'. Regarding Erasure, the linguistic techniques of nominalisation, abstraction and the use of superordinate are investigated to examine the representation of environmental issues like pollution, degradation and the way non-humans are represented in the corpus. It is observed that the responsible agents are erased from the discourse by nominalisation of verbs; *pollute* and *degrade*. Non-humans are also erased from the discourse by the use of abstract terms like *environment*, *ecosystem* and *biodiversity*. Another technique that is used for erasure is the use of important ecological agents as a modifier of other nouns for example *salmon* is used as a modifier in *salmon stocks*.

Regarding Saliency, the concrete descriptions, activation, metaphor, sense image and frequency is examined to investigate the saliency of climate change. The word '*climate change*' is frequently used (394 times) and the prominence is shown by describing climate change as an active agent. The metaphor of person is also used for climate change to enhance its prominence. The detailed description is used to print a clear image of climate change on individual's mind.

Ecolinguistics provides tools to analyse a wide range of texts to encourage beneficial practices and discourage the destructive practices. The story framework of Stibbe is particularly helpful in integrating the scattered linguistic units into ideologies and frames. However, the stories may have different impact on the people based on their frequency and mode. If a story occurs once in a discourse, it is more likely to have less impact than the story that is repeated or occurred more frequently in the discourse. For example the machine metaphor for nature occurs once in the corpus, whereas the metaphor of protector of nature for humans occurs more often. So, the later metaphor would be more felt by the listeners, than the former machine metaphor. In the similar way, the mode of the discourse also affects the people differently. For example a story that is described through clear images, will be more eye-catching than the story that is told in the words.

Furthermore, the study analyzed the corpus and compared the results to the already setecosophy. The results may differ if the analysis of the corpus is compared to different ecosophy as it is mentioned earlier in this study that ecosophy may differ based on the value preference of the analyst. For example an analyst who prefers anthropocentric values will term the development discourse as beneficial.

5.3 RECOMMENDATIONS

- 1- Future researchers can work on analysis of environmental- friendly texts like nature writings to identify more beneficial frames.
- 2- Future researchers might go for multi-modal text analysis to resist the destructive discourse practices by discouraging them.

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