

**Love Nature-Hate Nature: An Ecolinguistic Analysis of  
Margret Atwood's *MaddAddam***

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**Abstract**

Anthropogenic climate change is a controversial issue which has received considerable attention in the literature. The present study carries out an ecolinguistic analysis of one of the climate fiction novels (henceforth, cli-fi), which is *MaddAddam* by Margret Atwood (2013). The following research questions are addressed: (1) how does the language used by the characters in the selected novel reflect the ecological stories they live by? (2) what are the impacts of the ecosystem on such stories? (3) How are the social, economic and political realities of the society in the selected novel connected to the physical environment? and (4) in what way is the power inequality, in both the social and ecological contexts, enacted and resisted by the characters in the novel? This study is conducted within the framework of Stibbe (2014, 2015 and 2021) with insights from the cognitive metaphor framework (Lakoff & Johnson, 1980; Lakoff, 2010 and 2014). Data were composed of selected excerpts from Atwood's *MaddAddam* (2013) as (in)direct contact between the characters and the surrounding ecosystem were embodied. Due to space limitation, it is only Stibbe's theory of framing that was selected and adopted. This study suggests that the language of the characters is a replication of the different ecological stories which exist in their minds and affect the way they approach the ecosystem and resist the power inequality on the social and ecological contexts.

**Keywords:** Climate Fiction; Ecolinguistics; Frames; Story Theory; The Cognitive Metaphor Framework

## مع الطبيعة - ضد الطبيعة: تحليل لغوي بيئي لرواية مارجريت أتود آدم/المجنون المستخلص

يعد تغيير المناخ البشري أمراً مثيراً للجدل، و قد حظى باهتمام كبير في مجال البحث العلمي. أحرثت هذه الدراسة تحليلاً لغوياً بيئياً لإحدى روايات الخيال عن المناخ و هي رواية آدم/المجنون لمارجريت أتود و التي كتبتها عام (2013). و تسعى هذه الدراسة إلى الإجابة عن التساؤلات التالية: (1) كيف تعكس لغة أبطال الرواية القصص البيئية التي يعيشون بها؟ (2) ما هو تأثير النظام البيئي على هذه القصص؟ (3) كيف يمكن القول بأن الأوضاع الاجتماعية و الاقتصادية و السياسية لمجتمع الرواية وثيقة الصلة بالبيئة المادية المحيطة بها؟ (4) كيف يمارس (أو يقاوم) أبطال الرواية عدم تكافؤ القوى في كلاً من الإطار الاجتماعي و البيئي؟ تحلل هذه الدراسة بعض النماذج المختارة من رواية آدم المجنون وفقاً للإطار النظري الذي وضعه ستيب (1014، 2015، 2021) ، مشيرة إلى إطار الاستعارة المعرفية للاكوف و جونسون (1980) و لاكوف (2010 ، 2014). و حللت عينة الدراسة وفقاً لنظرية الإطار، و تقترح الدراسة أن لغة أبطال الرواية تعكس بشكل مباشر نظرتهم للبيئة و من ثم رؤيتهم لها و تصديهم لعدم تكافؤ القوى الاجتماعية و البيئي.

### الكلمات المفتاحية:

روايات الخيال عن المناخ ، علم اللغة البيئي ، الأطر ، نظرية القصة ، اطار الاستعارة المعرفية

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**1. Introduction**

Recently, human's practices, including drilling oil and gas, using nuclear power, cutting forests, and utilizing chemicals have induced several threats to the environment. Such activities have led to a new geological age, referred to as the *Anthropocene*, which dates back to the industrial revolution (Crutzen & Stoermer, 2000; Waters, et al., 2016 and Lewis & Maslin, 2018). The major reason for climate change is global warming which refers to the rising of the Earth's temperature. The potential impacts of climate change due to global warming include temperature rising, ice melting, heavy rains, floods, wildfires, volcanic eruption, and species. Ecolinguistics handles ecological crises from the perspective of language use in environmental discourses, since language shapes social reality and is shaped by it.

Climate fiction is taking part in addressing the climate change issue and fiction writers are concerned with raising the awareness of the public and creating new and constructive stories towards the environment through commenting on the contemporary climate change issues. The term climate fiction, or *cli-fi*, is coined by the journalist and climate activist, Danny Bloom, in 2008. Cli-fi is a new genre in contemporary literature, which focuses on the causes of anthropogenic climate change and its effects on the human and non-human lives and the whole ecosystem. Milkoreit (2016) states that cli-fi has a significant role in forming people's "collective imaginations of possible, plausible, desirable, and undesirable futures" (p.177) that are difficult to perceive without the help of that genre. Cli-fi highlights how the environmental disasters in the aftermath of climate change affect the cultural, political, economic, and ethical features of society.

## 2. Objectives and Research Questions

The present study conducts an ecolinguistic analysis of a cli-fi novel to achieve the following aims:

1. to investigate whether the ecology-based language of the selected corpus is beneficiary, destructive, or ambivalent.
2. to indicate how the ecosystem influences people's ecological stories.
3. to examine the way social, economic, and political realities in the selected novel are connected to its physical environment.
4. to detect the way power inequality is enacted and resisted by various characters in the novel on the social and ecological contexts.

## 3. Literature Review

This section is divided into two parts: the first part sums up some ecolinguistic studies on fiction, and the second part presents an overview of previous studies on the selected novel: *MaddAddam*.

### 3.1 A Sample of Ecolinguistic Analysis of Fiction

Ahmed and Sarhan (2014) applied an ecolinguistic analysis to Bahaa Taher's *Sunset Oasis*. They employ some linguistic tools to detect the stance of the two main characters in the novel (i.e. Mahmoud Abd el Zahir and his wife, Catherine) towards their environment and to reveal what type the stories they live by concerning the ecosystem is. Data were analyzed through linking the concept of evaluation in Stibbe's Story framework (2015) to that of stance in Martin and White's Appraisal theory (2005). To reveal the characters' attitudes, Ahmed and Sarhan (2014) investigated the lexico-grammatical markers. Their findings were that Mahmoud Abd el Zahir's story is destructive to the environment due to his negative attitude towards nature. On the contrary, the story of Catherine is beneficial, for she has a positive attitude towards nature.

### 3.2 Previous studies on Atwood's *MaddAddam* (2013)

*MaddAddam* was not addressed in the literature from an ecolinguistic view. The *MaddAddam* trilogy is comprised of *Oryx and Crake* (2003), *The Year of the Flood* (2009) and *MaddAddam* (2013). Rowland (2015), Masoomi, Bornaki and Salami (2019), Desbiens-Brassard (2020), and Sentov (2021) have conducted studies on Atwood's *MaddAddam*. Rowland (2015) explores how the ecofeminist principles of inclusion, variation, equality and democracy provide solutions to the environmental, social and political problems in *MaddAddam*. In the aftermath of the plague, the survivors, including few human beings, the

Crakers (the humanoid creatures), and the pigeons (pigs with human neocortex brain tissue), create a community which is heterarchical and democratic. Human beings live with the Crakers and the pigeons at a cobb house close to nature in contrast to living detached from nature before the plague. In addition, they build a new community where all creatures, not merely human beings, and natural resources are valued. Unlike the Church of PertOleum, which was famous before the plague as an advocate of capitalism and unlimited oil drilling, the surviving God's Gardeners are ethical people who advocate peace and spread love.

Masoomi et al. (2019) examined the *MaddAddam* trilogy from a sociopolitical point of view through applying Castells' (1996) theory of the Fourth World on the trilogy. According to Castells (1996), the Fourth World pertains to the new world in the 21<sup>st</sup> century which is characterized by the existence of network societies that have rapid advancement of digital communication technologies. In such communities, personal and social identities are in crisis, for they are modified all the time due to the continuous global progress in technology besides creating virtual identities. For instance, in the *MaddAddam* trilogy, Jimmy's identity is restructured when his identity changes to work as a prophet to the Crakers. These network societies suffer from inequality, poverty, polarization and destruction of the eco-system as a whole, such as the world depicted in the *MaddAddam* trilogy. Moreover, in such societies, the media manipulates the identities of people in favor of the powerful groups; i.e., the wealthy capitalists and rulers, which is similar to the media propagation for the creation of the Crakers, who are bioengineered creatures, in the *MaddAddam* trilogy. Castells (1996) argues that empathy and interaction between people are the solutions to all the problems of alienation and identity loss which is obvious in the love relationship between Toby and Zeb after the plague.

Desbiens-Brassard (2020) analyzed *MaddAddam* trilogy in terms of the characteristics of the Promethean discourse. The Promethean ideology refers to the human beings' hegemony over other creatures and the environment. It is compatible with the capitalist and neoliberal view of the natural resources as just raw materials to be exploited. Two different religious and philosophical tendencies of the Promethean discourse in the *MaddAddam* trilogy were investigated: (1) *anti-theistic* which views nature as a mere reservoir of resources and human beings have the right to exploit it for their benefit since they believe that there is no deity, and (2) *theistic* which justifies the over exploitation of natural resources from a religious perspective. Crake represents the

anti-theistic Promethean discourse and the Church of PetrOleum, the Petrobaptists and the Known Fruits represent the theistic Promethean discourse as they believe that human beings have a divine right to consume the natural resources without restrictions.

Sentov (2021) analyzes the *MaddAddam* trilogy from an eco-critical perspective which looks at the representation of nature and landscape in cultural texts, paying particular attention to attitudes towards *nature* and the rhetoric employed when speaking about it (Najar, 2010, p. 242). According to Sentov (2021), the eco-dystopian future in the trilogy reflects the ecological crisis at the present world. Humans' greed, reckless exploitation of natural resources and abuse of scientific knowledge lead to the ecological destruction. Climate change causes several repercussions, such as hot temperature, draughts, species extinction, forest fires, storms and floods. The devastation of the world after the outbreak of the man-made pandemic in the trilogy is in part reminiscent to the collapse of the world after the spread of the COVID-19 pandemic.

#### 4. Theoretical Framework

Ecolinguistics studies language from an ecological perspective. The word ecology is derived from the Greek word "OIKOS" which "situates the individual as a participant within a cultural and environmental context" (Bowers, 2009, p. 2). In ecolinguistics, the word ecology is used literally, rather than metaphorically, to refer to the relationship between all creatures to one another and to their surrounding environment (Skutnabb-kangas & Harmon, 2018). Ecolinguistics is defined by Fill (1998) as "an interdisciplinary and interactive field of study in which the natural sciences (most specifically biological ecology) and the humanities (philology and philosophy) interrelated" (p. 5). Ecolinguistics is concerned with "the life-sustaining relationships of human with other humans, other organisms and the physical environment, with a normative orientation towards protecting the systems that humans depend on for their wellbeing and survival" (Alexander & Stibbe, 2014, p. 105). Fill and Penz (2017) state that ecolinguistics stresses the role humans play in shaping the world through the language they use.

Ecolinguistics, as a new paradigm of linguistics, is introduced in Haugen's article: *Ecology of Language* (1972). However, Halliday's paper: *New ways of Meaning: the challenge to applied linguistics* (1990) is often regarded as the stimulus for linguists to investigate the ecological texts and discourses. Halliday urges linguists to explore



contemporary issues, especially the widespread destruction of the ecosystem through asking "Do linguistic patterns, literally, affect the survival and wellbeing of the human species as well as other species on Earth?" (Steffensen & Fill, 2014, p. 9). Fill (1998) states that there are two approaches of ecolinguistics: the first is referred to as *language\linguistic ecology* and is based on Haugen (1972) who considers 'ecology' as a metaphor to refer to the connectedness between language and the environment it is spoken in. The second approach is based on Halliday (1990) who states that the casual language which people use in their everyday speeches influence the social sphere and the whole ecosystem.

Ecolinguistics and CDA have similar premises and aims: (1) CDA aims at revealing socially-destructive discourses with the aim of changing them. By the same token, ecolinguistics seeks to "expose and draw attention to discourses which appear to be ecologically destructive" so as to mitigate them (Stibbe, 2014, p. 119); (2) ecolinguistics and CDA attempt to detect ideology, power relations, control, manipulation, bias, and any forms of inequality in discourse. Eco-critical discourse analysis is an extension to ecolinguistics that aims at rejecting language which destroys the ecosystem and encouraging language which protects it (Stibbe, 2014). Eco-critical discourse analysis investigates how language can create unequal relationships between humans, non-humans, and the environment.

Ecolinguistics is related to cognitive linguistics (henceforth, CL), for ecolinguistic analysis seeks to reveal people's cognitive structures which refer to the reservoir of values in the minds of several people in a specific socio-cultural context. From the perspective of Ahmed and Sarhan (2014), ecolinguistics is considered a cognitive approach, for it aims at "revealing cognitive discourse structures as they manifest in linguistic texts" (p. 219). This means that both CL and ecolinguistics share the view that people's conceptual system has its reflection on what people say, and what people say determines the way they deal with the world.

The ecolinguistic analysis, within which this research is implemented, is based on Stibbe's (2014, 2015, 2021) model where he attempts to detect the destructive ecological stories people live by to modify them. Stibbe (2014) postulates that ecolinguistics aims at "questioning the stories that underpin our current un-sustainable civilization" (p. 117), and he defines stories as "cognitive structures in the minds of individuals which influence how they think, talk and act" and they exist "in the minds of multiple individuals across a culture" (p.

6). Stibbe (2014, 2015, 2021) puts forward nine story types which are regarded as cognitive linguistic tools to investigate the ecological discourse; namely, ideology, framing, metaphor, evaluation, identity, conviction, erasure, salience and narrative. The current research focuses only on the ecological frames of *MaddAddam*.

Framing refers to "a story that uses a frame (knowledge about an area of life) to structure another area of life" (Stibbe, 2015, p. 17). These knowledge packages embrace "semantic roles, relations between roles, and relations to other frames" (Lakoff, 2010, p. 71). Framing takes place when a trigger word is employed to describe a particular area (Stibbe, 2015). From the perspective of Gamson (1989), a frame is a "central organizing idea for making sense of relevant events" (p. 157). Lakoff (2014) postulates that frames "shape the goals we seek, the plans we make, the way we act, and what counts as a good or bad outcome of our actions" (p. xi). From the perspective of Hameed (2021), "people initially use language to construct stories, and then these stories are converged to frames when they become popular narratives; these frames act as a source of inspiration to understand the world around us (pp. 116-117). Gong (2019) points out that a frame "is like a working framework that leads us to perform in a certain way. If a framework is ecological-friendly, then people will tend to protect the environment" (p. 10). The environmental frames in people's minds determine the way they treat the environment and different frames lead to different treatments. So the present study investigates the different ways the characters frame the ecosystem and the climate change.

## 5. Methodology

Data selected in this study were extracted from *MaddAddam*: a novel which encompasses different stories about people's relationships with their surrounding ecosystem. Seventeen excerpts were selected for analysis as they exemplify the actual harmony/clash with nature. Data were analyzed qualitatively following Stibbe's (2014, 2015, 2021) theory of framing. A reference to each character presented is given, followed by the analysis of the linguistic features in each excerpt.

### 5.3 Data Overview

*MaddAddam* is written by Margaret Atwood who is a famous Canadian novelist, poet, critic, feminist, environmental activist and animal rights activist. Among her fiction works are *The Edible Woman* (1969), *The Handmaid's Tale* (1985), *Alias Grace* (1996), *The Blind Assassin* (2000), the *MaddAddam* trilogy (2003-2013) and *The*



*Penelopiad* (2005). She was awarded several prizes including the Peace Prize, the German Book, the Franz Kafka, and the International Literary Prize (Margaret Atwood Biography, n.d.). Atwood's *MaddAddam* (2013) is the final novel of her *MaddAddam* trilogy, comprised of *Oryx and Crake* (2003), *The Year of the Flood* (2009), and *MaddAddam* (2013). *MaddAddam* was selected for an ecolinguistic analysis here as it depicts man's relationship to the environment in a world where climate change has become overwhelming. It is set in a post-apocalyptic world after a man-made plague weeps out humanity with merely few survivors. The near future before the plague is a world which suffers from overexploitation of natural resources, injustice, hot temperature, floods, storms, crops failure, plagues and man's interference with the ruling systems of life through genetic engineering.

## 6. Data Analysis

There are two conflicting groups in *MaddAddam*: (1) The Environmentalist group: the God's Gardeners headed by Adam and the MaddAddamites; (2) The Non-environmentalist group: the Corps, the Church of PetrOleum, the Petrobaptists, and the Known Fruits. The ecolinguistic analysis handles each group separately and the number of the ecological frames and their frequencies in the selected excerpts are discussed.

### 1. Frames of the Environmentalist Group

#### (a) Vanity kills

In excerpt (1), Rebecca is talking to Toby and reminds her of what the God's Gardeners' leader, Adam, used to tell them when they were members at that group. The God's Gardeners and the MaddAddamites believe in and advocate the simple life which is close to nature and devoid of arrogance and extravagance. This frame is elaborated by the linguistic expression "Vanity kills" where vanity, which leads to egotistic and consumerist attitudes is framed as being harmful to the ecosystem.

#### (b) Nuclear power is dirty

In excerpt (2), Crozier teaches the Crakers how to hand pump the groundwater; however, Toby feels worried about the groundwater which is supposedly poisoned by any spill or any nuclear meltdown. The frame *nuclear power is dirty* is illustrated in the linguistic expression: "nuclear meltdowns sending dirty particulate". Nuclear energy is framed by Toby as dirty for it is venomous to the groundwater.

#### (c) Scientists are slaves to the brain and captives to science

In excerpt (3), Manatee is a scientist who was working in the compounds related to the Corps before joining the MaddAddamites.

In this excerpt, the MaddAddamites and the God's Gardeners are discussing the reasons behind the Crake's decision to wipe out humanity and how the scientists were abused by the Corps and Crake. The frame ***Scientists are slaves to the brain and captives to science*** is elaborated by the linguistic expressions "brain slaves" and "The captive science brainiacs." Scientists are framed as slaves to the brain and captives to science since they are exploited by the Corps and Crake when they were working at the evolution of the Crakers without knowing that Crake intended to eliminate the human beings and replace them with the Crakers.

**(d) All creatures are useful and valued**

In excerpt (10), Toby remembers that that day is the Feast of Cyanophyta which she used to celebrate when she was an Eve at the God's Gardeners, a religious group which believes in the value of all creatures. She praises God for creating the Cyanophyta which helps in creating oxygen so that all living creatures stay alive. The frame ***all creatures are useful and valued*** is apparent in the linguistic expression: "*in Thy sight – that our oxygen-rich atmosphere came to be, without which we could not breathe, nor indeed could the other land-dwelling Zooforms, so various, so beautiful*" where the Cyanophyta, although overlooked by many people, has a great significance.

In excerpt (12), Toby is killing slugs which are plants annoying to human beings' plants. She remembers Adam, who would reproach her for killing slugs which are God's creatures. Then, she criticizes the act of most human beings when they kill slugs and other creatures merely because they annoy them and prevent their human plans. The frame ***all creatures are useful and valued*** is reflected in the linguistic expression: "*consider how useful and indeed edible and delicious so many of them are!*" where Toby recites the importance and edibility of weeds.

**(e) The capitalists are enemies of God's natural creation**

In excerpt (15), Toby is considering the prosperity of the plants and the freedom of the animals and birds after the human beings' domination of the planet is over and she comes to the conclusion that all creatures suffered before the plague from capitalism and consumerism. The frame ***the capitalists are enemies of God's natural creation*** is crystallized by the linguistic expressions "the enemies of God's Natural Creation no longer exist", and "the animals and birds ... are thriving unchecked. Not to mention the plant life." The capitalists are framed as enemies of other creatures for they consider the benefits of human beings without

regarding the benefits of other creatures and the environment, and they view natural resources as just resources to be exploited not having values for themselves.

**(f) The press is biased**

In excerpt (16), Pilar is talking to Zeb about Crake's father who discovered some immoral and harmful actions to the people's health done at the HelthWyzer and when he threatened to make this knowledge public, the CorpseCorps officers killed him. Pilar says that the press would not have tackled the knowledge that Crake's father found out for it was against the benefit of the Corps. In excerpt (16), Adam tells Zeb that the God's Gardeners discover that the vitamin pills which are created at the HelthWyzer and sold to the public are intended to cause diseases to make profits. Adam and his group refuse to sell these pills on the grey market and they do not seek to tell the press about the dangerous nature of the pills, for the press is controlled by the Corps. The frame *the press is biased* is reflected by the linguistic expression "The press is Corps-controlled." The press is framed as being controlled by and biased to the Corps even if they commit unethical actions.

**(g) The Corps are enemies in a war against the people**

In excerpt (16), Adam tells Zeb that the vitamin pills which are created at the HelthWyzer cause diseases to the public to make profits through buying the pills, then the drugs, and after that the hospitalization. The frame *the Corps are enemies in a war against the people* is highlighted by the linguistic expression "the white ones is in actual deployment" where the Corps are framed as enemies of the people who deploy the white pills as troops in a war.

**(h) The Corps are immoral**

In excerpt (9), Adam and Zeb are discussing their discovery of Adam's mother's murder by their father, the Rev, when Adam was a child. Zeb recommends that they tell the CorpSeCorps, but Adam refuses because of the fact that there is a common interest between the Church of Petroleum and the OilCorps, thereby the OilCorps would cover up the Rev's crime and kill Adam and Zeb instead. The frame *the Corps are immoral* is outlined by the linguistic expressions "the OilCorps would cover up for the Rev over a pure and simple wife murder that didn't per se threaten its holdings" and "They'd accuse the two of us of mental instability. Shut us away, use the heavy drugs. Or, as I said – dig a couple of new holes in the rock garden" where the cover up for a crime and the act of murdering are immoral deeds. In excerpt (16), the frame *the Corps are immoral* is highlighted by the linguistic expression "He felt this practice was not only unethical but dangerous to the public health, and

therefore immoral" which describes the immoral deeds performed at the HelthWyzer that are harmful to the health of the common people. In excerpt (17), the frame *the Corps are immoral* is reflected by the linguistic expression "pure evil" where the actions of the Corps when they create vitamin pills which cause diseases to the people is described by Adam as evil.

**(i) The capitalists value oil more than other creatures**

In excerpt (4), Toby and Zeb are discussing how Bearlift and the Corps would have never preferred the benefit of bears who are about to be extinct over the monetary value of oil which shows an anthropocentric focus on human business. The frame *the capitalists value oil more than other creatures* is clarified by the linguistic expression: "they'd never have let you waste such valuable primary material on bears" which entails that they are self-centered and just care about monetary value of oil regardless of the value and existence of other creatures, such as bears who are going extinct due to climate change.

**(j) Scientific experiments on other creatures are vicious**

In excerpt (6), Toby is thinking that the innocent, child-like, and primitive Crakers are lucky enough that they did not exist before the plague swept out humanity or they would have been cut into pieces for some scientific experiments. The frame *scientific experiments on other creatures are vicious* is tackled by the linguistic expressions "injected and jolted and probed and sliced apart" and "They'd have ended up as slabs of DNA in a freezer" which manifest the cruelty of scientific experiments which are done on other creatures.

**(k) Bearlift is a scam**

In excerpt (5), Zeb is telling Toby about some incidents in his life before the plague when he worked for Bearlift company in Canada that pretended to be save the hybrid bear populations from extinction because of climate change through dropping donated food to them from thopters. The frame *Bearlift is a scam* is outlined by the linguistic expressions: "Bearlift was a scam," "'I remember *adapt*,'" says Toby. "It was another way of saying *tough luck*. To people you weren't going to help out.'" and "But here's the scammiest part." Zeb views the Bearlift company as a scam because it claimed to help bears to adapt through providing them with the leftovers from the country people which did not make sense because bears, who were starving due to the melting of the ice and the death of seals, would have never been saved this way.

### (I) The God's Gardeners' cult is green

In excerpt (11), Toby decides to write her diaries at the cobb house after the plague as she used to do when she was kept alone at the AnooYoo spa during the plague. She chooses to write about the Gods' Gardeners to immortalize them in case there will be more human beings in the future. The frame *the God's Gardeners' cult is green* is highlighted by the linguistic expression "green religious cult." According to this frame, the religious cult is described as green since it causes no harm to the ecology. The word "green" refers to plants that grow without hurting the environment, thereby it implicates that this religious group advocates the eco-friendly attitudes and pollution-free development.

The number of ecological frames used by the environmentalist group in *MaddAddam*, and their frequencies are displayed in the following table:

**Table (1): Some frames of the environmentalist group from *MaddAddam***

Number	Frames	Frequency
1	vanity kills	1
2	Nuclear power is dirty	1
3	Scientists are slaves to the brain and captives to science	1
4	All creatures are useful and valued	2
5	Capitalists are the enemies of God's natural creation	1
6	The press is biased	2
7	The Corps are enemies in a war against the people	1
8	The Corps are immoral	2
9	The Corps and the Church of PetrOleum supporters do not value other creatures	2
10	Scientific experiments on other creatures are vicious	1
11	Bearlift is a scam	1
12	The God's Gardeners' cult is green	1
<b>Total</b>		<b>16</b>

## 2. Frames of the Non-environmentalist group

### (a) Oil and gas are holy

In excerpt (7), Zeb is discussing the cult of the Rev, and his supporters and followers. The Rev and the Church of PetrOleum have their own religion which is whipping the enemies through their tongues, evading taxes, telling people what they want to hear, calling themselves a religion, spreading their thoughts through books and media, and befriending or threatening politicians. The Rev and his supporters from



the Church of PetrOleum, the Petrobaptists, and the Known Fruits believe in the unlimited exploitation of natural resources to live in luxury which is obvious in the luxurious decoration of the Church. The Rev justifies the absolute freedom of man to exploit natural resources from a religious perspective. The Rev twists the interpretation of some verses from the Bible to come to the conclusion that oil is holy. The frame *oil and gas are holy* is portrayed in the linguistic expressions "gasoline came from heaven," "oil is holy throughout the Bible" where the unlimited extraction of oil and gas is justified from a religious viewpoint to give it a credit. In excerpt (8), the Church of PetrOleum sends hate messages to the donators against the environmentalists describing them as freaks, devils, and serial killers. The frame *oil and gas are holy* is demonstrated in the linguistic expression "God's Holy Oil" where oil is represented as holy by the Church of PetrOleum to justify their portrayal of the environmentalists who advocate the limited extraction of oil as devils. In excerpt (8), the frame *oil and gas are holy* is depicted in the linguistic expression "God's Holy Oil" where oil is portrayed as holy by the Church of PetrOleum, the Petrobaptists, and the Known Fruits so that the environmentalists who are against the unrestricted exploitation of natural resources are viewed as demons who are after destroying the prosperity of America.

**(b) Nature is a valuable commodity**

In excerpt (4), the frame *nature is a valuable commodity* is exemplified by the linguistic expression "valuable primary material" where the members of the Corps and the Church of PetrOleum assess the value of nature by a monetary criterion not by having value in itself. In excerpt (7), the Rev tells his sons to pray for oil and natural gas since they are the most valuable materials in the world. The frame *nature is a valuable commodity* is manifested by the linguistic expressions "What is more valued by us today than oil?" and "it was oil that put the food on the table because it ran the tractors that plowed the fields and fuelled the trucks that delivered the food to the stores, and also the car our devoted mother, Trudy, drove to the store in to buy the food, and the power that made the heat that cooked the food". The Rev frames nature as a resource whose main value is to be consumed and as the provider of capital wealth in the form of oil and natural gas. In excerpt (13), the frame *nature is the provider of capital wealth* is obvious in the linguistic expression "the American Way and God's Holy Oil, which were one and the same" where the economic prosperity of America is closely related to the existence of oil which is extracted from nature.



**(c) Oil is the food provider for people**

In excerpt (7), the Rev mentions that oil is the most valuable material for it is used to propel vehicles, to heat buildings, and to produce electricity. The frame *oil is the food provider for people* is manifested by the linguistic expression "it was oil that put the food on the table."

**(d) Environmentalists are freaks, devilish and serial killers**

In excerpt (8), the frame *environmentalists are freaks, devilish and serial killers* is featured out by the linguistic expressions "the Enemies of God's Holy Oil: "Solar Panels Are Satan's Work", "Eco Equals FreakO", "The Devil Wants You to Freeze in the Dark", "Serial Killers Believe in Global Warming", where the environmentalists are described by the Church of PetrOleum as freaks, devilish and serial killers for they are against the extensive extraction of oil. In excerpt (13) the Rev, the Church of PetrOleum, the Petrobaptists, and the Known Fruits hate the environmentalists who like natural creatures like daises, or mercury-free fish, and who do not like human's intervention to God's natural creation. The frame *environmentalists are freaks, devilish and serial killers* is clarified by the linguistic expressions "they were all death on ecofreaks" and "a demon-possessed Satanic minion of darkness, hell-bent on sabotaging the American Way and God's Holy Oil". In excerpt (14), the frame *environmentalists are freaks, devilish and serial killers* is represented by the linguistic expression "ecofreaks" where the Corps describe the environmentalists who like to protect the environment as being odd.

**(e) The Corps and the Church of PetrOleum are against green development**

In excerpt (14), Adam's father, the Rev, who is one of the famous leaders at the Church of PetrOleum refuses that Adam wears green color as a child for it is politically charged color since it refers to the environmentalists who are the enemies of the Corps. The frame *the Corps and the Church of PetrOleum are against green development* is illustrated in the linguistic expression "No green: it was a politically charged color, what with the vendetta against ecofreaks". The reason why the Corps and the Church of PetrOleum are against the environmentalists is directed towards their green development attitudes; that is to say, providing clean or green energy and maintaining a balance between energy production and the protection of the ecosystem. This is in contrast to the Corps and the Church of PetrOleum supporters who just seek to gain wealth to USA through extracting oil and natural gas regardless of the environmental implications. The number of ecological frames used by

the non-environmentalist group in *MaddAddam*, and their frequencies are displayed in the following table:

**Table (2): Some frames of the Non-environmentalist group**

Number	Frames	Frequency
1	Oil and gas are holy	6
2	Nature is a valuable commodity	2
3	Oil is the food provider for people	1
4	Environmentalists are freaks	3
5	Environmentalists are devilish	2
6	Environmentalists are serial killers	1
7	The Corps and the Church of PetrOleum are against green development	1
Total		<b>16</b>

## 7. Research Findings

This part discusses several stories that exist in the minds of the characters in the novel and whether these stories are beneficial, destructive, or ambivalent from an ecolinguistic perspective. The study aimed to investigate the relationship between the social, economic and political realities of the society of *MaddAddam* and the surrounding environment. It also attempted to examine how power inequality is enacted and resisted on the social, political, and ecological contexts. Results indicated that there is a clash between the two major ecological stories in the novel: the environmentalist, which consists of the God's Gardeners and the MaddAddmites, against the non-environmentalists, which consists of the Corps, the Church of PetrOleum, the Petrobaptists, and the Known Fruits. The frames used by the environmentalist group are beneficial to the environment for the following reasons: (1) they are against the consumerist and capitalist attitudes which lead to climate change and the extinction of some species. They advocate the simple life which is close to nature and this is elaborated by the frame *vanity kills*; (2) they view all creatures as having value in themselves; (3) they are against human beings' intervention with God's natural creation through technology or scientific experiments which is spotlighted by the frame *scientific experiments on other creatures are vicious*; and (4) they call for clean energy that does not harm nature which is represented by the frames *nuclear power is dirty* and *The God's Gardeners' cult is green*.

On the other hand, the frames used by the non-environmentalist group are destructive to the environment for the following reasons; (1) they regard oil as holy to justify their unlimited extraction of oil which is harmful to nature; (2) they view oil as the food provider for people to

affirm its significance; (3) nature is considered a resource and a provider of capital wealth which signifies that its main value is to be consumed and this is highlighted by the frame *nature is a valuable commodity*; (4) they frame the environmentalists as freaks, devilish and serial killers for they are against the boundless extraction of oil and gas; and (5) they are against green development since they take into consideration the economic progress and gaining wealth rather than the protection of the environment. As a result, the first and second hypotheses that the language of the characters in the selected novels reflects their attitudes towards the physical environment and the nonhuman beings were proven to be true. Moreover, the third hypothesis that there are a variety of ecological stories that the characters live by was proven to be valid.

Results illustrated that that the ecological stories that the characters live by have impacts on the whole ecosystem. The ecological story the environmentalists live by; that is, taking into consideration the benefits of the environment and other creatures not just the human beings' leads to sustainability and continuity of life on earth. On the contrary, the ecological story the non-environmentalists live; i.e., focusing on merely the benefits of human beings causes numerous damages to the environment and the extinction of species. Henceforth, the fourth hypothesis that the ecological stories that the characters live by have impacts on the whole ecosystem was proven to be true. The fifth hypothesis that the social, economic and political realities of the societies in the selected novels are closely related to the physical environment was proven to be true. It is obvious that climate change, which is typically significant in the high temperature, leads to crops failure and the extinction of several species, which, in turn, gets people ponder over to the political, economic and social causes of climate change. In the novel, the environmentalist group, resembled by the God's gardeners and the MaddAddamites, realize that the capitalist, consumerist and avaricious attitudes of the Corps and the Church of PetrOleum lead to climate change in the first place. Therefore, the environmentalist group calls for reducing oil extraction, looking for eco-friendly energy, avoiding the overexploitation of nature, valuing all creatures and reducing human beings' intervention with nature.

Results revealed that the environmentalist group resists the power inequality of the non-environmentalist group which is malignant to the environment, the other creatures, the common and less powerful people, and the coming generations. This resistance is highlighted by the frames:

- *capitalists are the enemies of God's Natural Creation*
- *the Corps are enemies in a war against the people*
- *the Corps are immoral, scientific experiments on other creatures are vicious*
- *the press is biased*

Consequently, the sixth hypothesis that power inequality on the social and ecological contexts is enacted and resisted by various characters in the novels was proven to be valid too.

## 7. Conclusion

The present study employed an ecolinguistic analysis of a cli-fi novel, Atwood's MaddAddam (2013) to reveal how the language of the characters mirrors the ecological stories they live by, whether beneficial, destructive, or ambivalent and how these stories have impacts on the whole ecosystem, to detect how the economic, political, and cultural backgrounds of different societies in the selected novels are related to the ecosystem, and to reveal how power inequality on the social and ecological contexts is enacted and confronted by the characters. This study recommends that future studies carry out a corpus linguistic analysis on the novel and cli-fi novels in other cultures, especially the eastern ones, are to be investigated,. The study suggests that high temperature resulting from climate change in the summer of 2023 gets people in several countries, including Egypt, pay attention to some political, social and economic aspects and some Facebook pages are created to call for saving the environment through asking the government to change their actions towards nature, to achieve sustainability, to increase plantation, and to avoid cutting trees, and they support their calls with expressive photos.

## References

- Ahmed, M. N., & Sarhan, B. A. (2021). Fictional stories to live by: An ecolinguistic perspective. *JWADI*, 32 (32), 213-240.
- Alexander, R., & Stibbe, A. (2014). From the analysis of ecological discourse to the ecological analysis of discourse. *Language Science*, 41, 1-12.
- Atwood, M. (2013). *MaddAddam*. Toronto: McClelland and Stewart.
- Bowers, C. A. (2009). Why the Lakoff and Johnson theory of metaphor is inadequate for addressing the cultural issues related to the ecological crises. *Language and Ecology*, 2 (4), 1-16. <http://ecoling.net/journal.html>
- Castells, M. (1996). The rise of the network society. *The Information Age: Economy, Society, and Culture*, I. Cambridge, MA and Oxford: Blackwell.
- Crutzen, p. J., & Stoermer, E. F. (2000). The Anthropocene. *Global Change Newsletter*, 41, 17-18.
- Desbiens-Brassard, A. (2020). Environmental Discourses in Atwood's MaddAddam Trilogy; Or, The Neoliberal Prometheus. *Studies in Canadian Literature / Études en littérature canadienne*, 45(2), 141-160. <https://www.erudit.org/en/journals/scl/2020-v45-n2-scl06266/1080277ar/>
- Fairclough, N. (1989). *Language and power*. London: Longman.
- . (1992). *Discourse and social change*. Cambridge: Polity Press.
- . (1993). Critical discourse analysis and the commodification of public discourse. *Discourse and Society*, 4 (2), 133-68.
- . (2003). *Analysing discourse: Textual analysis for social research*. London: Routledge.
- Fill, A. F. (1998). Ecolinguistics: State of the art, *Arbeiten aus Anglistik und Amerikanistik*, 23 (1), 3-16.
- Fill, A. F., & Penz, H. (Eds.). (2017). *The Routledge Handbook of Ecolinguistics*. New York: Routledge.
- Gamson, W. A. (1989). News as Framing. *American Behavioral Scientist*, 33, 157-161. <https://doi.org/10.1177/0002764289033002006>
- Gong, H. (2019). *A Corpus-based Critical Ecological Discourse Analysis of Corporate Annual Environmental Reports: China Three Gorges Corporation as an Example*. [Master Thesis, University of Helsinki]. <https://helda.helsinki.fi/handle/10138/309104>
- Halliday, M. A. K. (1990). New ways of meaning: A challenge to applied linguistics. *Journal of Applied Linguistics*, 6, 7-36.
- Hameed, A. (2021). An ecolinguistic perspective on framing of animals in Quranic discourse. *AWEJ for Translation & Literary Studies*, 5 (3), 113-124. <http://dx.doi.org/10.24093/awejtls/vol5no3.9>
- Haugen, E. (1972). *The Ecology of Language*. Stanford, CA: Stanford University Press.
- Lakoff, G. (2010). Why it matters how we frame the environment. *Environmental Communication*, 4 (1), 70-81. <https://doi.org/10.1080/17524030903529749>
- . (2014). Mapping the brain's metaphor circuitry: Metaphorical thought in everyday reason. *Frontiers in Human Neuroscience*, 8 (958). <http://dx.doi.org/10.3389/fnhum.2014.00958>
- Lakoff, G., & Johnson, M. (1980). *Metaphors We Live By*. Chicago, IL: The University of Chicago Press.

- Lewis, S. L., & Maslin, M. A. (2018). *The Human Planet: How we Caused the Anthropocene*. Penguin.
- Margaret Atwood Biography. (n.d.). <https://margaretatwood.ca/biography>
- Martin, J. R., & White, P. R. R. (2005). *The Language of Evaluation: Appraisal in English*. London and New York: Palgrave Macmillan.
- Masoomi, M., Bornaki, F., Salami, A. (2019). The fourth world and politics of social identity in Margaret Atwood's MaddAddam Trilogy. *World Sociopolitical Studies* 3 (4), 731-761. <https://www.researchgate.net/publication/344753759>
- Milkoreit, M. (2016). The promise of climate fiction: imagination, storytelling, and the politics of the future. In p. Wapner & H. Elver (Eds.), *Reimagining Climate Change*, 171-191. Routledge Publishing.
- Najar, P. K. (2010) *Contemporary literary and cultural theory: From structuralism to ecocriticism*. Pearson.
- Rowland, L. (2015). Speculative solutions: The development of environmental and ecofeminist discourse in Margaret Atwood's MaddAddam. *SCL*, 40 (2), 46-68.
- Sentov A. (2021). So obvious and so unthinkable: Eco-dystopia in Margaret Atwood's MaddAddam trilogy. *CIVITAS*, 11(2), 156-172. <https://www.researchgate.net/publication/366377799>
- Skutnabb-Kangas, T., & Harmon, D. (2018). Biological diversity and language diversity: parallels and differences. In H. Penz & A. Fill (Eds.), *The Routledge Handbook of Ecolinguistics*, 11-25. New York: Routledge.
- Steffensen, S. V., & Fill, A. (2014). Ecolinguistics: The state of the art and future horizons. *Language Sciences*, 41(Part A), 6-25.
- Stibbe, A. (2014). An ecolinguistic approach to critical discourse studies. *Critical Discourse Studies*, 11(1), 117–128.
- . (2015). *Ecolinguistics: Language, Ecology and the Stories we Live by* (1<sup>st</sup> ed.). New York: Routledge.
- . (2021). *Ecolinguistics: Language, Ecology and the Stories we Live by* (2<sup>nd</sup> ed.). New York: Routledge.
- Waters, C. N., Zalasiewicz, J., Summerhayes, C., Barnosky, A. D., Poirier, C., Gałuszka, A., Cearreta, A., Edgeworth, M., Ellis, E. C., Ellis, M., Jeandel, C., Leinfelder, R., McNeill, J. R., Richter D. de B., Steffen, W., Syvitski, J., Vidas, D., Wapner, M., Williams, M., ... Wolfe, A. P. (2016). The Anthropocene is functionally and stratigraphically distinct from the Holocene. *Science*, 351, 137.



**Appendix**  
**Excerpts from *MaddAddam***

**Excerpt 1:**

“I love you too,” says Rebecca. “Okay, I’m not fat. Those glasses are real crystal, I’m enjoying it. Cost a mint, this stuff did once. Remember at the Gardeners? Vanity kills, Adam One used to tell us, so it was earthenware or die. Though I can see the day coming when we’re not gonna be bothered with dishes anymore, we’ll just eat with our hands.” (p. 34)

**Excerpt 2:**

Crozier shows the Crakers how to work the hand pump: a retro decoration once but now the source of their drinking water. God knows what’s in it, thinks Toby: it’s groundwater, and every toxic spill for miles around may have leaked into it. She’ll push for rainwater, at least for drinking; though with faraway fires and maybe nuclear meltdowns sending dirty particulate into the stratosphere, God knows what’s in that as well. (pp. 41-42)

**Excerpt 3:**

“We were the brain slaves,” says Manatee, spearing another chop. “The captive science brainiacs, working the evolution machines for Crake. What a power-tripper, thought he could perfect humanity. Not that he wasn’t brilliant.”

“He wasn’t alone there,” says slender Zunzuncito. “It was big business, the BioCorps were backing it. People were paying through the ceiling for those gene-splices. They were customizing their kids, ordering up the DNA like pizza toppings.” (p. 43)

**Excerpt 4:**

“This was before the oil shortage really kicked in?” says Toby. “And the carbon garboil business took off. Otherwise, they’d never have let you waste such valuable primary material on bears.”

“It was before a lot of things,” says Zeb. “Though the oil prices were already getting pretty steep.” (p. 58)

**Excerpt 5:**

Bearlift was a scam, or partly a scam. It didn’t take anyone with half a brain too long to figure that one out. Unlike many scams it was well meaning, but it was a scam nonetheless. It lived off the good intentions of city types with disposable emotions who liked to think they were saving something – some rag from their primordial authentic ancestral past, a tiny shred of their collective soul dressed up in a cute bear suit. The concept was simple: the polar bears are starving because the ice is almost gone and they can’t catch seals any more, so let’s feed them our leftovers until they learn to adapt, “*adapt* being the buzzword of those days...

"I remember *adapt*," says Toby. "It was another way of saying *tough luck*. To people you weren't going to help out."

"You got it," said Zeb. "Anyway, feeding trash to the bears didn't help them adapt, it just taught them that food falls out of the sky. They'd start slavering every time they heard the sound of a 'thopter, they had their very own cargo cult.

"But here's the scammiest part. Yes, the ice had mostly melted; yes, some polar bears had starved, but the rest of them were drifting southwards, mating up with the grizzlies, from which they'd separated themselves a mere two hundred thousand years ago. So you'd get bears that were white with brown patches or bears that were brown with white patches, or all brown or all white, but whatever was on the outside was no predictor of temperament: the pizzlies would avoid you most of the time, like grizzlies; the grolars would attack you most of the time, like polar bears. You never knew which kind any given bear might be. What you did know was that you didn't want your 'thopter to fall out of the air over bear country." (p. 59-60)

**Excerpt 6:**

We'll never know, thinks Toby, holding Jimmy's nose to make him open his mouth: no way of wiring up their brains for scientific studies, not any more. Which is lucky for them. In the olden days they'd have been kidnapped from the Paradise Project dome by some rival Corp, then injected and jolted and probed and sliced apart to see how they were put together. What made them tick, what made them purr, what made them click. What, if anything, made them sick. They'd have ended up as slabs of DNA in a freezer. (p. 99)

**Excerpt 7:**

The Rev had his very own cult. That was the way to go in those days if you wanted to coin the megabucks and you had a facility for ranting and bullying, plus golden-tongued whip-'em-up preaching, and you lacked some other grey-area but highly marketable skill, such as derivatives trading. Tell people what they want to hear, call yourself a religion, put the squeeze on for contributions, run your own media outlets and use them for robocalls and slick online campaigns, befriend or threaten politicians, evade taxes. You had to give the guy some credit. He was twisted as a pretzel, he was a tinfoil-halo shit-nosed frogstomping kingrat asshole, but he wasn't stupid.

As witness his success. By the time Zeb came along, the Rev had a megachurch, all glass slabbery and pretend oak pews and faux granite, out on the rolling plains. The Church of PetrOleum, affiliated with the somewhat more mainstream Petrobaptists. They were riding high for awhile, about the time accessible oil became scarce and the price shot up and desperation among the plebs set in. A lot of top

Corps guys would turn up at the church as guest speakers. They'd thank the Almighty for blessing the world with fumes and toxins, cast their eyes upwards as if gasoline came from heaven, look pious as hell...

The Rev had nailed together a theology to help him rake in the cash. Naturally he had a scriptural foundation for it. Matthew, Chapter 16, Verse 18: "Thou art Peter, and upon this rock I will build my church."

"It didn't take a rocket-science genius, the Rev would say, to figure out that *Peter* is the Latin word for rock, and therefore the real, true meaning of 'Peter' refers to petroleum, or oil that comes from rock. 'So this verse, dear friends, is not only about Saint Peter: it is a prophecy, a vision of the Age of Oil, and the proof, dear friends, is right before your eyes, because look! What is more valued by us today than oil?' You have to give it to the rancid bugger."

"He really preached that?" says Toby. Is she supposed to laugh or not?

From Zeb's tone she can't tell.

"Don't forget the Oleum part. It was even more important than the Peter half. The Rev could rave on about the Oleum for hours. 'My friends, as we all know, *oleum* is the Latin word for oil. And indeed, oil is holy throughout the Bible! What else is used for the anointing of priests and prophets and kings? Oil! It's the sign of special election, the consecrated chrism! What more proof do we need of the holiness of our very own oil, put in the earth by God for the special use of the faithful to multiply His works? His Oleum-extraction devices abound on this planet of our Dominion, and he spreads his Oleum bounty among us! Does it not say in the Bible that you should forbear to hide your light under a bushel? And what else can so reliably make the lights go on as oil? That's right! Oil, my friends! The Holy Oleum must not be hidden under a bushel – in other words, left underneath the rocks – for to do so is to flout the Word! Lift up your voices in song, and let the Oleum gush forth in ever stronger and all-blessed streams!' "...

"Adam was better. In the Rev's church – and around the Rev's dinner table too – we didn't pray for forgiveness or even for rain, though God knows we could have used some of each. We prayed for oil. Oh, and natural gas too – the Rev included that in his list of divine gifts for the chosen. Every time we said grace before meals the Rev would point out that it was oil that put the food on the table because it ran the tractors that plowed the fields and fuelled the trucks that delivered the food to the stores, and also the car our devoted mother, Trudy, drove to the store in to buy the food, and the power that made the heat that cooked the food. We might as well be eating and drinking oil – which was true in a way – so fall on your knees! (pp. 111-113)

**Excerpt 8:**

Once possessed of the keys to the kingdom, Zeb diverted the river of donations – not all of it, a mere .09 per cent, margin of error, he wasn't lobotomized – into several accounts of his own devising, making sure that the donors got the standard grovelling thank-you and guilt-inducing pep-talk message from the church, plus a hate slogan or two directed at the Enemies of God's Holy Oil: "Solar Panels Are Satan's Work," "Eco Equals FreakO," "The Devil Wants You to Freeze in the Dark," "Serial Killers Believe in Global Warming." (p. 117)

**Excerpt 9:**

"It's what the congregation wanted to believe," said Adam. "And they did believe it. Bad mothers are always a good story, for them."

"Maybe we should call the CorpSeCorps," said Zeb. "Tell them to bring shovels."

"I wouldn't risk it," said Adam. "There's quite a few Petrobaptists on the force, and there are a number of OilCorps heavies on the Church board. There's a lot of overlap because of the benefits to both parties. They're agreed on the need to crush dissent. So the OilCorps would cover up for the Rev over a pure and simple wife murder that didn't per se threaten its holdings, since they'd know there'd be much credibility lost through a scandal. They'd accuse the two of us of mental instability. Shut us away, use the heavy drugs. Or, as I said – dig a couple of new holes in the rock garden."

"But we're his kids!" said Zeb, sounding about two years old even to himself.

"You think that would stop him?" said Adam. "Blood is thinner than money. He'd hear a convenient voice from God, suggesting a son sacrifice for the greater good. Remember Isaac. He'd slit our throats and set fire to us, because this time God wouldn't send a sheep." (pp. 124-125)

**Excerpt 10:**

She pushes herself upright, tries to remember what day it is. The Feast of Cyanophyta? *Thank you, Oh Lord, for creating the Cyanophyta, those lowly blue-green Algae so overlooked by many, for it is through them, so many millions of years ago – which timespan however is merely an eyeblink in Thy sight – that our oxygen-rich atmosphere came to be, without which we could not breathe, nor indeed could the other land-dwelling Zooforms, so various, so beautiful, so new each time we are able to see them, and intuit Your Grace through them ...* (p. 135)

**Excerpt 11:**

Our own deep what? Toby rummages for the next phrase. She's slipping: she ought to write such things down. Keep a daily journal, as she did when she was alone at the AnooYoo Spa. She

could go further, and record the ways and sayings of the now-vanished God's Gardeners for the future; for generations yet unborn, as politicians used to say when they were fishing for extra votes. If there is anyone in the future, that is; and if they'll be able to read; which, come to think of it, are two big *ifs*. And even if reading persists, will anyone in the future be interested in the doings of an obscure and then outlawed and then disbanded green religious cult? (p. 135)

**Excerpt 12:**

Late afternoon, after the rain. Nobody's around, with the exception of Crozier and Manatee, standing sentinel. Toby's kneeling in the garden, killing slugs. It's an act that would once have made her feel guilty – *For are not Slugs God's creatures too*, Adam One would say, *with as much claim to breathe the air, as long as they do it somewhere else in a place that is more congenial for them than our Edencliff Rooftop Garden?* But right now killing them serves as an outlet for her. An outlet for what? She doesn't wish to ponder that.

Worse, she finds herself editorializing. *Die, evil slug!* She drops each plucked slug into a tin can with wood ash and water in the bottom. They'd used salt earlier, but there's little of that to spare. Perhaps a swift blow with a flat rock would be kinder to the slugs – the wood ash must be painful – but she's not in the mood to weigh the relative kindness of slug execution methods.

She yanks out a weed. *How thoughtlessly we label and dismiss God's Holy Weeds! But Weed is simply our name for a plant that annoys us by getting in the way of our Human plans. Consider how useful and indeed edible and delicious so many of them are!* (pp. 158-159)

**Excerpt 13:**

Then he figured he was looking at the whole thing backwards. The Rev, and the whole Church, and their religious joined-at-the-hippers like the Known Fruits, and their political pals – they were all death on ecofreaks. Their ads featured stuff like a cute little blond girl next to some particularly repellent threatened species, such as the Surinam toad or the great white shark, with a slogan saying: *This? or This?* Implying that all cute little blond girls were in danger of having their throats slit so the Surinam toads might prosper.

By extension, anyone who liked smelling the daisies, and having daisies to smell, and eating mercury-free fish, and who objected to giving birth to three-eyed infants via the toxic sludge in their drinking water was a demon-possessed Satanic minion of darkness, hell-bent on sabotaging the American Way and God's Holy Oil, which were one and the same. And Bearlift, despite its fuzzy reasoning and its clumsy delivery system, was in a geographical area where more oil might well be

discovered, or through which it might well be piped, with the usual malfunctions, spills, and coverups. (pp. 182-183)

**Excerpt 14:**

Finally Adam came through. A meetup address, a time, and some instructions about what to wear. No red, no orange, a plain brown T-shirt if possible. No green: it was a politically charged colour, what with the vendetta against ecofreaks. (p. 189)

**Excerpt 15:**

Toby has a flash of memory: herself, back when she was Eve Six among the Gardeners, reciting this prayer along with old Pilar just before they set to work on the bean rows, doing their required stint of slug and snail relocation. Sometimes the homesickness for those days is so strong and also so unexpected that it knocks her down like a rogue wave. If she'd had a camera then, if she'd had a photo album, she'd be poring over the pictures. But the Gardeners didn't believe in cameras, or in paper records; so all she has is the words.

There would be no point in being a Gardener now: the enemies of God's Natural Creation no longer exist, and the animals and birds – those that did not become extinct under the human domination of the planet – are thriving unchecked. Not to mention the plant life. (p. 209)

**Excerpt 16:**

"He found out something they're doing, inside HelthWyzer," said Pilar. "He felt this practice was not only unethical but dangerous to public health, and therefore immoral. He threatened to make this knowledge public; or, well, not public as such, since the press probably wouldn't have touched it. But if he'd gone to a rival Corp, especially one outside the country, they'd have made damaging use of the information." (pp. 245- 246)

**Excerpt 17:**

"What is it?" said Zeb.

"Pure evil," said Adam. "If Pilar's right. But valuable pure evil. And very secret. Which is why Glenn's father is dead."

"What do they do?" said Zeb. "Supersex pills or what?"

"Cleverer than that," said Adam. "They're using their vitamin supplement pills and over-the-counter painkillers as vectors for diseases -ones for which they control the drug treatments. Whatever's in the white ones is in actual deployment. Random distribution, so no one will suspect a specific location of being ground zero. They make money all ways: on the vitamins, then on the drugs, and finally on the hospitalization when the illness takes firm hold. As it does, because the treatment drugs are loaded too. A very good plan for siphoning the victims' money into Corps pockets."...



“So now that you have this stuff,” he said after the first refreshing swallow, “what next? You going to sell these things on the grey market? Foreign Corps would pay a lot.”

“No,” said Adam. “We couldn’t do that. It would be firmly against our principles. All we can do in this world, now, is to learn what to avoid. We’ll warn others about the vitamin supplements if we can, but if we were to try going public with this information we wouldn’t be believed. We’d only sound paranoid, and after that we would have unfortunate accidents. The press is Corps-controlled, as you know, and any independent regulation is independent in name only. So we will keep the pills hidden until they can be analyzed without danger.”

“Who’s this we?” said Zeb.

“If you don’t know, you can’t tell,” said Adam. “Safer for everyone, including you.” (p. 254-255)