

THE "CLI-FI" AND THE ECOCRITICAL IN MARGARET ATWOOD'S ECOPOETRY

Inas Samy Abolfotoh, M.A.

Damietta University, Faculty of Arts, Egypt

Abstract

Ecocriticism is commonly associated in canonical circles with many names like John Muir, Henry David Thoreau, Aldo Leopold, Ralph Emerson, and other American pioneer ecophilosophers. However, this paper argues that Margaret Atwood is one of the assured ecocritical pioneer voices whose environmental insights have been marginalized in favour of an exceptional focus on her Feminist pioneering radical writings. Atwood, the paper proposes, has been poetically tackling many of the current ecological crises since about 30 years before the final coinage of Ecocriticism in the 1990s. As a matter of fact, Atwood has not only been marginalized as an ecophilosopher, but also as a poet. She is commonly identified as a prominent novelist and generally under-analyzed as a poet. Atwood has written 12 poetry books covering versatile issues and themes just like her novels. The present paper sheds light on both Atwood, the ecophilosopher, and Atwood, the poet. Her Ecopoetry envelops various ecocritical fields. Nevertheless, the research will concentrate on her interest in the mounting climate change that shows up clearly in a number of jeremiadic poems due to anthropocentric violations against Nature.

Keywords: Ecocriticism, Margaret Atwood, ecopoetry, climate change, jeremiad, anthropocentrism

Introduction

Canada's "Queen of Letters," Margaret Eleanor Atwood (1939-), is the prolific Canadian poet, novelist, short story writer, children's book writer, essayist, and critic. She is the author of more than forty books and is unquestionably one of Canada's most important living writers. Margaret Atwood in all of English literature, John Bemrose assures, is the second major novelist – after Thomas Hardy – who is also an important poet (85, 1995).

Some timid attempts have been made towards revealing Atwood's deep environmental affiliations. Martha Lamb, for instance, links Atwood to

the Romantic ideas of Blake and Coleridge in relation to the unity of man and Nature (28, 1994). She goes on drawing similarities between the two Romantic poets and Atwood observing that they are distant and ancestral voices that inspired her. However, a complete project of Atwood as an Ecocritical pioneer philosopher remains absent from critical circles.

The paper illustrates how Atwood has been interested since the 1960s in ecocritical issues that have currently turned into one of the hottest environmental debates. The change of Earth temperature and its irredeemable repercussions, for instance, are one of the crises that surfaces every now and then in Atwood's poetics. Rowland Hughes and Pat Wheeler claim that because of proliferated literary responses to climate change, "a new term – 'cli-fi' – has been coined to identify this new body of work that centrally addresses the issue of climate change and its associated environmental consequences" (2, 2013). "The Weather," "Spring in the Igloo," "Bear Lament," "Frogless," and "After the Flood, We" fall into this "cli-fi" categorization. The poems shed light on extreme weather changes, the melting of the Arctic sea ice, species extinction, habitat loss, heat waves, and sea level rise which are all directly related to global warming. They are selected from *The Circle Game* (1966), *Morning in the Burned House* (1995), and *The Door* (2007). As the publishing dates of those volumes imply, the poems demonstrate continuity in Atwood's ecopoetry that holds a persistent disclosure of environmental predicaments.

I.

To begin, the effect of climate change on "The Weather" is documented in the jeremiadic tone and scenes of the poem holding that title from *The Door* (53-54, 2007). This piece reminds the readers with the severe weather changes in the first part of Ronald Emmerich's 2004 climate fiction-disaster film *The Day after Tomorrow* that leads humanity to another Ice Age.

Due to greenhouse gases emitted with exaggerated amounts in the twentieth and twenty-first centuries causing the anthropogenic global warming phenomenon, the weather has changed. To fulfill their industrial, scientific, and technological ambitions, humans destroy the whole planet that sustains their life. "The [w]eather," damaged and severely affected by such violations, has transformed in the poem into a ferocious entity that can never be controlled or tamed and that can never retain its former Natural state. The poet in this poem is speaking on behalf of the entire human race using the collective pronoun "we." The anger of Nature, Atwood believes, will not differentiate between the guilty and the innocent; all of us will face the consequences of humanity's faults. This idea suggests the existence of a

collective responsibility for any violation against Nature; we are all responsible and all of us will pay.

In the past, humans used to be mindful to Nature and were alert to the weather. "Once," Atwood observes, "we didn't bother." Humanity thought they were secure under "umbrellas" and inside their "rooms" in their elegant undefeated established civilized world. However, when they reached the height of their self-confidence at their power and became "careless" about their environment, "the weather crept up behind [them] / like a snake or thug or panther, / and then cut loose." The weather is metaphorically likened to a dangerous reptile or animal unleashed or to a ruthless killer set free due to their "careless[ness]." The uncontrollable forces of Nature are released and humanity has to face its ruthless anger: tornados, hurricanes, and tsunamis: "the weather billows / over the horizon, green / and yellow, thickening itself / with sand and body parts and broken / chairs and shouts. / In its wake we shrivel or drown."

"How can we cram it back / into the sack or bottle / where it used to be so small?" humans wonder. "Who let it out?" they naively continue. Then they ask themselves regretfully in an innocent tone: "Is it our fault? / Did we cause this wreckage by breathing? / All we wanted was a happy life, / and for things to go on as they used to." It is not their own "breathing" that damages the atmosphere but the dark grey "breathing" of their chimneys and factories that leads to "this wreckage."

Humanity must pay for their "fault," their thoughtlessness, and industrialism that violated the sacredness of the world of Nature and its balanced forces. There is no escape, the weather "comes... / – again, again – / one huge relentless blare, / trampling everything down, / singeing the air. // It's blind and deaf and stupendous, / and has no mind of its own." Humanity once more denies the fact that Nature has its own order – evident in the words "blind," "deaf," and having "no mind." The poet objects to their conclusion and interrupts suspiciously with two short questions "Or does it [have a mind]? What if it does?" The poem ends with the poet inviting her fellow humans to seek redemption, to "pray to it," before it is too late.

Atwood's concerns about weather changes on Earth has earlier begun in her first poetry book in which she puts a spot light on the effect of seasonal changes on the inhabitants of the Polar circles. Those changes are directly related to the warming climate of the planet due to industrial expansions. "Spring in the Igloo" (*The Circle Game* 46-47, 1966) is a jeremiadic piece through which Atwood accompanies the readers into a freezing journey to the Arctic North so as to warn mankind against eminent climate catastrophes. Power's reading of the poem disappointingly ignores all explicit references to the near global ecological tragedy the poem predicts

and restricts it to a Feminist analysis of human emotional relationships in the light of destructive sexuality (28, 1973).

The Eskimo persona and her companion manage to survive the exceptionally Arctic weather. The two Natives are satisfied with their environment and accept its seemingly harshness through their recognition of a bigger Natural order. The poem opens in "[s]pring" time immediately after the passage of long dark wintery months.

"The sun had been burning for a long time" elsewhere, the persona tells her mate, "before we [last] saw it" in the final days of the previous summer. The long sunless winter has already passed away and the two companions "saw it [i.e., the sun] / only then because / it seared itself through the roof" of the igloo that has begun gradually to melt and lose its thickness by the warmth of the spring sun whose rays manage to pierce it like an arrow lighting its inside.

"We," the persona remarks, "thought we were living / in the centre of a vast night." In this concretization, the long darkness of the Polar winter "night[s]" is equated to a dark unlimited mass the two companions occupying its "centre." "[A]nd therefore," she continues, we "spent our time / hoarding our own heat." Their body heat that keeps the warmth of the igloo and saves them from perishing out by being frozen to death is likened to valuable stored goods whose preservation keeps them alive.

Their belief of being "the centre of a vast night" turns out to be false and the sun rises once more. They "were astonished by the light" after the long darkness they dwelt in. Their "astonish[ment]" affirms their longing for the sun, its light and warmth that have abandoned them for a long time. They are actually missing what most of the world population ironically barely notice or appreciate. The two mates celebrate its value and admit the importance of the sun, while other individuals despise it for its bright light or unbearable over-heat.

With the appearance of the sun, the igloo loses its value to the companions who "made this house once / because" they wanted "a / substitute for the sun" to offer them protection and warmth at its absence. Consequently, unlike all human constructions that are built and even worshipped becoming emblematic of an imposed order on the Natural world, the igloos are void of any glimpses of violation against Nature. They are not intended for enforcing a human order on the land. Instead, they are built from a Natural element to serve a precise function (surviving "the / coldest season"), then they melt back into Nature. They bear no luxurious marks of human arrogance and superiority over the environment.

The persona admits the greater Natural order she belongs to and humanity's dwarfness and restrictedness if compared to it: "the earth / turns for its own reasons / ignoring mine, and these human / miscalculations." At

this point, the poem takes a pessimistic turn and its structure becomes divided into two paradoxical halves: the preceding one celebrates Nature and their survival, the second part foresees their annihilation because of their human fellows' "miscalculations."

Due to "these human / miscalculations" and destructive violations against Nature, the two mates' life in the Arctic becomes on the verge not by cruel Natural elements but by the Earth warming climate which has reduced the availability of appropriate snow for igloo construction, the sole shelter from winter severe coldness. Moreover, with a continuous increasing global warming rate, the two companions and the whole ecosystem at the Polar circles are likely expected to be seen "drifting / into a tepid ocean / on a shrinking piece of winter." As the winter season gets shorter, the persona remarks in a five-lined stanza tabbed off the body of the poem and included within two parentheses that they cannot stand the increasing melting of ice: "(for two so frozen / this long in / glacial innocence / to swim would be / implausible)." With the escalating "shrinking" of the ice mass, the two companions will be two drowned corpses floating on a warm Arctic Ocean. Their death will symbolize the end of numberless forms of life dwelling the two Polar circles of the Earth. The dissolution of the Arctic Ocean will also increase the water level in the rest of the planet; many islands and coastal cities will perish under water. The whole human race and various ecosystems will go into extinction because of the former's "miscalculations."

However, the two mates so far continue to live "with ice the only thing / between [them] and disaster." What upsets them is not the cruelty of Nature or the freezing "ice" but the lack of "ice." Ice is their life and through preserving the remaining frozen masses and stopping the increase of Earth temperature, their survival will be guaranteed and they will escape the "disaster."

Like the Eskimos, polar bears are also suffering from seasonal changes at the North Pole. Now they are classified as a vulnerable species; their numbers are in an increasing decline, because they are losing their Natural habitat. The polar bear crisis is the focal point of "Bear Lament" (*The Door* 57-58, 2007). The poem demonstrates a bitter realism which is meant to alert the readers into quick reactions for saving polar bears, the albatross and many other Northern vulnerable creatures. This rescue mission, Atwood admits, must be "done today...; [t]omorrow it may not be possible, because saving a species from extinction also has a date stamp on it" (*Payabck* 173, 2008).

"I saw a bear last year," the poet recalls, "against the sky, a white one, / rearing up with something of its former heft." According to the Arctic Climate Impact Assessment (ACIA), the key danger on polar bears posed by climate change is malnutrition or starvation. Bears' preferred diet of seals

which they hunt through a platform of sea ice would not be available, because rising temperature causes the sea ice to melt earlier, driving the bears to shore before they have built sufficient fat reserves to survive the period of scarce food in the late summer and early fall ("Polar Bear"). The bear the poet saw has not only lost "something of its former / heft[,] / [b]ut it was thin as ribs / and growing thinner."

Polar bears are used to wait for hours by the holes that seals breathe through when they surface in order to hunt them. However, with sea-ice shrinkage, the thick ice becomes thinner and can no longer bear bears' heavy weight. With ice fracturing underneath their heavy feet, bears withdraw to more solid snow masses "[s]niffing the brand-new / absences of rightful food." The bear's excellent sense of smell that enables it to locate seals leads it to nothingness. The idiom "brand-new" which is often used in promising fulfilling occasions is immediately followed by the "absences" of seals. This nothingness that the bear nose has found "tastes as ripped-out barren space / erased of meaning." The "barren" land is metaphorically likened to a prey torn into pieces but since this prey is a "barren" land existing only in the bear's dreams, it has a "meaning[less]" taste. Consequently, the bear has to suffer starvation to death.

Global warming deprives the bear of the food that provides it with the fat reserves it lives off and employs to insulate its body from the severe coldness of the winter. Simultaneously, it dispossesses it of a solid land to walk on and of the possibility of building "its cold wise ice bear secret / house." If it miraculously manages to build one, it is most likely that its roof will collapse because of ice dissolution. The polar bear is going finally to drown in the "tepid ocean" that the two companions of "Spring in the Igloo" will drown in.

"So, scant // comfort there," the poet observes. Then she mournfully wonders: "Oh bear, what now? / And will the ground / still hold? And how / much longer?" Indeed, "the ground" will not "hold" "much longer," because "it is predicted that two-thirds of the world's polar bears will disappear by 2050 because of the shrinking of summer sea ice caused by climate change" ("Polar Bear").

"Frogless," from *Morning in the Burned House* (1995) (*Eating Fire* 324, 1998) illustrates one more serious consequence of climate change. A "[f]rogless" Earth is not a fictitious hypothesis. "[A]mong the most massive losses of recent decades has been the frog die-off' due to changes in habitat and atmosphere" (Copley 46, 2013). This piece demonstrates the poet's proleptic vision in relation to the annihilation of Natural creatures considering the realities of contemporary environmental abuse.

The poem displays the death of a number of Natural creatures (trees, frogs, and fish) because of extreme weather changes on Earth. The poet

draws a dim picture of the world of Nature, a sick landscape where "the sore trees cast their leaves / *too early*" (emphasis mine). The seasonal cycle has changed: the "trees" are "sore" and "early" "snow" is "searing the roots." Such changes are clearly sensed by contemporaries and affect the whole environment.

The "spring" too starts earlier than usual, "the stream warms," and "[t]adpoles [are] wrecked in the ["burning"] puddles." The damage of "trees" and "[t]adpoles" can be irrelevant and trivial to some short-sighted humans, because it is not affecting their life directly. Nonetheless, the poet, standing by the "[f]rogless" swamp sees "an eel with a dead eye / grown from its cheek." This detail succeeds at making her readers sense more insecure, feeling their well-being threatened. The poet, directly addressing mankind, wonders: "Would you cook it?" The question is immediately followed by the incomplete answer: "You would if[.]" Humans "would if" they have no other dietary options, if all fish get sick and all types of food become contaminated as well. To satisfy their hunger, they will eat anything.

"Any living thing that hopes to live on earth must fit into the ecosphere or perish" (qtd. in Rueckert 105, 1996). Humans sound to be unwilling to "fit into the ecosphere," so they have to "perish" as the poem suggests. The poet opens a window into the future and sees that "[t]he people eat sick fish / because there are no others. / Then they get born wrong." The lines, employing what Ranjan Ghosh terms "the ethics of the 'unborn'" (7, 2012), assure that future humans give birth to sick mutilated babies, because they got contaminated by bad food and other pollutants that have accumulated in their bodies over time. Contamination, studies assure, leads to genetic mutations and birth defects that cause such mutilations. Their children are "wrecked" just like the innocent "[t]adpoles" that fall a prey to a warm environment and are sacrificed in the name of progress. With the loss of future generations, both frogs and humans stand on the verge of extinction. Humans will pay for their exploitative policies and consumerism, and they will be the prey of their own deeds. Though blameless, the whole Earth will pay for humanity's blindness as well.

The poem highlights what Baxter terms current "increasing realization that human beings have important impacts upon each other's well-being even when they do not inhabit the same society or historical period" (6, 2005). To explain, he argues that how the distribution of environmental "goods" (like clean air and water) and "bads" (like toxic wastes) "cuts through the issues of intra-societal, international and intergenerational justice" (6-7).

The tone of the poem becomes more serious and threatening near its end. "This is not sport, sir," the poet assures, "This is not good weather. / This is not blue and green." Atwood informs humanity that what she depicts

in this poem is not a fictive story. Indeed, all current manifestations affirm Atwood's suspicions. Humans are destroying the planet. In the near future, there will be no stable normal "weather" or healthy "blue" seascape and the "green" landscape will be a barren desert.

"This is home," the poet admits, there is no way out: "Travel anywhere in a year, five years, / and you'll end up here." Despite the common use of the deictic "here" to refer to a definite area, it is used in the lines to signify *everywhere*. All ecosystems are interconnectedly related. The slightest damage of the most trivial creatures has drastic consequences on the whole environment. Nevertheless, "[t]o the systems *illiterate* eye," argues Gillen Wood, "there is no relationship between two areas so remote from each other. This form of illiteracy is, of course, dear to an advanced consumer society, which relentlessly promotes the complacent assurance that nothing is connected" (5, 2012, emphasis original).

Currently, developed countries are compiling "[e]xtensive datasets on ambient air quality, water quality, food contamination, pesticide use, and other environmental monitoring [criteria]... important to estimating disease risks and designing preventive interventions" (Omenn 2, 2010). However, their disease prevention and health promotion "datasets" will not guarantee them the longevity they desire. The catastrophic repercussions of environmental degradation going on at a great pace in this particular part of the world will include them regardless of their defensible empire, simply because they have no escape far from Earth ("here").

The poem with its threatening tone calls for positive quick changes, the sole hope for survival that humanity and all the Natural world badly needs. Simultaneously, the poet criticizes "cornucopians" – "financially supported... anti-environmentalist industrial pressure groups" – who argue that "the dynamism of capitalist economies will generate solutions to environmental problems as they arise, and that... [a developing world economy will] eventually produce the wealth needed to pay for environmental improvements" (Garrard 16-17, 2004). The cornucopian vision of current environmental degradation insists that "environmental threats... are socially constructed and culturally defined: there are no shared, universal threats" (14).

If humans think that the tragic annihilation of the Eskimos, polar bears, trees, and frogs is the sole consequence of their polluting industrial activities, they are very wrong. They are not far from the inevitable "disaster" earlier referred to. Indeed, in one of Atwood's future poems, the Earth is flooded and humanity drowns in a "tepid ocean" of melted ice from Polar circles. The only two human survivors of "After the Flood, We" (*The Circle Game* 4-5, 1966), the "I" and the "you," are left to witness and narrate the story of the tragic eradication of their race. Atwood speaks of the post-

1900 model of utopian/dystopian thinking in relation to the future of humanity in literary works. In this model, first the catastrophe occurs, "then blissful wonderfulness" follows (Halliwell 257-58, 2006). In the poem under discussion, Atwood takes a different path: catastrophe takes place, while the "blissful wonderfulness" part sounds to be restricted to Natural creatures that appear to have undergone a remarkable flourishing following the annihilation of most humans.

"We must be the only ones / left," the persona addresses her mate, "in the mist that has risen / everywhere as well / as in these woods." To escape the water, both "walk across the bridge / towards the safety of highground." It is a scene typically adopted 32 years later by Mimi Leder in his 1998 science fiction disaster film *Deep Impact* in which human survivals heed towards highlands to escape the first tsunami wave after a comet collides into the Atlantic Ocean.

A flood calmly ends the world in Atwood's poem. The forest underneath is covered with water, "(the tops of the trees are like islands)." According to the simile, when the forest is conquered by water, the landscape turns literally into a seascape where its tall tree "tops" become metaphorically "islands." In the next three lines, the poet fuses the landscape, the seascape, and the skyscape together in one image when the persona expectedly admits: "fish must be swimming / down in the forest beneath us, / like birds, from tree to tree." To clarify, the forest becomes a sea and the fish in the water swimming among sunken trees is likened to birds. The continuance of life which is evident in the reference to the "fish" in the water-filled forest shows the poet seeing through apocalypse where new hopes are established for humanity as well as other life forms that will continue to adapt and grow (Rozelle 78, 2010).

The poem suggests that the extinction of a species or a whole ecosystem would not end life on Earth. One species dies out, another flourishes, and life in the Natural world goes on and on. Life does not stop after the annihilation of dinosaurs, so it will not reach a dead end if the whole human race drowns beneath water. On the other hand, all life forms on Earth can really face their final tragic end if humanity continues their wicked destruction of the Natural world.

Mankind, the superior arrogant race, could not face a single power of Nature. Water invaded them and their noisy cities with their undefeated technology which "wide and silent, / [are] lying lost, far undersea" "a mile away" off the persona who is depicted "gathering the sunken / bones of the drowned." The greatness of the poem lies in its ability to link the past and the present of the human race to their future. After escorting her readers in this horrific journey into their future, the poet necessarily returns to the present time where humans are capable of contemplating their past and

present and are still in a position of choice. They can keep their damaging policies against Nature and drown or may admit their inferiority and escape "the deluge." But will they/we?!

Conclusion

To read Atwood "is to become acutely aware of the way the cosmic impinges on the human as much as vice versa, radically removing us from our positions of assumed control and understanding" (Parkin-Gounelas 937, 2008). The poems analyzed in this paper urge the readers to think deeply about their relation to the universe and most importantly about the question the poet poses in the epigraph to *Cat's Eye* (1988) from Stephen Hawking's *A Brief History of Time*: "Why do we remember the past, and not the future?" It is the future that is supposed to be worrying the human race. Futuristic thinking is our sole salvation from an eminent ecological disaster.

The current paper can be regarded as a series of eco-dystopias. However, this can be a one-sided unfair look at the poet's work, since Shirley Neuman assures that "implicit in every dystopia is a utopia" making use of Atwood's own observation that "the readers are to deduce what a good society is by seeing what it isn't" (865, 2006).

By the end of her 1995 *Strange Things: The Malevolent North in Canadian Literature*, Atwood invites visitors to Canada to wander through the souvenir shops where they would find many notecards with birds, animals, and landscapes on them and many gift books with names like *Beautiful Canada* where they will find large "Northern scenes – scenes shown as vast, empty, untouched, luminous, numinous, pristine, and endless" (115). "But," she disappointedly interrupts, "the bad news is coming in":

[T]he North is not endless. It is not vast and strong, and capable of devouring and digesting all the human dirt thrown its way. The holes in the ozone layer are getting bigger every year; the forest, when you fly over it in a plane, shows enormous wastelands of stumps; erosion, pollution, and ruthless exploitation are taking their toll....The North (soon) will be neither... fearful nor health-giving, because it will be dead. The earth, like trees, dies from the top down. The things that are killing the North will kill, if left unchecked, everything else. (115-16)

The paper has displayed how deep Atwood is affiliated to current ecocritical debates. Besides climate change, the writer has dealt poetically with another wide range of environmental issues like animal abuse, postmodern blind consumerism, deforestation, etc. Hence, Margaret Atwood is undoubtedly a pioneer ecocritical figure whose eco-poetic voice should not be underestimated.

References:

- Atwood, Margaret. *Payback: Debt and the Shadow Side of Wealth*. Toronto: House of Anansi Press, 2008. Print.
- The Door*. London: Virago Press, 2007. Print.
- Eating Fire*. London: Virago Press, 1998. Print.
- The Circle Game*. 1966. Toronto: House of Anansi Press, 1998. Print.
- Strange Things: *The Malevolent North in Canadian Literature*. New York: Oxford University Press, 1995. Print.
- Baxter, Brian. *A Theory of Ecological Justice*. London: Routledge, 2005. PDF file.
- Bemrose, John. "Winter of the Soul." Rev. of *Morning in the Burned House*, by Margaret Atwood. *Maclean's* 108.6 (1995): 85. PDF file.
- Copley, Soraya. "Rereading Marge Piercy and Margaret Atwood: Eco-feminist Perspectives on Nature and Technology." *Critical Survey* 25.2 (2013): 40-56. PDF file.
- Garrard, Greg. *Ecocriticism: The New Critical Idiom*. New York: Routledge, 2004. PDF file.
- Ghosh, Renjan. "Globing the Earth: The New Eco-logics of Nature." *A Review of Theory and Literary Criticism* 41.1 (2012):3-14. PDF file.
- Halliwell, Martin. "Awaiting the Perfect Storm." *Waltzing Again: New and Selected Conversations with Margaret Atwood*. Earl G. Ingersoll, ed. New Jersey: Ontario Review Press, 2006: 253-64. Print.
- Hughes, Rowland, and Pat Wheeler. "Eco-dystopias: Nature and the Dystopian Imagination." *Critical Survey* 25.2 (2013): 1-6. PDF file.
- Lamb, Martha Moss. *Margaret Atwood's "Trick Hip:" Transcending Duality with Imagination*. Diss. Florida Atlantic U, Ann Arbor: UMI, 1994. 1358330. PDF file.
- Neuman, Shirley C. "'Just a Backlash:' Margaret Atwood, Feminism, and *The Handmaid's Tale*." *University of Toronto Quarterly* 75.3 (Summer 2006): 857-68. PDF file.
- Omenn, Gilbert S. "Overview of the Symposium on Public Health Significance of Genomics and Eco-Genetics." *The Annual Review of Public Health* 31 (2010): 1-8. PDF file.
- Parkin-Gounelas, Ruth. Rev. of *Margaret Atwood: Feminism and Fiction*, by Fiona Tolan. *Modern Fiction Studies* 54.4 (Winter 2008): 935-8. PDF file.
- "Polar Bear." *Wikipedia: The Free Encyclopedia*. Wikimedia Foundation, n.d.: n. pag. Web. 20 Feb. 2014.
- Power, Linda Laporte. "The Reality of Selfhood: A Study of Polarity in the Poetry and Fiction of Margaret Atwood." Diss. McGill U, 1973. PDF file.
- Rozelle, Lee. "Liminal Ecologies in Margaret Atwood's *Oryx and Crake*." *Canadian Literature* 206 (2010): 78-85. PDF file.

Rueckert, William. "Literature and Ecology: An Experiment in Ecocriticism." *The Ecocriticism Reader: Landmarks in Literary Ecology*. Cheryll Glotfelty and Harold Fromm, eds. London: The University of Georgia Press, 1996: 105-23. *PDF file*.

Wood, Gillen D'Arcy. "What IS Sustainability Studies?" *American Literary History* 24.1 (Spring 2012): 1-15. *PDF file*.