

**VISUAL RHETORIC IN ENVIRONMENTAL DOCUMENTARIES**

by

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Visual rhetoric in environmental documentaries

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submitted by Claire Ahn in partial fulfillment of the requirements for

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## **Abstract**

Environmental issues are a growing, global concern. UNESCO (1997) notes the significant role media has in appealing to audiences to act in sustainable ways. Cox (2013) specifically remarks upon the powerful role images play in how viewers can perceive the environment. As we contemplate how best to engage people in reflecting on what it means to live in a sustainable fashion, it is important that we consider the merits of particular rhetorical modes in environmental communication and how those approaches may engender concern or hopelessness, engagement or disengagement. One form of environmental communication that relies heavily on images, and that is growing in popularity, is documentary film.

My study examines visual rhetorical modes in environmental documentaries and the types of impact they have on viewers. This study first identifies some dominant visual rhetorical modes through an extensive literature review and discussion of a variety of environmental documentary films. The resulting taxonomy of dominant visual rhetorical modes include: apocalyptic, jeremiad, hopeful, environmental nostalgia, sublime, and environmental melodrama. To explore how viewers react to visual rhetoric, eleven research participants were asked to view a sixty-minute compilation of video clips from various environmental documentaries that employed, to varying degrees, each of the dominant visual rhetorical modes. Using video annotation software, participants were asked to comment at points they felt to be particularly striking or evocative. Follow-up interviews were conducted for clarification of participants' annotations. The data collected and analyzed from participants' annotations and transcribed interviews revealed that viewers were disengaged with messages of ecological doom. The most powerful rhetorical effect was observed when participants drew personal connections to content of particular video clips, which raised their awareness about certain environmental issues.

## **Lay Summary**

Environmental issues are a growing global concern. UNESCO (1997) notes the significant role media has in appealing to audiences to act in sustainable ways. Cox (2013) also comments on the increase in environmental communication and, more specifically, the powerful role images play in how viewers perceive the environment. One form of environmental communication that is growing in popularity is the documentary film. This study identifies some dominant visual rhetorical modes used in environmental documentaries and describes which visual modes most affect the viewers' awareness and willingness to act in sustainable ways.

## **Preface**

This dissertation is the original intellectual property of the author, Claire Ahn.

The photographs are the property of Claire Ahn, unless otherwise stated.

This study was approved by the University of British Columbia's Behavioural Research Ethics Board (UBC BREB Number: H16-00408).

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## **Chapter 1: Introduction**

This dissertation explores questions about visual rhetoric and viewer response to visual rhetoric in environmental documentaries. Here I offer a prelude to the work that provides a sense of how I came to the topic and my positioning as researcher-educator.

My inspiration for this study emerged from my interest in and passion for film—not just as a viewer, but also as an educator. My Master’s thesis focused on the pedagogical value of teaching narrative film in secondary English classrooms. I argued for critical analysis of film; specifically, how inviting students to examine single shots or montages can help develop visual literacy skills and hone the traditional analytical skills curricular documents and educators deem significant. I wished to extend my work and expertise with film in my doctoral studies, but initially struggled to narrow the topic.

An increasing global interest as I commenced my doctoral studies was, and continues to be, environmentalism: How do people learn about the environment? What influences their environmental attitudes? What are the best mechanisms for promoting environmentalism? In the context of a study group on this subject guided by one of my advisors, I became particularly interested in the role film might play in relation to these questions. I prepared a literature review and watched many environmental documentaries. I also enrolled in two environmental education classes. In both classes, however, I felt like an imposter. I did not identify as an “environmentalist” and I questioned my authenticity in researching the influence of environmental documentary film. It was not until I had two serendipitous experiences that I finally felt a connection to my topic.

*Thinking about the past . . .*

In *A Sand County Almanac and Sketches Here and There*, Aldo Leopold (1949) reflects on a hunting excursion and vividly recounts a significant moment in his life:

I reached the old wolf in time to watch a fierce green fire dying in her eyes. I realized then, and have known ever since, that there was something new to me in those eyes—something known only to her and to the mountain. I was young then, and full of trigger-itch; I thought that because fewer wolves meant more deer, that no wolves would mean hunters' paradise. But after seeing the green fire die, I sensed that neither the wolf nor the mountain agree with such a view. (para. 5)

According to Knapp (2005), people develop a deeper awareness of the environment through their experiences: “it is a way to ‘re-member’ participants who feel dismembered from the physical context of their immediate worlds and for them to ‘remember’ earlier positive contacts with nature” (p. 278). Environmental scholars and activists (e.g., Carson, 2012; Leopold, 1949; Sobel, 1998) argue that to motivate people to protect the environment they must be connected, or re-connected, to a specific locale. For Leopold, it was the event of witnessing the “fierce green fire” dying out of the wolf’s eyes. I too had a similarly significant moment.

My re-connective experience to a local environment was during an intensely reflexive moment staring out at the ocean in Long Beach near Tofino, British Columbia.



**Figure 1.1 Long Beach, near Tofino, British Columbia.**

During that moment smelling the salt air and feeling the cool wind against my skin, I realized it had been a very long time since I had been in a natural environment. It was the silence that got me. The peace. I could feel my body disentangling and releasing tensions. I could not believe how relaxed I felt, how I did not want to move from that spot. And the view: endless water rolling in waves onto a beach in a natural rhythm, blue sky with wisps of white clouds reflected in the clear water. I had never seen something so beautifully calming. I realized I had been neglecting the wondrous natural world that existed at my very doorstep. It was also at this moment that I began to reflect on my own connection to nature. What was my place of connection? Where and with whom did this connection start? Through much contemplation and reflection I realized much of my connection to nature was because of my father.

In his youth, my father was an avid mountain climber in South Korea. He told stories of his adventures, of times when he stood on the edge of a mountain looking out at the vast landscape that was his home; stories of succumbing to extreme frostbite while climbing through the snow to build shelters and scaling up frozen waterfalls; warm recollections of befriending climbers from other countries; tranquil memories of just breathing in the forest air and escaping



the busy city life. My father has a great kinship with the mountains. Even to this day, in his early seventies, when he sees pictures of mountains, clips or movies about a certain mountain range, he is mesmerized and begins to tell stories of his mountaineering youth. My father, a man of few words, cannot stop talking when it comes to his connection to the mountains.

At the ripe age of one, while I was still wobbling around trying to maintain my balance on two feet, my parents took me camping. And, every year, for as long as I can remember, my family and I went camping in and around the Rocky Mountains in Alberta. I remember looking forward to the first camping trip of the year (always on the May long weekend) and looking forward to more travels as the summer months approached. Because of my father and my camping experiences, my favourite places are Banff and Canmore, Alberta, where I feel the Rocky Mountains are revealed in their greatest majesty.



**Figure 1.2 Bow River, near Banff, Alberta.**

I had not thought about these moments in a very long time until I sat on Long Beach. I was saddened to have neglected this very important part of my past. I wondered at what point I had lost my sense of wonder, curiosity, and willingness to be outdoors, to connect with nature and be

immersed in the grandeur of the mountains. Perhaps it was a coincidence, or serendipity, that this reflective moment and my visit to Long Beach occurred on a May long weekend. I quickly jotted some of these thoughts in my notebook, the words forming together naturally as a poem.

The Past:

My father.  
Lover of music,  
bands like:  
Dave Clark 5  
The Beatles  
The Rolling Stones.  
Producer of music,  
a quiet lyricist,  
whose songs  
are still sung  
over many campfires  
at dusk  
in forests  
nestled in the mountains  
of South Korea.

Adventurous mountaineer:  
trekking through tough terrain,  
fingers and toes  
    searching,  
        g r a s p i n g  
                for crevices  
in the mountain walls.



**Figure 1.3 Sang Kap Ahn. South Korea. Personal archives. Used with permission.**

Stories of  
tactfully scaling  
frozen waterfalls;  
digging in the snow,  
making shelters to

survive.

Photos of him  
sitting  
on the edge  
of a mountain,  
calm,  
tranquil,  
in his element,  
overlooking the vast  
and wondrous  
beauty of nature.



**Figure 1.4 Sang Kap Ahn. South Korea. Personal archives. Used with permission.**

This is what I know  
to be true  
about my father:  
one who is in love  
with the mountains,  
of being outdoors,  
hiking, climbing,  
breathing in the air,  
and feeling free.

My Past:

I was a wee little one,  
too young to be left alone,  
with a pink barrette in my hair,  
red flannel shirt,  
dark jeans rolled up into  
tiny bundles.  
Pictures of me,  
hoisted on my father's back,  
my mother along side us,  
walking through forests,  
exposed to fresh air,  
camping with  
good food and  
friends who  
became more like family.

My father's  
interests  
and love for  
nature  
was planted in me,  
and germinated into a  
young seedling.

Yet . . .



**Figure 1.5 Claire Ahn. Photograph by Sang Kap Ahn. Used with permission.**

My present:  
Where has this  
relationship with nature  
gone?  
I wonder now . . .

Where has my  
fearlessness and  
wonder  
resided?  
Perhaps to the  
deep,  
dark  
crevices of the mountains,  
where to *remember and*  
*become*  
*re-membered*,  
I must once again,  
go back to that  
place  
where I  
frolicked freely,  
questioned curiously,  
and enjoyed  
the calm  
the peace  
the wondrousness of it all.

### *The connection ...*

After this reflective moment at Long Beach, I was still grappling with many questions, and with narrowing the focus for my study. As I continued with coursework, I was also in the midst of watching environmental documentaries. They all seemed the same to me. They all followed a similar format: introduction of the problem, the backstory leading up to the problem, how to solve the problem, or what will happen if the problem is not solved. But amongst the repetitious cycle, there was one documentary that really struck me, that challenged me to think about the environment and my role in and impact on this world. The documentary was *Chasing Ice* (Aronson & Orlowski, 2012).

I was immediately drawn in and mesmerized by the imagery. This was the first environmental documentary I had come across that focused on images and offered little human narration or music. I immediately connected to the images of the ice: the stunning time-lapse photography and video recordings of massive glaciers covering an immense area of land and reaching heights as tall as or even taller than skyscrapers.

[Figure 1.6 has been removed due to copyright restrictions. It was a screenshot of a scene from *Chasing Ice* (2012) showing an image of a glacier. Original source: Aronson, J. (Producer) & Orlowksi, J. (Director). (2012). *Chasing ice* [Documentary]. United States: Exposure.]

**Figure 1.6 Screenshot of a scene from *Chasing Ice* (2012), 3:41.**

I was in awe and curious as to how this documentary was able to draw me in with such visual imagery. This documentary left me speechless, in wonder at the beauty of nature, and contemplating the consequences of what might be lost. I thought back to my moment at Long Beach, of my experiences camping in the mountains, of my father, and what it would mean if we remained complacent about the current state of the environment. I was devastated. Everything clicked. To have personally experienced a profound moment of change was just the beginning. If I could have such a powerful, evocative reaction to the images in an environmental documentary, what kind of responses might such visuals evoke in others? What kinds of reactions do people have to certain kinds of images, and are they then inclined to act in more sustainable ways after witnessing them? As more and more people receive information about the environment through media, what will happen if they are no longer engaged by what they see? Might seeing too many images of destruction of the natural environment lead to desensitization? Is it only fear of loss—

not regret for damage done—that changes the way we act and urges us toward sustainable living?

*A realization . . .*

These two moments near the beginning of my doctoral journey made a significant impact not only on my study, but also on my life. I have started to become much more conscious of the waste I throw away and of what I can and cannot recycle. I now make an effort to bring my own mug and pack my lunches in glass containers. I realize the impact I have on my own microcosmic world and how my actions can make a mark on the larger world. To preserve the natural places I hold so dear to my heart, I need to do something. We all need to do something, and we should start doing it today.

At this time early in my doctoral work, I also learned about my feeling of connection to animals. For example, when I was reviewing documentary clips for inclusion in my study, I came across video footage uploaded by a research team from the Department of Oceanography at Texas A&M University. They encountered a large sea turtle near Costa Rica that had a ten to twelve centimeter straw lodged up its nostril. This eight-minute video is excruciating to watch: as the team attempts to help the turtle, viewers can see the turtle squeezing its eyes, apparently in extreme pain as blood starts to drip down its nose. Tears were welling up in my eyes. I could not watch, and so I forwarded the video to the end to find out if the team was successful in removing the straw. They were. Still tears form in my eyes when I recall the visual of the turtle in pain because of a small piece of plastic that was not disposed of properly. From this video, other documentaries, and my classes, I have a newfound appreciation for animals—all animals, and especially birds.

I was

afraid

of the unknown,  
of birds staring at me  
with their  
beady  
little  
eyes.  
Black circles,  
judging me,  
ready to swoop down  
and attack me,  
to validate  
the evilness of birds.

But now,  
I have come to realize that  
all creatures, no matter how  
small or  
scary or  
strange  
are similar to me.  
Have the same  
desires and  
needs  
as  
me.

That  
we are the same,  
Crows, ravens and I.

I have gained a  
respect  
for crows,  
who mate for life,  
who have  
an astounding memory,  
(probably better than my own)  
who protect,  
and who fiercely defend.

When will we realize,  
we are the same,  
we need each other  
to survive . . .



These personal epiphanies caused me to realize what I could bring, aside from my expertise in film education, to a study about environmental film in education. I am reminded of South African environmental activist, Wangari Maathai, who in the documentary *Dirt! The Movie* (Benenson, Rosow & Dailly, 2009) tells the story of a hummingbird. There is a forest fire. All the animals are watching helplessly at the edge of the fire except for the hummingbird. This hummingbird fills its beak at a stream, flies back and drops a tiny bead of water onto the fire. It does this over and over again while the bigger animals watch. They say to the hummingbird: “What do you think you can do? You are too little. This fire is too big! Your wings are too little! And your beak is so small!” Without being discouraged, the little hummingbird turns to the animals and says: “I am doing the best that I can.” It is with my own passion and expertise in media, film, visual literacy and visual rhetoric that I am able to contribute to research concerning environmental issues by exploring how visual rhetorical modes in environmental documentaries affect viewers’ awareness and understanding of environmental issues.

## Chapter 2: An Introduction to Environmental Communication

As noted earlier, this thesis is about visual rhetoric in environmental documentaries. In this chapter I define terms, offer an introduction to key influences and debates in environmental education, and then undertake a detailed literature review. The purpose of the overview section that discusses two influential texts—*Silent Spring* (1962) and *An Inconvenient Truth* (2006)—is to provide context in regards to environmental communication and audience reception. Subsequently, I acknowledge opposing perspectives about environmental issues and situate the focus of this dissertation in respect to such issues. A discussion of the role of images in environmental documentaries then leads to a literature review on this topic. The chapter concludes with the research questions.

### 2.1 Defining “nature” and “environment”

Terms such as “nature” and “environment,” which will be used in this dissertation, are complex. Within the context of environmental research, one could argue “nature” and “environment” have been used interchangeably to the point that they are almost viewed as synonymous (Clark, 2011). Clark (2011) observes: “in the limited sense of places unaffected by human activity there is no ‘nature’ as such left on the planet, but there are various ‘environments’ some more pristine than others” (p. 6). The way in which some describe nature or environment as being “pristine,” as Clark does here, is also complicated. In fact, according to Luke (1997), “nature” is “no longer a vast realm of unknown, unmanageable, or uncontrollable wild nonhuman activity ... nature is turning into ‘Denature’ . Much of the earth is a ‘built environment’, a ‘planned habitat’, or ‘managed range’ (p. 195). Williams (1993) further attests that “nature” is perhaps one of the “most complex word[s] in the [English] language” (p. 176). I would add that the same holds true for “environment.” While acknowledging the complexities of

the terms “nature” and “environment,” for the purposes of this study I define “nature” as being “the phenomena of the physical world, collectively, including plants, animals, the landscape, and other features and products of the earth, as opposed to humans or human creations” (Nature, n.d.). I define “environment” as “the surroundings or conditions in which a person, animal, or plant lives or operates” (Environment, n.d.).

## **2.2 *Silent Spring* (1962) and *An Inconvenient Truth* (2006)**

Environmental issues continue to be a global concern, and information on the subject is distributed through various forms of media such as print, film, and television. Some of these texts can have a profound effect on viewers. Historically, two influential texts that raised awareness about how environmental issues may impact people were Rachel Carson’s (1962) book *Silent Spring* and the documentary *An Inconvenient Truth* (Bender & Guggenheim, 2006).

*Silent Spring* informs readers of the dangers of the chemicals used in pesticides—danger both to the environment and to people. Carson’s (1962) book was immensely popular in the 1960s, and is still considered a key text because it engages readers with content that is relevant even fifty years later. The book informs people about chemicals used in pesticides and their effect on soil, water, people, and other organisms. However, rather than relying on scientific jargon, Carson writes the book as a narrative. The book, while factual, reads like a novel. It demonstrates how Carson’s “use of imagery and emotion is almost perfectly judged” (Radford, 2011, para. 6), and how she is able to let the text present itself, allowing readers to draw their own opinions and conclusions. This may have been one of the reasons *Silent Spring* was so well received and why it raised people’s awareness about the use of synthetic pesticides, such as dichlorodiphenyltrichloroethane (DDT) (Radford, 2011). This awareness, and the resulting outcry against the use of DDT, helped establish the US Environmental Protection Agency in

1970, which banned DDT in the US in 1972 (Paull, 2013). *Silent Spring* was and continues to be an influential text, and may have been one of the first to introduce the various symbiotic relationships between the land and pesticides, and the long-lasting effects of the latter. *Silent Spring* is considered to be “one of the most effective books ever written” (Radford, 2011, para. 11). In terms of its impact on environmental activism:

If you had to choose one text by one person as the cornerstone of the conservation movement, the signal for politically savvy environmental activism, and the beacon of worldwide lay awareness of ecological systems, *Silent Spring* would be most people’s clear choice. Its impact was immediate, far-reaching and ultimately life-enhancing. (Radford, 2011, para. 3)

After his term ended in 2001, Al Gore, former Vice President of the United States and avid environmentalist, commenced a lecture tour on the topic of climate change. These lectures became the basis for the documentary, *An Inconvenient Truth* (Bender & Guggenheim, 2006). The director, David Guggenheim, showcases some of Gore’s lectures. Although it is not without criticism, one might argue this documentary helped to move environmental issues from complex ideas to providing accessible explanations of information around climate change. Gore is able to deliver his argument

without being patronizing, boring or dry. He mixes in jokes . . . to keep you going between the beautiful but terrifying pictures of melting glaciers and disappearing forests. And the science is laid out flawlessly . . . [he] lays out the evidence piece by comprehensible piece to build a conclusion that’s hard to fault. (O’Hara, 2006, para. 3)

The documentary combines the use of science with elements of Gore’s personal narrative. *An Inconvenient Truth* also informs audiences of how people have caused environmental

devastation, while at the same time showing how people can also be a part of the solution. This documentary moved environmental issues from complex scientific perspectives and toward being about moral responsibility. It invited viewers to be part of the conversation to contribute to possible solutions (Johnston, 2013). The documentary “stands as a prototype of activist filmmaking” (Hachard, 2014, para. 3). *An Inconvenient Truth*, much like Carson’s (1962) *Silent Spring*, had a “much greater impact on public opinion and public awareness of global climate change than any scientific paper or report” (Cook, 2016, para. 4).

Both of these texts had a major impact on people regarding particular environmental issues in part because they framed the issues in a powerful persuasive manner. Rhetoric about environmental issues can have a profound effect as demonstrated by *Silent Spring* and *An Inconvenient Truth*.

### **2.3 Environmental issues and perspectives**

In 2015, over 190 nations gathered to discuss and ratify the Paris Agreement on climate change at the United Nations Framework Convention on Climate Change (UNFCCC). The world’s first universal climate change agreement outlines the commitment between participating countries to limit the increase in the average global temperature to less than two degrees Celsius, to provide aid to developing nations to combat climate change, to reduce greenhouse gasses, and to be carbon neutral by the year 2050 (Walters, 2015). But, as scientists and international leaders lean towards building a more promising environmental future, informing most people about these issues and encouraging them to act in more eco-conscious ways is a particular challenge.

It is difficult to educate about environmental issues because there are a great number of issues to consider, and they are often abstract and difficult to understand. Further, there are many different perspectives that people must consider. Globally, most political leaders and scientists

are working towards solutions to combat many different environmental issues. However, much scepticism and abundant counter-arguments still exist. Robert Muller, a physics professor at Stanford University, was doubtful about results from various studies examining climate change. This motivated him to conduct his own studies, which resulted in a reversal of his beliefs (Muller, 2012). At the same time, however, he stated: “I still find that much, if not most, of what is attributed to climate change is speculative, exaggerated or just plain wrong. I’ve analyzed some of the most alarmist claims, and my scepticism about them hasn’t changed” (Muller, 2012, para. 8). Nevertheless, Muller (2012) did believe humans were the cause of climate change, and acknowledged the need to find solutions.

When the documentary film *Gasland* (Fox, 2010) was released, it raised people’s awareness about hydraulic fracturing (Bogdan Vasi, 2018). But there was an equal amount of protest against the documentary and support for hydraulic fracturing. In 2012, some US natural gas corporations banded together to fund the documentary *Truthland* (Energy In Depth, 2012). *Truthland* centres on a teacher who was sceptical about the claims made in *Gasland*. It follows her on a quest to answer questions, such as allegations made about secret chemicals in water supplies. *Truthland* claims to reveal correct information about hydraulic fracturing, and about how the process is not harmful to people or to the environment.

*Fracknation* (Alberstat & McAleer, 2013) was also released to rebuke the ideas presented in *Gasland*. The inspiration for this documentary came from a moment when journalist (and producer of *Fracknation*) Phelim McAleer confronted Josh Fox, director of *Gasland*, about a scene in Fox’s documentary. The scene depicts a farmer running water from the kitchen tap and lighting it on fire. According to Fox (2010), this scene helps demonstrate the high quantity of methane in the water, caused by hydraulic fracturing. McAleer, conversely, claims that high

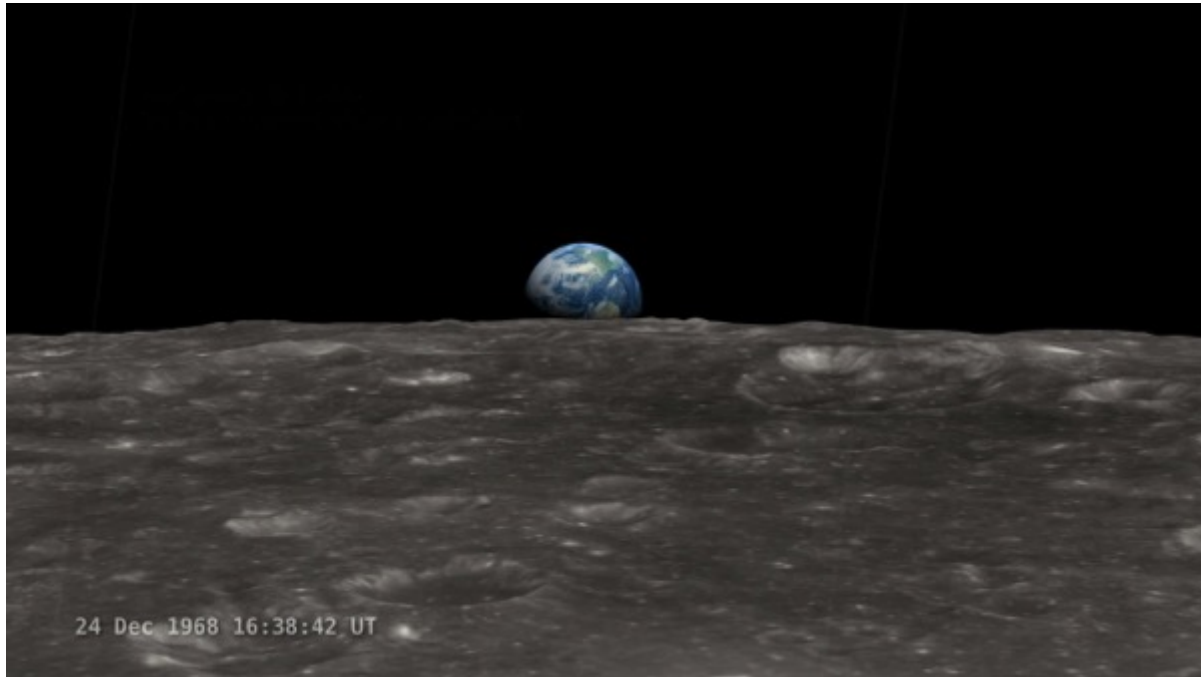
levels of methane gas existed in water supplies before the introduction of hydraulic fracturing. McAleer created a documentary countering Fox's perspective. Like *Truthland*, *Fracknation* also provides a more positive outlook on the benefits of hydraulic fracturing. McAleer, in partnership with another journalist, Ann McElhinney, also directed a film, *Not Evil, Just Wrong* (2009), that denies climate change as a response to *An Inconvenient Truth* (Bender & Guggenheim, 2006). There are numerous examples of people and of texts countering claims related to various environmental issues. For the purpose of this study, I focus solely on those documentaries calling attention to, and trying to combat, our environmental issues and problems. However, it is important to acknowledge that there are multiple perspectives to any issue, and people are constantly receiving varying and often contradictory information about the environment through the media.

## **2.4 Environmental documentaries and visual imagery**

Over two decades ago, UNESCO (1997) noted the significant role media has in appealing to audiences to act in sustainable ways. More recently, Cox (2013) observed the increase in environmental communication depicting a sense of urgency and, more specifically, the powerful role images play in how viewers perceive the environment. Environmental communication “helps construct or compose representations of nature and environmental problems as subject for our understanding” (Cox 2013, p. 19). Environmental issues are social-symbolic constructions of the environment whereby the environment becomes “something we know, at least partly, through language and other symbols” (Cox 2013, p. 62).

Among these symbols, images can have a very powerful rhetorical effect because they can represent complex ideas that may be otherwise difficult to understand (Gold & Revill, 2004). According to Kitchell (2012), the “consciousness changer” with regards to the use of images in

promoting environmental awareness was one of the first photographs of Earth from space. The juxtaposition of the blue and green Earth against the grey moon helped viewers realize the importance of protecting the Earth (Kitchell, 2012).



**Figure 2.1 NASA Google+ Hangout: ‘Earthrise’ A New Visualization - 45th Anniversary of Apollo 8 Viewing Earth from Space (c) NASA Goddard Space Flight Centre from Greenbelt, MD, USA, used under CC-BY-2.0.**

This image of Earth from space, later titled “Earthrise,” became one of the most “influential photographs ever taken” (NASA, 2012, para. 19). The employment of images to represent complex issues is designed “to awaken public consciousness over misuse of the environment and shape ... communications to create and reinforce that message” (Gold & Revill, 2004, p. 3). The selective use and representational patterns of certain images, resulting in a collection of pictures frequently used in many forms of environmental communication, suggests a higher degree of appeal of particular images over others (Gold & Revill, 2004).



One form of environmental communication that is growing in popularity is the documentary film. Historically, the documentary has been used to educate people about various issues and events, and will be discussed further in Chapter 3. The documentary genre seems to have endured and, in recent years, seems to have “increased its popularity, redefining itself as a type of connector or creative hub among vast fields of media activity” (Kara & Marcus, 2016, p. 1). Advancements in technology have directly influenced the kinds of documentaries filmmakers are able to produce, which continuously alters and advances the genre (Kara & Marcus, 2016; Nichols, 2016).

All documentaries are rhetorical because they address audiences with a specific point of view (Murray & Heumann, 2014) and offer the “best available means of persuasion in a given situation” (Hackley, 2012, p. 4). Environmental documentaries implement a variety of rhetorical modes, such as oral narration and the use of music, which also act persuasively on audiences (Cox, 2013). This study, however, will focus on how documentary images impact viewers, with attention to the complexities of how a viewer’s prior experiences and predispositions contextualize their interpretation of and/or reaction to what they are viewing.

The purposeful use of certain kinds of visuals in environmental documentaries helps shape people’s perceptions and understanding of environmental issues (Cox, 2013). Given the significance of such perspectives and the growth of documentary media as an important source of information, the ways in which people respond to visual rhetorical modes in environmental documentaries deserves scholarly attention. Yet, there appears to be a lack of detailed analysis of visual rhetoric in relation to how documentary genres promote and sustain environmental awareness, as the following literature review of studies exploring various forms of environmental communication demonstrates.

## 2.5 Literature review

Many studies explore how different forms of media communicate environmental issues (e.g., Bell, 1994; Boykoff, 2007; Brüggemann & Engesser, 2017; Carmichael & Brulle, 2016; Carmichael, Brulle & Huxster, 2017; Lowe, 2006; Nissani, 1999; Swain, 2012; Weingart, Engels & Pansegrau, 2000). The collection of chapters in *Climate Change and the Media* (2009), for example, explores ways in which various forms of media worldwide convey issues of climate change. Some studies reported on how different media outlets (e.g., newspaper, television news) in the US have been unsuccessful in effectively reporting on climate change (Boykoff, 2007; Swain, 2012) because the media “often frames climate change mitigation as a dynamic and contested issue within intersecting realms of policy, science and the public” (Swain, 2012, p. 162). Consequently, many people are likely to disconnect from media coverage of environmental issues that are heavily framed within a scientific, political or business perspective (Nissani, 1999; Swain, 2012). Other research has revealed viewers tend to disassociate with news coverage of environmental issues because of inconsistencies in reporting (Bell, 1994; Nissani, 1999; Swain, 2012) and a lack of balanced news coverage (Boykoff, 2007). The commonality among these studies and others exploring audience reception with regards to a specific form of media is a focus on oral and written rhetoric, with apparently less attention to the visual.

That said, some studies do examine visual rhetoric. Nissani (1999), for example, examined visual rhetoric and perception of the greenhouse effect; however, this study focused solely on print images. DiFrancesco and Young (2010) conducted a content analysis of images used in two national Canadian newspapers, *The Globe and Mail* and *The National Post*. They examined the combination of image and text, arguing that “images alone . . . fail to tell the whole story” (p. 524). Visuals used in environmental communication can have a powerful, persuasive

impact on viewers (Cox, 2013). According to Swain (2012), images “tend to be more compelling than logic or explanation within a media text” (p. 169), and they often “link to individuals’ everyday emotions and concerns in the context of climate change issues” (p. 187). The use of visuals is essential in raising awareness about environmental issues because they can reduce “complexity by providing interpretative frames or narratives that selectively blend fact and emotion . . . which suggests that visual imagery *potentially* has a strong role in public understanding of climate change” (DiFrancesco & Young, 2010, p. 518, emphasis in original). For example, Smith and Joffe (2012) asked participants to report their thoughts or feelings about global warming and found that participants’ first thoughts were in keeping with the dominant images depicted in the British Press, such as “melting ice caps, stranded polar bears, and flooded landscapes” (p. 18).

Other studies focus on visual media as a stand-alone method of communication. One study, for example, examined the covers of *Time* magazine from 1923 to 2011 and explored how environmental issues were visualized and how frequently this occurred (Meisner & Takahashi, 2013). They found the number of covers related to environmental issues increased within the last decade of their study. However, Meisner and Takahashi (2013) also found that while it appears as though *Time* recognized the importance of environmental issues, the arguments included in the magazine were weak, offered few solutions to readers, and employed, what the authors believed, to be disengaging visual imagery. Other studies examined visuals used by activists in their campaigns (Cozen, 2013) or explored images used to legitimize the production of fossil fuels (Takach, 2013). Ventura, Frisio, Ferrazzi, and Siletti (2016) acknowledge the limited number of studies exploring visual communication. They conducted a study examining the kinds of pictures resulting from a Google search on genetically modified organisms, analyzing the

images shown and in what order they appeared. They found that the results on the first page of a Google search often yielded more fearful information. Peeples (2013) focused on visual representation of the toxin Agent Orange in news and popular media during and after the Vietnam War, and Barnett (2015) examined visual rhetoric of “toxic portraits” (p. 405). Linder (2006) investigated visual representations of climate change in advertising. Remillard (2011) examined a photographic essay of the Canadian oil sands in *National Geographic Magazine*, focussing on how environmental risk is communicated through visuals and the tensions between the notions of nature-as-sublime and nature-as-resource. After an analysis of the images, Remillard (2011) argues that people’s awareness and motivations to act might not be affected by images associated with environmental risk. While examining static images, these studies do not specifically explore the different kinds of visual rhetorical modes, or investigate participants’ responses.

Some studies do consider participants’ responses. Covi and Kain (2016) conducted a study with participants regarding their understanding of sea-level rise risk in the regional and local documentation of several coastal cities in the US. Many of the documents in the study were in print form and images were comprised of graphs and maps that most participants found difficult to read and comprehend. The print images used in this study could be categorized as scientific in nature (e.g., illustrations, charts, graphs, maps). Sarge, VanDyke, King, and White (2015) explored visual framing of hydraulic fracturing, participants’ understanding of the process, and whether or not they supported the practice. As noted earlier, Smith and Joffe (2012) asked participants to record their thoughts and feelings about global warming, but Smith and Joffe did not specifically examine the different kinds of rhetoric used and how participants reacted to different visual rhetorical modes. In contrast, O’Neill and Nicholson-Cole (2009)

explored how still images depicting terrifying scenes of destruction of natural environments affected participants with regards to how they personally connected to the images, and whether or not participants were motivated to act in more eco-conscious ways. This study found that participants generally did not find frightening images to be persuasive; rather, these images left the participants feeling “fearful, depressed, scared or distressed at the thought of climate change” (O’Neill & Nicholson-Cole, 2009, p. 369). Many studies in the field of environmental communication have examined the use of images, but they often focused on still images and on the analysis of the images instead of exploring viewer response. There is a need for research to explore how viewers respond to moving images and visual rhetorical modes (Lowe, 2006; O’Neill & Nicholson-Cole, 2009; Smith & Joffe, 2012).

One area of research within environmental communication that is lacking involves examination of images used in environmental documentaries. Aaltonen (2014) examined three environmental documentaries: *An Inconvenient Truth*, the 2006 documentary discussed earlier that follows former presidential candidate Al Gore’s efforts to raise people’s awareness of environmental issues; *Not Evil, Just Wrong*, a 2009 documentary denying the issues of global warming; and *Recipes for Disaster*, a 2008 documentary that follows the director and his family living without using oil for a year. Aaltonen (2014) conducted a thorough rhetorical analysis based on Aristotle’s notion of rhetoric by examining the use of logos (logic, argumentation), pathos (emotional appeal) and ethos (ethics, or credibility). However, the study focused on verbal rhetoric and did not examine other rhetorical modes. Nosal, Keenan, Hastings and Gneezy (2016) explored the representation of sharks in documentaries and investigated how viewers responded to the use of music. Yet, again, there was limited discussion of the impact of visual images. Some have explored how Hollywood films portray environmental issues (Murray &

Heumann, 2014; Starosielski, 2013), but did not specifically explore visual rhetoric. Others explored environmental documentary films, but did not explicitly examine the role of visual rhetoric either (Ladino, 2013; Murray & Heumann, 2014; Starosielski, 2013; Vivanco, 2013). Very few of the studies noted here considered participant responses.

While discussed in more detail in the following chapters, little of the literature on environmental communication situates the research within a rhetorical genre studies (RGS) framework. Scholars in the field of RGS recognize the impact of textual regularities (such as the use of visual rhetorical modes) on patterns of human activity (Freedman & Artemeva, 2008; Freedman & Medway, 1994; Paré & Smart, 1994; Schryer, 1994). RGS recognizes “genre” as a form of social action (Miller, 1984), and examines how particular genres and their representational patterns can affect people. In the case of this study, examining environmental documentaries through a RGS lens will contribute to an understanding of how the documentary genre can create meaning and influence viewers. McLuhan (1964) notes how “the ‘medium is the message’ because it is the medium that shapes and controls the scale and form of human association and action” (p. 24). Bazerman (2010) also notes how genres help to shape people’s thoughts and habits of communication. Documentaries have the ability to “help sensitize consumers of documentaries to the ways in which celluloid rhetoric works upon and through particular cultures . . . ‘massaging’ the consumer’s sensibilities and even altering thought patterns” (Gronbeck, 1978, p. 140). In using the term “massage” here, Gronbeck is drawing on Fiore and McLuhan (1967), who wrote about how media “massages” consumer sensibilities. Although the platforms for documentary production and mobilization have radically changed in the forty years since Gronbeck made this observation, the notion of how rhetoric “massages” (McLuhan, 1964) consumer sensibilities remains a vital point of consideration.

The documentary is a genre that can communicate environmental issues to viewers (Janpol & Dilts, 2016). The documentary “has become a popular and significant vehicle for communication scholars analyzing media, visual rhetoric and implications for culture and pedagogy” (Janpol & Dilts, 2016, p. 91). Yet, the analysis often lacks focus on audience reception. More investigation of visual rhetorical modes in environmental documentaries would be of benefit, especially at a time when documentaries are gaining momentum and environmental messages are reaching larger audiences. With a view to addressing this gap in the research, my study discusses predominant visual rhetorical modes used in environmental documentary films and investigates participant responses to different visual rhetorical modes.

## **2.6 Research questions and dissertation overview**

Given the growing importance and popularity of environmental documentaries and their reliance on using images to convey messages to audiences, this study seeks to answer the following two questions:

1. What are dominant visual rhetorical modes evident in environmental documentaries?
2. Which visual rhetorical modes in environmental documentaries most affect viewers’ perceptions, attitudes, and understanding of environmental issues?

To begin exploring these research questions, Chapter 3 examines the documentary genre by offering a definition and also troubles the notion of “the real” in documentaries by addressing the theoretical perspectives of Christian Metz (1974, 1977) and Jean Baudrillard (1994). It then provides an overview of the history of documentary and discusses ways in which documentary films may be categorized. Chapter 4 provides an overview of rhetorical genre studies to ground the exploration of the impact of environmental documentaries on viewers. Chapter 5 provides a brief history of rhetoric with a focus on the notion of visual rhetoric, and provides an overview of

the dominant visual rhetorical modes in environmental documentaries. Chapter 6 describes the methods and data collected, leading to data analysis and discussion in Chapter 7. The final chapter offers a conclusion and consideration for future studies.



## Chapter 3: The Documentary Film Genre

This chapter aims to address in part the first research question, “What are dominant visual rhetorical modes evident in environmental documentaries?” I first offer a definition of *documentary* and then provide an overview of the history of documentary film. The overview also references television documentary and discusses technological inventions. The chapter ends with a summary of six documentary modes and three predominant environmental documentary modes.

### 3.1 Defining *documentary*

The documentary genre has changed over time due to a variety of different issues and technological advancements. Nichols (2010) suggests this fluidity should be accepted “as cause for celebration. It makes for a dynamic, evolving form. Fluid, fuzzy boundaries are testimony to growth and vitality” (p. 143). According to Nichols (1991, 2012), there are many factors to consider that contribute to the fluidity of the documentary, such as filmmakers’ interests and intentions influencing the production of the documentary, which may also include motivations of sponsors and funding bodies. There is also the role of audiences to consider.

John Grierson coined the term documentary, which he defined as being the “creative treatment of actuality” (Hardy, 1966, p. 13). This definition has endured because it is so flexible (Aufderheide, 2007). Grierson’s definition not only acknowledges the choices filmmakers have when creating their documentaries, but also the challenge they face in balancing between creativity and documentation. There is a tension in Grierson’s definition between the ideas of “creativity” and “actuality.” While some welcome creative additions, others, such as Grierson, believe in filming reality (Barnouw, 1993).

There is regularly a tension about notions of reality and truth in documentary film. Many have noted that the documentary, which is often associated with reality, is nevertheless a representation that cannot be truly objective. A documentary film is merely a representation of reality (Metz, 1974), and any representation may be contested, a point to which I return later. Aufderheide (2007) notes, “documentaries are *about* real life; they are not real life” (p. 2, emphasis in original). Further, documentary films are forms of art that rely on directors to “make specific choices when crafting the film, utilizing techniques such as framing, voiceovers, music, lighting and panning [to] capture, shape, manipulate and construct meaning” (Hackley, 2012, p. 4). In this regard, Aufderheide (2007) observes that no film is without manipulation, and that all aspects of a film—no matter the genre, the choice of topic, or the editing process—are manipulations. Thus, a simple definition of a documentary could also be: a film that “tells a story about real life, with claims to truthfulness” (p. 2). Nichols (2010) extends Aufderheide’s definition by providing specific details:

Documentary film speaks about situations and events involving real people (social actors) who present themselves to us as themselves in stories that convey a plausible proposal about, or perspective on, the lives, situations, and events portrayed. The distinct point of view of the filmmaker shapes this story into a way of seeing the world directly rather than into a fictional allegory. (p. 14)

Nichols’ definition appears to be the most specific and accurate, and is well-suited to environmental documentaries.

Many definitions distinguish documentaries as being evidence based. The status of documentary films as forms of evidence has legitimated them as sources of knowledge

(Aufderheide, 2007; Nichols, 1991). There remains, however, a need to trouble notions of reality and truth in such genres.

### **3.2 “Reality” in documentary film**

People may be drawn to documentary genres because of their apparent portrayal of “reality” or “truth.” When viewing and processing information in a documentary, viewers participate in “procedures of rhetorical engagement” (Nichols, 1991, p. 26), and one factor to consider includes realism. Nichols (2010) argues that viewers’ assumptions about the “reality” of documentaries rely heavily on the indexicality of the image. That is, the way in which “its appearance is shaped or determined by what it records” (p. 34). The structure of a documentary, Nichols suggests, contributes to its connection to reality. Specifically, a documentary relies on evidentiary editing, which “organizes cuts within a scene to present the impression of a single, convincing argument” (Nichols, 1991, p. 19). Some documentaries tend to rely on oral conventions because these are believed by some to convey the significance of an issue more effectively (Nichols, 2010). But, images in documentary films have an equal, if not more powerful, impact. As Nichols (2017) notes, documentaries that have been produced and distributed more recently rely heavily on visuals to “flesh out our sense of the world,” (p. 28) and to connect viewers to the subject matter.

Yet, ongoing criticism about the documentary genre asks whether visual representations are faithful representations of the world outside the documentary film. To elaborate on this persuasive rhetorical feature of the documentary genre, I will draw on the theoretical works of Christian Metz (1974, 1977) and Jean Baudrillard (1994).

A documentary film is merely a representation or, as Metz (1974) notes, an impression of reality. The genre of film, according to Metz (1974), provides a feeling of experiencing reality

because of the way it appeals to a sense of belief and the way it provides “accents of true evidence, using the argument, that ‘It is so’” (p. 4). This impression of reality is achieved in two ways: through the object perceived and the perception of the object (Metz, 1974). That is, an accurate reproduction of an object provides viewers with clues about reality, and the act of perception allows viewers to realize or make the object real (Metz, 1974). These two factors are intertwined and a persuasive reproduction causes an “affective and perceptual participation to be awakened in the spectator, which in turn, give[s] reality to the copy” (Metz, 1974, p. 7).

Some have argued that impressions of life and the natural world, for example, are more vivid in film because of movement. Metz (1974) refers to Edgar Morin, who notes that it is the combination of the *reality* of motion and the *appearance* of form [that] gives us the feeling of concrete life and the perception of objective reality. Forms lend their objective structure to movement and movement gives body to the forms. (p. 7, emphasis in original)

Motion contributes indirectly to the impression of reality by giving objects dimension, but it also creates a sense of reality (Metz, 1974). Viewers may have a sense of being disconnected from the world when viewing a film, and must then make a connection to an object or an event to accomplish a transference of reality (Metz 1974). Thus, according to Metz (1977), images in film belong to an order of reality, and are recognized as originating in the outside world. Yet, it is not the visual and auditory elements—“cinema’s signifiers” according to Metz (1977, p. 730)—that are real, but the characters and actions that are represented. For the purpose of this study, the cinema’s signifiers, or the documentary signifiers, represent environmental concerns and issues. In environmental documentaries images are used in part to educate viewers and possibly persuade them to adopt a particular perspective.

Baudrillard (1994) argues viewers' perceptions of an image evolve over four different stages, eventually becoming a simulation—more specifically, a simulacrum—which is a representation of a person or thing. The four stages of the evolution of an image mentioned by Baudrillard (1994) are as follows: “it is the reflection of a profound reality; it masks and denatures a profound reality; it masks the absence of a profound reality; it has no relation to reality whatsoever: it is its own pure simulacrum” (p. 6). To follow Baudrillard's line of reasoning, a photograph of a polar bear on an ice floe, for example, is an actual depiction of the animal attributed to a particular photographer.



**Figure 3.1 Polar bear (*urus maritimus*) in the drift ice region north of Svalbard (c) Andreas Weith, used under CC-BY-SA-4.0.**

Camera framing immediately removes the larger context of the image. And, over time, with multiple viewings, the context of the original image may be entirely lost. That is, the image of a polar bear on an ice floe becomes a poor representation of the actual polar bear and its habitat.

The absence of context goes unnoticed as the image of the polar bear loses its relation to reality and comes to exist independently as a token. Baudrillard's stages of an image can be seen in research such as Kawashima's (2002) study of media representation of whales. The whale, according to this work, has become a "fictitious character living primarily in our imagination" (p. 2). The polar bear is similar, I would argue, and the image of the polar bear has come to have a strong association with climate change. Grey London, an advertising group in London, England, approached the World Wildlife Fund (WWF) to change its logo from the familiar black and white panda to a polar bear (Richards, 2016).

[Figure 3.2 has been removed due to copyright restrictions. It showed a logo of a polar bear for the World Wildlife Fund proposed by the advertising company Grey London,. Original source: Richards, K (2016). Grey London wants to change the WWF logo from a panda to a disappearing polar bear. *Adweek*. Last retrieved September 15, 2017 from: <http://www.adweek.com/creativity/grey-london-wants-change-wwf-logo-panda-disappearing-polar-bear-175070/> ]

**Figure 3.2 Screenshot of a polar bear logo by advertising company Grey London.**

A spokesperson from Grey London remarked that changing WWF's logo to a polar bear would be more persuasive because they believe the polar bear to be "an animal synonymous with climate change, and the inclusion (or lack) of its habitat reflects this very modern and pressing threat better" (para. 4). Climate change cannot be easily explained or seen. Images of polar bears, both in still photography and moving images, have been used repeatedly in environmental visual rhetoric because they have a lasting effect.

As noted earlier, Smith and Joffe's (2012) study found that participants' thoughts and feelings about global warming were triggered by images that were most dominant in the British press such as "melting ice caps, stranded polar bears and flooded landscapes" (p. 18). The visual image has a tremendous impact on people's perception of and understanding about environmental issues (Cox, 2013) and offers opportunities to educate and influence people's behaviour (Lester & Cottle, 2009). Repeated use of images representing both natural phenomena and phenomena engineered by humankind in documentaries can significantly affect viewers' perception of environmental issues.

### **3.3 History of the documentary**

The history of the documentary is complex. While the discussion below is structured to follow a timeline, the development of the documentary has not been linear. Further, it should also be noted that the history of the documentary outlined below is based upon a predominantly Western perspective, mostly centering on countries in North America, UK, and Europe because these are the places where most documentary films began (McLane, 2012). I draw mostly upon Erik Barnouw's (1993) book *Documentary: A History of Non-Fiction Film* because his text offers a most comprehensive overview of documentary history that is relevant to this dissertation. Also, many scholars in the field of documentary film and history (e.g., Aufderheide, 2007; McLane, 2012; Nichols, 2010 and more) refer to Barnouw's text and some have regarded him as a noted scholar in the field of documentary history.

Although many inventors of cinematic technologies included those who produced or were interested in traditional Hollywood films, some of the early innovators in cinema were scientists who wanted to document events and actions, and it was in their work "the documentary film had prenatal stirrings" (Barnouw, 1993, p. 3). Eadweard Muybridge, a British photographer,





typical every-day occurrence of a train arriving into a station and passengers getting on and off the train. When this documentary was shown in theatres, it caused panic among viewers: they screamed and scrambled out of their seats because they believed the train was actually moving towards them. Witnessing the moving image was a new experience for viewers: “the use of movement from a distance toward the viewer, and the surprising depth of field in the sequence, offered audiences an experience quite foreign to the theatre” (Barnouw, 1993, p. 8).

Robert Flaherty’s renowned film, *Nanook of the North* (1922), was one of the first documentaries to expose viewers to a new genre: the explorer documentary (Barnouw, 1993) or the ethnographic documentary (Aufderheide, 2007) or the travel documentary (McLane, 2012). The ethnographic documentary invites audiences to learn about other cultures, which often focused on different customs (Aufderheide, 2007). Flaherty developed an interest in capturing other cultures on film as a way of providing a different perspective. According to Grierson (1976), Flaherty believed “that the story must be taken from the location and that it should be the essential story of the location” (p. 22). Many scenes in Flaherty’s *Nanook of the North*, however, were staged. Flaherty directed the actor playing Nanook inappropriately, as an Inuit who was ignorant, who clumsily tried to bite a gramophone record, and who participated in traditional hunts for walrus with spears, which was no longer customary of the Inuit people (Aufderheide, 2007). Some may define Flaherty’s approach to documentary filmmaking as *cinéma vérité*, a movement of filmmaking that emerged in the 1950s. In this method, the director combines an event or setting with staged actions and events (Aufderheide, 2007). This, according to many documentary filmmakers (i.e., Jean Rouch, Dziga Vertov, Robert Flaherty), is necessary to depict further information for audiences (Aufderheide, 2007). Today, *cinéma vérité* is used in many different forms of documentaries, including reality television shows.

Some documentary filmmakers were compelled to record events close to home. Films that focused on local places paved the way for advocacy documentaries (Aufderheide, 2007; Barnouw, 1993), as well as what McLane (2012) refers to as “interest films,” which often featured political figures and ceremonies. The advocacy documentary often focuses on political issues raised by individuals or an organization promoting a certain perspective (Aufderheide, 2007). One advocacy documentarian was John Grierson, who later founded the National Film Board of Canada. Grierson pushed for representing issues relevant to people of local communities. In this respect, his films focused on “the drama of the doorstep” (Barnouw, 1993, p. 85). Closely aligned with advocacy documentaries are government propaganda documentaries (Aufderheide, 2017) or what Barnouw (1993) refers to as “bugler” documentaries because they are intended to rally people as a bugle call might rally troops. These documentaries are supported, produced, and distributed by government organizations. Propaganda documentaries were more widely used as a mode of communication to influence people before, during, and after World War II (Aufderheide, 2017). One example is Frank Capra’s documentary series *Why We Fight* (1942 – 1945). Capra’s series relied on footage from Nazi Germany in order to recruit soldiers and to serve as a reminder to the soldiers of “why we are fighting and the principles for which we are fighting” (Barnouw, 1993, p. 157). Other filmmakers such as Humphrey Jennings of Britain drew attention to a different side of the war. Jennings’ films focused on the human spirit, its resilient endurance and survival, and drew upon nostalgic images.

World War II, not surprisingly given its position as a global event concurrent with and serving the rise of broadcast media (Horten, 2002), was a catalyst for the development of documentary forms (McLane, 2012). Documentaries from this period are sometimes difficult to categorize given the complexity of the social context. Consider *Triumph of the Will*, directed by

Leni Riefenstahl (1935), which documented Adolf Hitler and the Nazi Party Congress in Nuremberg. One of the most powerful images is a high-angle shot of Hitler walking through a massive formation of his army, presumably his Sturmabteilung (SA) and Schutzstaffel (SS) troops. Riefenstahl's documentary could be viewed as a form of propaganda. The footage in *Triumph of the Will* was used widely by Hitler and the Nazi party, and was also implemented in Capra's *Why We Fight* series because it served as a powerful reminder to the American people of why the allies were at war. However, Riefenstahl contested that her documentary was not propaganda, that she was not a Nazi, that she had no choice but to produce the documentary for Hitler, and that, despite the circumstances, she tried to create a beautiful work of art (Aufderheide, 2017). Riefenstahl's documentary is an example that demonstrates the blurry boundaries among documentary modes. Ultimately, classification invariably depends in large part on reception and social context: different audiences evidently may view a singular film or video as serving different ends.

Social documentaries were produced during the war to remind people of the importance of winning the war, but were also prevalent after the war, at which point they tended to focus on topics of rebuilding nation (McLane, 2012). As the war drew to an end, unused and newly discovered footage from the homes of Nazi officers provided material for prosecutor documentaries. These documentaries offered evidence of Nazi war crimes and were used, for example, at the Nuremberg Trials, where "wide use of photographic evidence was apparently without precedent" (Barnouw, 1993, p. 175). After World War II, documentaries related to the war offered documentation of wartime events. Resnais' (1955) film, *Night and Fog*, for example, was one of the first to provide a post-war documentation of concentration camps (Barnouw, 1993). These may be viewed as some of the first historical documentaries, films that provide a

narrative of a particular event or a biography. Historical documentaries serve to preserve memory, but also maintain memories of events. Aufderheide (2007) notes that historical documentaries are a means to archive stories, to provide opportunities to challenge public knowledge of historical events through personal accounts, and to revive or remind people of certain events, such as the Holocaust. Poetic documentaries also became an influential medium of inspiration after the war (Barnouw, 1993). Documentaries such as Arne Sucksdorff's (1941) *A Summer's Tale*, depicting idyllic natural environments, became popular.

The promoter-as-documentarian, or sponsored documentaries, emerged as corporate funding became prevalent in countries such as the US and the UK (McLane, 2012). One of the most celebrated promotional documentaries was *Louisiana Story* (Flaherty, 1948). Standard Oil from New Jersey commissioned Flaherty to make a documentary about oil exploration. Flaherty had to negotiate the tensions between his respect for the natural settings and his responsibilities to the company. Flaherty's solution was to focus on the wilderness and de-emphasize the impact of oil extraction. This message is most apparent in a scene showing a boy and his pet raccoon playing on the equipment used to extract oil, attempting to demonstrate that industry and the natural environment can co-exist (Barnouw, 1993; McLane, 2012). The film's message, "have no fear, the wilderness is safe, became in subsequent years the recurring theme of countless oil sponsored films and television commercials. They exemplified a political trend in business-sponsored films" (Barnouw, 1993, pp. 218-219). While Flaherty may have created *Louisiana Story* as a documentary, the combined effect of scenes of the natural bayou and Standard Oil's script resulted in a docu-fiction. As noted above, Flaherty was known to manipulate the action in front of the camera. Still, the message in Flaherty's film pioneered the way in which some

documentaries today attempt to communicate similar messages of a positive relationship between industry and the natural environment.

Around the 1960s, documentary filmmakers started exploring the role of the observer-as-documentarian. This represented a shift from employing actors to an approach in keeping with journalistic interviewing in order to elicit the perspectives of individuals *in situ*, a method that previously had been largely avoided or neglected in documentary filmmaking (Barnouw, 1993). Documentarians also began confronting individuals in order to provoke action, resulting in the emergence of the “catalyst-as-documentarist” (that is, a film-maker focused on raising social and ethical issues), which in turn led to the development of “guerrilla documentaries.” During the Vietnam War, guerrilla documentaries focused on criticizing administrative shortcomings. For example, the NFB film *The Sad Song of Yellow Skin* (Daly & Rubbo, 1972) “picture[ed] the disruption of Vietnamese life more vividly than anything else seen on American television” (Barnouw, 1993, p. 279). Today, understanding of the guerrilla documentary has shifted: such films now cover a larger range of topics, document live events, and are often produced on very low-budgets.

Barnouw’s (1993) notions of the observer, catalyst and guerrilla-style documentaries are also evident in “public-affairs documentaries.” For some time, documentaries were mostly shown in theatres as films, but from the 1950s to the 1980s, television became the primary source of communication in wealthier nations (Aufderheide, 2007). Television facilitated the emergence of public-affairs documentaries, which included an onset of investigative journalism programs, some of which are still viewed today. (For example, in Canada these include Canadian Broadcasting Corporations’ *Fifth Estate* or Canadian Television Network’s *W5*. In the US these include Columbia Broadcasting System’s *60 Minutes* or American Broadcasting Company’s

20/20.)

I would also like to acknowledge the impact of changing communication technologies in mobilizing the documentary form. At the time of writing this thesis, primarily 2017, many documentaries were distributed both as television series or films. Further, the increase in popularity of video sharing sites such as YouTube and video streaming sites such as Netflix alongside standard broadcast media made it possible for people to view documentaries on a variety of different platforms. This made it easier to distribute documentaries to a worldwide audience (McLane, 2012). Further, the camera itself underwent many transformations in the century prior to this study (e.g., increasing portability, a shift from analog to digital, drone mounting enabling unique perspectives, and so on). Although a detailed discussion of such changes is beyond the scope of this study, it is interesting to consider how advances in camera technology greatly influenced the nature of documentary filmmaking through history.

The portability of Lumière's cinematograph, for example, made it possible for documentary filmmakers to go to different places, but the equipment was cumbersome. The advent of the 35mm film in the early 1900s improved portability, but the filming process was still difficult because directors had to carefully plan the filming of scenes. It was also difficult to record ambient sounds (Aufderheide, 2007). As such, many documentaries recorded with 35 mm cameras were silent films. While filming *Nanook of the North* (1922), the equipment Flaherty carried included "75 000 feet of film, a Haulberg electric light plant and projector, and two Akley [35 mm] cameras and a printing machine so [he] could make prints of the film" (Flaherty, 1922, p. 554). For Flaherty, the prints were a way to edit the film on location. Flaherty also had to ensure the 35mm cameras were properly cleaned to avoid chemical build-up that might impact the quality of the image. Over time, cameras have become increasingly portable and of such

quality that directors are able to shoot events on location with greater ease. Further, it is possible to record both action and sound at the same time, to preview recorded images, and to include colour in film.

Ultimately, advances in technology and digital innovations have greatly impacted the ways in which documentaries are made and viewed. As noted above, a history of the technology related to documentary filmmaking is extensive and beyond the scope of this dissertation. Readers seeking more detail on this topic may look to McLane's book, *A New History of Documentary Film* (2012), which explores advancements and approaches to filmmaking. More recently, Kahans's edited volume, *The Documentary Film Reader: History, Theory, Criticism* (2016), provides a vast collection of essays including historical overviews of approaches and technologies for documentary filmmaking.

### **3.4 Documentary modes**

According to Nichols (2010), the evolving documentary genre has developed into six main documentary modes: expository, poetic, participatory, performative, observational, and reflexive. The *expository mode* is likely most used. The most prominent quality of this mode is how it directly addresses audiences through the use of voice-overs as a means to provide perspective or continue an argument. Images are occasionally separate from commentaries and are often used to illustrate a point. This traditional type of documentary attempts to build a sense of credibility using a professional commentator who can contribute intelligently to the issue and who, when necessary, can explain visual evidence.

In contrast, the *poetic mode* offers viewers an abstract representation of an issue through symbolic approaches as a means to encourage an affective response. Much of the interpretation is left open. Often, poetic documentaries rely heavily on visuals, and "the form and mood carry

as much expressive weight as the content” (Duvall, 2017, p. 13). Some poetic documentaries remove voice-over narration and rely only on music soundtracks or natural sounds (Duvall, 2017). Other poetic documentaries include voice-overs, but the narrative is used to complement the mood rather than to offer evidence.

The *participatory mode* allows a director to engage and interact with participants, and often focuses the director’s point of view. Similarly, the *performative mode* works to bring “emotional intensities of the embodied experience and knowledge to the fore rather than attempt to do something tangible” (Nichols, 2010, p. 203). A performative mode allows directors to provide a voice to issues that are personal to them, such as their own personal experiences and/or opinions related to a particular issue. These opinions are often quite visible in the documentary. Many of Michael Moore’s documentaries (e.g., *Fahrenheit 9/11*, *Bowling for Columbine*, *Sicko*, *Where to Invade Next*) might be classified as performative because he positions himself as the protagonist and makes his personal perspectives clear in the majority of his documentary films. It is often through his narrative and visible interactions and interviews with social actors that Moore addresses audiences. The main difference between participatory and performative modes is that a performative documentary emphasizes the director’s point of view, the director is very visible, and the director often focuses on emotional affect. That said, documentary modes are fluid, and one documentary often incorporates more than one mode. Michael Moore’s documentaries, for example, employ both the performative and participatory modes.

The *observational mode* in documentary films is synonymous with an ethnographic research mode, where audiences are invited to observe the lived experiences of others, including non-human subjects. This mode is seen in many environmental documentaries such as *Being Caribou* (2005), in which the filmmakers document the migration patterns of caribou in Northern



Canada as a means to understand the animals in order to protect them. The observational mode focuses less on sharing a particular rhetorical stance with viewers and more on providing a glimpse into the lived experiences of the subjects in the documentary.

The *reflexive mode* is the least common. It establishes a negotiation between the filmmaker and viewers by questioning the form or topic of the film. An example would be *Surname Viet Given Name Nam* (Trinh, 1989), a documentary in which interviews are used to share people's experiences since the Vietnam War. Half way through the film, viewers learn the interviews have been staged. Thus, the reflexive mode encourages viewers to be critical thinkers by actively criticizing the form and the subject of the media they are witnessing (Nichols, 2010).

### **3.5 Environmental documentaries**

Environmental documentaries employ the six documentary modes described above, but also employ other modes that make it easier for documentarians to showcase different topics and issues specific to the environment. These include, but are not limited to classic nature, companion species, and eco-disaster documentaries, which will be discussed below in more detail with brief historical connections.

#### **3.5.1 Classic nature documentaries**

Classic nature documentaries focus on one or more animal species and on a particular topic, such as the relationship between an animal and its geographical location. Bousé (2000) outlines several characteristics of a classic nature documentary, which include a focus on an animal and its habitat, often complemented with a dramatic narrative. There is little connection to science and politics, and avoidance of all controversial issues. Classic nature documentaries often have no historical referent so the film can remain timeless insofar as that is possible (Bousé, 2000).

Representation of events occurring in natural environments is a major focal point of classic nature films, and documentarians go to great lengths to hide most, if not all, aspects of production. For example, Disney's *True-Life Adventures* (1948-1960) "purposefully excluded any human presence, [and] offered an untouched and timeless envisioning of nature" (Molloy, 2013, p. 169). Walt Disney himself proclaimed, "nature writes the screenplays, we add the words for the narrator to say" (as cited in Molloy, 2013, p. 169). Classic nature documentarians are thus perceived as invisible recorders: they film the activities of animals as they occur and "generate a close symbolic, aesthetic, and popular association with documentary film" (Vivanco, 2013, p. 112).

In the early twentieth century, short wildlife films were often shown in theatres prior to feature presentations. They also helped to fulfill "a government requirement for 'public interest' programming on commercial television in the U.S., a factor that drove wildlife film production" (Vivanco, 2013, p. 113). In the 1960s, when the government requirement was dropped, wildlife films were distributed as public television broadcasts, which over time spawned the creation of conglomerate stations such as The Discovery Channel in the US. Meantime, in Canada, the government continued to fund public service announcements such as *The Hinterland Who's Who* series. Advancements in filming technology combined with the popularity of television resulted in growing public interest in environmental documentaries (Vivanco, 2013). Documentarians were able to capture footage during expeditions to new geographical locations and invite viewers into the lives and habitats of various species. Herbert Fonting's documentaries of Antarctica, for example, helped solidify "pre-existing ideas of penguins, primarily as peculiar and humorous creatures" (Vivanco, 2013, p. 115). The classic-nature documentary focuses on the personification of animals, "relies on the attribution of agency to nature," and codes "animals as

stereotyped characters whilst the narrator's didactic voiceover frames the stories" (Molloy, 2013, p. 169). This type of narrative is utilized in many environmental documentaries. Personification helps viewers identify with and develop empathy towards animals (and, I would add, plants) without the use of scientific jargon (Vivanco, 2013). However, some critique the "speciesist" gaze (discrimination or prejudice on the basis of species) because it "reduces animal behaviour to a caricature of human behaviour, providing erroneous information about how real animals live in the world" (Ladino, 2013, p. 131). One of the main concerns about personified narrative is that there is "little evidence that cinematic [animals] will be anything more than humans" (Starosielski, 2013, p. 119). Further, people may believe the portrayal of animal behaviours on screen and expect to witness the same behaviour off-screen. This is what Bahk (2010) refers to as perceived realism, an effect that "facilitates the viewer's conception of the world as being similar to its dramatic representations" (p. 3).

### **3.5.2 The companion environmental documentary**

While classic nature documentaries often employ personified narratives and show nature devoid of human interference, other documentaries examine the bond between humans and animals. Ladino (2013) examines the ways in which some nature documentaries adopt Donna Haraway's (2008) idea of companion species. These types of documentary films blur the boundary between the wild and the domestic, and focus on relationships between humans and the natural world as a partnership (Ladino, 2013). This "allows human and nonhuman animals to co-inhabit the cinematic space; shows nonhuman animals watching back; minimizes (or destabilizes) human language; and includes zoomorphic footage and commentary that remind

human viewers of our own animality” (Ladino, 2013, p. 131).<sup>1</sup> (These traits, I suggest, could also be applied to documentaries about non-animal entities.) Viewers of companion-species films may become active participants as the camera provides an alternative gaze that allows them to revise their ideas of nature (Ladino, 2013). This type of companion documentary relies heavily on images to demonstrate that “the only way to the ‘there’ in which the animals reside is to find them ‘here,’ in us and of us, as part of a plurality” (Wolfe, 2003, p. 203).

Paul Nicklen (2011), a photographer and co-founder of SeaLegacy, talks about the erasure of boundaries between human and animal in his TED Talk, *Tales of Icebound Wonderlands*.<sup>2</sup> Nicklen notes how leopard seals are perceived as being ferocious, which may generate less compassion for the animal among viewers. The way in which some people perceive certain animals or species as dangerous or as pests is referred to as self-validating reduction (Weston, 1996). Nicklen (2011) counters the stereotypical view of the leopard seal in his talk by showing how a seal he encountered demonstrated human-like characteristics. The leopard seal showed concern for Nicklen by warding off other potentially dangerous predators, offering Nicklen penguins as food, and huffing in annoyance because Nicklen was not accepting or eating the food.

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<sup>1</sup> Ladino’s (2013) reference to “zoomorphic” refers to the notion of applying animal characteristics to human behaviour.

<sup>2</sup> SeaLegacy is an organization devoted to promoting awareness of and protecting various different natural environments and species. Primarily it focuses on protecting the sea. The main method of communication is through visual storytelling.



**Figure 3.4 Leopard seal. Photograph by Paul Nicklen and SeaLegacy (c). Used with permission.**

### **3.5.3 The eco-disaster documentary**

Eco-disaster environmental documentaries feature natural or human disasters. Specifically, these types of films focus on environmental externalities that have become global concerns. The term “externalities” is derived from economics and refers to the effect of a choice or action by one party on the wellbeing of others uninvolved in the particular choice or action (Murray & Heumann, 2014). Externalities affecting the environment are usually negative and can include effects such as air and water pollution, soil contamination, etc. In other words, “environmental externalities have a global effect negatively impacting water, air and the quality of human and non-human life” (Murray & Heumann, 2014, p. xvi).

An example of an eco-disaster documentary film is *Gasland* (Fox, 2010), which explores the effects of hydraulic fracturing. Josh Fox, the writer and director, receives a letter from a natural gas company requesting to lease his land to drill for natural gas using the process of hydraulic fracturing. The film follows Fox’s journey to different areas of the US as he interviews people most affected by hydraulic fracturing and gathers samples in an attempt to demonstrate

the overall destructive effect. A noteworthy scene, which is mentioned earlier in this thesis, shows a man putting a lighter to the water running out of a tap. The water bursts into flame.

Eco-disaster documentaries borrow from other documentary modes, such as the expository mode. They blur the line between performative and participatory modes. *Gasland* is a documentary that is personal to Fox; he is seen and heard throughout the documentary, a trait of the performative mode. About an hour into the film, there is a quick montage of individuals listing their chronic health conditions and symptoms with pain and sadness. In one scene, Lewis Meeks, a landowner affected by hydraulic fracturing states:

I think it's criminal. What would happen if I took some chemicals and took them to the big boss of EnCana and dumped them in his well? They'd have me in a pen so fast my head would spin. But look. They come out here and do whatever they want to. And they don't even have to report and tell us what they're putting in there. (Fox, 2010, 39:16 – 39:33)

Both examples may draw viewers closer to the issue as they witness passionate testimonials by ordinary people. The film challenges viewers to stir interest, to act and, ultimately, to challenge and shape policy. For example, after reflecting on the importance of the land to him and his family history, John Fenton, a cattle farmer affected by hydraulic fracturing, states:

This is happening everywhere. That's the biggest thing I want people to know. You're not alone if this is happening to you because I'm in the same boat you are. And what we need to do is we need to get together and we need to stand up and we need to speak with a unified voice and we need to stand up to these [people]. (Fox, 2010, 44:33 – 44:48)

At the end of the documentary, Fox (2010) states: "I don't know what's going to happen . . . but I guess in a large part that's up to you . . . the story is not going away any time soon. *Gasland*

might stretch further than my backyard and into yours” (60:38:24 – 60:39:00). The participatory nature of this documentary allows viewers to engage with the topic by inviting them to witness and to listen to people’s stories and testimonials.

The discussion and analysis above demonstrate the documentary genre’s potential to influence viewers’ perspectives and actions. Recognizing environmental documentaries as a form of social action (Miller, 1984) can help inform how particular films such as *Gasland* (Fox, 2010) might stimulate awareness about an issue and persuade individuals to act, which will be discussed in the next chapter.

## Chapter 4: Rhetorical Genre Studies

*Genre studies* are concerned with categorizing and examining textual regularities (Bawarshi & Reiff, 2010; Freedman & Artemeva, 2008; Freedman & Medway, 1994), as well as looking beyond categorizations to examine the connection between textual regularities and patterns of human activity (Freedman & Artemeva, 2008; Freedman & Medway, 1994; Paré & Smart, 1994; Schryer, 1994). An overview of the history of documentaries demonstrates how the genre has developed and progressed over time due to people's interests, motivations, and reactions to social and environmental issues; it demonstrates the "complex interplay between texts and their social contexts" (Freedman & Medway, 1994, p. 2). Genres have become a way "of recognizing, responding to, acting meaningfully and consequentially within, and helping to reproduce recurrent situations" (Bawarshi & Reiff, 2010, p. 3).

This perspective of genres is applicable to this exploration of environmental documentaries because it offers opportunities to examine how people understand an environmental issue and possibly act in meaningful ways in response to a sometimes-formulaic genre. Placing a focus on rhetoric in genre studies allows one to "reanalyze and rethink the social, cultural, political purposes of previously taken-for-granted genres" (Freedman & Medway, 1994, p. 2). Following Miller (1984), recognizing genre as a form of social action allows researchers to understand what people are learning from and how people are reacting to a particular genre. In relation to documentaries, considering genre as a form of social action enables exploration of how genre impacts audiences and, in the case of this study, how it might engender an awareness to act in sustainable ways. Before exploring rhetorical genre studies, it is useful to briefly outline traditional approaches to the study of genre. For the first sections, I will draw mostly upon Bawarshi and Raiff's (2010) book *Genre: An Introduction to History, Theory,*



*Research and Pedagogy* because it provides an extensive and analytic overview of the various approaches to genre studies. This chapter will outline some literary and linguistic approaches to genre study, explore rhetorical genre study (RGS), and demonstrate how RGS is a suitable framework for this study.

#### **4.1 Genre study: Literary approaches**

A neoclassical approach to genre study provides systematic and inclusive rules for classifying and defining texts rather than, say, examining “how genres emerge from and are codified by users within actual contexts of use” (Bawarshi & Reiff, 2010, p. 15). A structuralist approach recognizes how a particular genre may shape one’s perception of literary actions, representations, and identifications and “acknowledges the power of genre to shape textual interpretation and production” (p. 19). Some scholars view texts as not belonging to a genre but more as participating in one or more genres, to the extent that every “textual performance repeats, mixes, stretches and potentially reconstitutes the genre(s) it participates in” (Bawarshi & Reiff, 2010, p. 21). Genres, according to this approach, are viewed as continuously reconstituted through various textual performances and as having the ability to “re-mark” themselves (p. 21).

Other approaches to the study of genre emphasize the importance of the performance of the reader, as seen in reader response views of genre studies. Scholars recognize the significance of readers’ background knowledge and its impact on meaning making. Frow (2006) notes “genre is not a *property* of a text but is a function of reading. Genre is a category we *impute* to text and under different circumstances this imputation may change” (p. 102, emphasis in original). Finally, a cultural studies approach examines “the dynamic relationship between genres, literary texts, and socio-culture... the ways genres organize, generate, normalize and help reproduce literary as well as non-literary social actions in dynamic, ongoing, culturally defined and

defining ways” (Bawarshi & Reiff, 2010, p. 23). This approach recognizes the relationship between what a reader chooses and how this choice is influenced by particular social practices (Frow, 2006). It is through an individual’s interaction with and knowledge about specific social practices, awareness of the “rules of use and relevance” (p. 140), that readers (and viewers) gain an understanding that enables them to respond to different genres. As Frow (2006) notes:

Genre theory is, and should be, about the ways in which different structures of meaning and truth are produced in and by the various kinds of writing, talking, painting, filming, and acting by which the universe of discourse is structured. (p. 10)

#### **4.2 Genre study: Linguistic approaches**

Linguistic approaches to genre studies include three categories: systemic functional linguistics (SFL), corpus linguistics, and English for specific purposes (ESP). Scholars in the field of SFL regard language as a structure that is inherently linked to social function and context. They argue that language is organized within a culture to serve specific social purposes. A corpus linguistic approach examines texts in two different typologies: deductive and inductive (Bawarshi & Reiff, 2010). Deductive texts are divided into categories of genre, to help “identify universal archetypes in order to classify and describe relations between literary texts” (Bawarshi & Reiff, 2010, p. 37). Inductive texts examine textual patterns and variations. Bawarshi and Reiff (2010) note that people may identify or distinguish genres following Prototype Theory. In this case, “people categorize objects according to a prototypical image they have conditioned in their minds by socio-cultural factors” (p. 39). Prototype Theory suggests that people recognize and “define text membership within genres on the basis of how closely their structure and linguistic patterns relate to the genre prototype” (p. 39).

In contrast, the ESP approach views genres as dynamic and intertextual, and recognizes the need to understand how genres interact with each other, following what Swales (2004) refers to as “genre chains” (p.18). This approach bridges linguistic and rhetorical traditions by examining both linguistic and communicative features of language. It allows for, as Swales (1990) adds, “assessing rhetorical purposes, in unpacking information structures and in accounting for syntactic and lexical choices” (p. 3). A genre prototype, in this approach, is dependent upon its communicative purpose; it is the motivation behind the genre that “shapes the schematic structure of the discourse and influences and constrains choice of content and style” (p. 58). This view of genre focuses on the relationship between text and context, viewing genres as dynamic—having the ability to evolve, develop and even decay (Miller, 1984).

A rhetorical genre studies framework can illuminate the relationship between genre and social contexts. What follows is a discussion of the rhetorical approach to genre studies and how it can provide a deeper understanding of how viewers are affected by environmental documentaries.

### **4.3 Rhetorical genre studies**

Within a rhetorical approach, genres are described as being “inherently dynamic rhetorical structures that can be manipulated according to the conditions of use,” having the ability to vary and also be responsive to the reader (Bawarshi & Reiff, 2010, p. 477). The development of Rhetorical Genre Studies (RGS) started with Miller’s (1984) positioning and definition of genre as a form of social action. The focus of analysis within this approach is to examine “the roles that genres play in how individuals experience, co-construct, and enact social practices and sites of activity” (Bawarshi & Reiff, 2010, p. 59). Freedman (1994) notes how genres also connect to each other, what she refers to as “uptake” (p. 46). Uptake examines when,

where, and why genres are used, as well as how a genre is used in a particular situation. These types of repeated social contexts, or genres, “enable us to create typified relationships between utterances as we organize and enact complex forms of social interactions” (Bawarshi & Reiff, 2010, p. 83).

Rhetoric, in an RGS approach, is connected to context; it is the circumstances of a situation that draws a particular response (Bitzer, 1968; Miller, 1984). That is, “the rhetor’s intentions to act in certain ways, at certain times, using certain types of discourse [are] largely determined by the kinds of situations for which they were perceived as fitting” (Bawarshi & Reiff, 2010, p. 64). The term “rhetoric” in this instance applies to what Burke (1951) refers to as a method of identification: how an individual identifies with another person or character or issue, an “‘unconscious’ factor of appeal” (p. 203). Genres have become “habitual rhetorical forms and strategies” that have come “to shape the ways we recognize and are inclined to act within situations,” and contain “rhetorical conventions can predispose future audience expectations” (Bawarshi & Reiff, 2010, p. 62).

Genres, in an RGS approach, are considered to be “stylistic and substantive” (Bawarshi & Reiff, 2010, p.65), but genres are also considered to be a combination of different forms, or a *constellation*. According to Campbell and Jamieson (1978), “these forms *in isolation* appear in other discourses. What is distinctive about the acts in a genre is the recurrence of the forms *together* in constellation” (p. 20, emphasis in original). This in turn creates a specific and repeated rhetorical effect (Bawarshi & Reiff, 2010).

Drawing on Campbell and Jamieson, Miller (1984) examines and defines genres “as typified rhetorical actions based in recurrent situations” (p. 31), and positions genres as functioning between forms of life (social situations) and forms of discourse or familiar symbolic

acts. Bazerman (1994) also recognizes that “the typifications [of a situation] give writers symbolic means to make sense of things; in turn those means of sense-making help set the stage and frame possible action” (p. 19). Miller (1984) contests that “an understanding of genre can help account for the way we encounter, interpret, react to and create particular texts” (p. 23). Bazerman’s (1988) study of the progressive change of the experimental science article demonstrates how the genre started as correspondence reports and later shifted to include a specific style within the scientific community whose members were reading and writing the articles. Genres are a powerful means to develop social order and social actions (Bawarshi & Reiff, 2010). The progressive change documented by Bazerman in relation to the science article is paralleled in the development of other genres, such as environmental documentaries.

#### **4.4 Implications for environmental documentaries**

While some may say that environmental movements have increased dramatically within the last decades (Gold & Revill, 2004), motivations and popular movements to protect the natural environment have been around for a long time. According to Pepper (2004), it is the “critical understanding of socio-economic, political and cultural processes and structures that is central in understanding environmental problems and establishing environmentally sustainable development” (p. xiii). For example, John Muir was a strong proponent for preserving nature. When governments started exploring natural areas for water-damning projects, as they did in the Hetch Hetchy region of Yosemite National Park, Muir was fiercely opposed and fought a long but unsuccessful battle against people like Gifford Pinchot, who argued that the resources were available for people’s needs. Nonetheless, Muir’s efforts gave room for others to pursue his fights and later were successful in providing protective status to other natural areas. Similarly Aldo Leopold’s (1949) more personal experience of seeing the “fierce green fire” leave the eyes

of a wolf he shot developed his connection with the natural environment. Later, he became known for developing the notion of land ethic: experiencing, respecting and preserving local environments. Rachel Carson, as noted earlier, was heavily concerned about the use of pesticides, which resulted in her iconic book *Silent Spring* (1962). The stories of these pioneers of environmental movements demonstrate how social context and life events may impact actions and promote the development of particular genres.

The RGS framework allows for focus on non-literary forms (Freedman & Artemeva, 2008). It allows for the examination of how syntax and semiotics affect viewers. Further, an RGS framework allows for consideration of context: not just the relationship between text and context, but for examination of genre “as traces of social, political and rhetorical actions implicit in [the texts]” (Freedman & Artemeva, 2008, p. 2). In other words, within an RGS approach, “genres play a key role in reproducing the very situation to which they respond” (p. 2).

While traditional RGS approaches focus on studies in written and spoken language, this approach is also suitable for the examination of other forms of texts, such as documentary film, that make extensive use of visuals in addition to written or spoken language. An RGS framework recognizes that texts evolve in relation to context and depending on the social and/or political forces. An RGS framework also provides opportunities to highlight and explore the “historical evolution of genres, the creation of specific genres in response to evolving socio-cultural, ideological and political circumstances, and the acquisition of genres by novices to new communities of discourse” (Freedman & Artemeva, 2008, p. 2). Over the years, documentarians have drawn attention to the working conditions of fishermen in England, contrasted idyllic forests and the events of war, and revealed the rising power of a political figure. The genre has not remained rigid; while the structure of the documentary remains relatively static, it adapts

according to a number of contextual elements including time, circumstances, motivation of the director and technological advancements. According to Schryer (1994), genres are “stabilized for now” (p. 107) in that they provide familiar structures and guidelines, but are also adaptable depending on the circumstances.

Miller’s (1984) call for viewing genres as a form of social action offers invaluable insight in relation to the potential rhetorical power of the environmental documentary. Specifically, framing this study through a RGS lens will contribute to an understanding of how viewers create meaning and how they might be influenced to act in sustainable ways. Scholars in genre studies also recognize the importance of viewers’ previous experiences and how those experiences can impact meaning making (Frow, 2006). This idea is also one of the key components of reader response theory. Rosenblatt (1969) suggests readers (viewers in this case) are engaged in a relationship with the text, they engage in a transaction. Hall (1973) and Iser (1974) also recognize the significant role of readers, and articulate how meaning is created between viewers and texts. As Berger (1978) observes,

for Iser, the joy and excitement of reading lies in the process of trying to remove indeterminacy, to fill in gaps, while simultaneously becoming aware of other possibilities through the attempt to exclude them ... Iser analyzes the ‘unwritten’ text and its *potential* realizations. (p. 148, emphasis in original)

The “unwritten” to which Iser alludes here is also a significant feature of filmmaking, and brings to mind Lev Kuleshov’s and Sergei Eisenstein’s theories of montage. Kuleshov (1974) explored how audiences react to what they view on screen, and determined that the shots override the actual performance: that viewers seek to fill perceived gaps between cuts and in doing so interject their own unique understandings. Extending from Kuleshov’s ideas, Eisenstein (1942)

discovered that a montage, for example, requires viewers to create meaning. Further, with film viewers are not always creating meaning based entirely on previous knowledge, but also “through the examination of what is created when seemingly random images are pressed together on a visual plane” (Begin, 2006, p.1120-1121). As Eisenstein (1942) notes, the question is how “two film pieces of any kind, placed together, inevitably combine into a new concept, a new quality arising out of that juxtaposition” (p. 4).

As noted above, the RGS approach examines the impact of social context on text. In the contemporary moment, environmental issues are of high concern. However, corporate media often either remains silent so as not to frighten viewers (Duvall, 2017) or relies heavily on business or political rhetoric that results in viewers not listening or even caring (Boykoff, 2007; Nissani, 1999; Swain, 2012). Nevertheless, in recent decades there has been a significant increase in the production and distribution of environmental documentary films (Duvall, 2017). Duvall (2017) attributes the increased accessibility of environmental documentaries to “the miniaturization of professional quality video production technology, and [to] the expanding diversity of windows of distribution” (p. 2). Viewers watch documentaries out of a desire to learn, which then can have an impact on their actions or raise their awareness about an issue (Duvall, 2017; Nichols, 2010). Further, notes Duvall (2017), the “documentary film enjoys a privileged status as a mediated representation of reality compared to fiction films” (p. 8).

The form or textual regularities of environmental documentaries must be considered in relation to social context because it is these “patterns of arrangement which are given a rhetorical force by their habitual use and codifiability” (Gronbeck, 1978, p. 140). Further, rhetorical forms are “socially learned and hence represent conventionalized patterns-for-thought,” which have the power to create meaning and “to affect beliefs, attitudes, and values because they arise out of



social reality” (p. 140). For the purpose of this study, an RGS approach provides opportunities for an in-depth exploration of the kinds of visual rhetoric (textual regularities) implemented, and an investigation into how viewers respond to different visual rhetorical modes. Chapter 5 provides a more detailed discussion of visual rhetoric in environmental documentaries.

## Chapter 5: Visual Rhetoric in Environmental Documentaries

The opening montage of the environmental documentary *Chasing Ice* (Aronson & Orlowski, 2012) shows a series of catastrophic images: Mighty floodwaters causing a house to fall into the water and be swept away. A digital map of Texas covered in flame icons indicating the number of consecutive fires burning out of control. A video capturing the power of a tornado ripping through a field, debris flying everywhere. Powerful waves and high waters of hurricane Irene. The results of weather-related damages on homes and neighbourhoods. Cracked, dry earth due to a severe drought. Raging wild fires in various areas throughout the world. These visuals are interspersed with images and narratives of news reports, interviews, debates about climate change and, as some believe, the conspiracy of it all. The screen fades to black.

Some of the images in the opening scenes of *Chasing Ice* are similar to the recurring images Gold and Revill (2004) discovered are used in advertisements related to environmental issues:

- Factory chimneys belching out plumes of smoke.
- Industrial effluent spewing into rivers from corroded pipes.
- Trees dying from the effects of acid rain.
- Cars snarled up on urban motorways and emitting exhaust fumes.
- Unarmed protesters in small, vulnerable vessels confronting huge whaling vessels.
- Seal pups on the ice floes being clubbed to death by hunters.
- Oil-coated seabirds floundering on blackened beaches.
- Children staring at the carcass of a dead dolphin, washed up on a beach after an incident involving toxic chemicals. (p. 3)

Such scenes imply an impending ecological doom and also attribute human behaviour as the cause of the current state of the environment. These images, among others, are used in many forms of environmental communication such as documentary film. The more frequently similar

images are used to convey environmental issues such as climate change, observe Gold and Revill (2004), the more profound their effect. Visuals are a powerful tool for environmental activists because they provide a means to inform people about complex issues that are often difficult to visualize and understand (Cox, 2013; O'Neill & Nicholson-Cole, 2009). The images used in an environmental documentary film can help

communicate and simplify information, making messages memorable, condensing complex information, communicating concepts instantly, and providing a basis for personal thoughts and social interactions that contribute to people's awareness and opinions about particular issues. (O'Neill & Nicholson- Cole, 2009, p. 357)

How do messages become so memorable that they not only invite audiences to understand environmental issues but also raise awareness and persuade them to act in more sustainable ways? The following sections explore visual rhetoric and the persuasive power of images.

## **5.1 Visual rhetoric and the rhetorical tradition**

The term *visual rhetoric* is diversely understood. Studies of visual rhetoric may include the study of print texts, visual semiotics in media, architecture and interior design of buildings, and so on (Goggin, 2004). Each case in the exploration of rhetoric—verbal or visual—is unique and involves different perspectives. For the purpose of this thesis, “visual” refers to “visual imagery” (Foss, 2005, p. 141) as well as “the cultural practices of seeing and looking” (Olson, Finnegan, & Hope, 2008, p. 3). “Rhetoric” can be viewed as a method of communication (Foss, 2005) and more specifically “persuasive symbols and actions” (Olson et al., 2008, p. 3). “Visual rhetoric” thus can be defined as “those symbolic actions enacted primarily through visual means made meaningful through culturally derived ways of looking and seeing and endeavouring to

influence diverse publics” (Olson et al., 2008, p. 3). In other words, visual rhetoric refers to the ways in which images mediate information and meaning making.

Some rhetoricians have attended to verbal rhetoric over visual rhetoric (Helmets & Hill, 2004; Hill, 2004; Olson et al., 2008). This emphasis on logocentric approaches is likely inspired by classic literature on rhetoric (Blair, 2004). As Bonsiepe (1965) observes, rhetoric contains an “aura of antiquity” (p. 37). Rhetoric was divided by the ancient Greeks into three areas—the political, the legal, and the religious—because individuals from these areas used rhetoric to address and influence people, to persuade them, to develop an opinion, or to evoke emotion (Bonsiepe, 1965). Aristotle viewed rhetoric as a mode of persuasion and viewed persuasion as “a sort of demonstration, since we are most fully persuaded when we consider a thing to have been demonstrated” (Bizzell & Herzberg, 1990, p. 152). Here, Aristotle’s notion of “demonstration” refers to an *enthymeme*, which is the part of an argument that is intentionally unstated, allowing audience members to become active participants and come to their own conclusions (Bizzell & Herzberg, 1990; Blair, 2004). In order to persuade audiences, Aristotle notes three modes of appeal at the rhetor’s disposal: *logos*, an appeal to reason; *pathos*, an appeal to emotions; *ethos*, an appeal to ethics (Ehres & Lupton, 1988).

Aristotle’s approach to rhetoric focuses on and assumes the rhetor’s medium of persuasion is words (Blair, 2004). Over the past two decades, the inclusion of visuals in rhetorical studies has seen criticism (Foss, 2005). It was not until the 1990s, when Mitchell (1994) referred to the visual turn, that the examination of visuals in rhetorical studies started to become more commonplace. The visual turn highlighted “that symbolic action entails visual representation in the inseparable and complex verbal, visual, and perceptual acts of making

meaning” (Blakesley, 2004, p. 112). In 2005, Foss noted the focus on visual images in rhetorical studies had been increasing primarily because of

the pervasiveness of the visual image and its impact on contemporary culture. Images in the form of advertisements, television, film ... constitute a major part of the rhetorical environment, and such images now have the significance for contemporary culture that speeches once did. (p. 142)

Earlier, media scholars such as Bolter (2001) also pointed out that the emergence of digital technologies for knowledge mobilization such as the Internet has resulted in reading environments that are increasingly multimodal, giving rise to new and hybrid genres, and calling for different ways of reading. In the Second Edition of *Writing Space: Computers, Hypertext and the Remediation of Print*, Bolter includes a chapter on “The Breakout of the Visual.” He remarks that although print texts can and regularly do offer images, verbal text often “contains and constrains” those images. Hypermedia spaces such as the Internet, in contrast, regularly give priority to images (Bolter, 2001). In this sense, hypermedia is participating in a remediation of writing spaces toward a focus on visual rhetoric. Indeed, it is in large part the rise of such digital reading environments that encouraged the New London Group (1996) to promote a paradigm shift in literacy studies to favour “multiliteracies” over “literacy” as a descriptor for the complex task of making sense of and producing contemporary multimodal texts. The New London Group observed that texts are deictic, and that there are a “burgeoning variety of text forms associated with information and multimedia technologies” (p. 61). This in turn, has an impact on the ways in which people communicate and understand information, which can greatly affect personal and social lives (e.g., Leu, Kinzer, Coiro, Castek, and Henry). Greater attention to image analysis in the field of rhetoric appears to correspond roughly with this paradigm shift in literacy studies and

the study of digital culture in the humanities. Foss (2005) also observes including visuals in rhetorical study provides understanding of human experiences not always accessible through study of verbal language. Human experiences, argues Foss (2005), are often “spatially oriented, nonlinear, multidimensional and dynamic” (p. 143).

Many scholars in the field of visual rhetoric acknowledge that to understand the persuasive power of images we must examine rhetorical perspective (Foss, 2004, 2005; Olson, Finnegan, & Hope, 2008) because “verbal rhetoric paves the way to visual rhetoric” (Bonsiepe, 1965, p. 38). That is, there is fluidity between the two forms (Goggin, 2004). For example, some have preferred to examine the relationship between audiences and products. They suggest understanding the creator’s intent is difficult and irrelevant. Once the “artifact is created, it stands independent of its creator’s intention” (Foss, 2004, p. 308). The ability of film to influence audiences to focus on one object (or idea) over another—referred to by Burke (1966) as a *terministic screen*—is a powerful rhetorical device.

Aristotle’s notion of an enthymeme is also evident in many visual forms. Film producers regularly create “visual enthymemes, thus drawing the viewer to participate in completing the construction of the argument” (Blair, 2004, p. 59). A visual enthymeme is a form of visual rhetoric (Blair, 2004; Foss, 2004, 2005). The three modes of appeal mentioned earlier—logic, ethos and pathos—are also evident in visuals. In environmental documentaries, for example, the use of pictorial or animated graphs and charts indicating, say, the Earth’s rise in temperature appeals to logic, and interviews with professionals or famous people well known for advocating a cause, such as Al Gore in *An Inconvenient Truth* (Bender & Guggenheim, 2006), invokes a level of trust and appeals to the mode of ethos. Pathos, appealing to emotion, is a common and

powerful form of visual rhetoric. Examples of appeals to pathos in environmental documentaries might include images of injured or unwell animals and humans.

## **5.2 The effect(s) of the visual**

Focusing on visuals begs the question, as Hill (2004) posits, “How exactly do images persuade? How do images work to influence the beliefs, attitudes, opinions—and sometimes actions—of those who view them?” (p. 25). One way is through the notion of *presence*, which refers to “the extent to which an object or concept is foremost in the consciousness of the audience members” (Hill, 2004, p. 28). Hill (2004) argues that residual presence is linked to visual perception because an image can provide evidence and “be present.” Images such as photographs or those used in documentary films are viewed as reflections of an event or of people (Barthes, 1981). As previously noted in Chapter 3, this is what Nichols (2010) refers to as the indexical quality of the image, the ways in which an image “bears a strict correspondence to what it refers to” (p. 34). According to this line of thought, the so-called reality of the image draws a desire to know (Hill, 2004; Nichols, 2010) and an emotional response from the viewer, which makes it more persuasive (Hill, 2004). As noted earlier, while we may question binary constructs that pit “fiction” against “reality,” it is clear that images are presented as evidence in documentary film, and this positioning of image-as-evidence is persuasive.

The effect of an image also depends on its vividness. Many researchers suggest that images are likely to provoke an emotional response and this in part is what makes visual rhetoric so effective (DiFrancesco & Young, 2010; Hansen & Machin, 2013; Hill, 2004; Joffe, 2008; Olson et al., 2008; O’Neill & Nicholson-Cole, 2009; Smith & Joffe, 2012). That said, based on an exploration of studies in psychology, Hill (2004) suggests that some visuals are more vivid than others: Statistics presented on graphs are less vivid, for example, have more codified

abstraction and less of a presence, and are thus less rhetorically effective than moving images reflecting experiences viewers may be able to relate to. Joffe (2008) adds that vividness leads to the *salience effect*—the ways in which an image stands out and is remembered: “vivid visuals leave a rich and strong memory trace where less vivid information would fade. This establishes the salience of what is portrayed” (p. 85). Further, a higher level of vividness coupled with repetitious viewings of the same or similar image also has a more persuasive effect (Cox, 2013; Hansen & Machin, 2013; Helmers & Hill, 2004; Hill, 2004) and can result in images being more memorable (Helmers & Hill, 2004; Joffe, 2008; Smith & Joffe, 2012; O’Neill & Nicholson-Cole, 2009). Moving images do have the capacity to portray abstract values or ideas that can elicit complex emotions that are difficult to represent linguistically (Hill, 2004). Ultimately, images may help people to understand and connect to complex ideas such as climate change because they are vivid and salient (O’Neill & Nicholson-Cole, 2009). Access to relevant images, argue Lester and Cottle (2009), raises awareness about environmental issues.

### **5.3 Visual rhetoric and environmental documentaries**

Rhetoric has a constitutive action in that “the purposeful use of language . . . helps to shape our perception of the world itself” (Cox, 2013, p. 63). In a study with thirty participants with a range of backgrounds and experiences, O’Neill and Nicholson-Cole (2009) discovered the use of fear rhetoric is not effective in engaging audiences with issues of climate change. Images associated with fear rhetoric are seen in the description of the opening montage of *Chasing Ice* (Aronson & Orlowski, 2012), as well as in numerous other environmental documentaries such as *An Inconvenient Truth* (Bender & Guggenheim, 2006) and *The 11th Hour* (DiCaprio, Connors & Connors 2007). They found, instead, nonthreatening images connecting to a viewer’s local environment have a greater impact (O’Neill and Nicholson-Cole, 2009). They suggest the



rhetoric of fear should be used with caution “to avoid causing denial, apathy, avoidance, and negative associations that may come as a result of coping with unpleasant feelings evoked” (O’Neill and Nicholson-Cole, 2009, p. 376). Sobel (1998) also observes that focusing on the beauty of nature rather than problems can instill a connection with viewers and prevent feelings of “ecophobia —a fear of ecological problems and the natural world” (para. 5). James Balog, featured in the documentary *Chasing Ice*, also suggests engaging people about climate change with nonthreatening images.

#### **5.4 Visual rhetorical modes in environmental documentary films**

Within visual rhetoric there are a number of rhetorical modes, each with identifying characteristics. As is always the case with such classifications, these are not independent of each other. This section provides a list of visual rhetorical modes appearing in different genres of environmental communication, including environmental documentary films. The modes are not independent of each other; also, most documentaries utilize more than one visual rhetorical mode.

##### **5.4.1 The apocalyptic mode**

The most obvious and frequently used visual rhetorical mode in environmental documentaries is the *apocalyptic mode*. This mode utilizes images (see Figure 5.1 below as an example) containing messages of impending ecological crisis and depicting catastrophic effects (Cox, 2013). Apocalyptic visual rhetoric often induces a sense of fear among viewers.



**Figure 5.1 Dead tress. Unknown photographer, used under CC 1.0 Universal Public Domain.**

Cox (2013) asks, “how do you raise awareness of future, serious effects from climate change without relying on visions of apocalypse?” (p. 66). For some viewers, apocalyptic rhetoric can re-ignite awareness or perhaps even motivate a change in behaviour (Lowe, 2006). And yet, little is known about the effectiveness of this mode in producing long-term changes in behaviour. Lowe (2006) notes how the apocalyptic mode is often overused and may result in people feeling hopeless or apathetic about issues. The apocalyptic mode has the potential to make viewers feel “change is impossible, rendering them and us as powerless” (Lowe, 2006, p. 6).

#### **5.4.2 The jeremiad mode**

The *jeremiad mode* is similar—a key difference being that it attributes faulty human behaviour as the cause of environmental crisis (Cox, 2013; Rosteck & Frentz, 2009). “Jeremiad” is a late-eighteenth century term alluding to the “Lamentations of Jeremiah” (n.d) and referring to a “long, mournful complaint,” often in relation to moral decay (Jeremiad, n.d). The jeremiad mode is often coupled with the apocalyptic mode, warning of future consequences if people do not change their ways. It often focuses on human exploitation of natural environments, and

attributes human behaviour as the cause of environmental crisis (Murray & Heumann, 2014).

Images reflecting this mode include depictions of the end result of people's wasteful habits, such as mounds of garbage piles, pollutants in sewer systems, and smokestacks spewing air pollutants.

Documentaries such as *Manufactured Landscapes* (Baichwal, 2006) show images of how places in various parts of the world have been impacted due to human-caused changes to the landscape. This film relies on visuals with very little commentary. It follows photographer Edward Burtynsky, who states the purpose of his work is “to look at the industrial landscape as a way of defining who we are and our relationship to the planet” (Baichwal, 2006, 6:50). Images in the film, such as one of an elderly Chinese woman sitting beside an electronic waste heap located just on her doorstep, may encourage viewers to question the impact of manufactured landscapes on people's livelihoods.

[Figure 5.2 has been removed due to copyright restrictions. It was a screenshot of a scene from *Manufactured Landscapes* (2006). It showed an elderly woman sitting in front of her home beside electronic waste. Original source: Baichwal, J. (Producer & Director) (2006).

*Manufactured landscapes* [Documentary]. Canada: Foundry Films & National Film Board of Canada.]

**Figure 5.2 Screenshot of a scene from *Manufactured Landscapes* (2006), 24:00.**

By focusing on Burtynsky's work, director Jennifer Baichwal was able to produce a documentary that relied more heavily on jeremiad visual rhetoric to inform audiences about human impacts on the environment and on each other.

### 5.4.3 The hopeful mode

Occasionally, documentaries employing apocalyptic or jeremiad visual rhetoric also employ a *hopeful rhetorical mode*. About an hour into the documentary, *The 11th Hour* (DiCaprio, Connors & Connors, 2007) offers viewers optimistic images of solar panels, as well as eco-friendly solutions such as photosynthetic buildings, wind turbines, and animations of carbon-neutral cities. It should be noted that hopeful rhetoric appears to be more prominent in current environmental documentaries and is used more often in the context of verbal rhetoric (e.g., the narrator speaks about progress, plausible solutions, etc.).

### 5.4.4 The environmental nostalgia and sublime modes

The *environmental nostalgia mode* is often used, presumably to evoke an emotive response. This mode points to a “remembered Earth ... [that] draws on the power of nostalgia to skilfully frame global warming as a problem we share, but can solve together” (Murray & Heumann, 2007, p. 4). Environmental nostalgia serves to highlight a natural local environment, and to consider the loss of landscapes. As Aldo Leopold (1949) advocated, it is important to reflect on and develop an affinity for a local place. In addition, the *sublime visual rhetorical mode* is also used to develop an awareness of a particularly magnificent landscape or object in nature; by extension, it may aid in the development of a personal connection to the area (Cox, 2013).



**Figure 5.3 Jökulsárlón, Iceland. Photograph by Dr. Justin Ahn. Used with permission. An example of the sublime visual rhetorical mode.**

Some critics of environmental nostalgia view this mode as limiting “because the past evoked by a nostalgic view is not only unobtainable but also cast in an unrealistic innocence” (Murray & Heumann, 2014, p. 74). Nevertheless, using eco-memories can actually be a powerful persuasive tool. Murray and Heumann’s (2007) examination of *An Inconvenient Truth* (Bender & Guggenheim, 2006) demonstrates how images associated with Al Gore’s ecological past—his childhood farm along a river, vast landscapes, family members enjoying the outdoors—can affect viewers because of the way they draw “on environmental nostalgia, a nostalgia we share for a better, cleaner world” (p. 1). The authors do note, however, that the effectiveness of the eco-memory mode is most successful in influencing viewers when it is coupled with evidence. Other films, such as Benjamin Paull’s *Gateway: The Enbridge Northern Gateway Pipeline* (2013), include little evidence. Instead, the documentary draws heavily on images to convey the

potential of losing the landscapes witnessed in the documentary. Paull (2013) achieves this effect by portraying a series of sublime panoramic views briefly narrated by an aboriginal elder near the end of the documentary; the elder simply states: “enjoy it as much as you can, while it lasts” (13:50).

#### **5.4.5 The environmental melodrama mode**

The *environmental melodrama rhetorical mode* typically sensationalizes social actors to draw an emotive response among viewers while also placing “the inaccuracy of scientific language on display and highlight[ing] its potential blindspots” (Schwarze, 2006, p. 251). Environmental melodrama often avoids scientific jargon and focuses on an individual event or person. This rhetorical mode can emphasize the effect of environmental disasters on people’s homes and health and can also highlight the effects on animal and plant life. Often environmental melodrama occurs in the context of spoken segments, such as when interviewees recount their experiences during a natural disaster or talk about the effects of toxic chemicals on their health. Sometimes, the message is strengthened by imagery. For example, in *Gasland* (Fox, 2010), cattle farmer John Fenton reflects on a time when he and his wife enjoyed the land before it was covered with natural gas wells. An image just prior to this interview shows a jarring juxtaposition of a massive industrial well in the middle of a vast landscape under a cloudy sky. Fenton states: “it’s amazing that what took Mother Nature millions of years to build can be destroyed in a few hours with a piece of heavy machinery” (Fox, 2010, 46:26). Scenes depicting social actors talking help to show their reactions to their experiences. There are also times when environmental melodrama is portrayed through images. For example, in an environmental documentary mentioned earlier, *Manufactured Landscapes* (Baichwal, 2006), the director focuses on elderly women in China who have to live and work within an electronic waste dump.

These types of images can invite viewers to reflect on how people's livelihoods are affected.

Table 5.1 summarizes the visual rhetorical modes that appear to be most prevalent in the literature and environmental documentaries I reviewed. These visual rhetorical modes served as a guide for choosing documentary clips for this study, which will be discussed in the next chapter.

**Table 5.1 Terms and definitions of visual rhetorical modes in environmental documentaries.**

Visual Rhetorical Mode	Definition
Apocalyptic	Images implying an impending ecological crisis and depicting catastrophic effects.
Jeremiad	Images attributing human behaviour as the cause of environmental crises.
Hopeful	Positive images providing eco-friendly solutions.
Environmental Nostalgia	Images of natural environments used to evoke an emotive response in relation to loss or potential loss of the same.
Sublime	Images used to develop awareness of a particularly magnificent landscape, natural object or creature, and by extension to aid the development of personal connection with the same.
Environmental Melodrama	Sensationalizing social actors as a means to draw emotive responses.

## Chapter 6: A Study with Viewers of Environmental Documentaries

To answer my second research question about which visual rhetorical modes most affect viewers' perceptions, attitudes, and understanding of environmental issues, I conducted a qualitative study with viewers of environmental documentaries. This chapter outlines participant recruitment procedures and data collection procedures; it also provides an overview and brief analysis of the environmental documentaries participants viewed.

### 6.1 Participant recruitment

I recruited students enrolled in two sections of a University of British Columbia (UBC) course titled LLED 361: Literacy Practices and Assessment, which was offered from May to June 2016. This course is a requirement for all secondary teacher candidates in the Teacher Education Program at UBC. This course challenges students to think about how knowledge is transferred across different modalities and how multimodal genres affect learning and meaning making. Students examine how to work with multiple literacies and how to create connections between particular genres and citizenship. Also, part of the focus of LLED 361 is on understanding the impact of multimodal genres, including how moving images affect viewer perception. Students in the LLED 361 course were ideal participants for this study because they came from a diverse range of disciplinary backgrounds.

The lead instructor for the two sections of LLED 361 was Dr. Kedrick James. In keeping with third-party recruitment protocol, he was not in the classroom when I introduced the study and he did not know which students volunteered to participate. In accordance with UBC policy, the study adhered in all respects to the guidelines of the Canadian *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans* (Government of Canada, 2014). The UBC Behavioural Ethics Review Board study approval number for this research is H16-00408.



Initially, I also considered recruiting participants enrolled in LLED 210: Introduction to Analyzing Meanings of Images in Texts. This course is an elective in the UBC-Ritsumeikan Program, which offers students from Japan a one-year program in English in one of two options: the academic exchange program and the global citizenship program. LLED 210 focuses on teaching students the skills to analyze images. Initially, I felt including participants from the Ritsumeikan program would increase the diversity of the participant group and would provide insight into potential cultural differences in understanding environmental issues. However, as I proceeded with the study I realized the question of cultural differences was beyond the scope of a single thesis and I honed my research questions accordingly.

To recruit participants from the two sections of LLED 361, I ran two separate, ninety-minute workshops in June 2016 on media and environmental literacy. Seventy-two students (thirty-six from each class) took part in the workshop. Students took part in the workshop regardless of whether they were participating in the study. Workshop activities were designed in collaboration with Dr. James to integrate seamlessly with the course content. They were not graded.

During the workshop, I showed two clips from the environmental documentary *Chasing Ice* (Aronson & Orlowski, 2012). The first clip was from the opening two-minute sequence showing images of droughts, floods, fires, and the like. At the end of the clip the scene fades to black and transitions to a new scene showing images of the ocean and glaciers. It also shows the protagonist, James Balog, taking photographs of chunks of ice in the water. This second two-minute scene acts as the prologue for the documentary. It ends with a transition displaying the title of the documentary before fading to black. I chose these two clips because they rely primarily on visual imagery; as well, when juxtaposed, the scenes show a stark contrast between

two different visual rhetorical modes. The first clip combines apocalyptic and jeremiad rhetoric, which is juxtaposed with the second clip employing sublime visual rhetoric.

After viewing the clip, I engaged students in a discussion about their reactions and responses: how did the video make them feel? Did it raise their awareness of environmental issues? I then showed them how to use an application that enables users to annotate videos, the Collaborative Learning Annotation System (CLAS). The program is openly available to all UBC students. Of benefit for the purpose of this study is that it has privacy settings so that I could ensure student-participants would see only their own comments. Although collaborative video annotation has many benefits in generating rich discussion, I wished to study personal response and did not want individuals to be drawn to particular moments in the compilation solely on the basis of observing the annotations of others at a particular time stamp.

Each class participated in an exercise of viewing and responding to one short clip of about two minutes on CLAS. The clip was taken from the end of an environmental “documentary short” (a documentary of less than forty minutes), *Gateway: The Enbridge Northern Gateway Pipeline* (Paull, 2013). Students were asked to stop the clip at any moment they found striking or evocative, and to provide a response. After this exercise, I engaged the class in a large group discussion about media literacy and the merits of using video annotation software to examine rhetoric in visual media.

I introduced the study in the remaining thirty minutes. To do this, I handed out consent forms (see Appendix A), explained the study in more detail, read the consent form aloud, and answered questions. The classes were informed they had one week to decide if they wanted to volunteer for the study; however, all of those who were interested in volunteering signed the consent form immediately. A total of eleven participants volunteered for this study. Table 6.1,

below, provides a summary of each participant. Names are pseudonyms. Most of my participants were long-term residents of cities in the Lower Mainland of British Columbia, Canada. The data offers a Western Canadian, middle-class perspective. Opportunities to explore other perspectives will be discussed in Chapter 8.

**Table 6.1 Participant Overview**

Name	Teaching Specialization
Betty	Drama
Brian	Technology Education
Finn	English
Fran	English/Home Economics
Laura	Food and Nutrition
Lori	Biological Sciences
Martin	Technology Education
Nicole	English
Peter	Technology Education
Samantha	French
York	English

I acknowledge here my position as researcher-educator in the context of this study. A few months prior to conducting my study, I taught a course to a group of secondary teacher candidates: LLED 360: Classroom Discourse and English Language Learners. Many of my former students were also enrolled in Dr. James' LLED 361 classes. My professional relationship with some of these students may have affected their decision to participate in my study: out of the eleven who volunteered, six were my former students.

## 6.2 Procedure

Volunteers for this study were asked to view and respond to a sixty-minute compilation that included eleven clips from documentary films and shorts. The purpose of including a variety of short clips was to expose participants to a greater number of documentaries and a wider variety of visual rhetorical modes. The compilation (described in more detail in Section 6.3) was available on UBC's video annotation software, CLAS, which enabled participants to complete the viewing when convenient so that they would not feel pressured in viewing and responding by time constraints or by my presence.

Volunteers were instructed to provide annotations at points in the compilation they felt to be particularly striking or evocative. Participants were given no parameters as to how to respond or as to how long responses should be. I drew this approach from reader-response researchers Miall and Kuiken (2001), who asked participants to choose striking or evocative passages from literary selections, inviting them "to concurrently describe any and all aspects of their reading experience: thoughts, feelings, interpretations, evolutions, memories and so on" (p. 13). This approach allows for revelation of "the temporally unfolding experience of a text rather than its consummating interpretation" (Miall & Kuiken, 2001, p. 239).

Volunteers were invited to view the compilation and make annotations within two weeks. Most of the participants were able to complete the tasks within this timeline; four took an extra week. After all participants completed their annotations, I reviewed the comments and wrote relevant questions to be used as a guide during the interview (see Appendix B for an example of interview protocol guidelines). After an initial examination of the collected data, I arranged to meet with each participant to conduct semi-structured one-on-one interviews. These interviews

occurred within a week after I received participants' responses. Semi-structured one-on-one interviews provided participants the opportunity to clarify and elaborate on their responses.

I asked participants to review their comments in preparation for the interview, and to bring their laptops. During the interview, participants were encouraged to review their comments and to re-watch clips. I hoped for elaboration and clarification, as noted above, and therefore each interview script included unique questions tailored to individual annotations. The interviews were audio-recorded and, depending on the interest of the participants in expanding on their annotations, took up to 30 minutes. All participants completed the annotations and the interviews.

### **6.3 Environmental documentary clips**

Table 6.2 provides a list of documentary shorts and clips in the video compilation, in the order they appeared. For the purposes of this study, a "documentary short" is less than forty minutes in length, a "documentary feature" is more than forty minutes in length, and a "documentary clip" is an excerpted fragment of a longer film. Following Table 6.2 is a brief overview of each of the environmental documentaries and an explanation of why they were chosen.

**Table 6.2 Environmental documentary films and shorts**

<b>Title, Year, Type</b>	<b>Total Run Time (minutes)</b>	<b>Clipped Time from Feature Documentary &amp; Total Time</b>	<b>Director</b>	<b>Country (Produced)</b>
<i>Chasing Ice</i> (2012) Documentary Feature	75	60:04:91 – 60:07:31 Total – 2:40	Jeff Orlowski	US
<i>Climate Change and the Optimistic Future</i> (2015) Documentary Short	4:31	Total: 4:30	GoPro Original Productions	US
<i>Ashes and Snow</i> (2005) <sup>3</sup> Documentary Feature	63	0:00:00 – 0:06:55 Total: 6:55 <sup>4</sup>	Gregory Colbert	US
<i>HUMAN</i> (2015) Documentary Feature (Volume I: Extended Version)	90	7:04 – 8:30 27:07 – 28:07 43:54 – 45:04 58: 39 – 60:00:26 Total: 5:37	Yann Arthus-Bertrand	France
<i>Jumbo Wild</i> (2015) Documentary Feature	52	Total – 7:49 <sup>5</sup>	Nick Waggoner	Canada
<i>Manufactured Landscapes</i> (2006) Documentary Feature	86	2:22 – 5:46 <sup>6</sup> Total – 3:24	Jennifer Baichwal	Canada

<sup>3</sup> An explanation for why this title is here, and not at the start is provided below.

<sup>4</sup> Clip taken from promotional video. Detailed explanation provided below.

<sup>5</sup> Total clip taken from a preview. Detailed explanation provided below.

<sup>6</sup> Total clip taken from a preview. Detailed explanation provided below.

<b>Title, Year, Type</b>	<b>Total Run Time (minutes)</b>	<b>Clipped Time from Feature Documentary &amp; Total Time</b>	<b>Director</b>	<b>Country (Produced)</b>
<i>Our Daily Bread</i> (2005) Documentary Feature	92	5:43 – 9:43 Total – 4:00	Nikolaus Geyrhalter	Germany
<i>The 11<sup>th</sup> Hour</i> (2007) Documentary Feature	95	0:00 – 1:30 60:07:47 – 60:17:04 Total – 10:46	Leila Conners & Nadia Conners	US
<i>The Antarctica Challenge: A Global Warning</i> (2009) Documentary Feature	45	0:00 – 5:45 Total – 5:45	Mark Terry	Canada
<i>The Cove</i> (2009) Documentary Feature	92	60: 17:14 – 60:20:53 Total – 3:39	Louie Psihoyos	US
<i>The Fisherman's Son</i> (2015) Documentary Short	28:57	0:00 – 7:54 Total – 7:54	Chris Malloy	US

My choice of clips was guided by two key factors. First, I wanted the clips to include examples of the predominant visual rhetorical modes discussed in the previous chapter: apocalyptic, jeremiad, hope, environmental nostalgia, sublime, and environmental melodrama. Some of the clips include narration and/or music, while some include only sounds from the environment in question. Second, I wanted to include different documentary modes discussed in Chapter 3, such as the eco-disaster and the expository modes.

Numerous environmental documentaries are publicly available. Some are feature-length films that have been showcased at film festivals and in theatres. Others are documentary shorts that provide quick insight into an environmental issue. Some of these documentaries are produced by professional filmmakers, while others are produced by amateurs. The documentaries I chose address a wide range of globally significant environmental issues. Initially, I wanted to select more documentaries by amateurs; however, while such documentaries are interesting and valuable, they did not provide a sufficient variety of visual rhetorical modes to support the investigation of my research questions. As such, I chose to focus on documentaries produced by professionals. A study of the work of amateurs is a topic I hope to explore in the future.

To limit the selection and keep the topics relatively current, I chose environmental documentaries that were produced in the ten-year period between 2005 and 2015. With the exception of one documentary short included in its entirety, *Climate Change and the Optimistic Future* (GoPro, 2015), the entire video compilation is comprised of clips from documentary feature films and clips from documentary shorts. I recognize that clipping decontextualizes content and is likely to modify audience response. Although it is not ideal, clipping was necessary to enable the inclusion of the variety of modes discussed above within a manageable length.

Given this study was conducted at an English-speaking university in Canada, I selected documentaries I knew my participant group would be most likely to encounter: those produced in recent years and easily available via video sharing sites such as YouTube. I also primarily selected documentaries in English. A valid critique of this collection is that the perspective is skewed along the lines of commodification of culture, exoticism, and neocolonialism. This, in



fact, is a critique that has been made of documentary film generally (e.g., Aitken & Deprez, 2017; Smaill, 2016, Starosielski, 2013; Vivanco, 2013). For the purpose of this thesis my aim was to examine participant response to the sorts of documentaries they would be likely to encounter through standard Internet searches. I view this collection as a small sample of the same evidencing a wide variety of rhetorical modes. What follows is a brief overview and analysis of the documentary clips chosen for this study.

### **6.3.1 *Chasing Ice* (2012), Director Jeff Orlowski, 75 minutes**

*Chasing Ice* (Aronson & Orlowski, 2012) follows renowned photographer and researcher James Balog's journey to the Ilulissat Glacier in Greenland. Orlowski is the founder of Exposure Labs, a film production company that aims to produce socially relevant films. According to the website, their goal is to allow "audiences to better understand the reality and intricacy of the subject" and "to use film and art as tools to shift understanding and to make a difference" (Exposure Labs, n.d., para. 2). A geographer and geomorphologist, Balog started as a photographer and has since become well-known for his work in *National Geographic*. He is also the founder of the Extreme Ice Survey (EIS), which is "an innovative, long-term photography program that integrates art and science to give a 'visual voice' to the planet's changing ecosystem" (Extreme Ice Survey, 2014, para. 1).

[Figure 6.1 has been removed due to copyright restrictions. It was a screenshot of the opening title scene from *Chasing Ice* (2012). Original source: Aronson, J. (Producer) & Orlowski, J. (Director). (2012). *Chasing ice* [Documentary]. United States: Exposure.]

**Figure 6.1 Screenshot of a scene from *Chasing Ice* (2012), 4:07.**

*Chasing Ice* follows Balog as he and his EIS team prepare for an expedition to the Ilulissat Glacier to use time-lapse photography to document the changes in the glacier. Orlowski provides a mere glimpse into what Balog and the EIS team were able to capture: the largest calving of a glacier ever recorded that lasted for seventy-five minutes and caused about five kilometers of ice to spill into the ocean. The visual scenes in this documentary “are consistently breathtaking, and accumulate real power” (McCahill, 2012, para. 1). According to Kaminski (2014), Balog uses striking and evocative visuals “to jolt viewers into awareness as quickly as possible” (para. 13). Balog argues that when it comes to issues of climate change, people do not “want to hear about more statistical studies, more computer models, [or] more projections. What they need is a believable, understandable piece of visual evidence, something that grabs them in the gut” (Orlowski, 2012, 9:47-10:07).

The segment from *Chasing Ice* I chose for this study includes part of the largest-recorded calving event, and would be categorized as sublime rhetoric. This scene is shot at a flat angle (eye level) and the camera zooms in as different parts of the ice break off into the ocean. As it zooms out, the panoramic shot captures the magnitude of the glacier and shows the glacier shifting as pieces of it plunge into the ocean. The only auditory element in this scene is the sound made by the movement of the ice as it breaks and crashes thunderously into the ocean. In the last minute of the clip, an EIS engineer briefly describes what the viewer just witnessed. I debated whether or not I should stop the clip before the narration started; however, I chose to leave it in to help provide some context for participants.

### **6.3.2 *Climate Change and the Optimistic Future* (2015), GoPro, 4:31 minutes**

This documentary short features Richer Muller, a professor of physics at the University of California (I discuss his perspectives earlier, in Chapter 2). In early 2000, Muller was sceptical

about the conclusions drawn from climate change studies. His scepticism led him and his daughter to start the Berkeley Earth Surface Temperature project. Through their work on the project, Muller (2012) came to realize “global warming was real and that prior estimates of the rate of warming were correct” (para. 1). He asserts, “humans are almost entirely the cause” (para. 1-2). From his extensive research on the Earth Surface Temperature project, Muller co-founded Berkeley Earth, a website that provides access to his and his team’s research and findings on varying topics of climate change. The documentary short is peppered with voiceovers of Muller talking about climate change issues and the impact people have had on global warming. However, as the title of this documentary short implies, Muller (2015) is “enormously optimistic about the future” (2:53). Muller himself is only shown for a total of approximately twenty-five seconds; the majority of the clip relies on images depicting various human-made and natural landscapes, as seen in.

[Figure 6.2 has been removed due to copyright restrictions. It juxtaposed two screenshots of two scenes from *Climate Change and the Optimistic Future* (2015): one of a factory setting and the other of a mountain landscape. Original source: *Climate change and the optimistic future* [Documentary]. (2015). United States: GoPro. Retrieved September 15, 2015 from:

[https://www.youtube.com/watch?v=sT6jtTsG\\_M&t=210s](https://www.youtube.com/watch?v=sT6jtTsG_M&t=210s) ]

**Figure 6.2 Screenshot of different landscape scenes from *Climate Change and the Optimistic Future* (2015).**

These images include aerial shots of mountain ranges and of oceans. There are also some scenes depicting evidence of human development such as highways and factories. The majority of the shots appear to be in real time, although time-lapse is used to show cars driving faster on

the highway or the passage of the moon at night. Overall, the documentary short alternates between panoramas of natural environments and human-made environments. I chose to include this documentary short because it mostly focuses on images of different landscapes. It is also one of the few environmental documentaries that convey a sense of hope and optimism about the future; I was interested to learn if participants would deem such an approach effective.

### **6.3.3 *Ashes and Snow* (2005), Gregory Colbert, 63 minutes**

Colbert's *Ashes and Snow* is described as “an immersive experience of nature that combines photographic artworks, films and soundscapes” (“Gregory Colbert,” 2016, bibliography para. 1). *Ashes and Snow* explores the intimate relationship between people and animals through sepia-tone images, and complemented by music. The clip invites viewers to witness people interacting with animals such as leopards, orangutans, elephants, and whales. For the filming process, Colbert notes he allowed the animals to roam freely during shoots and only directed the human actors to “go inside themselves and trust the animals” (Glover, 2002, para. 11).

[Figure 6.3 has been removed due to copyright restrictions. It was a screenshot of a scene from *Ashes and Snow* (2005) that showed a person sitting in water surrounded by five elephants.

Original source: Colbert, G. (Producer & Director). (2005). *Ashes and snow* [Documentary]. United States: Flying Elephants Productions.]

**Figure 6.3 Screenshot of a scene from *Ashes and Snow* (2005), 4:19.**

The clip, shot mostly at a flat angle, zooms in on interactions between animals and people, such as an orangutan and a woman holding hands, or a person sitting amongst elephants.

Other times, extreme long shots show an interaction such as the scene of Colbert swimming with a whale. The sepia-tone contributes to a feeling of nostalgia. According to Glover (2002), the colour tone provides “a sense of timelessness; they could have been taken now or 100 years ago” (para. 11). The clip is also filmed in slow motion, which reinforces the feeling of nostalgia. The images Colbert utilizes are described as stunning (Haupt, 2002), and as having a peaceful poetic simplicity while being awe-inspiring at the same time (Glover, 2002).

I found the clip of *Ashes and Snow* on a video sharing site where it is part of a two-part eleven-minute video highlighting Colbert’s work. I chose to use this version because it was more accessible lengthwise. It uses similar footage to the feature film, but provides short glimpses into a variety of scenes. At the time I made the compilation, I inadvertently named the clip *Flying Elephants*, which is the name of the production company and which is the title the film is indexed by on YouTube. I did not discover the error until after my participants had viewed and responded to the video.

*Ashes and Snow* was premiered as part of an “exhibition of 200 large photographs and slow-moving film in the vaulting Nomadic Museum” (Smith, 2005). Colbert’s film is referred to as “a poetic narrative rather than a documentary” (IMDb, *Ashes and Snow*, n.d.). One might categorize *Ashes and Snow* as a poetic documentary, as it relies on metaphoric representation of an issue through vivid images (Duvall, 2017). Or, one might argue *Ashes and Snow* is not a documentary at all because, according to the definition Nichols (2010) provides (see Chapter 3), it does not provide plausible representations of situations or events. In this regard, *Ashes and Snow* may perhaps best be viewed as an *art film*. According to Bordwell (2008), “Art cinema, defines itself explicitly against the classical narrative mode, and especially against the cause-effect linkage of events” (p. 152). In the context of the video compilation for this study, I

included a clip of this film because the visual rhetoric is uniquely striking. That is to say, the inclusion of this clip is a genre-bending ploy of my own: accepting hybridity of form and genre as a feature of contemporary visual rhetoric, the clip belongs in this compilation because it is about human interaction with the natural environment rather than because it can be categorized as an “environmental documentary,” *per se*.

#### **6.3.4 *HUMAN* (2015), Yann Arthus-Bertrand, 90 minutes**

*HUMAN* (2015), directed by Yann Arthus-Bertrand, takes viewers on a journey around the world. This film took Arthus-Bertrand three years to complete as he travelled to sixty countries and interviewed thousands of people to record first-hand accounts to a variety of questions that are raw, evocative, and inspiring. Inter-cut with these stories are mostly aerial shots of the Earth.

There are different versions of this documentary. The shorter theatrical version, which was featured at the 2016 Vancouver International Film Festival, is approximately two hours long. There is also an extended version on YouTube that divides the film into three volumes of about ninety minutes each. I decided to use clips from the first extended volume found online. *HUMAN* alternates between images of people speaking and landscapes.

[Figure 6.4 has been removed due to copyright restrictions. It was a screenshot of a scene from *HUMAN* (2015) showing an aerial shot of a body of water, with flocks of birds flying above. Original source: Arthus-Bertrand, Y. (Director) (2015). *HUMAN* [Documentary]. France: GoodPlanet Foundation.]

**Figure 6.4 Screenshot of a scene from *HUMAN* (2015), 7:18.**

In order to include a variety of images, I chose four different segments from the first extended volume focussing on varying landscapes. I recognize editing and clipping affects the content and the viewing experience. However, as noted earlier, I felt this was necessary in order to include a greater range of visual rhetorical modes for this study. One part of the clip, for example, includes a scene of people working in a garbage dump in the Dominican Republic. This scene added to the variety of visual rhetorical modes for participants to view and to comment on. The scene from the Dominican Republic is not shot in the same way as the majority of other scenes in the documentary. It is shot at a flat angle and uses close-ups to focus on the garbage or on the people. Otherwise, Arthus-Bertrand includes images such as sweeping aerial shots following a flock of birds over a body of water (see Figure 6.4), or slow panning across a river.

#### **6.3.5 *Jumbo Wild* (2015), Nick Waggoner, 52 minutes**

The documentary *Jumbo Wild* is focused on the proposed development of the Jumbo Glacier Resort in British Columbia. Director Nick Waggoner begins with the story of Oberto Oberi, an Italian-born architect residing in Vancouver who plans to build a ski resort in an area of spiritual significance to the local Indigenous people. The majority of the documentary focuses on those who reject the proposal. These people mostly include local residents and the Ktunaxa First Nations community.

I chose to include a clip from the seven-minute preview because it highlights a local environment and situation thus increasing the likelihood that my participants would regard it as personally relevant. The clip also adds variety to the video compilation because it includes what might be defined as environmental nostalgia and sublime visual rhetoric. The clip opens with sweeping aerial shots of the mountain region where the proposed ski resort is to be built (see Figure 6.5).

[Figure 6.5 has been removed due to copyright restrictions. It was a screenshot of a scene from *Jumbo Wild* (2015) showing a panoramic shot of a mountain range. Original source: Ramras, Z. (Producer) & Waggoner, N. (2015). (Director). *Jumbo wild* [Documentary]. Canada: Sweetgrass Productions.]

**Figure 6.5 Screenshot of a scene from *Jumbo Wild* (2015), 0:36.**

The images are juxtaposed with recordings of a formal proceeding in which people argue for and against the development. The rest of the clip features people recounting reasons why the region is important to them. The verbal narrative is complemented by footage of forests and mountains, people downhill skiing, news footage of protests, and grizzly bears.

### **6.3.6 *Manufactured Landscapes* (2006), Jennifer Baichwal, 86 minutes**

*Manufactured Landscapes* features the work of Canadian photographer Edward Burtynsky, known for its ambiguity and intense beauty, as well as for how it may provoke viewers to consider the tensions between how we live and our impact on this world.

As Burtynsky (2013) explains:

These images are meant as metaphors of the dilemma of our modern existence; they search for a dialogue between attraction and repulsion, seduction and fear. We are drawn by desire—a chance at good living, yet we are consciously or unconsciously aware that the world is suffering for our success. Our dependence on nature to provide the materials for our consumption and our concern for the health of our planet sets us into an uneasy contradiction. For me, these images function as reflecting pools of our times. (“Edward Burtynsky, About,” n.d. para. 2)



The director, Jennifer Baichwal, follows Burtynsky during one of his photographic journeys. One might expect Burtynsky's images to be revolting and to leave viewers disgusted about the human impact on the world, yet, according to French (2008), the images "don't have that tragic sense of death we experience" (para. 2) and instead might leave viewers to ponder the juxtaposition of the splendour and the ugliness of human development.

[Figure 6.6 has been removed due to copyright restrictions. It was a screenshot of a scene from *Manufactured Landscapes* (2006) showing a person working in an electronic waste dump in China. Original source: Baichwal, J. (Producer & Director) (2006). *Manufactured landscapes* [Documentary]. Canada: Foundry Films & National Film Board of Canada.]

**Figure 6.6 Screenshot of a scene from *Manufactured Landscapes* (2006), 3:55.**

The majority of the film shows people working in long rows at menial tasks, workers in an electronic waste (e-waste) dump salvaging parts (see Figure 6.6), or people disassembling materials to access what can be re-used. I chose to include these scenes because they rely primarily on visual imagery. During the filmed scenes there is no music or narration—only the ambient soundscape of the factories, the clanking of metal, and so on. The montage of photographs showing people living in and separating endless mounds of e-waste is set to music. Burtynsky provides limited narration in some scenes. At the time of creating the video compilation, I only had access to previews of the documentary on video sharing sites. The videos contain segments of footage from the feature documentary. I chose to include this clip because it uses a variety of combinations of the jeremiad, environmental melodrama and apocalyptic visual rhetorical modes.

### **6.3.7    *Our Daily Bread* (2005), Nikolaus Geyrhalter, 92 minutes**

*Our Daily Bread* takes viewers on a visual journey showing how food is processed. Austrian director Nikolaus Geyrhalter relies only on images and sounds from the environments he is filming as he tours various slaughterhouses and factories where food is produced. He describes the industry as “a closed system that people have extremely vague ideas about” (Geyrhalter, 2005, para. 1). Geyrhalter does not conduct any interviews perhaps to ensure that the scenes of industry are uninterrupted, thereby allowing viewers to be immersed in particular situations and to form their own conclusions (Dargis, 2006). The only human voices come from the casual conversation that occasionally occurs between workers. Geyrhalter does not include any reference to names or locations of the factories, for he believes it does not matter where these practices are taking place. In his words, if “things are made too easy” it

dulls our perception of the world. In this film a look behind the structures is permitted, time is provided to take in sounds and images, and it’s possible to think about the world where our basic foodstuffs are produced, which is normally ignored. (Burner, 2006, para. 3)

I chose to include a clip from this documentary because of its reliance on visuals over other forms of knowledge representation, and because it employs a type of jeremiad visual rhetoric.

The clip I selected for the video compilation comes from a four-minute scene that occurs near the beginning of the documentary. The scene opens in complete darkness, and then a series of lights eventually flicker on, exposing a long, white hallway. A worker walks in, looks into the window of what appears to be a storage room, opens the door, enters, and returns wheeling a large trolley holding layers of trays. The scene transitions to a shot of factory trays filled with baby chicks being moved along a conveyor belt while workers standing on either side of the belt

inspect them. The chicks are seen at two different stages of inspection, during which they are being shot out of a chute and onto a conveyor belt (see Figure 6.7). The scene ends with a worker seemingly tagging the chicks.

[Figure 6.7 has been removed due to copyright restrictions. It was a screenshot of a scene from *Our Daily Bread* (2005) showing chicks on a conveyor belt in a factory. Original source: Geyrhalter, N. (Producer & Director). (2005). *Our daily bread* [Documentary]. Germany: Nikolaus Geyrhalter Filmproduktion.]

**Figure 6.7 Screenshot of a scene from *Our Daily Bread* (2005), 7:42.**

Through this entire scene, audiences hear the sounds of machines, which drown out occasional verbal exchanges between the workers. Despite this, the sound of the chicks chirping is evident. Factory scenes can be gruesome; this scene, however, only depicts the beginning of a factory farming process. For some viewers, many of the other scenes in the documentary might be more difficult to view, such as ones that depict animal carcasses, animals being butchered, and live chickens being beheaded. To be sensitive to my participants' emotional well-being, in accordance with ethical guidelines, I chose to limit inclusion of such clips in this study.

### **6.3.8 *The 11th Hour* (2007), Leila Conners and Nadia Conners, 95 minutes**

Environmental activist Leonardo DiCaprio narrates parts of *The 11th Hour*, and also produced the documentary. *The 11th Hour* features interviews with many specialists and scientists to “explore how we’ve arrived at this moment—how we live, how we impact the earth’s ecosystems, and what we can do to change our course” (11thHourFilm, 2017, para. 1).

The documentary focuses on the interviewees as they speak to specific issues, and is

sometimes combined with a series of images. Occasionally, images are shown at a fast pace, which may imply an urgent call to act now (Dargis, 2007). While the majority of the documentary relies on apocalyptic and jeremiad rhetoric (see, for example, Figure 6.8), the last ten minutes employ a hopeful rhetoric and convey a sense of optimism about the future, perhaps to encourage people to act.

[Figure 6.8 has been removed due to copyright restrictions. It showed, side-by-side, two screenshots of two scenes from *The 11th Hour* (2007): one of factories and another of floodwaters running through a neighbourhood. Original source: DiCaprio, L. (Producer) & Connors, L., & Connors, N. (Directors). (2007). *The 11th hour* [Documentary]. United States: Appian Way.]

**Figure 6.8 Screenshots of scenes depicting jeremiad visual rhetoric from *The 11th Hour* (2007).**

I chose to include two different clips from *The 11th Hour*. The first is a montage that uses the apocalyptic and jeremiad visual rhetorical modes, which are achieved by the depiction of floods, smoke stacks, droughts, and forest fires. I also chose to include a portion of the last ten minutes of this documentary, which relies on hopeful rhetoric. The hopeful rhetoric is mostly achieved through verbal narratives that offer people suggestions on how to make a change. I was also interested in how participants would respond to the verbal rhetoric as opposed to the visual rhetoric in this clip.

### **6.3.9 *The Antarctica Challenge: A Global Warning* (2009), Mark Terry, 45 minutes**

*The Antarctica Challenge: A Global Warning*, written and directed by Mark Terry, attempts to demonstrate how global warming affects Antarctica. The film centres on images of

glaciers and Antarctica's plant and animal life. These images are interspersed with Terry's narration, as well as interviews with scientists and environmental advocates. This film is visually stunning, and provides information about how "the effects of global warming on Antarctica will have dire, if not downright cataclysmic effects on virtually every other continent on earth" (Heard, 2009, para. 2). Echoing some of the themes in *Chasing Ice* (Aronson & Orlowski, 2012), this documentary also provides historical context and offers scientific information and analysis. The visual scenes in *The Antarctica Challenge: A Global Warning* range from cityscapes to interviewees to glaciers to organisms living on the land and in the sea.

[Figure 6.9 has been removed due to copyright restrictions. It was a screenshot of a scene from *The Antarctica Challenge: A Global Warning* (2009) showing the opening title credits of the documentary. Original source: Terry, M. (2009). (Producer & Director). *The Antarctica challenge: A global warning* [Documentary]. Canada: Polar Cap Productions.]

**Figure 6.9 Screenshot of a scene from *The Antarctica Challenge: A Global Warning* (2009), 0:21.**

Animation overlays of falling snow and melting ice are used in the opening credits (see Figure 6.9), and the opening images are accompanied by an atonal soundscape. The documentary transitions to a narrated montage of scenes showing particular characteristics of Antarctica, including snow-covered mountains, penguins, seals, starfish, and glaciers. In the footage depicting the glaciers, the camera zooms in on icicles and time-lapse is used to show ice melting. The montage transitions to a scene featuring Dr. Julian Scott, a geophysicist, who explains what happens when glaciers break off and disappear into the ocean. A five-minute clip from this

opening segment is included in the video compilation. I chose this segment of the documentary because it extends the content of *Chasing Ice* by providing a greater variety of images.

#### **6.3.10 *The Cove* (2009), Louie Psihoyos, 92 minutes**

*The Cove*, directed by Louie Psihoyos, examines the controversial fishing practice of using sonar “to confuse dolphins and lead them into a cul-de-sac where they’re trapped and killed” (Ebert, 2009, para. 2). The coastal Japanese village where this takes place is tight with security and some of the footage was acquired illegally or using hidden cameras—Psihoyos is transparent about this in the documentary. *The Cove* is based on the narrative of Richard O’Barry, a dolphin trainer who captured and trained five dolphins for the television series *Flipper* in the 1960s. Over time, he began to realize that the dolphins did not belong in an aquarium, that they were stressed by having to perform and negatively affected by loud sounds, such as applause. As a result of that realization, O’Barry committed himself to fighting the captivity of dolphins.

[Figure 6.10 has been removed due to copyright restrictions. It was a screenshot of a scene from *The Cove* (2009) showing workers preparing for an illegal fishing expedition. Original source: DePre Presmen, P. (Producer) & Psihoyos, L. (2009). (Director). *The cove* [Documentary]. United States: Diamond Doc Films.]

**Figure 6.10 Screenshot of a scene from *The Cove* (2009), 60:07.**

The documentary intersperses footage of Psihoyos and his team accessing the fishing village with footage of conferences at which representatives from various countries meet to establish regulations to prevent illegal fishing activities from occurring. Psihoyos and his team

were able to acquire footage of a mass killing of dolphins by hiding special cameras inside fake rocks (Ebert, 2009). I included the scene of the killing of the dolphins in the video compilation. The scene lasts for about three minutes and there is no music or narration. The only sounds are faint verbal exchanges between the workers and louder noises from the dolphins. Viewers are able to see dolphins being trapped and can assume the dolphins are then killed because the water in the cove progressively turns a deep red. This scene (which occurs near the end of the documentary) is arguably one of the most disturbing scenes in the entire documentary and one of the only scenes that rely mostly on visual imagery over other forms of expression. The use of the jeremiad visual rhetorical mode in this clip from *The Cove* is unlike other clips included in the compilation.

#### **6.3.11 *The Fisherman's Son* (2015), Chris Malloy, 28:57**

*The Fisherman's Son* (2015) is directed by Chris Malloy, professional surfer, filmmaker, and environmental advocate. He tells the story of Ramón Navarro, a professional surfer from Chile who is the son of a third-generation fisherman in a remote village three hours from Santiago. The documentary follows Navarro as he works to protect his hometown of Punta de Lobos—a coastal fishing village where he grew up surfing and where his family has fished for generations—from corporate development. The film is a collaborative effort between Malloy, Patagonia, and Save the Waves organization. The thirty-minute documentary short showcases Navarro's experience surfing and explains why Punta de Lobos is so important to him. The narrative is accompanied by images of historical and current footage of the area, of Navarro and his family fishing, and interviews with other renowned surfers attesting to Navarro's character and passion for the environment.

[Figure 6.11 has been removed due to copyright restrictions. It was a screenshot of a scene from *The Fisherman's Son* (2015) showing the protagonist, Ramón Navarro, on a beach preparing to walk into the ocean. Original source: Malloy, C. (2015). (Director). *The fisherman's son* [Documentary]. United States: Farm League. Retrieved July 18, 2017 from <https://www.youtube.com/watch?v=0VMMrUzOhIk>]

**Figure 6.11 Screenshot of a scene from *The Fisherman's Son* (2015), 7:54.**

I chose to include a clip from the first eight minutes of *The Fisherman's Son* because it provides a variety of images evidencing environmental nostalgic visual rhetoric. The documentary is subtitled in English when Navarro or his family is speaking Spanish. Navarro narrates the opening clip, which shows a re-enactment of Navarro as a child learning how to fish. The scene transitions to present time and viewers see Navarro preparing for a dive and then eventually bringing back a haul of fish for his family to prepare. Members of his family are interviewed and his grandmother notes how, at one time, she and her family caught such abundant amounts of sea bass—more than they could use. The remainder of the clip provides some background information and footage from Navarro's surfing career, but mostly focuses on his efforts to protect Punta de Lobos.

The clips included for the video compilation thus include a variety of visual rhetorical modes. Participants viewed this compilation on a video annotation platform, CLAS (Collaborative Learning Annotation System). Participants were invited to add annotations at moments they found striking or evocative. Participants could only view their own comments. Later they clarified or elaborated their responses in interviews. Chapter 7 first provides an overview of the approach used to analyze participant annotations and transcribed interviews.



This is followed by analysis and discussion with a view to answering the second research question: which visual rhetorical modes in environmental documentaries most affect viewers' perceptions, attitudes, and understanding of environmental issues?

## **Chapter 7: Data Analysis and Discussion**

The following discussion provides an overview of data analysis steps and the approach to thematic analysis. The chapter then interweaves a discussion of the analysis and findings, ending with a summary of the findings.

### **7.1 Thematic analysis**

The data sources for this study were the participants' annotations on the video clips and transcriptions of the semi-structured in-person interviews. I used a thematic approach to analyze the data. Thematic analysis enables the exploration of patterns in texts without having established a predetermined set of themes (Braun & Clarke, 2006; Creswell, 2014). This is an “emergent” approach to analysis whereby multiple and diverse perspectives from participant responses are revealed through a process of discovering reoccurring themes and uncovering connections between themes and subthemes (Creswell, 2014).

Thematic analysis has been used in other environmental communication studies exploring media representation of hydraulic fracturing in the UK (Jaspal & Nerlich, 2014) and in examination of nuclear discourse in environmental communication (Kinsella, 2005). Specifically, Jaspal and Nerlich (2014) used thematic analysis as a means to “clarify the structure of social representations of fracking as a political and media issue, and the dominant rhetorical strategies used to construct them” (p. 7).

I attempted to follow Creswell's (2007, 2014) stages of thematic analysis (outlined below), which have been used and adapted by other scholars (e.g., Braun & Clarke, 2006; Huberman & Miles, 1994; Jaspal & Nerlich, 2014; Wolcott, 1994). The stages include: organizing the data, reading and re-reading the data, coding, categorizing and refining codes, describing codes, and reporting findings (Creswell, 2014). My process was highly iterative, in

keeping with a “learn-by-doing” approach (Saldaña, 2009). Huberman and Miles (1994) also note that there is no textbook approach to analyzing data, and that the process of analysis differs from researcher to researcher. Some argue that thematic analysis lacks rigour due to reliance on intuition, while others point to the lack of linearity in the process (Creswell, 2007). A thematic analysis follows a pattern that may not always be linear, but instead “moves in analytic circles” (Creswell, 2007, p. 150). The process is iterative, as noted above; qualitative researchers move between and among the layers in what may be described as a spiral fashion (Creswell, 2007). For example, one reads and re-reads (level one of the spiral), and may cycle at this stage for a while before moving to the next stage of categorizing the data. One may go back to this level of the spiral to review and re-visit themes as they emerge during the coding process.

My approach to thematic data analysis draws on Huberman and Miles (1994), who focus on the relationship between themes. For this study, the approach of Huberman and Miles (1994) can, for example, help examine similarities and differences among participants’ responses to the same visual rhetorical mode. I also follow Wolcott (1994), who stresses the importance of developing a description that reveals connections between academic literature and the data and, as Huberman and Miles (1994) point out, helps identify potential gaps in the literature.

## **7.2 Approach to thematic analysis**

As noted earlier, participants were invited to make annotations at points of the sixty-minute video compilation they found striking or evocative using software that allowed their writing to be linked to particular moments in the video. This exercise was not heavily structured: respondents were invited simply to stop the video if they wished to add an annotation explaining why they found given moments striking or evocative, and to write any thoughts that came to mind. All told, the eleven participants produced 4,861 words of commentary in the form of video

annotations. On average, participants each made five unique annotations, which ranged from 1 to 170 words in length. The number of unique comments per participant ranged from three to forty-six, and some participants made multiple comments on several videos. Figure 7.1 and Table 7.1 provide a summary of participants' annotations. Subsequently, I interviewed each participant to allow for clarification or expansion of annotation commentary. These interviews were between thirty and forty-five minutes in length and the interview transcripts total 62,838 words.

Using Creswell's (2007, 2014) phased approach to thematic analysis, I began by analyzing the annotations and followed that with analysis of the transcripts. The themes I discovered through my examination of the annotations aided in the development of the coding scheme I used for the transcribed interviews.

First, I familiarized and re-familiarized myself with the data. I initially conducted an active reading, which Braun and Clarke (2006) describe as reading the data to search for themes and patterns within the themes. I did this by highlighting passages of interest and making notes along the margins of the annotations and in my notebook. Second, I used NVivo software for qualitative data analysis as a tool to begin the coding process. Using NVivo, I categorized the data by coding it into meaningful groupings based on an examination of "the frequent, dominant, or significant themes inherent in [the] raw data" (Thomas, 2006, p. 238).

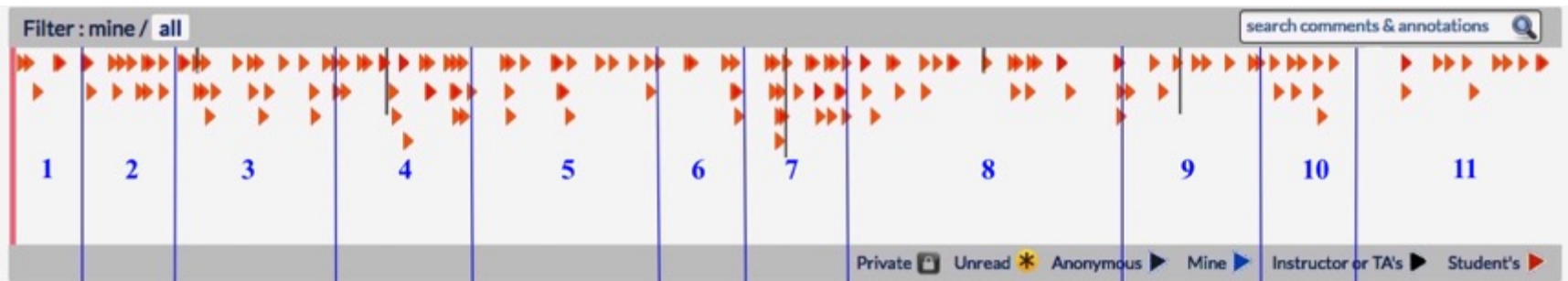


Figure 7.1 Visualization of participant annotations in the entire video compilation. Red triangles indicate unique annotations.

Table 7.1 Title of the documentary, length of clip and number of annotations per clip.

	Documentary Title	Length of Clip	Number of Annotations
1.	<i>Chasing Ice</i> (2012)	2:40	6
2.	<i>Climate Change and the Optimistic Future</i> (2015)	4:31	12
3.	<i>Ashes and Snow</i> (2005)	6:52	22
4.	<i>HUMAN</i> (2015)	5:20	18
5.	<i>Jumbo Wild</i> (2015)	7:49	23
6.	<i>Manufactured Landscapes</i> (2006)	3:24	7
7.	<i>Our Daily Bread</i> (2005)	4:00	22
8.	<i>The 11th Hour</i> (2007)	10:46	25
9.	<i>The Antarctica Challenge: A Global Warning</i> (2009)	5:45	11
10.	<i>The Cove</i> (2009)	3:39	9
11.	<i>The Fisherman's Son</i> (2015)	7:54	12

Keeping my second research question in mind, I focused on how participants responded to what they were viewing. As a guide, I asked the following questions:

1. To what are the participants responding?
2. How are participants responding to what they are viewing?
3. Do participants refer to or specifically address an environmental issue?
4. Is participant awareness and understanding of environmental issues evident?
5. What interesting or new thoughts and ideas have emerged?
6. What thoughts or ideas are consistent with current research?

A large number of themes emerged from this analysis. I then re-read the data and started combining themes. After numerous cycles of reading and coding, I was able to narrow down the codes to four key themes reflecting participants' responses: emotive, moral, personal connection, and cinematography.

I then proceeded with a second round of coding, again categorizing the data into more meaningful groupings and common sub-themes. This entailed multiple cycles of reading, of reviewing the sub-themes, and of narrowing themes into more refined subthemes. I initially started this process using NVivo, but found this difficult; a limitation of the software in my view is that it restricts the ways in which researchers can envision how the themes are interconnected. I therefore printed out the annotations according to the four themes, cut out individual annotations, and stuck them on a wall in their categories, using removable adhesive so I was able to reposition the strips. I found this process much more useful because I could readily see patterns emerging from the data. In repositioning the slips of paper, I interacted with the data manually and was able to re-arrange, even re-code, themes.

I followed the same approach when analyzing the transcripts, but I started with the four themes that had emerged from my analysis of the annotations. After multiple cycles of analysis, I

added the following two themes: disconnection and personal responsibility. Within the six main themes, there are also sub-themes. The complete list and definitions (listed in no particular order) are shown in Table 7.2. I would note that the themes and sub-themes are not necessarily mutually exclusive: that is to say, multiple codes are at times applied to a single excerpt from the data.

**Table 7.2 Themes and descriptions of participant responses to visual rhetorical modes in the video compilation.**

Themes	Description
1. Emotive Response	Refers to the participants' expression of emotion(s) and/or feeling(s) about what they are experiencing while they view a scene and/or clip. This may be explicitly stated or implied.
<i>Subthemes</i>	
<i>Confusion</i>	Expression of a lack of clarity, lack of understanding, or uncertainty about the viewing. Expression of desire to understand the intent of what they are viewing.
<i>Disgust</i>	Reference to or direct comment on feelings of revulsion.
<i>Hopeful</i>	Reference to or direct comment on feelings of optimism.
<i>Hopeless</i>	Reference to or direct comment on feelings of defeat or despair.
2. Moral	Reference to or direct comment on the perceived rightness or wrongness of the situation or about the moral compass of a character.
<i>Subthemes</i>	
<i>Humanity</i>	Reference to or direct comment on the nature of humanity by referring to a specific trait, such as greed.

Themes	Description
<p><i>(Subthemes of “Moral” theme continued)</i></p> <p><i>Humans &amp; Animals</i></p> <p><i>Humans &amp; Nature</i></p>	<p>Reference to or direct comment on people’s treatment of animals.</p> <p>Reference to or direct comment on people’s treatment of nature and/or the impact humans have had on nature.</p>
<p>3. Personal Connection</p> <p><i>Subthemes</i></p> <p><i>Home</i></p>	<p>Connection to participant’s life and/or personal experiences (work, education, personal preference).</p> <p>Reference to or direct comment on current, future or past home.</p>
<p>4. Disconnection</p>	<p>Reference to or direct comment on a sense of disconnection between the video and a perceived reality of the situation.</p>
<p>5. Personal Responsibility</p>	<p>Reference to or direct comment on feelings of responsibility for negative impact on the environment; reference to or direct comment on human responsibility and the need for humans to contribute to solutions.</p>
<p>6. Cinematography</p> <p><i>Subthemes</i></p> <p><i>Juxtaposition</i></p> <p><i>Awareness of Manipulation</i></p>	<p>Reference to or direct comment on cinematography, including the use of visuals, transitions and proxemics, colour, montage, music, narrative, and so on.</p> <p>Reference to or direct comment on visual symbolic juxtaposition of images.</p> <p>Reference to or direct comment on awareness of being manipulated.</p>



### 7.3 Analysis and discussion

In the following section I first provide a brief overview of the analysis of the annotations and interviews. The remainder of the discussion focuses on the themes of disgust, disconnection, and confusion. These themes will be examined in the context of participant responses to the clips from *Our Daily Bread* (Geyrhalter, 2005), *The Cove* (DePre, Pesmen & Psihoyos, 2009) and *Ashes and Snow* (Colbert, 2005), respectively. I have chosen to focus the discussion on these themes and clips because they speak most clearly to my research question. The chapter ends with a summary of the findings.

#### 7.3.1 Overview

##### *Hope and hopelessness*

My participants responded most positively to moments in the video offering plausible solutions, including, for example, living a more sustainable lifestyle. This hopeful rhetoric is common in environmental documentaries, but it is often expressed in verbal modes of communication such as narration and interviews. One of my participants, Laura, wrote: “I really appreciated his comment about the future. Too often discussions about global warming are very gloomy and apocalyptic, which tends to cause the viewer to shy away” (Laura, personal communication [video annotation], 5:40).<sup>7</sup>

[Figure 7.2 has been removed due to copyright restrictions. It was a screenshot of a scene from *Climate Change and the Optimistic Future* (2015) showing ocean and beach. Original source:

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<sup>7</sup> Participant statements are unedited.

*Climate change and the optimistic future* [Documentary]. (2015). United States: GoPro.

Retrieved September 15, 2015 from [https://www.youtube.com/watch?v=sT6jtTsG\\_M&t=210s](https://www.youtube.com/watch?v=sT6jtTsG_M&t=210s)

**Figure 7.2 Screenshot of a scene Laura responded to from *Climate Change and the Optimistic Future* (2015).**

Laura specifically responded to the comments made by Robert Muller in *Climate Change and the Optimistic Future* (2015). At the very end of the clip, Muller states, “I’m enormously optimistic about the future, if you look at the world objectively, it’s a great future” (Muller, 2015, 5:36).<sup>8</sup> Muller’s statements are heard as voice-overs accompanying panoramic shots of different landscapes including mountains, ocean, and prairies. These images would be categorized as sublime visual rhetorical mode as the images focus on particularly magnificent landscapes.

In our follow-up interview, Laura talked about how the combination of the images and the narration was effective in creating a sense of hope for her. She admitted this was the first environmental documentary she had viewed that offered a positive or hopeful message. Laura recalled that in her previous viewing experience the visual rhetoric in environmental documentaries were normally “of catastrophic events or natural disasters and manmade disasters” (Laura, personal communication [interview], July 5, 2016). Laura identified the images she described as specifically being apocalyptic. She also stated, “I usually prefer not to watch environmental documentaries because I feel that I always leave the documentary feeling more hopeless, and so I tend to stay from that” (Laura, personal communication [interview], July 5, 2016). Laura’s comments are supported by research reporting people’s negative responses to

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<sup>8</sup> Timestamps following a specific clip or environmental documentary from here on in are in reference to the times in the video compilation.

apocalyptic rhetoric (Lowe, 2006; O'Neill & Nicholson-Cole, 2009). Betty made a similar comment about the same clip, noting that what she saw offered “a positive message” and that “phrases like those are effective” (Betty, personal communication [video annotation], 6:10). In her interview, Betty discussed how positive messages of hope, or rhetoric that offers solutions, are “digestible” and more plausible than rhetoric that claims the only solution is to “live off the grid” (Betty, personal communication [interview], July 6, 2016).

Martin also wrote of hopeful rhetoric. In response to the clip from *The 11th Hour* (DiCaprio, Connors & Connors, 2007), he commented: “I really like this video because it showed us how we can help especially through technology” (Martin, personal communication [video annotation], 45:46). *The 11th Hour* relies heavily on verbal rhetoric, and this is particularly evident in the extract included in the video compilation. The clip starts with the combination of visuals employing apocalyptic and jeremiad modes, but as the organizational leaders and scientists explain working solutions to various problems, the visuals become hopeful in nature. This hopeful visual rhetoric is conveyed, for example, through images depicting how technology has contributed to developing solutions such as solar panels and wind turbines. During his interview, Martin clearly voiced his liking for this clip because, for him, it helped demonstrate how people are developing solutions: it is not simply a “concept,” he said, “they’re thinking, there’s progress ... there’s hope for the future” (Martin, personal communication [interview], July 5, 2016).<sup>9</sup> My participants’ comments reflecting hopelessness in the face of apocalyptic rhetoric and optimism in the face of hopeful rhetoric are supported by current research. For example, Lowe (2006) shows that the apocalyptic mode can be effective, but it is often overused

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<sup>9</sup> Ellipses in participant statements reflect a break in text.

in environmental documentaries and results in people feeling anxious or hopeless. Scholars suggest apocalyptic rhetoric should be used with caution to avoid negative responses (O'Neill & Nicholson-Cole, 2009), and to prevent further fears of ecological problems (Sobel, 1998).

It was interesting to note how positive or hopeful feelings were evoked mostly by verbal rhetoric. Martin provided a general comment about the video, noting: “my favourite one was the one that talked about how future science can help us and gave a positive look of the future” (Martin, personal communication [video annotation], 60:00). During the interview he supported his choice again by stating, “the strongest one would be about the scientists talking” (Martin, personal communication, [interview], July 5, 2016). Martin was referring to how, for him in this instance, verbal rhetoric was most effective.

Nicole also made a comment about the solutions offered in the clip from *The 11th Hour* (DiCaprio, Connors & Connors, 2007): “what a beautiful idea ... reusing everything!” (Nicole, personal communication [video annotation], 36:28). In this instance, Nicole was referring to comments made by Lester Brown, the founder of the Earth Policy Institute, who states: “instead of a throwaway economy, it will be a reused economy where everything is reused” (36:28). The narration is paired with animation demonstrating how water might be reused.

[Figure 7.3 has been removed due to copyright restrictions. It was a screenshot of a sequence of scenes from *The 11th Hour* (2007) showing an animated scene of how water might be reused.

Original source: DiCaprio, L. (Producer) & Connors, L., & Connors, N. (Directors). (2007). *The 11th hour* [Documentary]. United States: Appian Way.]

**Figure 7.3 Screenshots of the sequence of scenes Nicole commented on from *The 11th Hour* (2007), 36:28.**

Nicole observed: “I connect a lot with words. I connect more with words than I do with just images” (Nicole, personal communication [interview], July 20, 2016). The annotations and comments made by Laura, Betty, Martin, and Nicole all demonstrated that verbal rhetoric influenced them in considering environmental issues, which is a common representational pattern in environmental documentaries. Specifically, in the case of Martin and Nicole, analysis demonstrated that hopeful rhetorical mode was most influential when delivered in verbal explanations and narratives.

### *Personal connection*

It was evident that some of the images evoked strong reactions from many of my participants. In reference to the opening scene depicting vast mountain ranges in *Jumbo Wild* (Ramras & Waggoner, 2015), Lori explained: “as an outdoor enthusiast, the message was sold as soon as the panorama came up at the start” (Lori, personal communication [video annotation], 20:31). Similarly, Betty observed, “this is part of the world I feel personally connected to, I care and the images feel like home” (Betty, personal communication [video annotation], 22:38).

[Figure 7.4 has been removed due to copyright restrictions. It was a screenshot of a scene from *Jumbo Wild* (2007) showing a panoramic view of a mountain range. Original source: Ramras, Z. (Producer) & Waggoner, N. (2015). (Director). *Jumbo wild* [Documentary]. Canada: Sweetgrass Productions.]

**Figure 7.4 Screenshot of a scene Martin responded to from *Jumbo Wild* (2007), 26:43.**

Martin also reacted positively when he commented on the “beautiful views.” He said the clip “hit a nerve because I like the outdoors and love to go to places like that in total isolation and seeing

that this could possibly be taken away really doesn't sit well with me" (Martin, personal communication [video annotation], 26:43). During his follow-up interview, Martin again noted how this clip "hits me at home pretty hard just because . . . if I see that being taken away, I'm going to be quite upset if I don't get to share that with like the kids of the future, generations. . . some things should just be left alone" (Martin, personal communication [interview], July 5, 2016).

Martin's personal experience of being outdoors influenced his desire to protect places that are important to him. This was further emphasized when he connected the topic of this clip to his experiences as a camp counsellor: "they were thinking of building a mine near by, and if that were to happen, all that water, all of a sudden would probably get polluted, because it takes one spill to destroy everything" (Martin, personal communication [interview], July 5, 2016).

Martin's desire to be outdoors and his work experiences at an outdoor camp affected his response to the clip from *Jumbo Wild* apparently because he was able to make a personal connection. He understood the development of a ski resort in a natural environment has potential risks. Martin was troubled by the fact that if he does not work to protect natural landscapes that these natural areas will soon disappear. In this instance, Martin, Lori and Betty reacted more to environmental nostalgia and sublime visual rhetoric. The combination of these modes often focuses on images of vast landscapes, on memories, and on encouraging reflection on natural environments. In the case of Martin, connection to a specific place and previous experiences raised his awareness of a specific environmental issue. This finding is supported by other studies, which suggest images that connect to a local or familiar place can better engage or persuade viewers (Covi & Kain, 2016; O'Neill and Nicholson-Cole, 2009).

Fran commented on the clip from *The Fisherman's Son* (Malloy, 2015) and talked about how it reminded her of her childhood in Australia. She talked about how her father used to fish, and how the same values portrayed in the clip (family connections, and protecting the natural landscape) were ones with which she had grown up and continued to value.

[Figure 7.5 has been removed due to copyright restrictions. It was a screenshot of a scene from *The Fisherman's Son* (2015) showing a person surfing in the ocean. Original source: Malloy, C. (2015). (Director). *The fisherman's son* [Documentary]. United States: Farm League. Retrieved July 18, 2017 from <https://www.youtube.com/watch?v=0VMMrUzOhIk>]

**Figure 7.5 Screenshot of a scene Fran responded to from *The Fisherman's Son* (2015), 59:25.**

Conversely, in response to fishermen killing dolphins in *The Cove* (DePre Pesmen & Psihoyos, 2009), Fran was clearly revolted. I asked Fran about her response in our interview. Fran spoke candidly about a time when she was a child and witnessed a porpoise being killed. In her words:

they had cut the head off and took the head and left the whole body on the beach, of our local beach . . . it was so revolting, and it was super hot, so you can imagine the stench. But even then as a kid I remember seeing it was just the head taken. I was like “what the heck?” (Fran, personal communication [interview], July 11, 2016)

While most of my participants gave positive examples of personal connections, Fran's personal experiences influenced her negative reaction in *The Cove* (Psihoyos, 2009).

Findings demonstrating a personal connection to a memory, an experience, or an event are reflected in environmental theories such as those proposed by Aldo Leopold (1949), Rachel Carson (1962), and David Sobel (1998), who note that to influence or enact some kind of

change, people must make a personal connection to a place. People often need to “remember and be re-membered” (Knapp, 2005, p. 278), to recognize the importance of a local area, which then might extend to an awareness of larger, global issues. As Betty noted at the end of her annotations, “I think an environmentalist film’s message is more effective when the film is about a place where you live or a place you have a personal connection to” (Betty, personal communication [video annotation], 60:00). The data suggested that it was not just a local place that made a significant impact, but also personal experiences within a local place. Martin and Fran both had personal experiences that helped them identify with the images and issues portrayed in the clips. In addition, Lori and Martin identified with issues in the clips in ways that suggested their personal experiences of the outdoors played a role in their response. Thus far, my findings suggest environmental nostalgia, sublime, and jeremiad visual rhetoric evoked some level of personal connection—whether positive or negative—and raised awareness about particular environmental issues.

### *Personal responsibility*

Many of my participants’ responses alluded to the importance of responsibility. After viewing the opening scenes of *Climate Change and the Optimistic Future* (2015), Lori commented: “the flashback between the city (where most people live) and the melting ice links what is remote to personal responsibility” (Lori, personal communication [video annotation], 2:59). Here, Lori was responding to the juxtaposition of sublime and jeremiad visual rhetoric.

[Figure 7.6 has been removed due to copyright restrictions. It was a screenshot of a scene from *Climate Change and the Optimistic Future* (2015) showing one image of a glacier, and another of a cityscape. Original source: *Climate change and the optimistic future* [Documentary]. (2015).



United States: GoPro. Retrieved September 15, 2015 from

[https://www.youtube.com/watch?v=sT6jtTtsG\\_M&t=210s](https://www.youtube.com/watch?v=sT6jtTtsG_M&t=210s)

**Figure 7.6** Screenshots of the scene(s) Lori responded to from *Climate Change and the Optimistic Future* (2015), 2:59.

During her interview, Lori stated that it appeared as though the documentarian was “tying the two images together” to show “we’re actually interconnected and we’re responsible for taking care of not just our city but also of the wilderness” (Lori, personal communication [interview], July 13, 2016). Lori used the term “links” and phrases such as “tying the two images together,” implying viewers must construct meaning by finding the connection themselves: an example of a visual enthymeme. This is suggestive of notions in keeping with Iser’s (1974) “unwritten” (e.g., narrative gaps), as well as Kuleshov’s (1974) discovery that the arrangement of the shots is persuasive because viewers make causal links. Lori’s comments demonstrated her understanding of the strategic placement of images.

While Lori commented on humanity in general, Betty provided a more personal response to the end of the same clip: “I can’t believe that a species (humans) could make such an impact on such a huge otherwise stable planet. So sad. I feel bad! I feel like I personally have made a huge mess for everyone” (Betty, personal communication [video annotation], 5:30).

[Figure 7.7 has been removed due to copyright restrictions. It was a screenshot of a scene from *Climate Change and the Optimistic Future* (2015) showing a landscape including fields and mountains in the background. Original source: *Climate change and the optimistic future* [Documentary]. (2015). United States: GoPro. Retrieved September 15, 2015 from [https://www.youtube.com/watch?v=sT6jtTtsG\\_M&t=210s](https://www.youtube.com/watch?v=sT6jtTtsG_M&t=210s)

**Figure 7.7** Screenshot of a scene Betty responded to from *Climate Change and the Optimistic Future* (2015).

During her interview, Betty reflected that she felt guilty at times because she did not always make the best choices, yet she was aware of how these choices influenced the environment. Scenes of mountains and sweeping valleys, as well as other vast natural landscapes, caused Betty to realize how people have negatively impacted the natural environment. In that instance, Betty was responding to the use of sublime visual rhetoric. Similarly, Nicole appeared to respond with a sense of guilt to *The 11th Hour* (DiCaprio, Connors & Connors, 2007). That is, while Nicole reported that she appreciated being informed of possible solutions, she also stated that the responsibility to protect the environment is often placed on young people: it “definitely creates a sense of responsibility in the heaviest sense of the word, like it almost creates guilt” (Nicole, personal communication [interview], July 20, 2016).

Brian also referred to the idea of personal responsibility. After watching a scene from *HUMAN* (Gilard & Arthus-Bertrand, 2015) where people are sorting through a garbage dump, Brian expressed frustration when he noted feeling “very sad and pissed off” and “troubled by the amount of trash we create” (Brian, personal communication [video annotation], 18:13).

[Figure 7.8 has been removed due to copyright restrictions. It was a screenshot of a scene from *HUMAN* (2015) showing people sorting through a garbage dump. Original source: Arthus-Bertrand, Y. (Director) (2015). *HUMAN* [Documentary]. France: GoodPlanet Foundation.]

**Figure 7.8 Screenshot of a scene Brian responded to from *HUMAN* (2015), 18:13.**

Similarly, in response to a scene from *Manufactured Landscape* (Baichwal, 2006), Brian commented on images of an electronic waste dump: “seeing the amount of waste of electronic material makes me frustrated with North America and the greed that we have for more stuff”

(Brian, personal communication [video annotation], 30:01). Both of the images Brian referred to employ jeremiad and environmental melodrama visual rhetoric; in both instances, the scenes depict the enormous impact of human waste on environment and on people's lives.

As shown in the previous discussion, the idea of personal responsibility was evoked by a variety of different visual rhetorical modes. Lori specifically pointed out the contrast between cityscapes and landscapes (classified here as jeremiad and sublime rhetoric). Betty talked about feeling guilty when viewing mountain landscapes, and Nicole expressed the same feelings of guilt, but in response to imagery of different solutions. Still, Brian's reflections about personal and societal responsibility were evoked specifically by scenes of people working in garbage or sitting beside electronic waste (these scenes employ jeremiad and environmental melodrama rhetoric, respectively). My participants all commented on the idea of personal responsibility, but in response to different images. Genre, as Frow (2006) notes, is a function of reading, and viewers' background experiences have an impact on how they might respond to texts or, in this case, the textual patterns of a genre.

### **7.3.2 Disgust and disconnection: Jeremiad visual rhetorical mode**

Participant response to visual imagery categorized as jeremiad reflected disgust and disconnection. Observing a group of fishermen killing dolphins in *The Cove* (DePre Pesmen & Psihoyos, 2009), Nicole stated, "this is disgusting and so disheartening" (Nicole, personal communication [video annotation], 53:06). Fran's comments on the four-minute clip from *Our Daily Bread* (Geyrhalter, 2005) showing factory workers sorting chicks are an interesting instance of an instinctive stream of consciousness response to the jeremiad visual rhetorical mode. Fran's annotations are listed in Table 7.3

[Figure 7.9 has been removed due to copyright restrictions. It was a screenshot of a scene from *Our Daily Bread* (2005) showing workers sorting through chicks on a conveyor belt in a factory setting. Original source: Geyrhalter, N. (Producer & Director). (2005). *Our daily bread* [Documentary]. Germany: Nikolaus Geyrhalter Filmproduktion.]

**Figure 7.9** Screenshot of a scene Fran responded to from *Our Daily Bread* (2005), 31:42.

**Table 7.3** Example of Fran’s annotations

Time Stamp	Fran’s Annotations	Description
31:18:00	it is pretty uninteresting	Opening scene— factory worker going to what appears to be large cupboards, pulling out a cart layered with caged drawers.
31:29:00	oh no, poor little chicks!	Close up of what are in the caged drawers—chicks.
31:42:00	oh my god, it’s horrible to watch!	Chicks in trays on a conveyor belt, with workers sorting through them and eventually throwing them around to different trays.
32:01:00	they are throwing them!!	
32:29:00	okay, I hate watching this clip. I am a huge animal lover and this disregard distresses me.	Chicks are seen travelling along the conveyor belt down a chute.
33:44:00	I wish this would stop.	Chicks are in a final tray, with a worker inspecting the chicks, separating them into different piles.

Fran's comments reflect increasing levels of disgust. The majority of participants expressed disgust in their responses to images classified as apocalyptic or jeremiad visual rhetoric, which were most evident in the clips from *Our Daily Bread* (Geyrhalter, 2005) and *The Cove* (DePre Pesmen & Psihoyos, 2009). Other participants expressed similar aversion to the clip from *Our Daily Bread*:

this whole process seems SO SENSELESS. Why are there so many chicks!?! What could they possibly do with chicks?!?! Why do they have to go through so many tunnels and scary chambers?! What is this even for? I'm glad I'm a vegetarian! Poor chicks! (Betty, personal communication [video annotation], 33:59 – 34:09, emphasis in original)

Betty did not comment at any specific points in this clip, instead choosing to comment at the end. Her capitalization of "SO SENSELESS" and streaming questions about the purpose of the factory processes evidenced repulsion. In her follow-up interview, Betty noted that she could not comprehend the mistreatment of the chicks, and that by choosing to be a vegetarian she could "at least remove myself from that" (Betty, personal communication [interview], July 11, 2016). During the interview, Betty continued to question the purpose of the treatment of the chicks. She noted how she actually had to "click away" because she "didn't understand" (Betty, personal communication [interview], July 11, 2016). She also noted, "it just seems like so much effort to make it miserable for them which is so sad. Why did someone go through so much effort ... they're like baby chicks" (Betty, personal communication [interview], July 11, 2016).

In his annotations, Finn wrote, "this has been awful. At every step the chicks are just slung carelessly around, and the whole thing has been designed to limit the force of impact so that the number of casualties falls just below the threshold of acceptable loss" (Finn, personal communication [video annotation], 34:14).

[Figure 7.10 has been removed due to copyright restrictions. It was a screenshot of a scene from *Our Daily Bread* (2005) showing chicks being moved along and sorted on a conveyor belt in a factory setting. Original source: Geyrhalter, N. (Producer & Director). (2005). *Our daily bread* [Documentary]. Germany: Nikolaus Geyrhalter Filmproduktion.]

**Figure 7.10 Screenshot of a scene Betty and Finn referred to from *Our Daily Bread* (2005), 32:42.**

Like Betty, Finn not only expressed his disapproval of the treatment of the chicks, but also of the factory setting itself. In his follow-up interview, he explained:

these chicks are like hitting these things and sliding down and some part of me knows that somebody somewhere has calculated the velocity with which they can hit this wall safely so that most of them don't die, and maybe the occasional one dies, and I'm like it's just so perfectly designed. This perfectly designed cycle of just de-personalized killing.

(Finn, personal communication [interview], July 12, 2016)

The scenes to which Fran, Betty and Finn responded are classified in this thesis as jeremiad visual rhetoric (images attributing human behaviour as the cause of environmental crises). Other participants reacted to these scenes in similar ways. Nicole, for example, stated, “oh my god, this is difficult to watch” (Nicole, personal communication [video annotation], 33:09), and York simply wrote, “Fuck me” (York, personal communication [video annotation], 33:51). In fact, all participants responded similarly to the clip from *Our Daily Bread* (Geyrhalter, 2005).

Geyrhalter remarks on how such treatment of animals might be overlooked, remarking that he is “fascinated by ‘zones and areas people normally don't see’” (as cited in Dargis, 2006, para. 3). His documentary, like no other, brings these zones to the forefront for the viewer.

Geyrhalter's fascination with zones and areas people do not recognize is often referred to as a form of self-validating reduction (Weston, 1996). Within environmental education, this refers to a "disvaluing of nature" (Weston, 1996, p. 115) and is used as an excuse or rationale to justify an action. Participants' annotations on *Our Daily Bread* also demonstrated a level of self-validating reduction, which was revealed by comments made about the disconnection between the food we consume and the way in which the animals were treated, such as the following: "I am in disbelief this actually happens" (Brian, personal communication [video annotation], 32:56). Later during our interview, Brian noted that he normally did not think about where the meat comes from when eating a meal. In an annotation, Martin noted: "makes me feel kind of bad about eating chicken. I knew commercialized farming wasn't a nice thing but after watching this video it really showed me how commercialized it is" (Martin, personal communication [video annotation], 34:28). Martin noted in our follow-up interview that although he would not omit chicken from his diet, he would make a more conscious choice about the kinds of meat he did purchase.

In an annotation on *Our Daily Bread* (Geyrhalter, 2005), Laura noted: "This also allowed me to realize how disconnected we are from our food and how it is grown" (Laura, personal communication, [video annotation], 33:53). When asked to elaborate, Laura said the following:

if you show visuals of like baby chicks or any sort of young animal, maybe a calf or a piglet then people would be like "oh", most people would be like "oh, that's adorable, like it's so sweet." And if you were to kind of link that to "oh ya, so that's your McNugget, or that's your patty" it'd be a bit upsetting for them. But, they would kind of be "oh I'm not actually killing it, I don't have to deal with that sort of thing." So, it kind of provides them with, it's better for their conscience, that they don't have to physically

kill something in order to eat it. But indirectly they are because they are eating it, so it had to be killed for them. (Laura, personal communication [interview], July 5, 2016)

Laura's remarks are an example of self-validating reduction. Her comment about how animals are viewed as "adorable" reflects the idea of role affinity (Bahk, 2010). The participants developed an affinity for the chicks, which then made it challenging for them to assess possible negative outcomes for these animals. Self-validating reduction is also reflected in Laura's comments when she refers to people's excuses about not contributing to the problem of the treatment of animals because they as individuals are not killing the animals. Laura made clear during our interview that her awareness of this disconnection was because of her background in food and health nutrition. She admitted that this clip made her think about these issues again, stating: "I think it's one of those things where you think about it, and it's a bit unsettling, so you tend to try to either block it out or you don't think of it as much" (Laura, personal communication [interview], July 5, 2016).

Fran's comments also provided examples of disconnection and self-validating reduction. When I asked her about her stream-of-consciousness comments from the clip from *Our Daily Bread* (Geyrhalter, 2005), Fran replied:

We have no regard for animals. . . . You want your Kentucky Fried, you want a McDonald's chicken burger, there's your cost. Because for those of us who love to hide behind "I buy eggs that are ethical" you know, total free range, organic, and then I could sit there in my little sanctity and go "I can feel good about myself because I don't buy eggs where chickens are put in [inaudible]." (Fran, personal communication [interview], July 11, 2016)



The scenario Fran describes whereby choices to eat at certain fast food restaurants are justified or balanced by purchasing other products that are ethical is another example of self-validating reduction.

When examining the annotations and transcribed interviews from participants' responses to *Our Daily Bread*, I observed that few made a direct connection to the effectiveness of the clip at raising awareness of the environmental issues involved in commercialized farming. Many participants, however, did allude to human impact on the environment. The ethical treatment of animals is an environmental issue. Animals are directly affected when people and corporations continue to be involved in commercialized farming. While unnerving, the jeremiad visual rhetoric of *Our Daily Bread* (Geyrhalter, 2005) did make an impact on my participants, as most spoke to the cruelty of commercialized farming.

Responses to *The Cove* (DePre Pesmen & Psihoyos, 2009) generated an equal, if not greater, amount of disgust. As noted earlier, the clip opens showing fishermen preparing for a hunt. Using rowboats, they drop nets into the water and wait for a brief moment for a pod of dolphins to swim into the cove. Quickly, the fishermen trap the dolphins and, while standing on the rowboats, spears in hand, stab and kill the dolphins. Slowly the water in the cove turns red, which is contrasted against the dull greys of the cliffs and rocks surrounding the cove.

[Figure 7.11 has been removed due to copyright restrictions. It was a screenshot of a scene from *The Cove* (2009) showing workers killing dolphins. Original source: DePre Presmen, P. (Producer) & Psihoyos, L. (2009). (Director). *The cove* [Documentary]. United States: Diamond Doc Films.]

**Figure 7.11 Screenshot of a scene many participants responded to from *The Cove* (2009), 53:57.**

The comments in response to the clip from *The Cove* (DePre Pesmen & Psihoyos, 2009) for most were very short. For example, Nicole wrote, “this is disgusting and so disheartening” (Nicole, personal communication [video annotation], 53:06); Martin wrote, “that’s pretty fucked up” (Martin, personal communication [video annotation], 53:59); and Betty wrote, “This is horrifying”(Betty, personal communication [video annotation], 54:36). Samantha noted that she “absolutely could not watch the wanton, merciless destruction of these animals” (Samantha, personal communication [video annotation], 52:54).

Brian elaborated, stating, “this graphic scene, while the sea turns blood red makes me pissed off and frustrated with humans” (Brian, personal communication [video annotation], 53:57). When asked about this annotation his interview, Brian noted he was responding to the “the mass murder aspect of it” (Brian, personal communication [video annotation], July 6, 2016), and discussed the ways the dolphins were being killed. He also commented on how the scene was more striking because of the “blood water” and remarked simply, “it was just like, ‘whoa’” (Brian, personal communication [interview], July 6, 2016). The connection Brian made was not just to the mistreatment of animals. He wrote, “It also makes me realize how ignorant I am of the world” (Brian, personal communication [video annotation], 53:57). During the interview, Brian surmised that perhaps the fishermen were killing the dolphins as a food source. He related this to the issue of dolphins being caught and used in canned tuna products. Brian noted he does not put in the time to do research or read the labels: “Do I read the labels? No, so it’s one of those things where I get mad, but I don’t do anything about it” (Brian, personal communication [interview], July 6, 2016). Brian’s comments in this regard revealed his awareness of a disconnection.

Fran also noted during her interview that the fishermen showed no regard for the dolphins, and further stated, “the people are methodical and it feels like without feeling. It’s

systematic” (Fran, personal communication [interview], July 11, 2016). Finn also offered his thoughts about the clip from *The Cove* (DePre Pesmen & Psihoyos, 2009):

the thrashing dolphins impaled on the end of spears by a boatful of men scores an obvious emotional victory. Sure, I feel manipulated, but there’s no missing context that could make this suddenly all right, so it’s more like manipulating me by reminding me of how awful people are and have always been. Tradition and hungry families be damned; maybe the icecaps melting and flooding all the coasts wouldn’t be so bad after all? (Finn, personal communication [video annotation], 54:08)

During his interview, Finn attributed the effectiveness of the clip from *The Cove* to its use of cinematography, noting:

they’re not creating this scene, it’s already there. They’re filming it in a particular way, which is to say as though they were unobtrusive and just like presenting us with what’s happening . . . the manipulation comes, like I know why this image exists, I know that it’s meant to provoke me and to make me feel exactly how I’m feeling. (Finn, personal communication [interview], July 12, 2016)

Finn also referred to his comments about the flooding of coasts in his interview, admitting it was an exaggeration while maintaining that people are at fault. He ended this thought by referring back to the annotation above: “this clip makes me feel ‘ya, it wouldn’t be so bad if we could just start over’” (Finn, personal communication [interview], July 12 2016). Betty also expanded on her annotations when she talked about how there was

so much blood. . . it takes a lot of blood to turn all that water, like, opaque red. So it was just kind of like “oh!”. Ya, and to be swimming in the blood of, I don’t know, the blood

of your family it was horrible. (Betty, personal communication [interview], July 11, 2016)

It could be argued that my participants reacted more strongly to the images in *The Cove* because of its vividness (Hill, 2004) and its salience (Joffe, 2008). Indeed, many have argued that the more vivid the image, the more likely it is to provoke an emotional response, which makes the image more persuasive (e.g., DiFrancesco & Young, 2010; Hansen & Machin, 2013; Hill, 2004; Joffe, 2008; Olson et al., 2008; O'Neill & Nicholson-Cole, 2009; Smith & Joffe, 2012). The influence on viewers also depends on the salience effect, or the way in which an image stands out and the way images are presented, for this is what viewers will remember (Joffe, 2008). It is evident that images focusing on the blood in the water of the cove were vivid, and it was this visual image that stood out for all my participants.

[Figure 7.12 has been removed due to copyright restrictions. It was a screenshot of a scene from *The Cove* (2009) showing the bloody water of a cove after workers killed a number of dolphins. Original source: DePre Presmen, P. (Producer) & Psihoyos, L. (2009). (Director). *The cove* [Documentary]. United States: Diamond Doc Films.]

**Figure 7.12 Screenshot of a scene Betty commented on from *The Cove* (2009), 54:36.**

Betty's comments began with "so much blood"; in fact, she repeated the word "blood" four times. She remarked that it would require a large amount of blood to turn the water in the cove into an "opaque red." The vividness of the colour red against the background of the dark blue sea, the grey rocks, and blurry figures make the blood stand out even more, which appeared to

evoke strong responses: all participants focussed their commentary on the sight of so much blood.

It is worth noting that *Our Daily Bread* (Geyrhalter, 2005) and *The Cove* (DePre Pesmen & Psihoyos, 2009) do not employ music or voice-overs. It is primarily animal sounds that are heard in both. It is interesting, however, that while participants did not particularly comment on the constant chirping of the chicks heard in *Our Daily Bread*, they did hone in on the sounds of the dolphins. For example, Fran stated: “and the squealing, right? The noise. Adding audio. Wow” (Fran, personal communication [interview], July 11, 2016). Brian also commented on the sound, specifically how he was able to hear the “dolphins screaming” (Brian, personal communication [interview], July 6, 2016). Nicole also noted:

it is just disgusting because it just is so raw. . . . the sound of it . . . It’s good that there’s no talking because you hear the dolphins, and you hear, the actual, almost like you can hear their flesh almost being punctured. It’s pretty intense. (Nicole, personal communication [interview], July 20, 2016)

Clearly the auditory element did make an impact on the participants. In particular, there was a connection to the event, as indicated in Nicole’s comment about “almost hearing the piercing of the dolphins’ flesh.” Dolphins are often viewed as strongly connected to humans through their intelligence and communication abilities, which may have provoked such a strong response. If this were the case, this would be another example of Bahk’s (2010) notion of role affinity. Fran, for example, referenced intelligence in reflecting on the dolphins’ awareness of their entrapped situation and on their crying out: “they understand what is going on. They do. I know they’ve got higher intelligence levels. They understand what’s going on, they’re desperate to get out” (Fran, personal communication [interview], July 11, 2016). Fran also noted the effectiveness of the

imagery is due to its “rawness,” including hearing “the desperation of the animals” (Fran, personal communication [interview], July 11, 2016). Further, the dolphin sounds do resemble human calls of distress. Vocalized distress calls of dolphins “share a common acoustic structure and adaptive function, showing only limited variation ... and are homologous with the cries of humans” (Lingle, Wyman, Kotrba, Teichroeb & Romanow, 2012, p. 699).

The visual rhetoric in *The Cove* (DePre Pesmen & Psihoyos, 2009) evoked strong emotive responses, specifically in relation to feelings of disgust. The auditory element also had an impact on participants. One might conclude that the vividness and salience effect of the footage was enhanced by auditory elements. Participants responded with some level of anguish to jeremiad visual rhetoric in combination with other forms of rhetoric in *The Cove*, and all commented on the mistreatment of the dolphins.

### **7.3.3 *Ashes and Snow*: Genre expectations**

Responses categorized in the theme of confusion include instances when participants expressed a lack of understanding, a desire to understand, or uncertainty. Most annotations and comments reflecting some level of confusion were in response to the clip from *Ashes and Snow* (Colbert, 2005).

In the literature I reviewed for this study, there was no clear indication of a specific kind of visual rhetorical mode that corresponded to the images my participants were responding to in *Ashes and Snow*. There are many aspects beyond visual rhetoric to consider when viewing film. Lye (1996), for example, describes texts as “coded structures,” with rhetoric being only one element, and genre being another. Within a rhetorical genre studies framework, genres are described as being “stylistic and substantive” (Bawarshi & Reiff, 2010, p.65). Genres have markers, or textual patterns, that provide familiar structures and guidelines (Schryer, 1994).

These rhetorical forms are learned, expected, and can affect viewers' attitudes and beliefs (Gronbeck, 1978). As indicated earlier in this dissertation, the representational patterns for most environmental documentaries include voice-overs, experts providing advice, a clear representation of a current environmental issue or event, and perhaps scenes of natural landscapes. *Ashes and Snow* does not include many of these recognizable documentary patterns. Categorizing the film into any particular genre is in fact difficult because it includes a combination of different forms, creating what Campbell and Jamieson (1978) describe as a constellation. In the case of the clip from *Ashes and Snow*, my participants' evident confusion appeared to arise in part because the genre did not fit their understanding of "documentary film" and in part because they found the imagery ambiguous.

As noted earlier, Colbert (2005) is known for implementing artistic and ambiguous images with no commentary. A moment early in the clip depicts a scene between an orangutan and a woman on a boat. The entire clip is in sepia tone and choral music plays in the background. The scene is shot at a flat angle, and sometimes zooms in on the clasped hands of the woman and the animal.

[Figure 7.13 has been removed due to copyright restrictions. It was a screenshot of a scene from *Ashes and Snow* (2015) showing a woman interacting with an orangutan on a boat. Original source: Colbert, G. (Producer & Director). (2005). *Ashes and snow* [Documentary]. United States: Flying Elephants Productions.]

**Figure 7.13 Screenshot of a scene from *Ashes and Snow* (2015), 10:34.**

In reference to the opening scene, Lori wrote:

Perhaps it is the lack of context? This is rather confusing. What is the message that the director is trying to convey? That we have a connection with other animals? Why are they staged on a boat? The woman is wearing a costume? (Lori, personal communication [video annotation], 10:19)

This clip from *Ashes and Snow* challenges the traditional documentary mode and, I would argue, the conventional environmental documentary mode because Colbert relies on symbolic visual imagery, with no commentary. Lori's uncertainty about what she should glean from *Ashes and Snow* is noteworthy. Other participants echoed Lori's confusion. Even Martin, who claimed to understand the intent, admitted to being confused. Martin noted:

I understand that it is implying that we are ones with nature but for the last 5 minutes all the images have just been way too weird and are almost off putting. It might just be me because I am not an "artsy" person but perhaps these are too odd for most people too. It makes me want to skip this part, which is not a good quality for a documentary. (Martin, personal communication [video annotation], 12:25)

It was evident during the interview that Martin did not like the clip from *Ashes and Snow*. However, he did claim that the clip made him "feel bad" because it pointed out that "humanity is intertwined with nature and then how we're destroying it" (Martin, personal communication [interview], July 5, 2016). Afterward, he discussed how the clip actually made him feel "more angry that they're showing me this" (Martin, personal communication [interview], July 5, 2016) because for him there was no indication as to what viewers can do to help with the potential problem. He saw this as a "passive-aggressive" way to inform people (Martin, personal communication [interview], July 5, 2016). He elaborated:



There isn't a clear point. It's just there was a lot of dancing and it's kind of like up to people's interpretations. And when it's up to people's interpretations I can interpret it totally different from what it's meant to be and then if I think I'm the right one, I can just argue without any conclusion. (Martin, personal communication [interview], July 5, 2016)

Most of Martin's annotations and interview comments revealed he did not like what he perceived as overly artistic—what he termed “artsy”—images. He claimed this was “not a good quality for a documentary” (Martin, personal communication [video annotation], 12:25). As well, when he realized the clip did not conform to the traditional genre patterns, he reacted adversely. Genres have become forms that people recognize and often respond to in a particular way (Bawarshi & Reiff, 2010). If the genre markers are shifted, this affects the ways in which viewers respond, as demonstrated by Martin's reaction. Betty, likewise, identified the genre as being other than environmental documentary and remarked that the film was ineffective because of its genre markers: “I don't really like this stuff ... it's like an art film ... I guess it's just more of an artistic expression and I don't completely understand what they're saying ... it doesn't call me to action” (Betty, personal communication [interview], July 11, 2016).

Fran also alluded to her feelings of confusion: “it's just too artistic for me” (Fran, personal communication [interview], July 11, 2016). When asked to elaborate, Fran noted: “I found it was probably meant to be very subjective. And I mean there can be subjective and I get it. But I didn't get it” (Fran, personal communication [interview], July 11, 2016). It was evident from her responses that there were moments when Fran could understand or relate to an image, but then she quickly became confused again. Fran elaborated: “I know the next image with the

whale and the person I got that. I thought ‘oh we’re mimicking the beauty of the animal’” (Fran, personal communication [interview], July 11, 2016).

[Figure 7.14 has been removed due to copyright restrictions. It was a screenshot of a scene from *Ashes and Snow* (2015) showing a man interacting with a whale, underwater, in the ocean.

Original source: Colbert, G. (Producer & Director). (2005). *Ashes and snow* [Documentary].

United States: Flying Elephants Productions.]

**Figure 7.14 Screenshot of a scene Fran commented on from *Ashes and Snow* (2015), 11:11.**

But Fran continued to question her judgment: “Is it meant to be we’re co-existing, is it meant to be about the relationship with the animal kingdom and humanity?” (Fran, personal communication [interview], July 11, 2016). Fran did admit to being drawn into the beauty of the scenes, but it was still evident she was confused about what she was viewing: “I’m looking at the majesty of the leopards and it’s absolutely gorgeous, and the people are stoically sitting there. But, is the parent nurturing the child or is this a protective sort of thing, protect the vulnerable, but in this case is it the animals protecting the humans?” (Fran, personal communication [interview], July 11, 2016).

[Figure 7.15 has been removed due to copyright restrictions. It was a screenshot of a scene from *Ashes and Snow* (2015) showing leopards walking around people. Original source: Colbert, G.

(Producer & Director). (2005). *Ashes and snow* [Documentary]. United States: Flying Elephants Productions.]

**Figure 7.15 Screenshot of a scene Fran commented on from *Ashes and Snow* (2015), 12:02.**

Although some level of abstractness leading to questions is useful, Fran noted, there still needs “to be some moment where you get an inherent message” (Fran, personal communication [interview], July 11, 2016). It was clear both genre expectations and her reading of the images as ambiguous contributed to her confusion.

At the end of our interview, I asked Laura if she had any additional comments or questions about the video compilation. While she did not provide annotations for the clip from *Ashes and Snow*, she did bring it up at the end of the interview. Laura stated she was confused about some of the clips, and sought to verify if all the clips were from environmental documentaries. She stated: “There was one, about the woman and the monkey ... and I guess I didn’t really understand what the message was” (Laura, personal communication [interview], July 5, 2016). She further stated, “just seeing visuals, it’s kind of jarring in that I’m not sure what I’m supposed to see and I don’t want to impose my own opinions on it” (Laura, personal communication [interview], July 5, 2016). Genre expectations clearly influenced her commentary: expecting an environmental documentary and being faced with something other, she referred to the images as “jarring” and complained that they did not help her to understand the issue. The annotations and comments made by Lori, Martin, Betty, Fran, and Laura all reflected a level of confusion in response to the clip from *Ashes and Snow*. In contrast, Finn found the clip to be powerful and wrote the following annotation:

This sequence, with the quiet droning music and repetitive, non-semantic vocals is effective. I feel drawn into an intimate moment between the chimp and woman, which is both adorable and loaded with meaning. It is impossible to articulate exactly how I am feeling—voyeuristic, fascinated, sceptical, manipulated—but the image communicates beauty, serenity, isolation (as if they are the last two beings left after some unspecified

disaster) and also a vague sense of unease, as though something dark waits just beneath the surface of the water, or her skin. Perhaps it's the knowledge that both species are capable of sudden violence as well as sustained intimacy that fills me with equal parts wonder and dread. Without context, it's impossible to say where this ends. The recurring image of clasped hands, the chimp's fingers so like hers, is powerful. (Finn, personal communication [video annotation], 10:34)

Finn's response reveals his attraction to the clip; however, there is still an element of uncertainty. When asked about his response during our follow-up interview, Finn said he found the scenes to be loaded with meaning: "I'm a literary person, I have to struggle to sort of come up with some sort of interpretation of these things. It's difficult for me to sit back and enjoy" (Finn, personal communication [interview], July 12, 2016). Here, he attributes his literary identity as the root of his inclination to want to formulate his own meanings and understandings, even if it takes effort to do so.

[Figure 7.16 has been removed due to copyright restrictions. It was a screenshot of a scene from *Ashes and Snow* (2015) showing an orangutan and a person touching hands. Original source: Colbert, G. (Producer & Director). (2005). *Ashes and snow* [Documentary]. United States: Flying Elephants Productions.]

**Figure 7.16 Screenshot of a scene Finn referred to from *Ashes and Snow* (2015), 7:56.**

Finn elaborated when he referred to the clasped hands of the woman and the orangutan as "more like an exploratory sort of intimacy" (Finn, personal communication [interview], July 12, 2016). He also pointed out that "they're both sort of enjoying the tactility and it makes it difficult to

interpret what the relationship between these, the woman and the ape is” (Finn, personal communication [interview], July 12, 2016). By questioning the relationship between the orangutan and the woman, Finn acknowledged he felt manipulated. He noted that he was immediately “suspicious of the motives.” This, he said, is “not necessarily a bad thing because you’re always being manipulated. Whatever you’re watching. If it’s framed or staged, but always sceptical so wanting to know more about the purpose of this particular clip (Finn, personal communication [interview], July 12, 2016). Finn’s remarks demonstrated his openness to the unique visual rhetoric of *Ashes and Snow*, as well as his keen attention to the rhetorical elements influencing his response.

Peter also spoke of manipulation and exoticism in response to *Ashes and Snow*. He stated, simply, “only seen or felt through media from afar for many people” (Peter, personal communication [video annotation], 7:56). He clarified during the interview:

I wouldn’t say I felt in real life what the people in these clips are experiencing, and so I realize that this is a very compelling and majestic clip, but . . . the media like this really can make things much more majestic than they really are in real life, like he’s playing with that elephant and I just, you know, now I’m playing with my gerbil, it’s not quite the same thing as in the video. (Peter, personal communication [interview], July 19, 2016)

[Figure 7.17 has been removed due to copyright restrictions. It was a screenshot of a scene from *Ashes and Snow* (2015) showing a woman lying with an elephant in water. Original source: Colbert, G. (Producer & Director). (2005). *Ashes and snow* [Documentary]. United States: Flying Elephants Productions.]

**Figure 7.17 Screenshot of a scene Peter commented on from *Ashes and Snow* (2015), 12:29.**

He continued:

Once you realize that – wait none of my experiences are quite living up to how awesome they make it seem – and it sort of gets disappointing a little bit . . . a lot of times we’re sort of limited to some mediocre events in our everyday lives. (Peter, personal communication [interview], July 19, 2016)

Like Finn, Peter was aware of being manipulated. As mentioned earlier and in Chapter 3, Bahk (2010) discusses the notion of perceived realism, which “facilitates the viewer’s conception of the world as being similar to its dramatic representations” (p. 3). The opposite can be true as well. As Metz (1974) argues, there needs to be transference. Viewers need to be able to identify with an image, and this involves “a whole affective, perceptual, and intellectual activity, which can be sparked *only by a spectacle resembling at least slightly the spectacle of reality* [emphasis added]” (Metz, 1974, p. 11). Part of Peter’s inability to connect to the images or the clip might be in part due to the genre and use of symbolic images.

Nearly all my participants did not react favourably to *Ashes and Snow*: most were left feeling confused and, as in Martin’s case, even angry. These responses appeared to stem from the failure of the film to meet their expectations for environmental documentaries. Nevertheless, the clip did provoke them to question the ways in which documentaries can and should communicate such information. At the same time, however, it is worth noting that all my participants found the clip memorable as it evoked strong opinions and reactions.

#### **7.4 Summary of findings**

The purpose of this research is two-fold: to explore the different visual rhetorical modes evident in environmental documentaries; to investigate the ways in which participants responded to different visual rhetorical modes, and to determine which visual rhetorical modes most

affected participants' perceptions, attitudes, and understanding of environmental issues. The data collected were video annotations and interviews with eleven participants. The following provides a summary of findings.

All eleven of my participants demonstrated some personal connection to what they were viewing. As described in Table 7.2, the theme of personal connection was evident when participants made a connection to their life and/or personal experiences (e.g., work, education, personal preference). In total, there were thirteen annotations that reflected some kind of a personal connection. The data suggest that a strong affinity to a particular locale, coupled with personal background and preferences, played a significant role in whether or not participants were motivated to act in more eco-conscious ways. Participants demonstrated a personal connection mostly when responding to sublime and environmental nostalgia visual rhetoric. The former focuses on images used to develop an awareness of a particularly magnificent landscape or object in nature. Environmental nostalgia evokes an emotive response through images of nature that conjure memories of one's past (Murray & Heumann, 2007). Based on the data, images that evoke the sublime and environmental nostalgia did raise participants' awareness of human impact on the current state of the environment, as well as of the importance of working towards protecting landscapes. Martin was the only participant who explicitly stated he was moved to action after watching the clip from *Jumbo Wild* (Ramras & Waggoner, 2015).

There were twenty-two annotations made reflecting feelings of disgust in response to the clip from *Our Daily Bread* (Geyrhalter, 2005). Images in this clip are categorized in this thesis as jeremiad visual rhetoric. Most participants commented on the disregard for animals. Three annotations reflected examples of "disconnection"; also, three different participants commented on "disconnection" during the interviews. In this case, "disconnection" refers to the lack of

connection between commercialized food consumption and production: that is, it is the failure to understand that food products are regularly the result of food processing in which animals are mistreated. While all participants commented on the cruel treatment of the animals, Martin was the only participant who mentioned that he would act by making a better effort to purchase food from ethical farms.

Nine annotations were made in response to *The Cove* (DePre Pesmen & Psihoyos 2009) that evidenced disgust. The visual rhetoric in this clip is categorized as jeremiad. Four participants specifically focused on the actions—luring and trapping dolphins into a cove, then proceeding to “murder” them, in Brian’s words. From the interviews, three participants responded to the combination of the jeremiad rhetoric and the live-recorded sounds of dolphins being killed. In this clip the sound, described as “squeals” and “screams” by participants, had a profound effect. All participants expressed extreme disapproval about the key environmental issue in this documentary: unethical fishing practices.

Twenty-two annotations were made in response to *Ashes and Snow* (Colbert, 2005). The majority of my participants did not react favourably to this clip. Nine participants commented they did not like *Ashes and Snow*, stating they felt confused or did not understand the inherent message. As noted earlier, Martin demonstrated a level of frustration and even anger: he felt the “passive-aggressive” method of communication was ineffective because it did not clearly outline a problem and solution. Two participants indicated they liked the clip, but there was still a level of uncertainty, as demonstrated by Finn’s comments. While participants expressed confusion, they all perceived the message of the clip had to do with the need to connect or re-connect with animals and nature. Confounding participants’ genre expectations through inclusion of this clip showed the degree to which context influences understanding and response.



The visual rhetorical modes that most affected participants' awareness of environmental issues were sublime and environmental nostalgia. The data revealed that people bring their own experiences when viewing documentaries and those experiences impact meaning making (Eisenstein, 1942; Frow, 2006; Iser, 1974; Rosenblatt, 1969). I would further add that this transaction is continuously shifting, and that the meaning can alter from one viewing to the next (Rosenblatt, 1969). The data also shed light on the role of genre expectations in influencing viewer response. Data demonstrated that representational patterns are familiar (Schryer, 1994), are part of the coded structures of a text (Lye, 1996), and can be rhetorical (Gronbeck, 1978). A rhetorical genre studies framework helped to illuminate how viewers can be affected by the syntax and semiotics of a particular text. Based on the analysis and discussion of the data, the final chapter of this dissertation considers, among other topics, the implications of this study and future research.

## **Chapter 8: Conclusion**

This final chapter addresses implications and limitations of this research. In addition, it reviews possibilities for extension of this work in the context of future studies. Finally, I frame this work by returning to my own narrative as a researcher-educator in the field of literacy and the environment.

### **8.1 Implications**

Rhetoric about the environment and sustainability is embedded in many media forms, one of which is the environmental documentary. If we educators view developing awareness of environmental issues, working toward solutions, and inspiring willingness to act as desirable goals, then it is important we understand how visual rhetoric might serve ends.

Exploring the impact of various forms and aspects of media is a critical component in education. Recently in British Columbia the Ministry of Education implemented new curricular goals for kindergarten to grade 12. The Core Competencies are central to the redesign of the new BC curriculum, and include three main tenets: Communication, Thinking, and Personal and Social competencies (Province of British Columbia, 2017a.). Communication competency includes the skills students require to exchange ideas, to explore different perspectives and to effectively engage with digital media. This includes, I would argue, understanding how visual information is mediated across different platforms. Thinking competency involves the development of both creative and critical thinking skills. In respect to the latter, this includes being able to analyze and make sound judgements based on reading or viewings of different texts. Personal and social competency focuses on fostering students' individuality, and also on developing skills to enable understanding and awareness about other people and issues, both locally and globally, such as issues with the environment. These three competencies are evident

in many areas of the curricular documents. In secondary English Language Arts, for example, the New Media module for grade 10 outlines one of the strategies as providing students with opportunities “to reflect [on] the changing role of technology in today’s society and the increasing importance of digital media in communicating and exchanging ideas” (Province of British Columbia, New Media 10 with Elaborations, 2017b, p.1). This research may directly inform pedagogy and policy articulated in such curricula. The nuanced play of visuals in documentaries can be tremendously persuasive. When students turn to documentary media to learn about environmental issues, it is important that they are informed about what visual rhetorical modes are, how to identify such modes, and how these modes may impact and shape understanding about environmental issues. One way to help with this process is to have educators include video annotation software tools in their classrooms, similar to the Collaborative Annotation System implemented in this study. A benefit of inviting student commentary using video annotation software is that it affords a convenient way of capturing their responses to a specific moment. Educators may then use these commentaries as a starting point to engage students in lessons about media, visual rhetoric, and have students consider their own perspectives.

The format or genre in which information about the environment (or other topics) is delivered can also affect audiences. As noted earlier, texts are “coded structures” that include rhetoric and genre (Lye, 1996). Framing this study within a rhetorical genre study framework, and specifically examining genre as a form of social action can illuminate how students learn, how students react to particular genres, and how those genres might engender an awareness to act in sustainable ways. My study can complement and inform policy and teaching practices related to critical media literacy on many different levels.

## 8.2 Limitations

One limitation of this study is the relatively short time period for data collection with participants. The approach was selected to respect participant time at a busy moment in their post-graduate program. Beyond limiting the amount of data that could be collected, this method also prevented any collection of longitudinal data that might speak to prolonged effects of watching these videos.

Another limitation may have been the timing of the interviews (calling participants in several days after viewing rather than conducting interviews immediately upon completion of viewing). Possibly participants' distance from the viewing modified their perspectives; however, allowing viewing at participants' convenience was most feasible and respectful of their time. Also, the sample may be viewed as small and homogenous. Seventy students were invited to participate and only eleven enrolled in this study. Although I might have wished for more participants, the data from the annotations and interviews was rich and I believe working with a smaller data set allowed for a closer, more in-depth approach to analysis (Denscombe, 2014).

Part of the aim of this work was to investigate the kinds documentaries and types of visual rhetoric my participants would be likely to encounter through standard Internet searches. One limitation of my taxonomies of documentary, environmental documentary, and visual rhetorical modes outlined in this thesis is that they were produced based on a small sample of different modes, and drew largely upon western knowledge frameworks. Another limitation concerns the challenge of categorizing clips into specific documentary and visual rhetorical modes. As noted above, all modes are fluid and complex. Routinely clips might have been categorized in numerous ways (i.e., modes were not mutually exclusive). Further, participants'

responses may have been based on a number of variables. That is to say, it is difficult in a study such as this to isolate variables influencing viewer response.

A final limitation concerns intellectual property regulations in respect to the use of figures. The process of obtaining written permissions to include images in this document, including screen captures, was onerous and often unsuccessful. The UBC Faculty of Graduate and Postdoctoral Studies will require that many figures be removed from the final version of this thesis to be published in the institutional repository, *circle*, ironically erasing visuals from this work about visual rhetoric. As research with multimodal texts grows, I am hopeful that guidelines will be implemented such that it is possible to include, at the very least, screen captures in dissertations examining visual rhetoric in film and video.

### **8.3 Consideration for future studies**

There are several ways in which I would like to extend this research in the future. I would like to conduct a longitudinal study with a more diverse participant population. In such a study I would consider diversity of response with a view to determining if certain populations are more receptive of or attuned to particular forms of rhetoric. A longitudinal study would also allow me to determine if viewers act upon their claims of future action.

Most notably, I would like to conduct studies similar to this in grade-school settings, with a view to fostering visual critical literacy and understanding how youth take up visual rhetoric. A further extension I will pursue is to have students engage in creating their own documentaries, and examining their rhetorical choices therein. This would also allow for consideration of how the process of creating a documentary may affect understanding of and willingness to act in relation to environmental issues.

Beyond this, I intend to continue examination of visual rhetorical modes in environmental documentaries within a genre studies or rhetorical genre studies framework. Considering the data that emerged from my participants' responses to *Ashes and Snow* (Colbert, 2005), one direction of study would be to investigate how viewers' genre expectations may modify their responses to hybrid and ambiguous rhetorical forms.

#### 8.4 Final thoughts

In December 2017 this photo of an emaciated polar bear went viral.



**Figure 8.1 Polar bear. Photograph by Cristina Mittermeier and SeaLegacy (c). Used with permission.**

I came across the photo on SeaLegacy's Instagram account. I was immediately saddened: it reminded me again of how I need to continuously learn to make better, eco-friendly lifestyle choices and reduce my impact on planet Earth.

Many comments in response to this photo on the Instagram account evidenced similar concern for the bear. There was some discussion about the issues; however, there were also comments expressing a level of scepticism about climate change and some criticized the

photographer for not taking action to help the bear. I was curious as to how this one photo was elicited such passionate and polarized responses from viewers. Was it because there was a lack of context? Why was the photo so jarring? Did it have the power to change people's attitudes? Were viewers reminded about the importance of climate change? Were viewers influenced to act in more eco-conscious ways?

I had already reached out to SeaLegacy to ask for permission to use this photo in my dissertation as I pondered these questions. To my surprise, one of the co-founders and photographer, Paul Nicklen, emailed me directly and requested that I call him. We had a conversation about the significant role images play in inviting viewers to seriously consider environmental issues. And while he admitted to receiving much backlash about the photo at the time, we both agreed that the photo created a visceral reaction strong enough to re-ignite the discussion on climate change, not that it seems to go out for very long. Case in point, Wenthe (2017) observes: "starving polar bears are the stuff of periodic propaganda shots" and further notes that in 2015 a photo of an emaciated polar bear in Norway "became the temporary poster animal for global warming" (para. 5). So while these photos trigger important discussions, and while they serve as a reminder of environmental issues for some people (such as myself), the questions that remain in my mind are: how do we sustain an awareness and live more gently on the Earth as human beings? Is it even possible? These are questions I hope to continue to explore with future studies.

The focus of this work is visual rhetoric, and I have offered discussions about the possible effects of such rhetoric on my participants. But I have also learned from this experience. As I have had to re-watch clips from the video compilation on multiple occasions, they all still affect me on some level. I am astonished when I re-watch *Our Daily Bread* (Geyrhalter, 2005),

the chicks being funnelled into chambers and tracks, with workers throwing some out on the side, and some chicks falling to the floor. I am still in awe whenever I see the time-lapse of the largest calving recorded from *Chasing Ice* (Aronson & Orlowski, 2012), or of any other images of the mountains or icebergs. This use of sublime visual rhetoric always gets to me and, now more than ever, always has me reflecting on my own actions.

Working towards completing this dissertation in Spring 2018 I am enthusiastic about the future directions of this research. Also, coincidentally, my father is preparing for a trip back to South Korea for a reunion with his mountain climbing club. My father does not talk much. He does not go into details about what he does when he is in Korea, except to say: “We go to the mountains.” But what I do know, even from talking to my father on the phone, is that he eagerly awaits this yearly event. He is silently excited. In May 2017 I went to visit Korea with my mother. I had not visited Korea since 2002. My relatives asked about what I would like to do, and see. This time, not knowing when I would have the chance to visit Korea again, I asked to visit Seoraksan, one of the mountains my father climbed when he was younger.





**Figure 8.2 Seoraksan National Park, South Korea.**

Not being a climber, I went to the highly touristy area of the national park. But, at the same time, I recall a strong connection to my father. I was so happy to be there. To see what he loved. I took the gondola part way up the mountain and walked up the windy peaks. I knew it was not the same, but it was remarkable: a bit of a surreal experience. I was so happy. It was as though I could feel my father with me. I wished he were able to take the trip to Korea with my mother and me, to be there beside me, to share his stories, to explain the history of that place. On our walk back to the car, my mother suddenly pointed to a waterfall in the distance and explained to me that was the waterfall my father climbed, frozen, when he was younger. I could not even begin to describe how I felt in that moment. Awe. Pride. Honoured. It was a mix of emotions. As I stated at the beginning of this thesis, it is because of my father that I have gained a connection with and

respect for nature. And this experience of viewing sublime landscapes and feeling nostalgic in Korea has definitely deepened those feelings.

This study sheds light on the use of visual rhetorical modes in environmental documentaries: how they might engender awareness and, possibly, a willingness to act in more eco-conscious ways. Such documentaries are clearly an important means of educating for sustainability, although some rhetorical modes may be more influential in promoting action than others. This study has also allowed me to reflect at length on how and why I respond to certain images, and to consider my actions. Even so, it feels as though I have merely scratched the surface. As a researcher, educator and person living on this Earth, I feel it is important now, more than ever, that serious attention is paid to issues of the environment and sustainability. This is work that simply cannot be finished and set aside. It is scholarship and a manner of living I will continue in myriad ways.

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## Appendices

### Appendix A Participant recruitment and consent form



**a place of mind**

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#### **Consent Form**

**Principal Investigator:**

Dr. Teresa Dobson, Professor



**Co- Investigator:**

Claire Ahn, PhD Candidate



**Title of Study:** The Iconic Polar Bear: Visual Rhetoric in Environmental Documentaries  
Environmental documentaries are growing in popularity among many amateur and professional documentary filmmakers as a way to educate the public about environmental issues that are of global concern. The purpose of this study is to examine the persuasive rhetorical elements in environmental documentary films and how they affect viewer perception.

#### **What is involved if you participate?**

You will be asked to view approximately 60 minutes of clips from selected environmental documentaries outside of class time. The clips will be available online on UBC's video annotation tool, Collaborative Learning Annotation System (CLAS). While viewing, you will be asked to make up to 5 comments on sections of the video you find striking or evocative. You are encouraged to complete the viewings and responses within one week. It is expected that the total viewing and response time should take no more than 2 hours; however the total time will be dependent on your engagement with and interest in the process.

After you have completed your responses, Claire Ahn will contact you to arrange a one-on-one interview in which you will be invited to clarify or expand on your video responses. These interviews will be audio-recorded and will take up to 30 minutes. Finally, should you wish, you

will be invited to review the transcribed interviews and the analysis of the data for accuracy. The total time involved, including the introduction to the study, will be no more than 3.5 hours.

**What will be done with information that is collected?**

The results of this study will be used in Claire Ahn's doctoral thesis research and may be published in journals or presented at conferences. All data collected from this study will remain confidential and names will remain anonymous in any publications and/or conference presentations. All data collected will be encrypted and stored on UBC servers. All audio-recorded interviews will be stored in a locked filing cabinet in the UBC office of the Principle Investigator. Transcriptions of interviews will not contain any real names, and will be password protected and encrypted.

**What are the risks of participating?**

The study entails viewing environmental documentaries and commenting on the effectiveness of the visual rhetoric therein. None of the documentaries have Motion Picture Association of America's Classification ratings that would suggest the material poses a psychological risk (e.g., R or NC-17). There are minimal physical or social risks.

You may be concerned that your participation or lack thereof may affect your course grade. Your instructor will not know who volunteers for this study. Hence, final grades in this Pass/Fail course will not be affected. You are free to withdraw from this study at any time and there will be no penalty.

**What are the benefits of participating?**

You may become more aware of environmental issues addressed in the documentaries and this might increase your awareness of ways to act sustainably, which you may view as beneficial. Additionally, you may find becoming familiar with video annotation useful in your own learning and future professional practice.

**How will we keep your identity safe?**

Your confidentiality will be protected both during and after data collection. Your name and identity will remain anonymous in any publications or presentations of this research. As noted above, your instructor will not know whether you have volunteered for this study. All data collected will be encrypted and stored on UBC servers indefinitely. Data will not be distributed to third parties.

**More questions or concerns?**

If you have any questions or concerns about what we are asking of you, please contact Claire Ahn (██████████) or Dr. Teresa Dobson (██████████). Additionally, the telephone and fax numbers of the department are listed at the top of the first page of this form.

*If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics at 604-822-8598 or if long distance e-mail [RSIL@ors.ubc.ca](mailto:RSIL@ors.ubc.ca) or call toll free 1-877-822-8598.*

**CONSENT TO PARTICIPATE IN THE STUDY: The Iconic Polar Bear: Visual Rhetoric in Environmental Documentaries**

Taking part in this study is entirely up to you. You have the right to refuse to participate in this study. If you decide to take part, you may choose to pull out of the study at any time without giving a reason and without any negative impact on your class standing.

- Your signature indicates that you consent to participate in this study.
- Your signature also indicates that you consent to allow the audio-taping of interviews.

Participant Name: \_\_\_\_\_

Participant Signature: \_\_\_\_\_

Participant Primary Contact E-mail: \_\_\_\_\_

Date: \_\_\_\_\_

**Optional:**

If you wish to review transcribed data, receive a summary of the research results and/or to be notified when the results of this study may be presented or published, please indicate so below.

Yes. Please contact me about:

\_\_\_\_\_ review transcribed data.

\_\_\_\_\_ the research results.

\_\_\_\_\_ the results of this study presented at a conference and/or published in a paper.

\_\_\_\_\_ all of the above.

## Appendix B Sample interview protocol guidelines

Time	Photo	Responses	Questions
12:25	(* Due to copyright issues, the photos were removed. Images included here were still shots of points at which participants made their annotations on the video compilation.)	I understand that is is implying that we are the once's with nature but for the last 5 minutes all there images have just been way too <b>weird</b> and are almost <b>off putting</b> . it might just be me because i am not an “ <b>artsy</b> ” <b>person</b> but perhaps <b>these are too odd for most people too</b> . it makes me want to skip this part which is <b>not a good quality for a documentary</b> .	<p>1. Can you elaborate on why you find the images weird and off putting?</p> <p>2. If you are not an artsy person, how would you define yourself?</p> <p>3. Why do you feel these images are “too odd for most people too”?</p> <p>4. What makes a good-quality documentary?</p>
18:56		<p>this <b>was way more powerful</b> then the previous “artsy” stuff. this part make me wonder <b>what kind of technology</b> can <b>be created to employ those people</b> (because i think they were just picking cans) and make that job support the planet. now for who is going to pay them the system needs to be that the tech that is made to employ them, the product of their work can be sold. kind of like this model bill gates made. he takes waste and turns it into profit.</p> <p><a href="http://www.techinsider.io/bill-gates-once-drank-from-a-machine-that-turns-poop-into-water-now-its-being-tested-in-africa-2015-8">http://www.techinsider.io/bill-gates-once-drank-from-a-machine-that-turns-poop-into-water-now-its-being-tested-in-africa-2015-8</a></p>	<p>1. Can you elaborate on why you found this clip more powerful?</p> <p>2. What forms of technology were you thinking about?</p> <p>3. Who are you referring to when you say “those people”?</p>

26:43:00		<p>this is the best part ive seen so far. it gives information on the back ground and beautiful views. You could feel peoples emotions in the way they spoke and that really stood out to me. Perhaps it also hit a nerve because i like the outdoors and love to go to places like that in total isolation and seeing that this could possibly be taken away really doesnt sit well with me. Even though the last part was super quick it showed us how we can help out by going to that website and filling out a survey. not enough of these videos actually tell you how you can help.</p>	<ol style="list-style-type: none"> <li>1. Are you referring to all of the clips or the images within this clip? Are you referring to the background as in the topic of the video?</li> <li>2. What kinds of emotions are you referring to?</li> <li>3. Can you expand on how the people's emotions "spoke to you" and "stood out for you"?</li> <li>4. Can you elaborate as to why "this doesn't sit well with you"?</li> <li>5. You make a reference to the website and the survey, did you fill it out?</li> <li>6. Did you feel the people's responses to be more effective than the visuals?</li> </ol>
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34:28:00		<p>makes me feel kind of bad about eating chicken.. i knew commercialized farming wasnt a nice thing but after watching this video it really showed me how commercialized it is</p>	<p>1. Can you expand on what you mean by “commercialized farming” and it “not being nice”?</p> <p>2. Could you expand on how this video made you realize “how commercialized [farming] is”?</p> <p>3. Has this video made you change your habits in relation to buying chicken?</p>
45:46:00		<p>i really like this video because it showed us how we can help especially through technology.</p>	<p>1. What specific examples from the video did you feel helped to demonstrate how technology can help?</p> <p>2. Is there anything else about this video that you found striking, evocative or effective?</p>