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How Deep is the Pit?

Economic Externalities, Cultural Sustainability, and the Environment

in Contemporary Nova Scotian Mining Fiction

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Abstract

Mining has been a central industry in Pictou County and Cape Breton in Nova Scotia for hundreds of years, but though it has economic benefits, it also has significant social and environmental damages. These negative externalities largely outweigh positive impacts, and are memorialized in Nova Scotian novels including *No Great Mischief* by Alistair MacLeod, *The Glace Bay Miners' Museum* by Sheldon Currie, and *Twenty-Six* by Leo McKay Jr. This project approaches the depiction of mining in these texts from an interdisciplinary ecocritical perspective to question the relationship between mining, the environment, and culture. Textual analysis reveals that externalities are shown as a consequence of industrialization, as a disruption to family and community cohesion, as a detriment to environmental sustainability, as a detriment to Scottish Gaelic cultural sustainability, and as a catalyst for social and political change among the characters. This project also suggests that together the imaginative representation of externalities and natural imagery can create empathy for characters and the environment and that empathy could cause readers to take action on social and environmental issues that the authors depict. Ultimately, the novels could motivate societal change like stopping or mitigating mining's negative externalities and thus could contribute to a sustainable future.

Keywords: Sustainability, Ecocriticism, Nova Scotia, Externalities, Gaelic, Mining

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Dr. Carrie Dawson

17 April 2015

How Deep is the Pit? Economic Externalities, Cultural Sustainability and
the Environment in Contemporary Nova Scotian Mining Fiction

We hear the whistle call, down the coal town road,
And we take our towels and all, where the coal trains load.
In the cages then we drop 'til there's nowhere else to fall,
And we leave the world behind us, down the coal town road.
Allister MacGillivray

Introduction

Opportunity and Purpose. Atlantic Canadian literature has changed over time, but

natural resources and the people that extract them remain prominently depicted in

contemporary texts. Previously, authors propagated "the Folk" image of Atlantic

Canadians "engaged in hardy, independent, elemental, and timeless toil," but ongoing

globalization has caused contemporary writers to instead show "the more complicated

and less idyllic lived realities of Atlantic Canadians" (Wyile 1, 30).[1] Despite the new

perspectives that technology and modernization have generated, resource-based

industries – "fisheries, agriculture, forestry and mining" (Bourque et al. 123) – still

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1. Early Atlantic Canadian texts that Wyile cites as including Folk imagery
include Lucy Maud Montgomery's *Anne of Green Gables,* Frank Parker Day's
Rockbound, and the works of Norman Duncan and Thomas Head Raddall (1, 33). Ian
McKay cites folklorist Helen Creighton in his book, *The Quest of the Folk* (3).

provide jobs and livelihoods in the region. As a result of their economic importance, natural resources remain central to the lives and self-conceptions of Atlantic Canadians, and the literature that they create.

With reference to *No Great Mischief* by Alistair McLeod, *Twenty*-Six by Leo McKay Jr., and *The Glace Bay Miners' Museum* by Sheldon Currie, this paper examines the depiction of the social and environmental externalities of mining in contemporary Nova Scotian fiction. The opportunity to address this topic exists because mining has a long, treacherous legacy in Nova Scotia, vestiges of which are reflected in literature from the province. Mining has created livelihoods for thousands of Nova Scotians, but it has also caused environmental and social harms: land disturbance, methane emissions, deaths, and injuries are just some of the negative effects ("Coal Mining and the Environment"; Sandlos and Keeling). Mining and quarrying for gold, gypsum, anhydrite, limestone, silica, and salt in Nova Scotia have had, and in some cases continue to have, negative effects as well (Ecology Action Centre; "Historic Gold Mine Tailings"). Furthermore, the price that consumers pay for Nova Scotian geological products frequently does not reflect these harms, particularly those incurred when mining (Parmenter, Cain, and Lipp 2); as a result, they can be seen as negative external costs or "externalities" that society pays as a whole ("Negative Externality"). Externalities are generally thought to be market failures wherein the private cost does not include the social and environmental measures necessary to mitigate the effects of producing a consumer item ("Negative Externality"). Though few coalmines remain in Nova Scotia, mining for other minerals is ongoing and Nova Scotians work in geological resource extraction in other provinces; consequently, Nova Scotian authors continue to portray mines, their externalities, and their impacts.

Not only does this paper consider the negative externalities of mining in Nova Scotian fiction, it also considers whether their depiction creates empathy for the environment. Alison Glassie argues that literary criticism can "provid[e] a reading of the novel and its scientific and historical context" that allows "environmental problems [to be cast] in a deeply personal light" (24). The environmental aspects of mining and resource depletion depicted in the novels therefore allow us to "develop empathy with both the humans most greatly affected and with the non-human animals and environments with which we interact" (Glassie 35). Furthermore, Glassie says, "by identifying and unpacking the meaning and emotion in both the human and non-human elements of the ecological story at hand, literary scholars can use the literary arts to help others understand and feel the real consequences of ecological, and therefore economic, ruin and poverty" (22). A critical view of Nova Scotian fiction reveals the connections between social and environmental externalities in novels like *No Great Mischief, Twenty-Six,* and *The Glace Bay Miners' Museum* because novels can create a deeper understanding of and empathy for the environment.

Ultimately, this paper examines the relationship between negative social and environmental externalities, mining, and empathy. Ecocriticism – the study of literature and the environment" (Glotfelty xviii) – is its general approach. "Negative externalities" are defined as occurrences wherein "a product or decision costs the society more than its private cost" ("Negative Externality"). Suzanne Keen defines empathy, or more specifically "narrative empathy," as "the sharing of feeling and perspective-taking induced by reading, viewing, hearing, or imagining narratives of another's situation and condition" ("Narrative Empathy"); she argues that it includes "altruistic action," which is

when that feeling causes the reader to take "willed steps on another's behalf" (*Empathy and the Novel* xiii). This paper attempts to answer the questions: how are social and environmental externalities of coal mining depicted in *No Great Mischief* by Alistair MacLeod, *Twenty-Six* by Leo McKay Jr., and *The Glace Bay Miner's Museum* by Sheldon Currie? Furthermore, do the externalities depicted in these works create empathy for the environment? If so, how, and what is the value of the altruistic action they advocate?

Delimitations. There are several self-imposed delimitations in this project. First, I focus on fiction written in English from Pictou County and Cape Breton in Nova Scotia; I thus exclude non-fiction, poetry, literature in French and Mi'kmaq, and works from outside those geographic areas. I focus on works that depict coal mining and uranium mining; therefore I have further narrowed my scope and excluded fiction that depicts other natural resources, such as fisheries, forestry, and agriculture. My focus on coal and uranium also excludes other mining industries in Nova Scotia, like gold and gypsum. I set these delimitations because I am fluent in English; Nova Scotian literature is of particular interest to me given my university's location; there is a concentration of contemporary novels that depict coal and uranium mining; and that fiction is set primarily in Pictou County and Cape Breton, or involves Cape Bretoners. Mining literature also prominently depicts social and environmental externalities, and there is a body of existing peer-reviewed literature on the externalities of mining.

I focus on three novels: *The Glace Bay Miners' Museum* by Sheldon Currie, *No Great Mischief* by Alistair MacLeod, and *Twenty-Six* by Leo McKay Jr. My selections exclude numerous other works of Nova Scotian fiction that depict mining, such as *Fall on Your*

Knees by Anne Marie MacDonald and *A Possible Madness* by Frank MacDonald. The three novels I have chosen stand out because they comply with my delimitations. They were also published within ten years of one another. Furthermore, mining and its impacts contribute to the foreground of the novels and form central plot elements; in other Nova Scotian fiction, mining is in the background. Finally, each novel that I have selected is popular and has literary merit: *No Great Mischief* won the 2001 International IMPAC Dublin Literary Award, among other prizes, and a panel named it Atlantic Canada's greatest book based on public nominations (Adams and Clare 8); *Twenty-Six* was a national bestseller and won the 2004 Dartmouth Book Award ("Twenty-Six"); and *The Glace Bay Miners' Museum* was adapted for radio, stage, and film, all versions of which have been critically acclaimed ("The Glace Bay Miners' Museum"). Overall, I selected these texts for their comparability, their prominence, and their pertinence.

  Contribution. Given the current provincial legislative climate, this paper contributes to contemporary debates about energy in Nova Scotia. In 2007, the Environmental Goals and Sustainable Prosperity Act (EGSPA) set legal targets for the Government of Nova Scotia; among these goals were targets for provincial renewable energy generation. Specifically, the Government committed that "eighteen and one-half per cent of the total electricity needs of the Province will be obtained from renewable energy sources by the year 2013" (Bill No. 146 2.g.). In 2012, new long-term goals were added: "25 per cent is obtained from renewable energy sources by 2015, and … 40 per cent is obtained from renewable energy sources by 2020" (Bill No. 136 2.b.ii-iii.). The implication of increasing renewable energy generation is that conventional energy generation must decrease. In Nova Scotia, the primary source of conventional energy was

historically domestic coal, and provincial infrastructure is oriented to that source

(Moreira 77). Before EGSPA, 80% of energy was generated with imported coal

("Thermal Electricity"). According to the *EGSPA Annual Progress Report 2012*,

renewable energy accounts for 17.4% of electricity generation (Government of Nova

Scotia 10); furthermore, the dependence on coal had decreased, with coal accounting for

59% of energy generation ("Thermal Electricity"). Other non-renewable energy sources,

such as oil and natural gas, fill the gap between renewables and coal ("Thermal

Electricity"). Policy change can directly create the shift to renewable energy, but it

cannot create the societal shift in understanding necessary for Nova Scotians to support

the change; literature and literary criticism, however, can alter citizens' views of the

environment. Novels like *No Great Mischief, Twenty-Six* and *The Glace Bay Miners'*

Museum can create the human-environment connection that produces the paradigm shift

necessary to motivate environmental change.

The recent release of the One Nova Scotia Report, formally known as *The Report*

of the Nova Scotia Commission on Building Our New Economy, also frames this paper's

contribution. The report recommends that "improving productivity and competitiveness

in our foundational rural industries – tourism, agriculture, fisheries, forestry, mining and

manufacturing – is essential if we are to build a stronger trade economy for the province

as a whole" (Ivany et al. ix). Mining, and especially coal mining, could grow, as the

proponent Pioneer Coal suggests in its 2014 Environmental Impact Assessment

application to expand blasting operations at its surface mine in Stellarton, Pictou County

("Stellarton Surface Coal Mine Extension"). Nova Scotian colliers who have travelled for

work to uranium mines in Ontario and the tar sands in Alberta could return to mine coal

again. Nevertheless, expanding the industry requires that Nova Scotians confront the legacy that this paper addresses; considering these impacts in light of jobs and the economy, they will have to decide whether the gains are worth the risks. This paper will not directly influence the decision, but it exists within the context of the debate. In addition, the literature that it analyses and the connections between humans and the natural world that those novels contain could influence public opinion.

Literature Review

I aim, with this literature review, to discuss ecocriticism, globalization, and capitalism. In order to understand ecocriticism, I will review its definition, its emergence, its themes, and conflicts in its conceptualization. Next, I will outline three specific examples of Canadian ecocriticism that connect the environment to economics; each offers a perspective that will inform this project. Finally, I will connect ecocriticism to globalization and capitalism; to do so I will discuss several academic works that fall outside the realm of ecocriticism. As a whole, this review will identify this project's place in the literature and provide a base upon which my methods and analysis will stand.

Ecocriticism.

Definition

Ecocriticism is the critical framework through which I view the works of Alistair McLeod, Leo McKay Jr., and Sheldon Currie. It is broad and garners many definitions and descriptions, but at the simplest level, it is "the study of the relationship between literature and the environment" (Glotfelty xviii). Ecocriticism's central tenet is that human culture, including literature, is damaging the environment; as a result, traditionally anthropocentric literature and literary studies must consider the natural world in addition to human struggles (Glotfelty xx-xiv).

Ecocriticism is a method of activism. Soper and Bradley say that ecocriticism is "an activist commitment to the protection or amelioration of the world's environmental health" (xiv). Glotfelty states that one of its explicit goals is to raise public consciousness about environmental issues (xx-xiv). Howarth goes further when he reaches into the political sphere and suggests that ecocriticism should "celebrat[e] nature, berat[e] its despoilers, and revers[e] their harm through political action" (69). However, beyond suggesting that ecocriticism breaks from existing criticism, Howarth does not specify the method with which ecocriticism engenders political action. Furthermore, just as gender inequality motivates feminist critique, ecocritics engage with the representation of the environment in literature as a result of their concern with environmental destruction (Glotfelty xxiv). They aim to motivate societal changes that mitigate or prevent the detrimental effects that humans have on their surroundings.

Origins

The idea that the environment and literature are related arose from the environmental movements of the 1960s (Soper and Bradley xx). The area of study was formalized in the 1990s with the formation of the Association for the Study of Literature and Environment (ASLE) in 1992 and the publication of Cheryll Glotfelty and Harold Fromm's *The Ecocriticism Reader: Landmarks in Literary Ecology* in 1996 (Soper and Bradley xx). A number of forerunners in the field were anthologized in *The Ecocriticism Reader*: among them, William Howarth, William Ruekert, and Glen A. Love. Together, they established a sense of urgency that literature and literary critics must take part in the mitigation of human impacts on the environment; that urgency is also a defining characteristic of current ecocriticism.[2]

Themes

Ecocriticism is broad, but it contains a number of reoccurring themes. Glotfelty separates ecocritical readings into three stages that correspond to those in feminist criticism. First, there is the representation or absence of nature in literature. For example, Ruekert discusses the abstract representation of energy in poetry and literature: "poems are a verbal equivalent of fossil fuel (stored energy), but they are a renewable source of energy, coming, as they do, from those ever generative twin matrices, language and imagination" (108). Next, there is nature writing: Love discusses the centrality of

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2. Prominent examples of ecocriticism include Rob Nixon's *Slow Violence and the Environmentalism of the Poor*, Lawrence Buell's *The Environmental Imagination: Thoreau, Nature Writing, and the Formation of American Culture*, and the work of Scott Slovic.

ecocentricism in scholarly studies of nature writing and regional literature (230). Finally,

there are theoretical approaches to the construction of core concepts like species and

wilderness (xxii-xxiv). William Cronon analyzes the cultural significance of dominant

conceptions of wilderness and emphasizes that wilderness is a social construction (69).

Glotfelty's categories are thus useful for understanding the place of a particular critic in

the broader scheme of ecocriticism.

While the essays presented in *The Ecocritical Reader* provide an overview of

ecocriticism, the field has now expanded beyond the parameters identified in the

anthology. Soper and Bradley note that Glotfelty and Fromm's compilation is far from

geographically complete because it is almost entirely American (xxi). Glotfelty claims

that ecocriticism will become international in the future, but Soper and Bradley assert that

Canadian ecocriticism has existed for decades (xxi). For example, in 1971, Northrop Frye

published *The Bush Garden: Essays on the Canadian Imagination*, which contained a

number of influential essays analyzing Canadian constructions of wilderness. Margaret

Atwood followed suit with the publication of *Survival: A Thematic Guide to Canadian*

Literature in 1972. Soper and Bradley argue that contemporary Canadian ecocriticism

continues to address the value and meaning of wilderness, "the close relation of nature

and nation," a "fascination with animals," and "the intersections of political theories and

environmental politics" (xxii-xxiii). For example, Susie O'Brien compares Canadian and

American ecocriticism and argues, "the everyday practices of ecocriticism and

nationalism are radically conjoined, and often difficult to separate" (169) because, among

other issues, "the politics of ecology [are] both shaped and constrained by practical issues

of sovereignty" (172). She addresses the idea of nature/nation that Soper and Bradley

identify as prevalent in Canadian literature. Carrie Dawson addresses the Canadian fascination with animals and the category of nature writing in her analysis of Grey Owl's *Pilgrims of the Wild*. In particular, she explores the concepts of "sympathetic identification" and "strategic self-representation" while discussing "the relationship between and among human and non-human cultures" (388). Finally, Jenny Kerber discusses the "border effect" in Canadian literature, arguing that national borders are social constructs that create "conflict, refuge, and cooperation" (213-14). She addresses the theme of environmental politics, but her analysis is also a theoretical approach to the 'natural' construct of borders. Canadian ecocriticism draws on its American counterpart but has additional preoccupations.

This paper draws on a number of the themes and concerns that Soper, Bradley, and Glotfelty address, which is not surprising because Glotfelty notes that the categories that she lists are fluid (xxii). As decades have passed since the initial formalization of the discipline, it is not necessary to write within her somewhat narrow definition of ecocriticism. Of the themes that Soper and Bradley mention as common in Canadian ecocriticism, I foreground environmental politics because I am interested in externalities that stem from globalization and capitalism, which are innately connected to power.

Conflicts in Conceptualization

Ecocritics have the common goal of discussing literature in relation to the environment, but debates remain. First, there is the difference between a 'scientific' approach to literature, and a 'humanistic' approach to science (Howarth 78). There is also the difference between viewing humans as a part of nature, and viewing humans as outside of nature (Mason 476). A critic's position on these issues influences his or her

ecocritical approach; thus, exploring these debates is valuable because it enables an understanding of these different perspectives.

Some ecocritics advocate a 'scientific' approach to humanistic literature, while some advocate a 'humanistic' approach to science (Howarth 78). Ecocriticism is interdisciplinary because it combines "ecology, ethics, language, and criticism" (Howarth 71). As a result of its interdisciplinary nature, some critics use ecocriticism to dissect scientific texts, while some apply a scientific perspective to the study of literature. Alison Byerly analyses the National Park system using a humanistic approach (52): a tactic like hers "enables an understanding of how the physical world functions – biologically, chemically, ecologically – and how 'science' collects organizes, and disseminates such knowledge" (Mason 478). Conversely, Cynthia Deitering views fiction using the scientific concept of toxicity (196). Critics like Deitering aim "to inflect conventional approaches to humanistic inquiry with scientific knowledge" (Soper and Bradley xiv). They are "not just interested in transferring ecological concepts to the study of literature, but in attempting to see literature inside the context of an ecological vision" (Ruekert 115): Deitering sees literature within the context of environmental pollution that was coming to light in the 1980s. The approaches that Deitering and Byerly take are equally valid, but the scientific approach to humanistic literature is more common.

Another debate is the difference between viewing humans as part of nature, and viewing humans as outside of nature. Travis Mason notes that there are two extremes in ecocriticism: it can "understand[] humans both as vectors of injustices perpetrated by political and economic globalizing powers against the planet and its inhabitants *and* as agents capable of atoning for such injustices," or it can "plac[e] humans within a natural

and cultural world, a world that acknowledges the revolutionary theories of geologic time, of evolution by natural selection, and of non-human agency – a world in short, in which humans, historically, matter very little" (476). Ruekert views humans as integral to the environment because imagination and creativity are, to him, part of the energy flow of the universe (109); on the other hand, Howarth positions humans, and scholars in particular, as exterior viewers of environmental problems who nonetheless have an obligation to become involved in their remediation (69). As in the debate about scientific and humanistic approaches, neither position has more authority than the other; however, the view of humans as part of the environment is more consistent with ecocriticism's goal to move from anthropocentrism to ecocentrism.

This paper is positioned within these current debates in ecocriticism. Instead of analysing scientific writing, I apply elements of ecology and geology, as well as economics and cultural studies, to my study of Nova Scotian literature. In considering human impacts, I position the characters in the novels as integral to the ecosystems in which they live, though they also have agency to inflict damage on the humans and non-humans around them. In doing so, my argument is more ecocentric than literary criticism is typically; however, my approach remains anthropocentric. I agree with Don McKay that it is never possible to entirely escape anthropocentrism: "nature writing [and other literature that incorporates nature] should not be taken to be *avoiding* anthropocentrism, but to be enacting it, thoughtfully" (29). My melded and interdisciplinary ecocritical approach thus takes its cues from a variety of scholars in order to provide a view of Nova Scotian literature that involves environment, economy, and society.

Examples of Canadian Ecocriticism

There are many examples of Canadian ecocriticism: Soper and Bradley's 2013 anthology *Greening the Maple: Canadian Ecocriticism in Context* is just one collection. Despite ecocriticism's growth as a discipline, not every critic considers the economy as well as the environment. Three articles in particular – two of which are from *Greening the Maple* – do consider globalization and capitalism. In doing so, they address the spatial dimensions that Soper and Bradley itemize: "ecocriticism has become at once global and local, simultaneously cosmopolitan, national, regional, and local in its manifestations" (xxiii). A closer reading of Travis Mason, Alison Glassie, and Cheryl Lousley's criticism offers insights that are useful for this paper.

Travis Mason takes an interdisciplinary approach to the relationship between literature and geology. He states that ecocritics typically address ecological aspects of the environment – living organisms – rather than environmental elements like rocks (476). Mason views Don McKay's poetry through the lens of geology in order to consider human "traces" in the wide scope of geologic time (497). He considers human insignificance and the necessity for humbleness in the face of "physical forces bigger and older than humanity" (483); however, Mason does note that "humans are affected by and complicit in" geological processes (483). Overall, Mason suggests that ecocritical analysis should also consider the relationship between humans, literature and environmental processes like geology.

Alison Glassie's article "The Lost Mother? Overfishing and the Discourse of Gender in Morrissey's *Sylvanus Now*" is an interdisciplinary exploration of the ways in which the novel represents the capitalist exploitation of Atlantic cod. Though she does

not take an explicitly ecocritical approach, she incorporates elements of history and economics that are useful to this paper. For example, she considers how industrialization and globalization contributed to the international success of the Atlantic cod industry (24). Glassie compares Donna Morrissey's characterization of the ocean as female with the global exploitation and ultimate collapse of the cod fishery (24). Her "grounding of the gender discourse in scientific fact and history, coupled with the problematic connotations of rape, impotence, and loss of life at sea introduced by doing so make overfishing the wrenching, visceral, and personal issue that every environmental catastrophe should be" (35). Glassie "use[s] the literary arts to help others understand and feel the real consequences of ecological, and therefore economic, ruin and poverty" (22). In connecting Sylvanus's story of human costs of the cod fishery with its ecological detriments, she creates empathy for the environment in order to show the parallels between simultaneous environmental and human struggles associated with the declining cod fishery. Glassie's work suggests that I should look for a similar connection in *No Great Mischief*, *Twenty-Six*, and *The Glace Bay Miners' Museum*.

Finally, Cheryl Lousley explores the politics of environmental knowledge in her article "Knowledge, Power and Place: Environmental Politics in the Fiction of Matt Cohen and David Adams Richards." She argues that "ecocritical analysis should attend not only to representations of nature or environment, but, more fundamentally, to how characters, narrators, and readers are positioned as knowing or not knowing the environments they inhabit and produce" (250). She pays close attention to economics by recognising that "environmental degradation and risk are inseparable from capitalism and other structural inequalities" and she argues that environmental knowledge or lack

thereof contributes to those inequities (248). Finally, Lousley addresses the concept of

risk and asserts, "a key task for ecocriticism is to consider how knowledge of

environmental ills and risks … is staged in contemporary literature" (268). Lousley

argues that the characters in Richards's and Cohen's novels do not recognize that they are

putting the environment at risk, or that the environment poses a risk to human wellbeing

(249). They do not recognize that risk because they do not understand their environment:

"every individual is cut off from knowledge about his or her world and body" (249).

Lousley's study contains the incentive to consider capitalism, environmental knowledge,

and risk.

   Capitalism and Globalization. Coal mining in *No Great Mischief, Twenty-Six,* and

The Glace Bay Miners' Museum impacts the environment, but it is also affects the

economy. Soper and Bradley note in the introduction to *Greening the Maple: Canadian*

Ecocriticism in Context that "the interconnectedness of environments and economies is,

after all, an inescapable aspect of life in the twenty-first century – global climate change

and global capitalism are ineluctable and interrelated phenomena" (xxiii). Several critics

working outside the realm of ecocriticism have considered the implications of

globalization on Atlantic Canada: Ian MacKay, Herb Wyile, and Susan Dodd address it.

Their work can be categorized into two general ideas – the idea of "the Folk," risk, and

remembrance – and yields concepts that are relevant to this paper.

The Folk

Ian McKay discusses cultural commodification in Atlantic Canada. In *The Quest of the Folk*, he argues that urban folklorists in Nova Scotia "constructed the Folk of the countryside as the romantic antithesis to everything they disliked about modern and industrial life" (4). The Folk is a modern construction: cars enabled the middle-class to become mobile during the twentieth century and began to move to the countryside "in pursuit of natural treasure" (9). The middle class was unwittingly part of "aesthetic colonization" in that they projected their own ideals onto the countryside: rural people were seen as a "distinctive culture… isolated from the modern society around them" (9). The idea of the Folk soon became integral to the Nova Scotian economy because it attracted tourism. Despite its innate nostalgia and its romanticization of the antimodern, the Folk is ironically connected to globalization because it resulted from the rise of technology that allowed people to become tourists; it is related to capitalism because the Folk is sold to tourists as a consumable experience.

Most relevant to this project is the fact that McKay excludes mining from the idea of the Folk in Nova Scotia; specifically, he says that "workers and socialists, those deracinated products of the coalfields and cities, could not be true Folk … because in their emphasis on a politics based on class, they violated the vital nucleus of the Folk idea: the essential and unchanging solidarity of traditional society" (12). McKay discusses how the exclusion of mining and other industries from Nova Scotia's self-conception is problematic given their economic prominence (27). He does not include miners in the Folk, but his work is still pertinent because the exclusion is predicated upon the notion that fishers and farmers were part of the Nova Scotian Folk because "they

were rooted to the soil and to the rockbound coast, and lived lives of self-sufficiency

close to nature," while miners are more connected to industrialization and capitalism than

to the environment (26). In my analysis, I agree with McKay that the Folk is problematic

because I see miners as directly connected to the environment and geology in a way that

the Folk does not. In doing so, I align them both with industrialization and capitalism,

and with the environment they rely upon for their livelihoods.

Drawing on McKay, Herb Wyile takes up the idea of The Folk in his book *Anne of Tim Hortons: Globalization and the Reshaping of Atlantic Canadian Literature*. He

notes that Atlantic Canada is framed using "a derogatory view" as "politically, culturally,

and economically parochial" (21-22). Like McKay, Wyile notes that tourism campaigns

are ironically modern when compared to the ideals that they propagate because they

attract visitors from around the world (22); unlike McKay, however, he ties the view to

the broader power relations among provinces that have cost Nova Scotia its economic

prosperity (23). Effectively, Nova Scotia is "selling back to the rest of the country a very

stylized and romanticized version of the underdevelopment in which those more powerful

regions have played a large part" (23). Wyile offers a reminder that I should consider the

influence of economic and ecological inequalities within Canada as well as the broader,

global effects of capitalism.

Risk

In addition to discussing the Folk, Herb Wyile examines risk in the Atlantic

Canadian mining industry. His thesis is that "the energy needs of the wider society, and

the profit requirements of international capital, rely on the physical, social, and economic

sacrifices of labour" (55). Wyile analyses several works of Atlantic Canadian fiction in

order to illustrate the risks that capitalism poses to workers. He discusses short stories by Alistair McLeod that depict characters who are "economic exiles" due to consumer capitalism; despite the risk of death and injury, they must move around the world pursuing their mining careers (58-61). Then he turns to *Twenty-Six* by Leo McKay Jr. and points to the personal and familial struggles that emerged as a result of an economic downturn in the 1980s (67-68). Finally, Wyile discusses mourning and its implications in Lisa Moore's *February*, which depicts the accidental wreck of the oil platform *Ocean Ranger* (75). In relation to this project, Wyile's discussion of risk alerts me to the need to consider the capital's movement in a globalized economic system. As non-renewable resource extraction causes environmental degradation, I consider the impulsive geographical changes that cause coalmines to close and labour to move and the environmental effects of mines move with them.

Remembrance

Susan Dodd discusses remembrance in her book *The Ocean Ranger: Remaking the Promise of Oil*. The book is wide in scope, but the part that is particularly relevant to this paper is her discussion of popular art, performances, and literary works that "expres[s] traumatic memory" of the wreck of the *Ocean Ranger* and counter the narratives that the oil companies popularized in the wake of the disaster (147). Like Wyile, she draws upon *February* by Lisa Moore, arguing that it "conveys feeling, affect, and makes no claim to accurately report on real events" (117). It tries to "move out of a more immediate traumatic past and towards long-term remembrance" for the sake of cultural continuity, community, and an unnostalgic view of the past (126). Though the *Ocean Ranger* was a maritime disaster, the implications of literary work in recovering

from trauma are important to this paper because McLeod, McKay, and Currie each depict

fatalities and trauma in their novels. In my investigation, I look for the environmental

traumas of capitalism as well as social traumas and consider whether these books attempt

to move towards remembrance.

Methods

For centuries, mining has had serious environmental and social impacts in Nova

Scotia; these effects are depicted prominently in contemporary Nova Scotian literature.

Following Alison Glassie, who argues that literature allows readers to have a personal

connection with environmental issues, I ask three questions: how are social and

environmental externalities of coal mining depicted in *No Great Mischief* by Alistair

MacLeod, *Twenty-Six* by Leo McKay Jr., and *The Glace Bay Miner's Museum* by

Sheldon Currie? Furthermore, do the externalities depicted in these works create empathy

for the environment? If so, how, and what is the significance of the altruistic action they

advocate?

To answer my research questions, I take an ecocritical approach my three primary

texts. First, I determine how social and environmental externalities are portrayed; to do

so, I survey existing social science and economics literature to determine the social and

environmental externalities of coal mining, and I uncover the depictions of these

externalities in the primary texts. I follow the examples of Travis Mason and Don McKay

and take a self-consciously anthropocentric view. I consider the externalities in the scope

of geologic time, and the connections between the characters and geologic processes. It is

important to consider geologic time because of the nature of coal itself: it has taken 350

million years to form but humans have depleted within three centuries ("How Coal is

Formed"). I also consider the externalities based on a shorter 'human' timescale, and address globalization, risk, and power dynamics; the key critics that I draw upon are Cheryl Lousley, Herb Wyile, and Ian McKay. Perhaps social externalities like fatalities are not as impactful when seen in relation to the millions of years that coal took to form, while the environmental implications of coal extraction might have larger significance. I connect social and environmental externalities to two concepts of sustainability: cultural and environmental.

I follow the examples of Alison Glassie and Susanne Keen to determine whether connections between social and environmental externalities create empathy for the environment. According to Glassie's work on *Sylvanus Now*, if the human and non-human impacts of coal mining are characterized similarly, they could create a deeper feeling among readers for ecological systems. Furthermore, as Keen argues that empathy creates altruistic action and that the connections between social and environmental externalities do create a deeper feeling, I look for evidence that they motivate readers to take action. However, I also consider Derek Attridge's work; he says that each reading is unique and cannot be compared: "we experience literary works less as objects than as events - and events that can be repeated over and over again and yet never seem exactly the same" (2). Finally, I draw upon Susan Dodd's work on remembrance to consider these books as memorials. Ultimately, my ecocritical analysis determines the manner in which externalities are depicted in *No Great Mischief, Twenty-Six,* and *The Glace Bay Miners' Museum,* whether McLeod, McKay Jr., and Currie's depictions of coal mining's externalities generate empathy, and whether the feelings that they create motivate positive environmental change in society.

How are externalities depicted?

Many have difficulty reconciling the benefits and the costs of mining. In *Coal Black Heart*, John DeMont struggles to find the balance between positive and negative externalities of coal, though he does not use the term "externality." DeMont credits mining with

> lift[ing] Pictou County - and most of the rest of [Nova Scotia] - out of its pioneer existence… Without coal, whole sections of Nova Scotia might not have been settled at all, or at least might have been settled more slowly. Without coal, Nova Scotia might still be just a collection of scattered farms and fishing villages. (6-12)

Despite these benefits, DeMont also exclaims:

> But the trade-offs! Jesus, the trade-offs. All those names on the miners' monuments in Westville, New Waterford, and Springhill. All those old men coughing their lungs out at Cape Breton Regional Hospital. All those shattered communities, devastated wives and fatherless children. All those economies locked in the last century even as the new one begins. (12)

His struggle with "trade-offs" (12) is reckoned with in the novels that this project addresses. A careful consideration of the trade-offs in those texts, including both positive and negative externalities, is necessary to comprehend how externalities are depicted.

Positive Externalities. Though negative externalities are the primary focus of this project, there are also positive externalities of mining. The economist James Meade described one of the best-known examples of a positive externality: beekeepers who do not receive the full benefit of their production costs for honey because their bees pollinate

neighboring fields and benefit the farmers at no cost (qtd. in Johnson 37). Meade suggested that the government should tax the farmers and subsidize the beekeepers in order that all the costs and benefits are internalized in the price (qtd. in Johnson 37). Economic benefits are the positive externalities of mining most often mentioned. The most direct benefit is the coal itself, because it is used to generate electricity, but additional positive externalities could include "buying goods and services, and providing direct and indirect jobs" ("Tentative Donkin"). Mining coal "could also help reduce electricity costs for Nova Scotians and lessen the need for imported coal" ("Tentative Donkin"). According to Meade's model, the government should tax those who experience the benefit and subsidize those who create it; Nova Scotia has subsidized coal production and transportation with millions of dollars, such as "a total of $12 million in federal and provincial funding, loan guarantees and interest rate subsidies" for the developers of the Westray Mine (DeMont 13). Coal mining, and mining in general, has positive impacts on communities whose economies are stimulated.

The novels included in this project depict the benefits of mining; economic benefits, in particular, are used as justification for the mining projects central to the narratives. For example, in *The Glace Bay Miners' Museum*, coal mining employs nearly everyone in the insular town of Reserve Mines near Glace Bay in Cape Breton, and the protagonist Margaret's grandmother Morag indicates that coal mining was more profitable for her husband than farming (Currie 103-104). Margaret's father also says to her mother that he "can make more money today in the pit… than [he] can save on vegetables if [he] work[s] every day of the vacation in the garden" (34). When Neil becomes Margaret's fiancé, he goes back to the pit so that they can be married, buy land,

and support themselves (23). From a personal perspective, the economic benefits allow the characters to earn a steady income; from a narratological perspective, the economic benefits contribute to the conflict between pre-industrialization and industrialization. As a result, economic benefits drive the novel's plot.

Twenty-Six also depicts economic benefits as an essential plot element because they illustrate the desperate economic circumstances of Albion Mines. The novel, which centers on a family involved in a devastating fictional version of the Westray Mining Disaster, depicts the inability of the family's two brothers, Arvel and Ziv, to get well-paid, stable work for which they are qualified. The novel references "the glory days" when coal production was plentiful in Albion Mines (17) and the advancement that the town experienced as a result, including the construction of the houses on Red Row (256). The contrast between the benefits of mining that the town had seen, Ziv's current underemployment (222), and Arvel's chronic unemployment (243) highlights how reopening the mines could benefit employment and community development. The positive externalities in Twenty-Six are justification for reopening the mine, which ultimately leads to the disaster, but they also illustrate the changing economic circumstances in the town.

In addition to economic benefits, there is a further positive externality that the novels explore: a sense of pride that is gained from physical labour. In Coal Black Heart, John DeMont notes that miners are proud of their work: "they talk mostly in positive terms of the camaraderie of soldiers, professional athletes and other men who have shared intense, dangerous work; of the professionalism that comes from doing a difficult job well" (16). In Twenty-Six, Arvel and Ziv's father, Ennis, has a similar attitude. He does

not understand his sons because he does not see their jobs as adequate; he particularly does not like Ziv's job at Zellers because the workers are not organizing themselves into a union (McKay Jr. 264). Having worked in manufacturing, Ennis expects his value of hard, physical work to be reflected in his sons, and he does not understand why "they [are] in their middle twenties" while "he started his working life at sixteen" (262). When Ziv and Arvel are hired at Eastyard, Ennis is ecstatic and extremely proud that his sons will have "good jobs" and be doing "real work" (261-262). According to Ennis's value system there is fulfillment in the physical labour of mining.

Janice Kulyk Keefer notes that the value of hard physical labour that is present in *Twenty-Six* also exists strongly in *No Great Mischief,* Alistair MacLeod's masterpiece novel that exposes the struggle of the MacDonald family from Cape Breton as they engage with their heritage and with industrialization. Keefer says, "[i]n Alistair MacLeod's writing, labour and lyrical are intertwined, not antithetical: his celebration and lamentation of the disappearance of the traditional forms of masculine labour indigenous to Nova Scotia prove to be the apotheosis of his elegiac vision, as we find in his long-awaited novel, *No Great Mischief"* (73). The uranium miners continue to have "the profound dignity and heroism of traditional forms of human labour" (Keefer 73) while Alexander, the orthodontist, has a "profession [that] represents… the farthest possible remove from honest and authentic labour" (80). Positive externalities of mining are therefore not solely economic, but extend to the pride of physical work.

Pride contributes to each novel differently. In *Twenty-Six* the difference between Ennis's pride and his sons' indifference indicates the changing economic and social circumstances of Albion Mines. As the economy fluctuates, so does society's attitude

towards work; that change correlates with the decline of industry in the town, which shows that though mining has costs as well as benefits, a lack of industry can also be very detrimental. Alternatively, in *No Great Mischief,* pride in work creates a sense of community; for example, Alexander is compelled to join his brothers' mining crew when his cousin is killed (MacLeod 131). His reason for joining is what his grandmother calls being "loyal to his blood" (35), even though he is studying to become an orthodontist and is not a miner by trade (103). Alexander's actions show that physical labour contributes to a sense of cohesion when it is completed in a group; consider the Cape Breton miners' shared cultural background and the novel shows that it is not only shared history that creates community, but also shared actions. Pride in physical labour emphasizes the socio-cultural importance of work, for it contributes to the configuration and cohesion of the families in the novels.

Finally, pride of work has a shared effect in *Twenty-Six* and *No Great Mischief*: it leads to respect for the characters and their occupational choices. McKay Jr. frequently foreshadows the mine explosion; for example, "the entire drift collapse[s] into itself when Arvel is on shift but does not injure anyone (73). MacLeod and McKay Jr. unabashedly show smaller health impacts of mining that foreshadow bigger impacts to come; in *No Great Mischief*, the miners "check in [their] miner's lamps to the old man with the missing fingers and silicosis who could no longer work underground" (MacLeod 142) and they spit "gobs of silica-coated phlegm" (MacLeod 205) and in *Twenty-Six,* Ziv's grandfather suffers from chronic health problems like "violent convulsions that lead to unconsciousness" (McKay Jr. 68). As the books progress, the authors encourage pathos for the characters who experience negative externalities because the sense of respect for

physical labour that Ennis holds and Arvel seeks in *Twenty-Six* and that the MacDonalds have in *No Great Mischief* shows that their jobs hold esteem in their communities. The esteem could correlate with the problematic notion that Ian McKay labels "The Folk" (4). I will address this aspect in more detail later in this project, but even if the novels do play to that stereotype, the characters' pride shows that they are not just pitiable personages whom the mine affects terribly, but people engaged in broader, frequently troubling, economic and social systems that have benefits as well as costs.

Negative Externalities. Despite the benefits of mining, the negative externalities tend to outweigh the positives. A well-known example of a negative externality is air pollution from cars, because the cost of cleaning the air is not included in the price of gasoline, so society must pay for the lack of air quality and later, the cleanup ("Externalities of Air Pollution"). The novels in this study depict coal mining and uranium mining, but the social costs of coal mining and coal-fired electricity generation are addressed most prominently in social science and economics literature, though the impacts are similar. A group of scientists from Harvard University, lead by Paul Epstein, did a life cycle analysis in 2011 in which they considered the negative externalities at each stage of coal's production in the Appalachia Region of the United States; they concluded that "the life cycle effects of coal and the waste stream generated are costing the U.S. public a third to over one half of a trillion dollars annually" (73). Researchers from the environmental firm GPI Atlantic and Dalhousie University did an "analysis of the damage costs associated with Nova Scotia's energy sector in 2000" that, based upon "only air emissions and greenhouse gases… resulted in a low estimate of over $444 million, and a high estimate of almost $4 billion" cost to society (Parmenter, Cain, and

Lipp 2). While the GPI Atlantic study included all methods of energy production in the province, it is important to remember that as of 2006, 80% of Nova Scotia's energy was generated from coal, so the majority of these emissions were a result of burning coal ("Thermal Electricity"). The harms of coal mining and coal-fired electricity generation have additional costs far beyond the price that Nova Scotians pay for their electricity. Importantly, for *No Great Mischief*, which depicts uranium mining rather than coal mining, uranium has similar health and environmental impacts during the extraction phase, even though it is not burned in the same way as coal to produce electricity (Dewar, Harvey, and Vakil 469).

The numbers exhibited in life cycle analyses and cost accounting reports are shockingly large, but they derive from very real social and environmental harms. Epstein et al. include several specific externalities in their larger number. They divide the impacts into four categories: economic, human health, environment, and other; they summarize the impacts in Table 1 (Epstein et al. 78-79). Parmenter, Cain and Lipp only include air pollution and greenhouse gas emissions in their analysis but acknowledge "energy affordability, reliability, security, resource costs, subsidies, land use, and land and water contamination" as additional "cost impacts" (2). The costs that Parmenter, Cain and Lipp and Epstein et al. list impersonally are largely the costs that DeMont worries about at a more human level, and the reason that he states, "[c]oal has a lot to answer for in Nova Scotia" (12).

Table 1

Excerpt from the costs Epstein et al. include in accounting for the full life cycle

cost of coal in the Appalachia Region of the United States, including only those

costs from coal's mining stage.

Economic	Human health	Environment	Other
Opportunity costs of bypassing other types of economic development (especially for MTR mining	Workplace fatalities and injuries of coal miners	Destruction of local habitat and biodiversity to develop mine site	Infrastructure damage due to mudslides following MTR
Federal and state subsidies of coal industry	Morbidity and mortality of mine workers resulting from air pollution (e.g. black lung, silicosis)	Methane emissions from coal leading to climate change.	Damage to surrounding infrastructure from subsidience
Economic boom and bust cycle in coal mining communities	Increased mortality and morbidity in coal communities due to mining pollution	Loss of habitat and streams from valley fill (MTR)	Damages to buildings and other infrastructure due to mine blasting
Cost of coal industry litigation	Increased morbidity and mortality due to increased particulates in communities proximate to MTR mining	Acid mine drainage	Loss of recreation availability in coal mining communities
Damage to farmland and crops resulting from coal mining pollution	Hospitalization costs resulting from increased morbidity in coal communities	Incomplete reclamation following mine use	Population losses in abandoned coal-mining communities
Loss of income from small scale forest gathering and farming (e.g. wild ginseng, mushrooms) due to habitat loss	Local of health impacts of heavy metals in coal slurry	Water pollution from runoff and waste spills	

Loss of tourism income	Health impacts resulting from coal slurry spills and water contamination	Remaining damage from abandoned mine lands	
Lost land required for waste disposal	Threats remaining from abandoned mine lands; direct trauma from loose boulders and felled trees	Air pollution due to increased particulates from MTR mining	
Lower property values for homeowners	Mental health impacts		
Decrease in mining jobs in MTR mining areas	Dental health impacts reported, possibly from heavy metals		
	Fungal growth after flooding		

Source: Epstein, Paul R., Jonathan J. Buonocore, Kevin Eckerle, Michael Hendryx,

Benjamin M. Stout III, Richard Heinberg, Richard W. Clapp, Beverly May, Nancy

L. Reinhart, Melissa M. Ahern, Samir K. Doshi, and Leslie Glustrom. "Full cost

accounting for the life cycle of coal. *Ann. N.Y. Acad. Sci.* 1219 (2011): 73-98. Print.

Many negative externalities of mining that Epstein et al. and Parmenter, Cain and

Lipp discuss are depicted in the novels in this project, some more prominently than

others. Less significant, for example, is "damage to surrounding infrastructure from

subsidence" (Epstein et al. 78-79), which is mentioned in passing in *Twenty-Six* when

there is a tremor from the mine explosion and Ziv thinks it might be "[s]ubsidence, a fall

of earth from the cave-in of an abandoned mine shaft [that] sometimes swallowed up a

house" (McKay Jr. 182). In this instance, subsidence acts as a metaphor for the grief and

turmoil that subsumes Ziv's family in the wake of the explosion, rather than as an

externality that plays a larger role in the novel. However, there are several other negative

externalities that are much more conspicuously displayed. A close reading of these costs reveals that they function in several different, yet sometimes related, ways: as a consequence of modernity, as a disruption to family and community cohesion, and as a catalyst for social and political change.

First, negative externalities are shown as a consequence of modernity; this depiction is most prominent in *Twenty-Six* and *The Glace Bay Miner's Museum*. *Twenty-Six* includes the externality that Epstein et al. call the "economic boom and bust cycle in coal mining communities" (78-79). The cycles are shown when McKay Jr. compares the town where Ziv goes to university with Albion Mines: "growth in the university town had taken place along with the campus, growth in the towns of Pictou County had come in the waves of the boom-and-bust cycle of capitalism" (McKay Jr. 127). He elaborates on the history of the area, saying, "the coal boom of the industrial revolution… had swollen Pictou County from a few farms and some trees into an industrial centre, a cluster of small blue collar towns… But by the late sixties and early seventies, when Bundy and Ziv had been children, there were only one or two pits still running" (McKay Jr. 16-17). Similarly, in *The Glace Bay Miners' Museum*, Margaret's grandmother Morag describes how working in the mine was a junction between farming and industrialization (Currie 103-104). As a result, the novels show externalities as the result of modernity; the presence or absence of externalities delineates the pre-industrial, industrial, and post-industrial periods that frame the plot and its conflicts.

Next, negative externalities are shown as a disruption to family cohesion. The externalities that most interrupt families in the novels are those that Epstein et al. associate with human health. Two impacts on human health are particularly prominent:

"workplace fatalities and injuries of coal miners" and "mental health impacts" (Epstein et al. 78-79). In *No Great Mischief*, the red-haired Alexander MacDonald dies in a uranium mine when "[t]he ore bucket [] hit[s] him in the shaft's bottom" (119). The red-haired Alexander's death contributes to the events that lead to Calum's incarceration for murder and the severe alcoholism that leads the narrator Alexander to call him "his blood-stained brother" (MacLeod 183). It also leads to the narrator Alexander's return to orthodontistry and the city; these events dissolve the MacDonalds' mining crew and effectively, their family unit. In *The Glace Bay Miners' Museum*, Margaret's "father [gets] killed in the pit… [Her] brother too" (Currie 9) and later her other brother and her husband "both [get] killed the same minute" (111). Their deaths lead to her struggle to reconcile the physical harms of the mine with their benefits, which motivates her to take organs from her loved ones to pickle for her museum (Currie 112-115); when she is released from psychiatric hospital, her mother, who is her final remaining family member, rejects her (114-115). Finally, In *Twenty-Six*, twenty-six miners die in a coal mine explosion in Pictou County and there are mentions of other deaths, such as "Bundy's father [who] had been killed in the pit" (McKay Jr. 16). Dunya, whose son Arvel dies in the explosion, plunges into desperate grief, throws out her furniture, and "cover[s] [the walls] all in white, drawing up a sheet over the inside of the house" (McKay Jr. 239); her husband Ennis and other son Ziv must also reckon with Arvel's death and find a way to exist as a family without him. Negative externalities, particularly deaths, injuries, and struggles with mental health, impact family cohesion in all three novels.

In addition to disrupting family cohesion, negative externalities impact community unity. Besides deaths and injuries, which could affect communities as well as

families, the novels include "population losses in abandoned coal mine communities" (Epstein et al. 78-79). In *Twenty-Six,* young people leave Albion Mines to go "off to university and either [do not] come back, or come back changed and disconnected" (McKay Jr. 41); Meta, for example, goes on to work in Japan after university (47). In *No Great Mischief*, Alexander's grandmother tells him how midway through her life,

> the men began to go away. At first to work in the woods during the winter. To
>
> mainland Nova Scotia, and then to New Brunswick, to the Miramachi, and then to
>
> the state of Maine… Later a lot of people went to the hard-rock mines. All over
>
> Canada and the States. To South America and all those places. (268)

Her grandsons' crew is part of the hard-rock mining that takes people from Cape Breton all over the world (269). The pull of jobs and prosperity away from small mining communities thus interrupts community cohesion.

Finally, negative externalities are shown as a catalyst for social and political change. Issues that characters reckon with in the novels as a result of negative externalities are out-migration from small communities, worker safety and risk management, and unions and the labour movement. For example, in *Twenty-Six*, characters want the mine to reopen because of the "economic boom and bust cycle in coal mining communities" (Epstein et al.78-79); once there is an explosion and negligence is revealed as the cause, there is a government inquiry that shows the "cost of coal industry litigation" (Epstein et al. 78-79) but also the necessity for better mine safety measures. The mine managers wanted work to continue even though they knew that "if there's a gas ignition, the presence of [coal] dust will turn a small rumble into a giant explosion" (McKay Jr. 312). In *The Glace Bay Miners' Museum*, the museum that Margaret creates

out of her loved ones' pickled body parts is also an effort to create a change and raise

awareness about what the publisher calls "the human price of coal" (Caplan 118).

Twenty-Six and *The Glace Bay Miners' Museum* also each show how unions could solve

the mine workers' poor representation and the mine managers' exploitation of their

labour. In *Twenty-Six,* the miners' attempts at organizing fail even though they are urged

to "all quit together" (McKay Jr. 78) because the alternative is to "wait to die" (77); they

work in "a methane contaminated atmosphere" that is ready to explode (90). In *The*

Glace Bay Miners' Museum, there is plenty of "union talk, strike talk" (81) and

eventually they strike (99). The externalities in the novels, particularly the deaths and

injuries, motivate characters to raise awareness and attempt to reduce the severity of the

externalities' effects.

 Environmental Sustainability. As is evident in my previous discussion, there is

little reference to environmental damages in the novels. Environmental externalities are

those that are least often included; the only clear example among the three novels is the

"destruction of local habitat and biodiversity to develop [the] the mine site" in *No Great*

Mischief (Epstein et al. 78-79). The narrator describes how in order to construct the mine

"crews of labourers hacked and slashed at the forest and blasted at the surface rock in an

attempt to establish footings for the foundations of new buildings" (MacLeod 136). In

this passage, the habitats that existed before the mine are destroyed. In *Twenty-Six,*

methane emissions, another environmental cost, are discussed; however, methane is

shown as a safety risk rather than a factor that "lead[s] to climate change" (Epstein et al.

78-79). Land degradation is included as an environmental cost, while methane emissions

are included as a workplace hazard.

Whether or not mining is explicitly framed as an environmental problem, it remains a sustainability issue outside of fiction because geological resources are a non-renewable, yet humans deplete them. Barbara Freese describes how coal was formed during "the Carbiniferous period – from roughly 360 to 290 million years ago" (17):

> Many of the plants of the Carboniferous period ended up as coal because they failed to decay the way plants usually do. Normally, when a plant dies, oxygen penetrates its cells and decomposes it (mainly into carbon dioxide and water). As the dense mass of Carboniferous plants died, though, they often fell into oxygen poor water or mud, or were covered by other dead plants or sediments… Because oxygen could not reach the buried plants and do its disassembly work, the plants only partly decayed, leaving behind black carbon. The spongy mass of carbon-rich plant material first became peat. After being squeezed and slow-cooked by the tremendous pressure and heat of geological forces, the peat eventually hardened into coal. (20)

Coal took millions of years to form, but humans have depleted coal resources significantly since they began to mine it in the 1200s (Freese 21). Uranium has an even longer history because it "was produced in one or more supernovae over 6 billion years ago" and "later became enriched in the continental crust" ("The Cosmic Origins of Uranium"). The disconnect between the rate at which geological resources like coal and uranium are formed and the rate at which humans use them is a sustainability problem that is evident when Travis Mason's work is considered because he reflects on human insignificance in the face of "physical forces bigger and older than humanity" (483).

Human lives are short compared to the millennia it takes coal to form, and so an externality like a death or an injury seems very small. However, like Mason says, humans are "affected by and complicit in" geological processes (483), so human depletion of coal and uranium is very significant because we have used nonrenewable resources that will take millennia to form again, or that might not ever form again. Mining is unsustainable, and so are its associated externalities because geological resources are nonrenewable.

Externalities are also unsustainable from an energy generation perspective. They are a market failure, which is "a market's inability to create maximum efficiency, by not properly providing goods or services to consumers, not efficiently organizing production, or not serving the public interest" ("Market Failure"). They prevent the producers and consumers from paying for damages to the environment and human wellbeing, which society must pay instead ("Market Failure"). Epstein et al. note that, for coal in the United States, "accounting for the damages conservatively doubles to triples the price of electricity from coal per kWh generated, making wind, solar, and other forms of nonfossil fuel power generation, along with investments in efficiency and electricity conservation methods, economically competitive" (73). Presuming that the case is similar in Canada, if renewable energy sources were less expensive than coal, governments would have financial impetus to switch their sources, and their subsequent electricity generation would release fewer greenhouse gasses into the atmosphere because renewables release far fewer greenhouse gases than coal: on average, wind releases 888 tonnes CO_2/GWh and coal releases 26 888 tonnes CO_2/GWh (World Nuclear Association 6). Greenhouse gases cause climate change ("Greenhouse Gases"), but externalities serve as an artificial cost barrier that means governments continue to burn coal.

Cultural Sustainability. There is a further externality and sustainability issue that I have not yet mentioned: cultural diversity. Specifically, Currie and MacLeod depict Gaels who are a linguistic minority, for though "[t]hirty percent of Nova Scotians claim Scottish Gaelic heritage as their birthright, representing the largest ethnic group of the province" ("Nova Scotian Gaelic"), only 1,275 speakers remained in Nova Scotia in 2011 ("NHS Profile, 2011"). According to Robert Dunbar, "the language is not only spoken by fewer and fewer people, but is also used less and less frequently for fewer and fewer daily activities" and often only by those who are "elderly or in late middle age" (2). *No Great Mischief* and *The Glace Bay Miners' Museum* are set in the mid-twentieth century, midway through Gaelic's decline. Gaelic forms a cultural backdrop to MacLeod and Currie's plots, is central to characters' identities, and serves as a thread that connects them to their history and surroundings. Currie and MacLeod each show what Michael Newton calls "indications that Gaeldom might atrophy into a cipher for Anglo-American global culture" (14). They see the mine and industrialization as detrimental to cultural diversity, but they do not reject modernity entirely. Instead, they depict characters that are "syncretists" who "try to adapt and accommodate various aspects of the new order into their culture" (Newton 23). MacLeod and Currie represent the tension between Gaels' heritage and future, and show that culture and externalities are tied because they recognize that characters participate simultaneously in their customs and modernity.

Cultural diversity is an important concept in sustainability, and UNESCO discusses it in detail. The organization positions cultural diversity as necessary for sustainability because "respect for biological diversity, which is a founding element of sustainability, implies respect for human diversity" (UNESCO 7). Minority culture like

that of the Gaels can provide society with another set "of representations, knowledge, and practices" that can help to solve sustainability issues because they are "source[s] of innovation, creativity, and exchange" (UNESCO 7). Helena Norberg-Hodge also addresses cultural diversity, saying, "cultural diversity is as important as diversity in the natural world, and, in fact, follows directly from it. Traditional cultures mirrored their particular environments, deriving their food, clothing, and shelter primarily from local resources" (182-183). Michael Newton describes how Gaels in Scotland "achiev[ed] an ecological balance… because of a simple approach to life, adapted to the local environment, that developed organically over many generations through continual observation of nature and social adjustments" (171). Their environmental knowledge allowed them to maintain biodiversity in "fragile human-made ecosystem[s]" such as the *machair,* "sandy grasslands" (Newton 183). In Cape Breton, too, Gaels lived lightly on the land: they "did not farm more than was necessary" (Newton 184); even Alexander, the protagonist in *No Great Mischief* sees the connection: he describes how Gaels "evolved differently and knew their land" (236) because "they were alone with their landscape for a long, long time" (269). Gaelic innovations and land management practices are valuable even though they did not develop directly from "a love for nature and a desire for sustainability" (Newton 171). They are worthwhile to preserve because they stem from survival and evolution rather than rapid innovation. As with other minority cultures with equally effective environmental planning, cultural diversity that includes Gaels can aid environmental sustainability.

Cultural diversity may seem unrelated to an economic concept like externalities, but they are related because of their mutual association with sustainability. Any damage

that mining might cause to a minority culture is a negative externality because it would impact cultural diversity, and thus social and environmental sustainability. I recognize that industrialization brought immigrants from many different cultures to Nova Scotia; *Twenty-Six* mentions, for example, "the Poles, Ukrainians, Belgians, and other European immigrant families" that settled in Albion Mines (McKay Jr. 347). However, the other two novels focus specifically on the impact of the mine on Gaelic culture. The focus on Gaelic frames their view of industrialization and shows that cultural sustainability and externalities are intertwined.

With cultural sustainability in mind, the first difference between Currie and MacLeod is that Currie is primarily concerned with cultural transmission, while MacLeod is not primarily focused on it. Currie includes four generations of Margaret's family, each with a different level of Gaelic. Her great-grandparents are Gaelic speakers, and when Margaret's grandmother Morag decides to move to Reserve Mines, she is warned to "keep [her] God, [her] tongue, [her] music and get some land" (Currie 103). Morag is a fluent speaker and she is also relatively literate in Gaelic: the first thing she writes in her notebook is "'Tha an là blàth an diugh, Morag,' and, 'Tha, ach bha e fuar gu lèor an dé,' and 'Tha, agus fliuch'" (Currie 101). There are two small grammatical errors - "Morag" should be "*a' Mhòrag*" in the first sentence and the verb in the final sentence should be in past tense: "*Bha, agus fliuch*" (Stirling) – and if they are corrected, the conversation is trivial: "It is warm today, Morag" and, "It is, and it was cold enough yesterday" and "It was, and wet." However, barring the two errors, the written grammar is correct. Charles Dunn writes, "one of the first Presbyterian missionaries to travel among the Highland settlers of Cape Breton estimated in the eighteen-thirties that not more than one-fifth of

the heads of families could read" (36). *The Glace Bay Miners' Museum* is set over a hundred years later in the 1950s and since Gaelic was not taught in schools, so Morag's literacy is evidence of her proficiency in the language. Her husband is also orally fluent - he "couldn't speak a word of English till he went to school" (Currie 30) - but he is not literate in his first language. When he writes song requests, his Gaelic spelling is miserable for it is chicken-scratch that is phonetically English: "Va me nday Ben Doran"(Currie 14) is actually "Bha Mi 'N De' M Bein Dobhrain" or "Yesterday I Was on Ben Doran" (D. MacLeod 64) and "Falte go ferrin ar balech in eysgich" (Currie 14) is actually "Fàilte gu fearann air balaich an iasgaich" or "Welcome ashore the lads of the fishing" (Moireasdan). His daughter, Margaret's mother, does not have any Gaelic at all: "[w]hen she heard people speak it she thought they were Eyetalians" (Currie 30). Finally, Margaret is almost entirely disconnected from her culture: though her grandfather who lives with her knows many songs in Gaelic, when Neil pulls out his bagpipes, she remarks, "I never seen bagpipes before" (Currie 8) and she calls Gaelic "a strange language" (53). However, she does retain Gaelic phrasing in English; for example, she says that her visiting relatives' "English talk had this Gaelic on it" (Currie 47), which is similar to the grammatical structure in Gaelic (Stirling). The MacNeils' level of oral fluency and written literacy deceases over time because of a break in cultural transmission, though traces of the language remain.

Currie shows the cause of the break in cultural transmission: the mine and its associated externalities. While Gaelic is simply disallowed in the mine – Neil is fired because he "wouldn't talk English to the foreman" (Currie 11) - the externality that most affects transmission within the MacNeil family is "morbidity and mortality of mine

workers resulting from air pollution (e.g. black lung, silicosis)" (Epstein et al. 78-79). Black lung prevents Margaret's grandfather from passing on his culture: he "can't breathe, he can't talk, he can't walk" because of the disease (Currie 19).[3] He cannot speak his language or sing traditional songs, and he cannot even write them down properly to request them. The mine is a physical block that affects health, and thus the ability of Margaret's grandfather to pass on his traditions.

A further externality that prevents cultural transmission is the migration from country to mining town. When Morag moves to Reserve Mines to marry her husband, they farm part-time and mine part-time to supplement their income; then, her husband decides to give up farming to mine full-time because it is more profitable (Currie 103-4). Consequently, Morag sees how he stops speaking in Gaelic to his friends and instead speaks "in English about how great it is to work in a hole in the ground" (Currie 104). Later, she sees that Gaelic is declining significantly in the town, and chooses to write in English in her notebooks "for fear… that soon enough there'll be not a soul in Reserve Mines or anywhere else that would read it in Gaelic" (101). The move from farm to mine is the tipping point at which Gaelic begins its decline among the MacNeils.

Like Currie, MacLeod is concerned with migration, but primarily as a part of a repetitive social history tied to "population losses in abandoned coal-mining communities" (Epstein et al. 78-79) rather than as a detriment to intergenerational cultural transmission. David Williams notes that *No Great Mischief* is a reenactment of

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3. Black lung, or coal workers' pneumonoconiosis, "describ[es] a preventable, occupational lung disease that is contracted by prolonged breathing of coal mine dust" (United Mine Workers of America) while silicosis is "a chronic lung disease caused by breathing in tiny bits of silica dust" ("Understanding Silicosis").

the Battle of the Plains of Abraham, the Battle of Culloden and the Highland Clearances (43); these events destroyed the traditional clan structure and evicted Highland tenants from their land, causing many to immigrate to Cape Breton (Dunn 11). According to Williams, the plight of the MacDonald family, who move around the world for work, shows that "nothing can change the reality of the Highland Clearances and the economic migration [away] from Cape Breton" (55). The lack of economic opportunities in Cape Breton and the pull of the uranium mines in Ontario mirror century-old events and persecutions that evicted Gaels from their land in Scotland and sent them overseas. Mining participates in the reenactment and causes one community to be abandoned for another.

The Gaels' migration from Scotland to Cape Breton and then on to Ontario is reinforced throughout the novel in many small ways. For example, the narrator Alexander is nicknamed "*[g]ille bhig ruaidh*" or "little red-haired boy" (MacLeod 8) just as his ancestor who immigrated to Cape Breton was named "*Calum Ruadh*" or "red-haired Calum" (11). Alexander says that he "will be fifty-five when the century closes" (17), which means he was born in 1945, 200 years after the Highland Clearances that sent his family to Cape Breton. In addition, *Calum Ruadh* "lived to be one hundred and ten years old; fifty-five in Scotland and a second fifty five 'in the land across the sea'" (27). In another scene, Alexander's Granddad finds out that another of his grandsons, "the red-haired Alexander MacDonald," has died in the mine and swears, "Goddamn it once again" (119-120). There is also the American cousin Alexander who symbolically wears "a Celtic ring – the never-ending circle" (223). Each of these small observations point to the history that David Williams notes, but also shows that it is repeating.

Natural imagery reinforces the miners' relocation. Geese are a motif that reoccurs three times: the first two instances are when Alexander's grandfather is telling him the story of Calum Ruaidh's emigration while they are chopping wood: "the geese [are] winging northward, flying over the still iced-in rivers and lakes" (24) and "[a]s I gathered the kindlings that fell from his axe, another V of geese flew north" (26). The final instance is after Calum kills a man:

> [w]hen the Canada geese fly north in the spring, there is a leader who points the way, a leader at the apex of the V as the formation moves across the land. Those who follow must believe that the leader is doing the best he can, but there is no guarantee that all journeys will end in salvation for everyone involved. (260)

Migrating geese are like migrating people. Just as Alexander's ancestors relocated, so do the geese; just as Calum Ruaidh led his family to Cape Breton, so Calum leads his family to Ontario. That "there is no guarantee that all journeys will end in salvation for everyone involved" is relevant to the immediate plot because Calum has just killed someone, but it is also relevant to the plot more generally because modernity does not "end in salvation" for all the Gaels involved (260). The geese are used for both stages in the MacDonald's journey – Scotland to Cape Breton and Cape Breton to Ontario – so they emphasize the repetitiveness of the moving process and its troubling ending.

Migration also emphasizes the MacDonalds' Gaelic history. After noting the geese's presence whilst helping his grandfather, Alexander says, "it was almost as if one could hear the song and regulated 'whoosh' of their grasping powerful, outstretched wings" (26). This description is similar to a Gaelic social event called a milling frolic.

The Leach Collection at Memorial University of Newfoundland describes milling thus:

> Milling, or Waulking as it is known in Scotland, was a method of fulling
> newly woven cloth, shrinking the nap so that the cloth might be warmer
> when made into clothing or blankets. The cloth was first sewn at the ends
> so as to create a circle, then placed on a wooden table and dampened with
> a mixture of soap and water. As many as twelve men and women might sit
> around the table and with their hands, beat the cloth to the rhythm of a
> song… Although the structure of milling songs may vary, as well as styles
> of beating the cloth and participation, one aspect remains constant and
> serves as the defining characteristic of the genre, that is the solo
> presentation of the verses and group participation in the chorus. (n.p.)

MacLeod's geese are described as if they are participating in a milling frolic: the "songs" are the milling songs, the "whoosh" is the cloth upon the table, and the "outstretched wings" are the people passing the cloth along (26). The metaphor reinforces Alexander's ancestors' strong connection to Gaelic culture, despite their new location in the Gaelic diaspora. In addition, geese fly in a V to improve their aerodynamics, with the lead goose exerting the most energy (Thien et al. 43). The comparison shows Calum and *Calum Ruaidh*'s strength in leading their families in migration, and the cohesiveness of the MacDonald family.

There is a further migration that MacLeod depicts in the novels that relates to the MacDonald family through similar economic circumstance rather than natural imagery: the migratory "foreign pickers" (MacLeod 71). The first reference to the pickers is on the first page of the novel: while Alexander is driving "along Highway 3" and sees farms on

which "much of the picking is done by imported workers; they too, often in family groups. They do not 'pick your own' but pick instead for wages to take with them when they leave" (MacLeod 1). Later, Alexander describes how

> [t]he Jamaicans and the Mexican Mennonites and the French Canadians move with dexterity and quiet speed. Their strong sure fingers close and release automatically even as their eyes are planning the next deft move. They do not bruise the fruit and their feet do not trample the branches or the vines. And they will not die from heart attacks between the green and flowering rows. They will work until the sun descends and then retire to their largely all male quarters. Many are in Canada on agricultural work permits and when the season is done they must make the long journey back to their homes. (169)

The fruit pickers are similar to the MacDonald family because of their migration and because they also participate in the same global economic system. The miners and the pickers "react[] to economics" just like those who "fill up their gas tanks on the Ontario side of the border because Ontario gas has traditionally been cheaper" (197). The alignment between the two sets of workers emphasizes the impermanence and transience of their labour.

MacLeod's emphasis on globalization is similar to Herb Wyile's discussion of Atlantic Canadian literature and Ian McKay's discussion of "the Folk" (4). If, as Wyile says, the Folk image is of Atlantic Canadians "engaged in hardy, independent, elemental, and timeless toil" (1), migrant miners participate in that conceptualization. The pickers with whom they are aligned have "dexterity and quiet speed," "strong sure fingers" and

they work "between the green and flowering rows" (MacLeod 169); "they do not sweat, and their children do not complain" (71). They move in a cycle: from home to work and back again, perhaps in what Wyile would call a "timeless" cycle (1). Similarly, the miners' work is focused upon their bodies and the perfection of their work. Images that recur in *No Great Mischief* are the miners' "huge hands" (7) and bodies. All of the MacDonalds are tall and strong: Alexander's uncle and brother Calum are both "big m[e]n" (69, 91); his cousin, the American Alexander, has "strong arm[s]" and is "absolutely fearless" even underground for the first time (242-43). The skill and dignity with which they complete their work is consistent with "the Folk" (MacKay 4).

Another thread that connects the MacDonalds to the Folk is the prevalence of music in *No Great Mischief*. Music Charles Dunn describes how "despite, or perhaps because of, their lack of literacy, the Highlanders nevertheless perpetuated a complete culture orally. They brought with them [to Cape Breton], unseen, a rich heritage of household arts, games, dances, music, and unwritten literature" (37). Throughout MacLeod's novel, there is music. Early on, he references Gaels "fighting… in the American War of Independence" and singing "Gaelic songs to one another across the mountain meadows where they would fight [one another] on the following day" (21). As they are driving home from Alexander's graduation, they sing "'*Fail-ill-o Agus Ho Ro Eile' 'Mo Nighean Dubh,' 'O Chruinneag,' 'An T'altan Dubh.' 'Mo Run Geal Dileas'* and *'O Siud An Taobh A Ghabhainn'*" (117). At the red-haired Alexander's funeral, "the

violinist play[s] 'Niel Gow's Lament' and '*Mo Dhachaidh* ('My Home')" (128).[4]

Lyricism and melody permeate their lives and their work, which is similar to the

"aesthetic colonization" that McKay argues folklorists create "as the romantic antithesis

to everything they disliked about modern and industrial life" (4). The MacDonalds' songs

exhibit what folklorists might see as a simple, rural life.

McKay associates the Folk with "lives of self-sufficiency close to nature" (26); as

a result, natural imagery further supports the connection between the MacDonalds and

the Folk. Alexander describes Calum's singing as "[s]ounds planted and dormant and

flowering at the most unexpected times" (MacLeod 17). Flowers are used again when

Calum recalls his parents lying "in the grass and mak[ing] chains of dandelions and

daisies" (MacLeod 216). Finally, Alexander thinks that his cousin's "parents had, no

doubt, planted flowers on the brown mud beneath [his cousin's] cross" (225). Each of

these images is "idyllic" like Wyile says (1), for in them Gaelic music is natural like

flowers and they use flowers in activities that might seem simple to urbanites. Flowers,

particularly in the scene with Calum's parents, are a "romantic" image (McKay 4).

Despite the connections to the Folk, to simply focus on picturesque nature and the

miners' work would ignore their lives, more intricate than imagery and labour alone.

Wyile terms this complexity the "more complicated and less idyllic lived realities of

Atlantic Canadians" and argues that it is frequently included in contemporary literature

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4. Recordings of these songs, and others mentioned in *No Great Mischief* and *The Glace Bay Miners' Museum* are available through the online oral recordings databases of The Beaton Institute at Cape Breton University, *An Drochaid Eadarainn* in Nova Scotia, and *Tobar an Dualchais* in Scotland ("Fàilte!"; "Search the Archives"; "Tobar an Dualchais/Kist o Riches").

(30). MacLeod and Currie conform to some aspects of the Folk, but they do not depict

Gaels as "isolated from the modern society around them" (McKay 9); based on the

miners' occupation, this makes sense, according to MacKay, for "workers… of the

coalfields and cities could not be true Folk" (12) because they are connected to

industrialization (26). However, coal mining seems an old-fashioned activity, so tension

remains. In MacLeod's novel, the miners' migration to another part of Canada pins them

to the dominant economic system and reinforces globalization; they are from Cape

Breton but they work in an industrial environment in another part of Canada. Their work

is not "elemental" or "independent" (1), though Alexander claims that they "worked

mainly for [them]selves" (MacLeod 146), for they rely on jobs in a globalized world.

Their occupations change with the economy, so they are not engaged in "timeless toil"

(Wyile 1).

The mine connects the miners to the global economy, while their music and

language connects them to the Folk; that relationship is complicated when the miners

sing at the mine. According to Charles Dunn, work songs are one of the most popular

genres of Gaelic songs, and there is a song for every type of work:

> Gaelic folk-literature, and especially the folk-song, was allied with every
>
> activity… For instance, during the fishing season, if there was no wind to
>
> fill their sails, the Cape Breton settlers might have to row six or eight miles
>
> to tend their nets and lines… As they rowed they sang an *iorram,* a boat-
>
> song, the tune and measure of which harmonized with the motion of the
>
> rowing. (37)

Similarly, Alexander and his relatives "s[i]ng all the old songs, the songs that people working together use to make a heavy task lighter" as they are driving back from his graduation (MacLeod 117). His sister recalls her grandparents singing work songs:

> Grandma said that when she was newly married, all of the women used to take their washing down to the brook. They would make a fire and heat water in those black pots they used to have and they would sing all day, slapping the clothes on the rocks in perfect rhythm. And they would do the same thing when they were making blankets, fulling the cloth, all of them sitting at that long table. They believed the music made the work go faster. And the men all sang when they were pulling their ropes and their chains. (228)

The MacDonalds speak their "own language" in the mine (137), but their music is not present below the earth's surface. Though they sing to pass the time in many areas of their lives, their songs do not accompany their work and they only sing on their breaks. When James MacDonald, "a James Bay Cree" with a Scottish "grandfather or… great-grandfather" arrives at camp with his fiddle and calls the MacDonalds "*Cousin agam fhein*… in a mixture of English and Gaelic" they "b[ring] out their own fiddle" and have a ceilidh with him and the French Canadians (151-52). The music is cultural expression, but it is also a bridge that allows them to connect with the French Canadians, who play their own tunes. The music is not "isolated from the modern society around them" (McKay 9), though it is traditional, because they play with others with other backgrounds. Music is a ground of intercultural expression that runs counter to the Folk.

An aspect of *The Glace Bay Miners' Museum* that defies the antimodern vision of the Folk is also music if it must be universally appreciated in order for characters to be part of the Folk. Neil is the primary musical influence in the novel, but the music that he plays does not resonate with his community. When Margaret first hears his bagpipes, she thinks, "it sound[s] like a cut cat jumping from table to table and screaming like a tiger" (Currie 8). The music might represent Neil's origins in rural Gaelic culture, but it does not represent others' experience with their heritage, except for Margaret's grandfather who also appreciates it. The community as a whole does not represent the Folk.

When the characters in Reserve Mines are considered on their own, rather than as a group, music does contribute to the Folk. Neil's music is "isolated" (McKay 9) because it is only him who plays it within his community and only Margaret's grandfather who appreciates it. They are also the only characters that can speak Gaelic. In comparison to the rest of the town, they are more connected with the Gaelic language and traditional music and they are the lonely members of the Folk.

If Neil and Margaret's grandfather are the Folk, Margaret is the folklorist. As the novel continues, she becomes fascinated with music and with Gaelic. She gets to know and to love Neil, and she likes his bagpipe music more and more. Instead of describing it as a "cut cat" (Currie 8), she describes it as "two happy hens fighting over a bean" (13). Though Margaret has a family connection to the music and language, she is interested in a way similar to the folklorists' "aesthetic colonization" (McKay 9). She sees Neil as a "distinctive culture" and projects her own vision – however well intended – upon him (McKay 9). She remarks, "isn't it funny how in a strange language a person can't understand something means more in song" (Currie 53), which shows that though she

appreciates Gaelic, she does not attempt to understand it. She is content when "Neil call[s her] by [her] Gaelic name" because "[she] didn't want anything but that" (65). They are folklorist and subject, and so they participate in the idea of the Folk.

A further indication Margaret is complicit in the propagation of the Folk is her museum. McKay describes how the Folk and tourism are related:

> Tourism… exploits the Folk past the point of credibility. It does so by radically cancelling the effects of time and space and by requiring the host society to adopt the techniques of mass marketing in order to succeed in this most global of all possible markets. Paradoxically, a globalized postmodern tourism industry means even more Folk essentialism, because as each society submits to the standardization and homogenization of the tourist gaze, it also requires a brand name and some degree of customer recognition to enjoy success as a tourist commodity. (280)

Margaret's display is horrific because it raises awareness about social impacts of coal mining, but it remains a museum for tourists. To bring in visitors she relies upon Nova Scotian publicity, which, as Wyile notes, is predicated on the idea of the Folk (22). Unless tourists already know about coal mining and are not visiting because they have read Nova Scotian tourism brochures, they are likely to visit her museum because they want to see a vision of "parochial" Cape Breton and its miners (Wyile 22). Margaret probably intends her museum to counter the idea of the Folk because it exposes the reality of miners' labour, but she also relies on the Folk to draw in visitors. She exemplifies the irony of McKay's concept: her anti-modern vision earns money in a post-modern world.

The Glace Bay Miners' Museum's reliance on the Folk, along with the terrible

damage that the mine wreaks on Margaret's family, justifies Currie's argument against

industrialization; however, MacLeod depicts his characters as participants in modernity

even as they attempt to subvert it, which is consistent with Newton's idea of

"syncretis[m]" (23). In the first scene of the novel, Alexander describes how

> [i]n the more extreme seasons of summer and winter, there is always the
>
> 401. The 401, as most people hearing this will know, is Ontario's major
>
> highway and it runs straight and true from the country that is the United
>
> States to the border of Quebec, which some might also consider another
>
> country. It is a highway built for the maximum movement of people and of
>
> goods and it is flat and boring and efficient as can be. It is a sort of
>
> symbol, I suppose, if not of the straight and narrow at least of the very
>
> straight or 'the one true way.' You can only join it at certain places and if
>
> your destination is directly upon it, it will move you as neatly as the
>
> conveyor belt moves the tomatoes. It will be true to you if you are true to
>
> it and you will never, never, ever become lost. (3)

The highway is a progression into the future; it is "efficien[t]" and "straight and narrow"

(3); like the linear progression of time, it is "the one true way" (3). However, the final

line of the paragraph is derisive when compared to Alexander's previous sentiment about

avoiding the 401:

> In the fall and in the spring I take the longer but more scenic routes:
>
> Highway 2 and Highway 3 and even sometimes Highways 98 or 21. They
>
> are meandering and leisurely and there is something almost comforting in

passing houses where the dogs still run down to the roadside to bark at the

wheels of passing cars – as if, for them, it were a real event. (2-3)

Alexander takes pleasure in traversing the alternative "rich and golden highway on its

way to [his] eventual destination of Toronto" (2). He still drives towards the city, and

towards the future, but he does not take the surest, simplest path. Instead of "never, never,

ever becom[ing] lost" (3), Alexander rejects the "boring" highway and instead gets lost in

his origins and his heritage (3). His actions make him a "syncretist" because he "tr[ies] to

adapt and accommodate various aspects of the new order into [his] culture," or arguably,

he tries to adapt elements of "his culture" into "the new order" (Newton 23). He takes

the modern 401 when it is convenient, but he also consciously avoids it in order to

appreciate the past.

The trust in the future that Highway 401 represents is furthered with Alexander's

occupation, orthodontistry. When he is studying in Halifax to become an orthodontist, he

"ha[s] a beer" with his professor, who has a view of the Maritimes based largely upon the

Folk and warns Alexander that he is "capable of making a lot of money in this field, but

[he] will never do it in the Maritimes. There is not a population here which cares enough

about its teeth" (103). Alexander eventually ends up practicing in Ontario, but, like he

does on the highway, he takes a detour before committing when he works in the mine

with his brothers. Alexander's orthodontic work is trustworthy because it is successful -

"in the affluence of this part of North America both [he] and [his] patients have done

pretty well" (103) - but he is not so set on his career that he cannot take a detour for his

family.

Another indicator of the tension between tradition and modernity is Alexander's grandparents' ambition, for they too are "syncretists" (Newton 23). Grandma thinks that Alexander is "in the business of 'improving on God'" (MacLeod 103), but she and his grandfather are extremely proud of him. At Alexander's graduation, Grandpa remarks, "[t]his means you will never have to work again" (107), meaning that Alexander will "not spend [his] life pulling the end of the bucksaw or pushing the boat off the *Calum Ruadh*'s Point in freezing water up to [his] waist" (107). They want him to improve his circumstances, but they are not fully sold on the progression that his career represents. Similarly, they are "tremendously happy" and "grateful" for "the chance" which was a "maintenance job" at the hospital that "led to [them] becoming dwellers of the town instead of dwellers of the country" (MacLeod 37) even though it meant speaking less Gaelic and "becom[ing] more adept at English" (40). However, like Margaret in *The Glace Bay Miners' Museum,* they retain Gaelic phrasing in their speech: Grandpa describes how when his relatives moved to San Francisco, "it seemed they really did not want to go themselves" (35); "themselves" is often used to add emphasis in Gaelic (Stirling). Alexander's grandparents' attitudes and vocabulary show that they are "syncretists" (Newton 23) because they remain committed to their heritage and speak their first language at home, and when Grandpa retires "they revert[] almost totally to Gaelic" (40), but are willing to move away from it for a job. Their dilemma represents the friction between their values, tied to their culture, and the success in the modern economy that they want for themselves and their grandson.

MacLeod and Currie present varied representations of the mine's impact on Gaelic culture, but their message is consistent. Both show the detrimental effects of

externalities like migration, while Currie also shows how injuries prevent Gaelic from being spoken and passed on. However, both also show that characters are willing to participate in globalization and capitalism, for it brings them benefits like prosperity and intercultural exchange. They comply with Newton's idea of cultural "syncretists" (23) because they do not abandon their heritage, but they are willing to detour to maintain its resemblance. The characters' syncretism emphasizes the conflict between the mine and Gaelic that runs through both novels, and the manner in which the mine affects cultural diversity and sustainability.

Do externalities create empathy?

Empathy for Characters. No Great Mischief, The Glace Bay Miners' Museum and *Twenty-Six* include externalities in various contexts and with many results; one effect that the externalities could have is empathy. Empathy is very complex because the relationship that each reader has to a text is different. Derek Attridge argues in *The Singularity of Literature* that "we experience literary works less as objects than as events - and events that can be repeated over and over again and yet never seem exactly the same (2); if he "read[s] [a] poem tomorrow, [he] will experience its singularity differently" than he did today (70). In *Empathy and the Novel,* Suzanne Keen notes similarly that "[n]o one text evokes the same response in all of its readers" (4) and that "[t]he capacity of a particular novel to invoke readers' empathy may change over time" (74). As a result of Keen and Attridge's work, I cannot speculate that a novel creates empathy for every reader. Despite the impossibility of speculating upon a general sense of empathy, there are several factors that Keen identifies as contributing to empathy that

are tangible and identifiable. These aspects correlate to aspects of the text, and I can suggest that the texts could generate empathy.

The first relevant factor is genre. Keen notes that a "reader's perception of a text's fictionality plays a role in subsequent empathetic response, by releasing readers from the obligations of self-protection through skepticism and suspicion" (*Empathy and the Novel* 88). *Twenty-Six* is closely based upon the Westray Mine Disaster, so perhaps a reader might not be as much at ease as they would with literature not based upon a real event; however, like *No Great Mischief* and *The Glace Bay Miners' Museum*, it is fictional. According to Keen's argument, all of the novels have imaginative origins that could enable empathy; these origins encourage readers to make a wide range of connections between the text and the world, without the wariness that non-fiction might cause.

A second factor Keen discusses is "character identification" that "lies at the heart of readers' empathy" (*Empathy and the Novel* 68); readers could empathize with characters in the novels because of character identification that stems from externalities. Based upon Keen's elaboration that "empathetic responses to fictional characters and situations occur more readily for negative feeling states, whether or not a match in details of experience exists," a reader might feel empathetic because a character is experiencing an externality and an associated "negative feeling state[]" (72). Each novel includes externalities that affect characters negatively, so reader could feel grief with Ziv and his family over Arvel's death in the explosion at Eastyard Mine in *Twenty-Six;* they could mourn for the MacDonalds' heritage with Alexander as he tells the story of his family's migration away from their home in Cape Breton in *No Great Mischief*; they could despair with Margaret's grandfather over his inability to speak Gaelic because

of his black lungs. Characters are in desperate circumstances that are the result of mining and its associated externalities, and if a reader feels a connection to a character due to the "negative feeling state[]" (Keen 72) that the mine creates, the externalities could cause empathy.

Keen notes that empathy does not require the reader and the character to be similar: in an empathetic relationship, "the character and reader differ from each other in all sorts of practical and obvious ways" (*Empathy and the Novel* 69); however, if there is a similarity, it could aid the connection. Keen continues, "[r]eader's empathy for situations in fiction may be enhanced by chance relevance to particular historical, economic, cultural, or social circumstances" (81) Attridge describes the reader's circumstance as "idioculture" and defines it thus:

> The way an individual's grasp on the world is mediated by a changing array of interlocking, overlapping, and often contradictory cultural systems absorbed in the course of his or her previous experience, a complex matrix of habits, cognitive models, representations, beliefs, expectations, prejudices, and preferences that operate intellectually, emotionally and physically to produce a sense of at least relative continuity, coherence, and significance out of the manifold events of human living. (21)

Each person's idioculture is "a unique configuration" so it is impossible to predict their interaction with the text (Attridge 21). Nevertheless, with the circumstances that Keen lists, I can enumerate "historical, economic, cultural, [and] social" aspects of the texts that could be relevant to the reader (81). For example, a reader might feel empathy for the MacDonalds or the MacNeils if he or she is also a Gael with a similar family history. If

the reader is from Cape Breton or Pictou County, or if he or she works in a mine or had family members or friends who worked, died, or were injured in a mine, he or she might be inclined to empathy. *Twenty-Six* and *No Great Mischief* could be relevant if the reader was involved in labour unions or was knowledgeable about labour history. Any of the novels could generate empathy if the reader was part of the working class. Ultimately, the reader could empathize with characters if their experience corresponds with the text and to the characters' experiences, including their experiences with externalities.

Empathy for the Environment. If "idioculture" includes "an individual's grasp on the world" (Attridge 21), it encompasses the way in which someone views the environment; this is relevant to a consideration of whether the novels create empathy for the natural world. There are three related perspectives of empathy to consider because each is included in the novels. I begin with my own, relatively narrow approach that considers the cultural connections between Gaelic and the natural world; then I move to Keen's broader approach, and finally, I address Glassie's perspective on literary criticism. I consider each approach to understand whether the novels could generate empathy for the environment.

Gaelic & Environmental Empathy

The first approach is to consider the cultural relationship between Gaelic and the natural world because the two are interrelated. As I have discussed, Gaelic culture is adapted to the environments of the Scottish Highlands and Cape Breton. Jim Crumley describes how on St. Kilda, the most westerly island in the Outer Hebrides, "[t]he landscape conditioned everything – the peculiar nature of their own evolution, physically, psychologically, perhaps even spiritually; the way they hunted; the way they built… even

the nature of the weather, for this landscape makes its own" (25). Linguistically, Gaelic

adapted to the landscape: the harshness is a "[g]eographical impediment[]" that means

that "[s]o slight has been the intercommunication between the various Highland

communities that each preserves its own clearly recognizable dialect" (Dunn 7). For

example, "[t]he bards were connoisseurs of the beauties of crag and cliff and possessed in

their mother tongue a rich vocabulary descriptive of the varied types of hills and knolls,

peaks and mountains, which every day they saw around them" (Dunn 9). The connection

between land and language is reflected Grandfather's statement in *No Great Mischief*

that, at Culloden,"[i]t was worth fighting for, our own land and our own people, and our

own way of being" (MacLeod 162); it is also shown in the Gaels' desire for land in Nova

Scotia, what Grandpa calls "our own country" (116). Joseph Howe described how "many

settlers were spending all their money in the reckless purchase of more and more new

acres when they should be using it to cultivate the ground they already possessed" (qtd. in

Dunn 33). Regardless of how many acres Gaels held, their close interrelationship with the

land and the responsibility for its management is reflected in Gaelic folklore, for "[m]any

parts of the landscape were inhabited by supernatural beings who required that humans

respect their homes and, if they entered them at all, that they obey the regulations for use"

which often protected the land from human use (Newton 185). Gaelic culture and

folklore are closely related to the natural world, and as two of the novels in this study are

concerned with Gaels, the relationship is important to consider.

  The Glace Bay Miners' Museum does not contain natural imagery that

corresponds noticeably to folklore, but *No Great Mischief* is rife with natural images and

metaphors that are relevant. There are no references to the supernatural figures that are

popular today like witches or ghosts but other symbols that recur in the novel are legendary. Ravens, fish, trees, and wells are all motifs in *No Great Mischief* that correspond to images in Gaelic folklore.

The raven is mentioned twice, briefly, in the novel. Alexander compares his sister's hair to that of "those heroines of the Scottish ballads with 'milk white skin and hair as black as the raven's wing'" (MacLeod 29); later when Calum disagrees with Fern Picard and his French mining crew, Alexander describes how

> Overhead the crows and ravens screamed. Once, my brother told me… [t]here was a man who used to wrap pieces of bread around live blasting caps and toss them to the ravens. The ravens would swoop down for the bread and seconds later when they were airborne the cape would explode, as would the birds, their black and shining feathers still clinging to flesh wafting down over a wide area from the sky. One night the man was beaten badly by someone with a wrench, and he left without collecting his pay and was never seen again. (205)

Ravens – *fitheach* in Gaelic - are commonly used to describe hair colour, but they are also a symbol that reoccurs in traditional stories and superstitions; they are supernatural beings who are very smart, but who are also bad omens and it is considered terrible luck to kill one (Stirling), which is why the miners would take such offense to someone who destroys them intentionally. The raven shows the remaining prominence of superstitions and Gaelic culture in the MacDonalds' lives, despite their distance from home.

The fish is another motif that is used in *No Great Mischief*, but MacLeod explains

the meaning more explicitly than he does the ravens. Alexander's sister tells a story about

"[t]he people of Glencoe" who

> believed that when the herring came they were led by a king. When they
>
> were scooping up the silver bounty they were always on the lookout for
>
> the king of the herring because they did not want to harm him. They
>
> thought of him as a friend who was bringing them food and perhaps saving
>
> them from starvation. They believed that if they kept their trust in him, he
>
> would return each year and continue to be their benefactor. It seemed to
>
> work for a long, long time. (226)

Other references to fish in the story tie into that image: James MacDonald, the cousin

who works with them in Ontario leaves them a picture of a "gigantic fish leaping towards

a lure" (158) when he leaves them and when Alexander's brother is visiting Scotland, a

man tells him that "[t]here is a fish farm where [he] live[s]" (MacLeod 263). The

connotation is that Gaels, particularly the MacDonalds, are like the school of herring.

James MacDonald's drawing foreshadows Calum's downfall because Calum is the king

herring of the MacDonald mining crew, but it also emphasizes Gaelic's decline because

aquaculture means that the herring no long return. Again, the symbol and its associated

metaphor are tied to the novels' themes.

Another motif that MacLeod uses frequently is the tree. Cape Breton is called "the

land of trees" (21), in Gaelic "*tìr nan craobh*" which is a phrase used to describe it in

traditional songs like the popular "'*S e Ceap Breatainn Tìr Mo Ghràidh*" or "Cape Breton

is the Land of My Love" (Campbell). Houses in Cape Breton are built using wood rather

than the stone that is used in Scotland (161), and Grandfather's father is "crushed beneath the load of logs on the skidway" when he is logging (32). According to Newton, the Gaels saw the forest as "an archetypal wilderness, an intermediary zone between the human world and the otherworld" and "an outlaw… was said to be *fo choill* (under forest)" (205). The symbolic meaning of the tree in *No Great Mischief* is obvious in light of that connection: if Nova Scotia is "the land of trees" with houses made from wood (MacLeod 21, 161) it is because Nova Scotia is far from Scotland, and the characters are almost *fo choill*. A tree that kills is further evidence of the uncertainty in that space, for it too is an outlaw. The trees are a cultural reference that shows that the MacDonalds are far from home and in the wilds.

The final motif, the well, is also mentioned more than once and ties to folklore. The well in *No Great Mischief* is on the island where the MacDonald brothers lived with their parents when they were young:

> The well was nourished by an underground spring and its water was particularly sweet. It was frequently by humans and animals as well, and visitors from the mainland would take bottles of it back with them, thinking of it as a tonic or particular refreshment. (174)

When the MacDonald brothers return to the island when they are adults, they go

> to look at the well. It was still there, although we had to clear some of the foliage and dead leaves in order to find it. We all lay on our stomachs and drank form it. The water was as sweet as we remembered it, pouring up put of the rock into the brambles and vines and decayed vegetation that threatened to overwhelm it (214)

Furthermore, Alexander's sister describes speaking Gaelic for the first time in years as a "subterranean river that had been running deep within me and suddenly burst forth" (163). Wells are one of the "sacred landscape features" that Newton lists; he says, "holy wells… were resorted to for healing and were visited by pilgrims on the Quarter Days" (212). Based on the well's use in Gaelic folklore, it makes sense that the MacDonalds want to drink from it and that the brothers return to it when they visit the island of their childhoods. The well represents Alexander's return to his language and heritage, the bursting of his own "subterranean river" (163). In drinking from it, he and his brothers can heal from their struggles; that MacLeod uses it near the end of the novel offers the reader some closure.

These are just a few examples of Gaelic folklore in *No Great Mischief*, but they show that the connections between Gaelic folklore and symbolism establish cultural relevance in MacLeod's writing; in addition, if a reader understands something of the history and enduring cultural prevalence of those connections, they could create a deeper understanding of the environment and the story. The references are culturally specific, so Gaelic or Celtic mythology and superstition would have to form some part of the reader's "idioculture" (Attridge 21) in order for the symbols to be recognized. However, if the reader knows them, he or she would have a better understanding of the cultural landscape that the characters' inhabit and might be able to empathize with them more based on common origins. In addition, the reader might understand the connection between landscape and culture that the novel presents and feel a connection – possibly empathy – to the natural world because it has cultural relevance. Connections between Gaelic and nature are one ground upon which empathy for the environment might form.

Anthropomorphizing Empathy

Another perspective on empathy towards the environment that is more broadly applicable and pertains to all three novels comes from Suzanne Keen. She argues that the characters with which readers identify "need not be human" but that "character identification and empathy felt for fictional characters requires… minimal elements of identity, situation, and feeling, not necessarily complex or realistic characterization" (*Empathy and the Novel* 68-69). Keen speaks primarily of anthropomorphized animals, like *Black Beauty*, but her argument about character identification could extend to other natural elements. Each of the novels includes metaphors that personify ecological features or compare them to specific characters or groups of characters, though none of the natural references are parts of the mine itself; still, these are moments of what Don McKay calls "anthropomorphic play" that "translat[e]" and "deform[] human categories, an extra metaphorical stretch and silliness of language as it moves toward the other, dreaming its body" (31-32). The metaphors linguistically and figuratively bolster the depiction of the characters' circumstances and perhaps generate readers' empathy for the characters; however, because of language's propensity to "dismantl[e] itself in a gesture towards wilderness" (D. McKay 32), they also do the reverse, for if a reader identifies with the character with whom the natural element is compared, it could generate empathy for the environment.

The first natural image that could generate empathy is the tree, which is used at the beginning of *Twenty-Six*. McKay Jr. writes,

> Death hides its face in winter, when trees are impossible to distinguish.
>
> The bony hands of branches clutch at the sky, waiting for the sun to rise

high enough to warm them back to life. With so many elms sick, and some

of them dying now, the only thing was to wait for spring before you put

your hope anywhere. (3)

The passage aligns death and winter, which is consistent with the imagery in the rest of

the novel, for McKay Jr. uses snow as an indicator of the disaster. For example, the

explosive coal "dust [is] drifted up like black snow" before the explosion (86). If a tree

dies in winter, and winter is like the mine, the miner and the tree are also aligned. One

could feel empathy for the tree if one feels empathy for the miner; similarly, if one feels

for the dying tree, one might also feel for the dying miner. The connection is less

concrete than examples from the other novels because the passage primarily foreshadows

later deaths rather than explicitly creating empathy for the environment.

MacLeod uses a more obvious correlation between trees and characters.

Alexander recalls a conversation he had with his brother:

"Calum once told me," I said, "that when they went back to the country,

they went one day to cut a timber for the skidway they were making for

their boat. They went into a tightly packed grove of spruce down by the

shore. In the middle of the grove, they saw what they thought was he

perfect tree. It was tall and straight and over thirty feet high. They noted it

as they had been taught and then they sawed it with a bucksaw. When they

had sawed it completely through, nothing happened. The tree's upper

branches were so densely intertwined with those of the trees around it that

it just remained standing. There was no way it could be removed or fall

unless the whole grove was cut down. It remained like that for years."

(239)

Immediately after recounting the memory, Alexander describes family photographs:
"[t]here are no pictures of our parents by themselves. They are always in large groups of *clann Chalum Ruaidh*. Sometimes they are holding children and sometimes they have their arms draped over the shoulders of whoever is standing next to them" (240). Like the trees, they support one another and hold each other up. Notably, this is consistent with the way that Gaels traditionally see forests: "[t]he forest represent[s] the familiar 'eco-system' of kith and kin" and is "one of the most common metaphors for human individuals and society" (Newton 205-206). Each MacDonald is an individual trees but he or she is also part of the forest. Though the scene includes a positive rather than a "negative feeling state[]" (Keen 72), it is troubling in light of the MacDonald clan's disintegration as they migrate for work and because of traditional Gaelic culture's decline. If one feels already feels empathetic for the family because of their migration, perhaps one might feel nostalgic for them in this image because they are supporting one another and supporting their culture, which becomes more difficult as time progresses. Furthermore, following Keen's argument, the comparison between the family and the trees could mean that the reader's empathy for the family extends to the natural environment, especially if one knows the importance of trees in Gaelic culture.

Another strong natural image that MacLeod uses to generate empathy is a beached whale. Alexander and his brothers see a pod of pilot whales at sea:

Out of the stillness of the calm, blue ocean, they rose and rolled in

glistening elegance… There were, perhaps, twenty in all, although it was

difficult to count them as they appeared and disappeared, now here and

now there in the waters off the *Calum Ruadh's* Point... Standing on the

extreme edge of the point, we shouted to them and offered our applause as

they sprouted and sported and turned and flipped, so near and yet so far in

the splendour of their exuberant happiness… Sometimes when they were

invisible my brothers would sing songs to them in either English or Gaelic

and place small bets as to which set of lyrics would bring them whooshing

to the surface, cavorting in their giant grace round the rocking boat... Later

in the early evening, I went down to the shore to bring home my brothers'

milk cows and discovered one of the whales washed up on the rocks… We

decided that he had not realized that the tide was falling and that in the

afternoon's high spirits he had come too close to the shore and in one of

his undulating dives he had found not the expected depth of water but

instead the submerged and jagged reef which had slashed his soft

underbelly and left him disemboweled and unable to rise again. We

thought of ourselves as deceptive male sirens who had lured him to his

death. (98-100).

The scene could create empathy for the whale on his own because he is given an

"identity, situation, and feeling" (Keen 69). He lives with his family, answers to cheers,

and has "high spirits" (100). However, at the end of the novel when Calum is associated

with the whale, that empathy is furthered:

I turn to Calum and he is still, though his eyes are wide open, looking at

the road ahead. Once we sang to the pilot whales on a summer's day.

> Perhaps we lured the huge whale in beyond his safe depth. And he died,
>
> disemboweled by the sharp rocks he could not see. Later his body moved
>
> inland, but his great heart remained behind. (282)

Calum is like the beached whale; moving inland to work in the mine, he is "beyond his

safe depth" (282). Global economics that "he c[an]not see" persecute him, and though he

"move[s] inland" his "great heart remain[s]" in Cape Breton (282). Due to his leadership

in his family, that plight extends to other MacDonalds and to Gaels in general. If a reader

feels empathy for the whale based on the previous scene, this comparison likely generates

empathy for Calum and Gaels. If a reader does not already feel empathetic for the whale,

perhaps he or she feels empathy for Calum in this scene.

Currie also uses a beached whale to generate empathy for characters and for the

environment. When Margaret, Peggy, Neil and Ian are walking on the beach, they

encounter a different whale than that in MacLeod's novel:

> A big whale was half up on the shore. A whole lot of people were thrashing
>
> around. Someone put a ladder up and there were kids and even older people
>
> on top of it dancing, and falling into the water or the sane. Somebody
>
> punched a hole in it and was filling a bottle full of blood. I couldn't believe
>
> my eyes… [Neil] went down and stood in front of a man who was standing
>
> in front of the whale's face and spitting in its eye… Neil said something, the
>
> man said something and Neil said something, and the man spit in the
>
> whale's eye. Then Neil spit in the man's eye. (68-69)

Neil's actions seem admirable, but it is the conversation that he has with Ian after his

fight that aligns the whale with the characters:

Ian said "You goddamn idiot. Didn't I tell you to stay put?"

"Well, Jesus, John, didn't you see what was going on?"

"I'm not blind. I saw what was going on. It wasn't our business."

"How would you like somebody spitting in your face?"

"For Christ sake, Neil, it's only a goddamn whale."

"And you're only a goddamn coal miner – do you like what they're doing

to you?"

"Like what?"

"Look at the goddamn whale, John… It was just trying to live its life.

When it needed a little help, some arsehole came along and spit in its eye.

Look at the whale, John, and read your grandfather's notebooks." (70-71)

The whale, in Neil's mind, is like an exploited coal miner, and because its treatment is

explicitly inhumane, the metaphor means that the coal miners' lives and working

conditions are also inhumane. As a result, a reader might empathize with a coal miner

because of their treatment; if they do empathize, their connection likely extends to the

whale. Like MacLeod and McKay Jr., Currie's natural image functions dually to

reinforce the reader's empathy for the character and to introduce empathy for the

environment.

Literary Criticism, the Mine, & Empathy

The final perspective on empathy and the environment comes from Allison

Glassie. She uses literary criticism to "ground[] the gender discourse [in *Sylvanus Now*]

in scientific fact and history" and, when this grounding is "coupled with the problematic

connotations of rape, impotence, and loss of life at sea," she sees "overfishing [as] the wrenching, visceral, and personal issue that every environmental catastrophe should be" (35). In my analysis, I have shown that mining is incredibly harmful because it generates externalities that have terrible social, cultural, and environmental impacts for individuals and communities. I have "cast environmental problems in a deeply personal light" like Glassie recommends (24). However, an aspect of Glassie's work that I have not yet addressed is the correspondence that she describes between empathy for the environment and empathy for characters. If the novels in this project function similarly to *Sylvanus Now*, in which Glassie finds a connection between empathy for the ocean and empathy for the characters, there would be a parallel between empathy for geologic resources and empathy for the miners, but that connection does not exist.

What does exist in the novels is a deep connection between the miners and the mine. For example, in *No Great Mischief,* geology constantly surrounds the miners, whether or not they are working. Their employment "depend[s] on the quality of the rock" (MacLeod 134), and sometimes "'hard rock" and hard times l[ie] ahead" (170). Stepdancing is "difficult because of the ribs of rock which protrude[] through the scanty soil" and they use "small stones… to construct a level surface" (154); they also use "a stone" as a paperweight "on top of the [dancer's] money so it w[ill] not blow away" (155). Even in Toronto, Calum has a "steel bedframe" (8) and his apartment is described as if it were a mineshaft: when Alexander is visiting, he

> go[es] out into the hall and past the closed doors and down the stairway
>
> into the street. The sun is shining brightly, which is almost a surprise, after

the dimly lit interior. [He] pas[es] through the space between the buildings

and [his] car. (9)

It is just as if Alexander has emerged from the darkness of the mine in which Calum lives

to the brightness of the day. Later in the novel, Alexander describes even the sun as

having "shafts" (167). Neither Calum nor Alexander can escape the mine's influence.

The mine is inextricable from the miners' lives, but it is also inseparable from the

miners themselves. McLeod uses a cliché to describe Calum: "[t]hat man is as solid as a

rock" (233) and in doing so, aligns Calum with the resource he extracts. Similarly, in *The

Glace Bay Miners' Museum*, the characters take on features of the mine and its functions.

Neil has "pan-shovel hands" (2) and the miners have black faces as if they are becoming

the mine while working in it (37). There are also grammatical indications: Ian is "scared

when *he was night shift* to come home alone in the dark [emphasis added]" (37) and Neil

refers to "the miner" as singular in the same way that one might refer to "the mine" (59).

The miners' are figuratively and grammatically part of the underground environment in

which they work.

According to my previous argument based on Keen's work that

anthropomorphization can create empathy, the alignment between the miners and the

mine could suggest that if one feels empathy for the miner, one might feel empathy for

the mine; however, empathy for the miners does not translate into empathy for

underground geological resources because of the way in which the mine is described

throughout the novels. The mine is a place of labour, injury, and sometimes terror; the

characters tolerate it for the prosperity and pride that it brings them, but they despise it

for its damages and externalities. The characters do not approach the humbleness towards

geological resource that Mason asks of us (483) because they are so wary and it has damaged them so much. Their wariness leads readers to be similarly distrustful of the environmental and cultural conflicts that the mine creates. Empathy, therefore, is not generated using the mechanism that Glassie identifies. The novels align miner and mine and generate empathy for characters and for other parts of the environment, but not for the mine and its geological resources.

What is the value of that empathy?

I have shown that externalities can create empathy for characters and the environment; my final step is to ask what the value of that connection. Before I address my question directly, I must acknowledge that value statements are dangerous, particularly where the environment and minority cultures are concerned. Western valuation of the economy more than the environment has caused disregard to natural systems and great damage to the atmosphere, land ecosystems, and the ocean (Patterson 52). Likewise, valuation of English as more progressive and higher class than Gaelic has caused the culture's decline:

> English-speaking people have consistently despised Gaelic culture and
> attempted to eradicate the language. In 1616 an act was passed in Scotland
> calling for the establishment of parish schools throughout the Highlands in
> order that English should be implanted among the people, and Gaelic
> "abolished and removed"… even in Nova Scotia, if settlers' children
> persisted in speaking their mother tongue at school instead of the
> unfamiliar English, they were either scolded by the gentle teachers or
> beaten by the impatient" (Dunn 35).

Considering that this project is concerned with both the environment and the sustainability of Gaelic culture, I must be cautious about assigning value.

Another reason for my caution is that there is great ambivalence among critics about detailing literature's usefulness. This ambivalence relates to Attridge's idea of singularity; he says, "literature… solves no problems and saves no souls" and is "not predictable enough to serve a political and moral program" because it affects everyone differently (4). Furthermore, from a sustainability perspective, demanding value from a piece of art contributes to the capitalist system to which growth – not constancy – is central: Attridge calls it "instrumentalism" and says that it is "part of a more general, globally experienced increase in the weight given to the values of the market-place, to the success ethic, to productivity as a measure of worth" (9). Assigning a value to these texts based on my ecocritical analysis would subtly reinforce the growth system that environmentalists generally deny.

Despite these conflicts, to answer my question I will turn towards Keen, who says that if empathy is generated, it "often features as a first step in a process that expresses concern for others in voluntary actions taken on their behalf" (16). If a reader is empathetic towards a character in a novel, there are several areas towards which they might direct their "prosocial behaviour, or voluntary actions benefiting another" (Keen 16). If working conditions in the mine in *Twenty-Six* are particularly troubling to the reader, they may choose to take action on workplace safety. If they see the unrealized benefit of unions in *Twenty-Six* and *The Glace Bay Miners' Museum*, they might be more likely to become involved in the labour movement. If they see how out-migration affects small communities, they might work in rural development. If they see how

industrialization has affected Gaelic culture, they might choose to learn the Gaelic language. These speculations, of course, are unpredictable and depend upon the reader, but are certainly possible.

The environmental actions that a reader might take are even less certain, because there are fewer situations in the novels that generate empathy for the natural world than there are instances that generate empathy for characters. It is very far-fetched to say that if a reader recognizes connections between Gaelic culture and the environment, they might want to learn about and later apply traditional land management practices that could benefit sustainability. It is perhaps more reasonable to say that if a reader empathizes with trees or whales, they might become involved in their preservation. More impactfully, though, the novels might motivate a reader choose another energy source rather than coal-fired electricity, which would have a positive impact, even though character identification would likely motivate their decision rather than empathy for the environment.

Ultimately, empathy can motivate readers to take action, but it remains uncertain whether the novels can create societal change. Attridge admits that literature "has had a role to play in significant, and frequently laudable, social changes, like the ending of slavery" (Attridge 8). However, for societal change to happen, there must be an "accumulation of individual acts of reading and responding [so] that large cultural shifts occur, as the inventiveness of a particular work is registered by more and more participants in a particular field" (79). I am not inclined to refer to sales figures because of Attridge's connection between instrumentalism and the marketplace, but each of the novels was a bestseller in Canada. The number of copies sold is not an indicator of

impact, though, because enough people must have a similar reaction to the novels for change to take place. In the context of this study, enough people must decide that the positive externalities of mining do not outweigh the negative, and then they must take similar action. It is not within this project's scope to survey reactions to the novels, and that may not even be useful given the complexities of "idioculture" (Attridge 23). In addition, even if the novels create empathy that motivates change, "[i]t may be a long time before the changes wrought by such an encounter make themselves felt" (Attridge 85). The novels are contemporary, and enough time might not have yet surpassed to gauge their effect. They may create encourage empathy and thus create societal change, but, based on textual analysis, I cannot conclude with any certainty that they do.

Conclusions

Literature and the environment are interrelated, and in this project, I have shown that studying their relationship connects the three pillars of sustainability: economic, social, and environmental ("Sustainability Primer"). However, the role of the novels in society remains unclear, so to conclude this project, I suggest that they simultaneously occupy three positions that can contribute to sustainability: they are memorials, they are appeals for cultural revitalization, and they are pleas for sustainable rural development.

First, the novels' roles as memorials are tied closely to Susan Dodd's work on remembrance. She discusses how literary works can "expres[s] traumatic memory" (147). Similar to the way in which *February* by Lisa Moore memorializes the sinking, the novels in this project remember mining's traumatic impacts, especially social externalities like deaths, injuries, and harms to communities. Dodd argues that *February* successfully memorializes because it "conveys feeling, affect, and makes no claim to

accurately report on real events" (117); the novel that most obviously functions in this way is *Twenty-Six* because there is a single, large tragedy at its core - a fictional version of the Westray Mine Disaster – and McKay Jr. subsequently depicts its effects on the Burrows family. Currie and MacLeod also fictionalize mining's ongoing impacts on the MacNeils and the MacDonalds respectively. Finally, Dodd says that literature can create successful memorials because it can counter conventional narratives of disasters (147). Each novel in this project tells an unconventional story given the history with which they are engaged because they focus on individuals and families rather than higher levels of organizations that are typically historicized or criticized; for example, the government and the mining company that owned the Westray Mine are wholly condemned for the explosion in Christopher McCormick's *The Westray Chronicles: A Case Study in Corporate Crime*. *The Glace Bay Miners' Museum, No Great Mischief,* and *Twenty-Six* participate in memorialization because they are consistent with Dodd's work.

The factor in Dodd's work that distinguishes the novels in this project is the desire to "move out of a more immediate traumatic past and towards long-term remembrance" for the sake of cultural continuity, community, and an unnostalgic view of the past (126). *Twenty-Six* and *The Glace Bay Miners' Museum* are unnostalgic, while *No Great Mischief* is rooted in the past. McKay Jr. references the "glory days" (17) of mining but he presents the explosion at the Eastyard Mine as the result of poor management, so though the characters crave economic prosperity, they have no desire to move backwards to a time when occupational health and safety was even poorer. Currie also shows the detriments of the mine very clearly, and through the injuries and deaths the characters suffer, presents no support for the mine itself. Conversely, McLeod is nostalgic about the

past, even though it includes trauma: characters "cry[] for history" (25); they have "the same sadness in different packages" (113); and they state that "what is important is that [they] will return" to their origins (170). *No Great Mischief* is thus a different memorial than Currie and McKay Jr.'s works.

Though the past is ever-present, to say that *No Great Mischief* is not a memorial would be a mistake, because it incorporates remembrance explicitly into its plot. There are several situations in which this occurs, but a setting related to remembrance that is repeatedly referred to throughout the novel is *Calum Ruadh*'s Point. The MacDonalds' ancestor, *Calum Ruadh*, is "buried all alone" on the "jutting headland that points out to sea, where it is caught by all of the many varying winds"; he is "apparently where he wants to be, marked only by a large boulder with the hand-chiselled letters which give his name and dates and the simple Gaelic line: *Fois do t'anam.* Peace to his Soul." (MacLeod 27). The MacDonalds place "a small stone chip from the original *Calum Ruadh* boulder" on the red-haired Alexander's grave (126). As a result, their ancestor's grave is a memorial to *Calum Ruadh,* and a connection to the family's history. It is also a memorial to the cultural trauma of migration and the erosion at the cliff's edge signals that symbolic purpose:

> After [] storms, the face of the cliff would be changed, although ever so slightly. Bits of rock would have fallen because of the wave's pounding, and small sections of the seams of clay and shale would also have been washed into the sea. Only the hardest promontories of pure stone seemed to remain constant, but if one looked closely one could see changes in them also. A new smoothness born of a new wearing, or small pockmarks

on new surfaces where previously there were none. The cliff was moving

inland, slowly but steadily, while *Calum Ruadh's* grave seemed to be

moving out towards its edge. (73-74)

Just as Alexander and his brothers no longer live in Cape Breton, so *Calum Ruadh's*

grave will fall from the headland and into the sea. Just as the MacDonalds weather their

history over and over, so the headland weathers storms. Just as Calum withstands the

onslaught of modernity but eventually relinquishes his strength, so the surface of the cliff

becomes smooth before disintegrating. Just as Gaelic declines, so the cliff erodes. *No

Great Mischief* is not a memorial to the trauma of the mines in the way that *The Glace

Bay Miners' Museum* and *Twenty-Six* are; instead, it is a memorial to the MacDonalds'

history and the persecution of the Gaels and so it remains nostalgic. Like Grandfather

says, the Gaels "didn't come all this way… because they wanted to forget" (MacLeod

215).

The novels are memorials, but they are also appeals for cultural revitalization.

Specifically, *The Glace Bay Miners' Museum* and *No Great Mischief* describe the

conflict between industrialization and Gaelic culture, and show the necessity for targeted

efforts to promote and restore the language in Nova Scotian communities. Emily

McEwan-Fujita created the Nova Scotian Gaelic Expanded Graded Intergenerational

Disruption Scale and scores the language as an eight, meaning that it is "[r]ediscovered

yet [m]oribund" for '[s]ome adults use Gaelic for symbolic purposes, but the language is

only spoken natively by elderly people, some of whom are socially active… but most of

whom have few opportunities for social interaction" (170). However, the Gaelic

community has mobilized upon many of points McEwan-Fujita cites as necessary to

achieve revitalization. For example, "Gaelic-speaking elders" are "re-integrate[d]… into Gaelic medium interaction" in community courses and events such as those at the *Colaisde Na Gàidhlig* (McEwan-Fujita 170; "Homepage"). Projects like *Cainnt mo Mhàthar* and *An Drochaid Eadarainn* have "record[ed] everyday spoken-language, expressions, [and] oral traditions from native speakers" ("Fàilte!"; McEwan-Fujita 170; "Welcome"). *Sgoil Ghàidhlig an Àrd-Bhaile* and other organizations offer "courses and programs in which adults acquire Gaelic as a second language" (McEwan-Fujita 170; "Fàilte/Welcome"). There is also a dedicated Office of Gaelic Affairs in the Nova Scotia government that works "to promote the Gaelic language and ensure that Gaelic culture continues to thrive in Nova Scotia" ("Gaelic Affairs"). Gaelic has much more institutional and community support than it did in the 1990s when these novels were written; though it is still in danger, the novels' calls for revitalization have in part been answered, which is beneficial for maintaining cultural diversity and thus sustainability, but there is still much more work to be done.

A final appeal that the novels present is for sustainable rural development that has long-term benefits for communities. Mining, as I have argued, is unsustainable because geological resources are unrenewable because the full cost of production is not integrated into the price and because negative externalities have terrible social and environmental impacts communities. *Twenty-Six* and *The Glace Bay Miners' Museum* buck against mining's impacts; McKay Jr. especially calls for an alternative method of rural development that would give young characters like Ziv, Arvel, and Meta jobs in Nova Scotia, while Currie also shows the necessity for occupations that do not cause damages like mining causes for Margaret and her family. MacLeod also questions mining's

impacts, particularly the necessity to migrate for work and the associated cultural

disruption. The novels show the detriments of poorly executed economic planning, and so

highlight the necessity for sustainable rural development.

In conclusion, *No Great Mischief, The Glace Bay Miners' Museum* and *Twenty-*

Six are multi-faceted texts that address many different issues: environment, development,

industrialization, history, and culture among them. My ecocritical approach is also multi-

dimensional because it is interdisciplinary and it contributes to contemporary debates

about the relationship between literature and the environment. I have shown that the

novels depict the negative externalities of mining that are detrimental to communities in

Nova Scotia because they damage environmental and cultural sustainability; that natural

imagery reinforces externalities and their effects; that together, the imaginative

representation of externalities and natural imagery can create empathy for characters and

the environment, depending on the connection that a reader has to a text; and that

empathy could cause readers to take action on the issues in the texts. Though these

conclusions seem inconclusive, they prove that, like Glassie says, "environmental

problems" are "deeply personal" (24). The novels show the inseparability of

environment, culture and economy, and prove that while mining has a damaging

environmental and social legacy, it is historically and culturally significant. The authors

exemplify what Margaret says when she hears Neil play his bagpipes: "one thing you can

say for all that misery, the music that came out of it was awful good stuff" (Currie 57).

These novels are art that has come from desolation; now Nova Scotia must find a way to

make new music without creating misery first.

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