



University of Otago

Going Green:

Evaluating the Effectiveness of Environmental Documentary Film

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ABSTRACT

Environmental documentary films have been recognised as having the ability to inspire people to change and make a difference, but how do they do it? This thesis investigates three ways in which environmental documentaries bring about this change through the use of emotive imagery, through the transportation of the viewer into the narrative and through viewer identification with the character or characters involved. It first explores the theory that underpins and validates the use of these techniques, and then uses that research to evaluate the effectiveness of five environmental documentary films. One of those films is the creative component of this thesis the documentary *Bluewater*. This environmental documentary focuses on a marine reserve located off the Australian coast that is the subject of considerable debate. Chapter 5.5 of the academic component of the thesis is an evaluation of that film in the light of the research and analysis found in the academic component of the thesis.

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INTRODUCTION

0.1) Environmental Documentaries

In the early part of the twentieth century, people were well aware that natural history film could serve as a powerful educative and propaganda tool. Julian Huxley and Fairfield Osborne, early pioneers of the natural history film, shared a similar view – that for the conservationist, natural history film was a powerful ally (Mitman, 1999). Pare Lorentz's films, *The River* (1938) and *The Plow that Broke the Plains* (1936), each with similar themes relating to the misuse of land, helped shape public opinion and promote conservation (Mitman, 1999). Similarly, Bernhard Grzimek's award-winning 1959 film *Serengeti Shall Not Die*, was used to educate local people in Tanzania about the value of wildlife conservation in national parks (Mitman, 1999). In the same year the BBC had aired one of their first conservation films, *The Return of the Osprey* (Bright, 2007). For a number of decades conservation documentaries were regularly scheduled by television networks.

However, by the 1990s the doom and gloom associated with such films was becoming unpopular with audiences. The conservation message, which many traditional nature documentaries tagged onto the conclusion of their films, had grown tiresome. Conservation had become a 'dirty word' in the television business and as a result environmental films were being pulled from schedules (Bright, 2007; Mitman, 1999). The genre then evolved into a form of entertainment in an effort to maximize

audiences. As BBC filmmaker Stephen Mills (as cited in Mitman, 1999) observed in 1997:

Our programs find a wide and appreciative audience. So many viewers could do a lot for conservation. But as viewing figures adamantly prove, once we make a habit of telling the bad news our audience slinks away. (p. 214).

Wildlife filmmakers had become dissatisfied with how the industry was now driven by profit and ratings. As a result, a number of filmmakers started producing their own films. *Filmmakers For Conservation* was established in 1999 by a number of producers and directors who were frustrated with how little funding and airtime was given to films about conservation and the environment (www.filmmakersforconservation.org). Similarly, filmmakers wishing to use film to achieve conservation objectives founded a number of NGOs, for example, the *Great Apes Initiative*, the *International Conservation and Education Fund*, and *Wildscreen*.

Other filmmakers are exploiting the recent rise in new technologies. Through web-based distribution, portable systems capable of HD capture, and easily accessible editing software, just about anyone can become an activist filmmaker. For example, *The Outlook for Someday* is an annual filmmaking challenge in New Zealand that began in 2007. It encourages young filmmakers to create films about sustainability and promotes this through sustainability filmmaking workshops (www.theoutlookforsomeday.net). In addition, with the help of recent documentary successes such as *March of the Penguins* (2005) and *An Inconvenient Truth* (2006) environmental documentary films have begun to reach a wider audience. Due to the

growing popularity and notoriety of environmental documentary films, an analysis of their persuasive style and effectiveness is warranted as part of the wider media communication discourse.

0.2) Academic and Creative Link: *Bluewater*

This, the academic component thesis, has been written in conjunction with the production of the creative component of the thesis the short film *Bluewater*. *Bluewater* follows Mark Kallman, a spearfisherman, who enters the annual Bluewater Classic, a spearfishing competition held in Coffs Harbour, NSW, Australia. Participants dive in the nearby Solitary Islands Marine Park. In November 2010, the local government tightened zoning regulations to increase the number of marine protected areas within the Solitary Islands Marine Park. No fishing is allowed within these marine protected areas. As a result of this change, there were complaints from the fishing community who believed the changes threatened their livelihood although marine scientists and conservationists were happy with the change.

However, when a new government was elected the regulations relating to the newly established marine protected areas were rescinded due to an election promise. This outraged members of the scientific community and conservationists, some deeming it as being politically motivated (B. Edgar, personal communication, December, 2011). In the light of this controversial decision a scientific review was requested to determine if the park required the increase in marine protected areas originally put in place. In early 2012, that review proposed that marine protected areas should be increased. *Bluewater* examines how this change could affect not only the Bluewater Classic but also the whole Coffs Harbour community.

Our aim in making the film was not only to create an entertaining and absorbing film, but also to persuade viewers that there was more than one minority that would be affected by these changes. Our goal was not to point-the-finger or to present a biased or one-sided point of view. The film would most likely be screened in Coffs Harbour and it was our desire not to offend or alienate anyone. However we did want viewers to fall in love with the park in the hope that they would come to appreciate the fact that this was a place worth protecting. At the start of production it was unclear whether or not this film would achieve its goals as an effective environmental documentary. This investigation is an attempt to establish criteria by which the effectiveness of environmental films can be evaluated and to evaluate our film to determine whether it is likely to achieve our objectives. The effectiveness of an environmental documentary film is defined as the film's potential to initiate action by the viewer towards a conservation goal

0.3) Rationale

In *Green Screen: Environmentalism and Hollywood*, David Ingram defines environmental films as those “in which an environmental issue is raised explicitly and is central to the narrative” (2004, p. vii). The goal of these films is to encourage viewers to react emotionally in order for them to act in favour of environmental conservation (Bouse, 2000).

In film, there are many different ways in which we emotionally react to what is on screen. We can respond to audial cues, for example, a musical crescendo or the cry of a distressed character. The images presented on screen have an even greater impact. Stunning landscapes or the death of a character are examples of strong images that we

respond to emotionally. We may also respond emotionally to the unfolding events within a narrative. Research has shown that emotions elicited can also facilitate the persuasion of a viewer to a different point of view.

To date there has been little research examining the role that emotion has on persuasive messages in environmental documentary film. In addition, no research has looked at how emotive imagery, narrative and character can determine the effectiveness of an environmental documentary in its attempt to persuade viewers to a particular point of view. This thesis seeks to understand how emotive imagery, narrative and character can mediate emotional responses, and how these responses can lead to action.

0.4) Outline

In the first part of this thesis, I will establish a theoretical framework for examining emotive imagery, narrative and character in environmental film. In the latter part of the thesis I will apply this theory to a number of environmental documentary films. In examining these films, I will be asking the following questions.

- How overtly is emotive imagery used and what are the likely implications of their use on the viewers of the film?
- What are the implications of the film's narrative approach and what elements in this approach may impede narrative 'transportation' and therefore the acceptance of the film's message by the viewer?

- How effectively and easily can the viewer identify with the characters in the film? Do the characters presented impede or promote an emotional response appropriate for the content of the film?

In choosing documentaries for this study, I was looking for films that clearly intended to mobilize viewers and stimulate action. I will be examining the following films:

- *The Cove* (Psihoyos, 2009)
- *Green* (Rouxel, 2009)
- *Vegucated* (Wolfson, 2011)
- *Earthlings* (Monson, 2005)

*Earthlings*¹ and *Green*² are available online. *The Cove* is widely available at Video Rental Services.

In addition, the creative component of the thesis, the film, *Bluewater* (see back cover for a DVD copy), will be examined using the same criteria to assess whether we met our aim of producing an effective environmental documentary film.

¹ <http://earthlings.com>

² <http://www.greenthefilm.com>

THE POWER OF IMAGES

Eitzen claims that documentary films have the capacity to tap into the audience's emotions because of the way they expose reality (Eitzen, 2005). In part, the appeal of documentary film for filmmakers lies in its power of persuasion through emotional engagement. This chapter falls into three sections. Part one will analyse the power of the visual image, part two will discuss the rhetorical appeal and effectiveness of images. This leads into a discussion in part three relating to the perception of reality in documentary.

1.1) The Power of Images

In his overview of photo elicitation, Harper (2002) described images as having the ability to “evoke deeper elements of human consciousness than do words”. Similarly Barry (1997) commented on the inadequacy of words: “because they [words] are removed from experience and therefore lack the immediacy and power of the real world's change and relativity” (p. 74). Cognitive studies in the literature support these claims. For example, an early study by Nelson, Reed, & Walling (1976), demonstrated the cognitive power of images. They found that subjects were more likely to remember items if they were presented as pictures rather than as words.

Barry discussed in her book *Visual Intelligence* (1997) the perceptual power of the image and its dominance over the spoken, and the written word. In her book, the

example of a comic strip is used to illustrate this dominance. In a comic strip with its combination of words and pictures, the words become secondary whereas the language of the image remains primary (Barry, 1997). Eisner (1990, p. 122) also commented about the placement of words when used or enmeshed in a visual context claiming that words are, “welded to the image” and “no longer serve to describe but rather to provide sound, dialogue and connective passages”. Blakemore agrees, writing, “Artwork dominates the reader’s initial attention” (as cited in Barry, 1997, p. 78).

Smith’s (2006) audience research in regard to IMAX nature documentaries support Blakemore’s claim. After viewing an IMAX nature documentary, audience members tended to recall only images, empathize with people on the screen, and were absorbed by the photography. Additionally, viewers responded by saying that the voiceovers were a distraction rather than an effective means of delivering information. LeDoux’s (1986) research on perceptual processing illustrates why this is the case. LeDoux writes that both written and oral forms of language are cognitively processed, while the image is perceptually processed in the same way a direct experience is processed. This means that the image reaches our emotions before it is cognitively understood. The significance of this is that images can therefore be powerful tools for persuasion, the reasons for that I will discuss in the next section.

Further empirical studies have supported the notion of the considerable power images have. Compared to verbal cues, visual imagery has been shown: to enhance learning and the retention of information (Childers & Houston, 1984; Rolandelli, 1989), to

promote information recall (Reese, 1984) and in some instances to influence people's decision-making (Slovic, Einucane, Peters & MacGregor, 2002).

Differences in viewers' cognitive responses between static and moving images have been noted. Research on static images has shown they have the capacity to reinforce the learning of information. For example, research by Mayer, Hegarty, Mayer and Campbell (2005) has shown that students who studied text plus static illustrations retained, and could apply concepts about certain scientific concepts, significantly better than those who studied text and viewed moving animations. Myers (2006) argued that while still imagery is less immersive than other multi-sensory media, still images provide multiple fixations and therefore generate greater detail perception than moving images.

In contrast, numerous studies have shown the cognitive impact of moving images. An early study by Goldstein, Chance and Buescher (1982) showed that long-term recognition memory was best achieved through moving stimuli when compared with static stimuli. In a similar study, Matthews, Benjamin, and Osborne (2007) reported that moving images (chromatic and monochromatic) were better remembered than the static versions of the same stimuli. In Gibson's (1979) ecological approach towards pictures, he suggests that because motion is the norm for all visual stimuli, recognition memory should essentially be better for moving images than for static images.

The power of the images contained in film is apparent in a number of ways. Firstly, it is clear that images have significant cognitive advantages over the spoken and written language. Secondly, images travel immediately to our emotions before we can think

critically about them. Not only are the cognitive advantages of moving images superior to those of static images, but we are also drawn more towards the aesthetics of moving pictures – a response not evident when we view static images. These traits of a moving image make film an appealing choice for those involved in communicating a persuasive message.

1.2) The use of images in persuasion

The notion that images can influence not only people's decision-making but also subsequent behaviour is well established in the literature. Past research has demonstrated the impact images have on behaviour in a variety of fields. This is particularly evident in film (Newhagen, 1998), advertising (Messaris, 1997) and politics (Kenamer & Chaffee, 1981). DeLuca (1999, p. 14) for example, suggests that images can carry powerful meanings and can promote more "reasoned or civil discourse" than words. He gives examples of how radical environmental groups were successful at raising awareness of environmental issues through media coverage of guerrilla tactics and protests (DeLuca, 1999).

In politics, images can be persuasive and overwhelm the message contained in the narration. In a television interview conducted by Bill Moyers with reporter Lesley Stahl, Stahl commented on this phenomenon (as cited in Barry, 1997). They were discussing her involvement in the coverage of Ronald Reagan's campaign for the US Presidency and Stahl observed that:

We just didn't get the enormity of the visual impact over the verbal ... It was a White House official who finally told me ... I did a piece where I was quite negative about Reagan – yet the pictures were terrific – and I thought they'd be mad at me. But they weren't. They loved it and the official outright said to me, "They didn't hear you. They didn't hear what you said. They only saw those pictures. " (p. 78).

In this example, the content of the images, reinforced with a positive valence, was used to project positive feelings towards the candidate depicted. Kenamer and Chaffee (1981) noted another example of the effectiveness of images in a political context. Commenting on the use of images during political campaigns they argued that by attributing certain virtues such as honesty, intelligence, or leadership through the image, it was possible to create in the viewer's mind a positive response to, and acceptance of other issues or positions, held by the politician. They demonstrated that viewers who were heavily exposed to campaign-related news events began to develop preferences for specific candidates.

In these examples, the content of an image was manipulated to attribute certain qualities or virtues to the specific individual (the political candidate), to create a positive (or in some cases negative) impression or attitude of the individual depicted. It's in this political context that images are perhaps their most powerful given the effect they can have on a voting population.

However, the substantial claims made regarding the power and influences of images are not universally accepted. Perlmutter (1998) argued that the "hypodermic" power

that the people ascribe to visuals to overturn policy or influence the public is largely an over exaggerated claim. He writes that pictures:

can be powerful tools of political argumentation, but what they show and what they connote are largely imposed on them, but only if the fire they fan is already burning – only if those effects follow pre-existing channels of prejudice. (p. 134)

The points made above highlight the fact that the engineering of an image through image content augmented by an appropriate choice of colour, framing, editing etc. can create a powerful rhetorical device. Research by Kepplinger (1982), on verbal and visual storytelling, supports this claim. He reviewed campaign coverage relating to the election of the Chancellor of the Federal Republic of Germany. His research supported his hypothesis that artful camera usage can influence opinion in a mass audience and determine a political outcome. The aim of the study was to determine how professional cameramen could and would use camera perspective to produce a variety of affective responses. Over three-fourths of those surveyed agreed that through mere optical means, a cameraman was able to make a person appear in a positive or negative way (Kepplinger, 1982).

Through the use of cinematic components, filmmakers are able to engage audiences and guide our emotions. Appealing to the viewer's emotions is a common rhetorical tool used in documentaries. Documentaries often call attention to an issue not through logical argument but instead through an appeal to the viewer's emotions, bypassing reason (Cialdini, 2001). Cialdini (1994) wrote that persuasion can be especially

effective when the individual has little time to think about the issue. If we consider Cialdini's writings in light of LeDoux 's (1986) research on perceptual processing, which I referred to in the previous section, this shows how and why documentaries can be particularly powerful persuasive tools. We become emotionally involved in the medium – accepting the visual message without critical thought. In *Introduction to Documentary* (2001), Bill Nichols writes, “much of the power of documentary ... [is] in its ability to couple evidence and emotion in the selection and arrangement of its sounds and images” (p.57).

In documentary, images provide visible evidence. Our own belief in the authenticity of the image means that documentaries can have a strong emotional impact on the viewer. It is a documentary's claim to represent reality that creates an aura of authenticity that supports any persuasive message it carries.

1.3) Reality and the documentary

Schaeffer (as cited in Aumont, 1997) argued that the power of the image to convince, often regarded as the ability to portray a fragment of reality itself (in this case a photograph), lies in the spectator's knowledge of the genesis of the image. That is, the knowledge that the image is an adequate representation of reality at the moment the image was created. Similarly Messaris (1997) suggests that a picture “can reproduce the significant visual features of real-world experience, it may also be able to exploit the response tendencies that are associated with those features” (p. 4). In addition, he suggests that unlike handmade images, photographs and video are typically seen as

direct copies of reality and thus create the illusion of the viewer interacting with the real world.

The simulation of reality created by film is widely discussed in the literature. Gibson (1971) and Anderson (1996) both imply from their arguments that the projected movement in cinema is essentially perceived as real motion. Gibson (1971) presents this idea on the basis that both types of perception (real and apparent) are mediated by the same brain processes. However, he then goes on to discuss, in what seems to be a contradiction to his previous position, the suggestion that the image, no matter how technologically sophisticated, cannot correspond directly to what is depicted - “the scene cannot be re-established” (p. 231). While some may argue that perception of real motion in film is the creation of the “illusion of reality” in cinema, our perceptions of the films reality must, perforce, stop at the edge of the frame.

What we see and thus what we subconsciously perceive as a representation of reality is limited to what is depicted inside the frame. It is the filmmaker who chooses what the audience perceives and what cannot be perceived. Stoffregen (1997) explains that a movie is a recording and that films are perceived as depictions rather than as the real thing. Anderson (1996) wrote in his book *Reality of Illusion* that film is, “a very complex set of instructions utilizing images, action, and sounds, a string of commands to attend to this now, in this light, from this angle, at this distance, and so forth ...” (p. 12).

It is essentially up to the artist to command the attention of the viewer to a particular subject in a scene. Their choices therefore influence what the viewer perceives. What

Anderson's writings fail to describe the differences between the depictions of fictional events versus those of non-fictional events such as those found in documentary films. In documentary, rather than pointing the camera at a pre-rehearsed performance, the camera is pointed at what is perceived as the "true" event and a recording of reality. The 'reality' of documentary film is a much-discussed topic for discourse among documentary film scholars (e.g. Onal & Ozcinar, 2011; Nichols, 2008). The apparent depiction of reality in documentary films is often the reason for their choice as a means of motivating action towards a desirable goal. Documentary tends to be the favoured vehicle in this regard when compared to other forms of media. The aesthetics of reality establishes a stream of similarity between the world on screen and the world of the viewer, where the viewer is poised to act in the world that so closely resembles the world depicted on screen (Gaines, 1999). By this means, documentary filmmakers, particularly in activist filmmaking, aim to promote this relationship by presenting the viewer with an emotional struggle that is relevant to his or her world.

Waugh (1984) defines the term '*committed documentary*' as "a specifically ideological undertaking, a declaration of solidarity with the goal of radical socio-political transformation" (p. xiv). The committed documentary adopts a rhetorical form marked by several distinguishing features (Bordwell and Thompson, 2008):

- The film addresses the viewer openly, trying to move him or her towards a new intellectual conviction, to a new emotional attitude, or to action
- The filmmakers position will be justified as plausible by presenting evidence and arguments ... involving an expression of ideology

- Filmmakers appeal to our emotions rather than through factual evidence
- The film attempts to persuade the viewer to make a choice that will affect the viewer's everyday life.

The very use of these rhetorical devices shows just how far *committed documentaries* are from documenting reality (Weik von Mossner, 2012). Nichols (2008) wrote, “rhetoric ... may sometimes be deceptive but it is also the only means we have as social actors ... for conveying our beliefs, perspectives, and convictions persuasively” (p. 34). The rhetoric of *committed documentaries* commonly includes emotional appeals to convey a message persuasively. Visually planned affective images are often used in *committed documentary* to draw attention to a particular aspect of a story.

Images with content that is intended to shock viewers are typically used to draw attention to details within a story. Shocking images are generally defined as ones that deliberately startle or offend their audience (Gustafson & Yssel, 1994). They are generally used with the intention of evoking a negative emotion by depicting a particular breach in a moral code (Dahl, Frankenberger & Manchanda, 2003). Researchers have shown that the use of scenes involving shocking images can significantly increase attention, benefit memory, and may in some cases positively influence behaviour (Dahl et al., 2003; Newhagen, 1998).

Newhagen (1998) uses the example of images in a news report detailing a famine in Somalia. In this example, Newhagen (1998) describes images that evoke disgust and anger; tight shots of a fly-covered face of a gaunt infant famine victim and soldiers

attempting to contain a hungry crowd fighting for relief supplies. Highly emotive scenes such as these can have important implications for message processing, message responses and in some cases can enhance the persuasiveness of a message (Newhagen, 1998). Persuasive films call attention to particular facts not through a cognitive process, but by stimulating and or provoking emotions and bypassing cognitive reasoning (Cialdini, 2001; Condos & Nimino, 1993).

Documentaries can be powerful rhetorical tools. Effective environmental documentaries engage our emotions and elicit an emotional response partly through the use of affective images. The appeal of environmental documentary for filmmakers is that the genre can have this emotional power and their hope is that this emotional response will lead to action (Ethics of Environmental Filmmaking, Appendix 1). To better understand the role that emotions can play in stimulating action responses to the visual images used it is important to review some of the literature relating to emotions and establish their relationship to action. This relationship will be explored in Chapter Two.

EMOTIONS EXPLAINED

Images can elicit a range of measurable emotions, and in some cases be difficult to erase from the viewers' mind. To consider the potential effect emotive imagery can have on influencing attitude and behavioural change, it is important to understand the function that emotions serve in facilitating this change. The first part of this chapter will look at the fundamentals of emotion theory and the characteristics of some discrete emotions used in environmental documentary films. The second part of the chapter will focus on research that discusses the ways in which emotion influences persuasive messages. Specifically, research within the discipline of conservation psychology is discussed.

2.1) Emotion theory

Definitions of what emotions are vary throughout texts. Whilst varied, the general consensus is that emotion is a complex state of an organism and involves widespread changes in our physiological and psychological states (Lazarus & Smith, 1991). It is followed by a state of excitation and perturbation and inspires an impulse toward a discrete behaviour (Lazarus & Smith, 1991).

There is less consensus about what qualifies as an emotion. At a fundamental level, emotion theorists describe emotion as having five basic, universal modes: happiness, sadness, fear (anxiety), anger and disgust (Oatley & Johnson-Laird, 1987). Other

researchers have expanded this catalogue of emotions to include more general feelings such as hope, joy, pride, and interest (Frijda, 1986; Silvia 2008). When defining discrete emotions, theorists often describe emotions in terms of the specific ‘action tendencies’ attached to them, that is, each emotion is identified with a specific pattern of action (Frijda, 1986).

Action tendencies, as described by Zhu & Thagard (2002) are, “states of readiness to execute a given kind of action involving both bodily arousal and psychological preparation following emotional appraisal” (p. 27). An emotion’s action tendency can also be described in terms of the impulses it generates from interaction with the stimulus, for example, the ‘moving away’, ‘moving towards’ or ‘moving against’ the stimulus (Frijda, Kuipers & Ter Schure, 1989). If, for instance, the emotion of ‘fear’ were to be aroused by a fear-evoking stimulus, the appropriate action tendency could be to flee (aversive response) from the stimulus rather than to confront it. Action tendencies are particularly relevant to this paper as they are precursors to action-oriented behaviour. It is important to note that this does not necessarily mean that during a stimulus event the prescribed action tendency will always be activated and realized. The action tendency is based on the appraisal of the emotion by the individual. If the individual does not deem the emotion as being significant then no action will be initiated.

How a given person reacts to an emotional encounter depends on their evaluation of the encounter, known as the emotional appraisal. This is a mental assessment of the encounter or situation as it relates to one’s own concerns (Zhu & Thagard, 2002). Lazarus and Smith (1991) suggest that there are at least two different types of mental

assessment governing an emotional encounter. The first is known as the *primary appraisal*, and involves deciding whether or not the situation is of relevance to one's wellbeing. The second is known as *secondary appraisal* and concerns the allocation of the person's resources and the selection of options for coping with the encounter. On the basis of this approach, the emotional experience provokes both an appraisal and action readiness phase. In summation, an emotion is triggered by a particular stimulus, for a particular duration. Depending on the emotion evoked a specific prescribed action tendency will follow. Different emotions will have different behavioural consequences.

There have been a comprehensive number of theoretical and empirical studies on discrete emotions, which focus upon the specifics of their appropriate action tendencies and appraisals (Silvia, 2008; Fredrickson, 1998; Nabi, 1999). However, most of this research has been focused on the specifics of negative emotions rather than on positive emotions. Rather than provide an exhaustive list and review of this ever-expanding area of research, below I have outlined a brief introduction to a series of basic positive and negative emotions that are of most relevance to this study.

Positive emotions

Love

Many theorists have supported the idea that love represents a fusion of other positive emotions (Ellsworth & Smith, 1988; Fredrickson, 1998). It is associated with love experiences often towards a specific individual and is contextualized by these relationships (Fredrickson, 1998; Oatley, Keltner, & Jenkins, 2006). Love and the

various other emotions associated with love, build and solidify social resources (Fredrickson, 1998). Much like intellectual and physical resources, social resources built by experiencing love can be drawn on later in other contexts and in other emotional states (Fredrickson, 1998).

Joy

Joy is often used interchangeably with happiness (Lazarus and Smith, 1991). Joy is often characterized by an improvement in ones physical, intellectual and social skills (Fredrickson, 1998). The elicitation of joy can further build on an individual's resources towards one's goals or desires through *free activation*, or “[a] readiness to engage in enjoyments” (Frijda 1986, p. 89).

Interest/ Curiosity

Interest/ curiosity is what might be called as an aesthetic emotion, in that it can attract us to beauty (Etcoff, 2000). Interest can arise from situations that appear as safe, offering novelty, change, and a sense of possibility or mystery (Izard, 1977; Kaplan, 1992). Izard (1977) describes the action tendency of interest as exploration, with the goal of increasing ones knowledge and experience of a particular subject such as faces or landscapes. Kaplan (1992) argues that interest (i.e. being intrigued by landscapes) encouraged our human ancestors to explore and seek new information about that landscape. Certain environmental aesthetics such as geographical features were of evolutionary importance, for example, water features or savannah like landscapes, provided views and may have allowed our forebears to identify possible places that had the potential to provide sustenance or refuge (Ward, 2008). While some theorists would exclude the emotion of interest as one of the basic emotions (e.g. Ekman, 1992;

Lazarus & Smith, 1991), others have included interest as one of the basic emotions because of its evolutionary significance (Izard, 1977).

Negative emotions

Sadness

The primary factors that elicit sadness are physical or psychological loss or separation, either real or imagined, and failure to achieve goals (Izard, 1977; Lazarus & Smith, 1991). The action tendency associated with sadness is one of inaction and concentrates attention onto the self to comfort and/or dwell on the physical or psychological loss that was experienced (Frijda, 1986; Lazarus & Smith, 1991; Nabi, 1999). Sadness also promotes problem-solving activity and attracts assistance from others in order to facilitate possible solutions (Izard, 1977; Nabi, 1999).

Fear (anxiety)

Fear is an elicited response to a perceived threat to one's physical or psychology self (e.g. Frijda, 1986; Lazarus & Smith, 1991). Fear's action tendency is generally considered an aversive response, i.e. if the threat is realized avoidance behaviour arises to escape the potentially threatening situation or agent (Frijda 1986; Lazarus & Smith, 1991). Fear is arguably the emotion that receives the most coverage in the literature. This tendency is most apparent in the field of risk communication, particularly in relation to Public Service Announcements (Dillard & Nabi 2006; Leshner, Bolls, & Thomas, 2009).

Anger

Psychologically, anger is 'aimed at the correction of a perceived wrong' and, socioculturally, at 'upholding accepted standards of conduct' (Strongman, 2003, p. 134). It arises from a demeaning agent that offends against oneself and/or his/her loved ones, or interferes with goal oriented-behaviour (Nabi, 1999). Anger is associated with the mobilization of behaviour to address the offending agent (Frijda, 1986; Lazarus & Smith, 1991). In addition, anger has been argued by some scholars to not be a complete negative emotion as small manifestations can facilitate problem solving (Averill, 1982).

Disgust

Izard (1977) defines disgust as a truly negative emotion. Disgust is usually elicited by a repulsive stimulus, for example, dead bodies, deformities, and morally offensive stimuli (Rozin, Haidt, & McCauley, 1993; Woody & Teachman, 2000). The action tendency associated with disgust is to turn away from or defend against the disgusting stimulus and this commonly creates an avoidance response or in some cases an offensive reaction to prevent contact with the stimulus (Izard, 1977; Lazarus & Smith, 1991; Rozin et al., 1993).

Guilt

Guilt can be elicited through violations to social norms (Izard, 1977; Lazarus & Smith, 1991). It is one of the few emotions that are 'self-directed' in that it holds the individual accountable for the cause of the violation (Nabi, 1999). Guilt motivates the individual to remove the source of harm in an attempt to remedy the situation (Izard 1977). It is important to note however, that guilt may not in some cases cause an

individual to address the guilt in a self-resolving matter. Rather, an individual may attempt to avoid the emotion by denying responsibility for the violation or by transferring the blame (Lazarus & Smith, 1991).

Lang (1995) describes the direction of behavioural action associated with each emotion as the valence of the emotion. Nabi (1999) proposed that the valence of an emotion is one of the determinants involved in whether a persuasive message is accepted or rejected. To date, a number of studies on emotion have adopted a valence based research approach (Feldman, 2005; Schwarz & Clore, 1996). However, as some theorists would agree, these studies specifically focus on the valence of emotions by contrasting negative and positive emotive states rather than focusing on discrete emotions (Lerner & Keltner, 2000). By contrasting emotions in terms of their valence, we may miss out on identifying the specific action tendencies associated with them. Each emotion influences message acceptance or rejection in a differing manner.

I would argue that it is important to identify the way in which a specific emotion can impact on a message's acceptance; for example, scenes of destruction and death are often used in environmental films. The scenes may contain images that evoke certain emotions such as disgust, guilt or anger. Filmmakers commonly include these sorts of scenes with the intention of persuading viewers to a particular position through their emotional responses to those images. Such an approach can impact on the effectiveness and persuasiveness of a message. How emotion can influence persuasion is discussed below.

2.2) Emotive imagery and persuasion

Following on from the basics of emotion theory, it is important to understand how emotional responses can support persuasive messages. For filmmakers, it is common to frame behaviour or a character in a certain way to elicit a specific emotive response. They might expose the viewer to images of rainforest destruction, or the suffering of an animal, in an attempt to provoke a response. A filmmaker's lack of understanding of how viewers actually respond to such images could mean that the filmmaker's intentions are thwarted. Research regarding responses to emotional images in environmental films is severely limited. Thus, to understand how emotion can affect the delivery of persuasive messages, research from other areas of the literature are discussed.

An aspect of emotion theory that has received particularly widespread attention is the impact of emotions on persuasion (see Petty, Fabrigar, & Wegener, 2003). In the literature, emotions have long been recognized as playing a significant role in persuasion. Recognition of this fact can be traced back to Aristotle's writings in his *Rhetoric*, where he suggested that an understanding of human emotions is critical for successful persuasion. Munsterberg (2004) suggested that images in the context of film are the surest route to the emotions influencing our attitudes before critical thought is engaged.

Research on perceptual processing of an image supports Munsterberg's claim. Findings from LeDoux's (1986) neurological research confirm this claim by showing that perceptual processing is done via two routes. The first route is an immediate

pathway. Signals from the eye run straight through the thalamus and the amygdala. The second is through the neocortex where the signal is analysed and then sent to the amygdala, adding an emotional response to the signal after cognition. The implications of this sequence of perceptual processing means that there is therefore a predetermined bias in the way we respond, i.e. the image reaches our emotions before we can cognitively process and understand the image. In doing so, emotions play an indisputable role in our decision-making and influence our judgment. As a result, emotion-laden imagery can help facilitate persuasion and may motivate people to act.

In the literature, there has been an increase in work addressing the role of different emotions in facilitating persuasion. However, this field of study has mainly focused on advertising, health awareness and public service announcements (Dillard & Nabi, 2006; Leshner et al., 2009). Public service announcements, for example, commonly use negative emotions to highlight the adverse outcomes associated with particularly risky or harmful behaviour. These types of messages are specifically regarded as ‘threat appeals’ and in some instances, enlist the use of what has been referred to as ‘shock’ images (Dahl et al., 2003).

Much of the literature discussing persuasive appeals is focused on the role the emotion of fear has in persuasion, while other emotions such as disgust, anger and guilt have been largely ignored. However, while the body of literature remains extensive, the results from these empirical studies are rather complex and have often produce inconsistent results. For instance, some research has found low levels of fear arousal to be most effective (Janis & Feshback 1953; Janis & Terwillinger 1962); others found that ‘moderate’ arousal of fear appeal is most effective (Keller & Block,

1996) and a third group that found ‘high’ fear to be most effective (LaTour & Pitts, 1989).

While shocking images in persuasive appeals may, as noted earlier, be particularly memorable, they may also inhibit positive responses to the appeal. An early suggestion made by Berlyne (1960) was that threatening or disturbing imagery that was overtly arousing would lead to the inhibition of adaptive responses. The term *defensive cascade* has been used to describe the response to a threat appeal and the subsequent overt action that follows (Bradley 2000; Lang, Bradley, & Cuthbert, 1997). The *defensive cascade* model suggests that as unpleasantness and arousal from the stimulus increase, individuals begin to exhibit signs of increased defensive responses, leading to an aversive response (Leshner, Bolls, & Wise, 2011). The *defensive cascade* response is also likely to be provoked by overtly disgusting or ‘shocking’ images often found in some persuasive messages.

Environmental campaigns often employ the use of shocking content in an attempt to persuade. However, as the research would suggest, viewer processing of highly arousing, shocking images may lead to an aversive response. If image content is employed incorrectly the message may be undermined and the images prove to be counterproductive. A particular example of how an environmental campaign can backfire was the use of a short film called *No Pressure* (Mango Swiss, 2010), produced by the global warming mitigation campaign *10:10*. The intention of the film was to make viewers think about their environmental impact and overcome public apathy regarding climate change. The 4-minute film (written by Richard Curtis and Franny Armstrong) is made up of a series of short segments each starting with a

character asking a number of people if they are interested in joining the *10:10* project and were prepared to commit to a reduction in carbon emissions. The first segment for example, depicts an enthusiastic and cheerful schoolteacher telling her class about the project. She then asks the class, which of them is willing to participate. All but two of the children put their hands up, while the two that have not, proceed to express an 'I don't care' attitude. The teacher then calmly responds to them by saying "that's fine, that's absolutely fine, your own choice". After a school bell rings and before the class leave, the teacher reveals a red button on her desk, which she presses. The two children, who were reluctant to participate, explode. The class screams as gore is splattered over them while the teacher casually explains a reminder for that night's homework.

Reaction to the campaign was overtly negative and sparked outrage. Initially it was planned to use the film in theatres and as television advertisements but it was withdrawn completely. James Delingpole (Delingpole, 2010, 'Go green or we'll kill your kids', para.1) from *The Telegraph* dismissed the film, regarding it as "the most emetic, ugly, counterproductive eco-propaganda movie ever made". Founder of *10:10* Franny Armstrong, defended the film saying, "We 'killed' five people to make *No Pressure* – a mere blip compared to the 300,000 real people who now die each year from climate change" (Carrington, 2010, There will be blood, para. 7). This example goes to show that while shocking images may be particularly memorable, they may not be effective in the context of a persuasive appeal. As a filmmaker, we must be aware that while we might be clear about our intentions when we use images to disgust or create fear in the viewer, the viewers may not react or respond to the film in the way intended.

In comparison to the research conducted concerning the use of negative emotions in persuasive appeals, the role that positive emotions play in persuasive message has been relatively overlooked. Research has typically favoured the study of negative emotions, effectively neglecting positive emotions such as those listed earlier. Their role in persuasion theory has been largely disregarded. This is not to say that positive emotions fail to facilitate persuasion.

Noticeably, positive emotions seem to lack the distinct evolutionary backgrounds that are prevalent in the action tendencies suggested and associated with negative emotions. The actions initiated by negative emotions are more specific in that they would, in our evolutionary past, increase our chances of survival, for instance a fight or flight response (Fredrickson & Levenson, 1998). In comparison, positive emotions do not typically arise from life-threatening situations and thus do not fit the negative emotion model, where a specific course of action is more likely to be provoked (Fredrickson, 1998). Fredrickson (1998) suggests that positive emotions should not be considered as having prescribed action tendencies like that of their negative counterparts. Instead, she suggests that positive emotions should be considered and evaluated as *thought-action tendencies*. That is, physical action follows on from changes primarily in cognitive activity (Fredrickson, 1998).

Fredrickson (1998) argues that compared with negative emotions, positive emotions broaden the scope of cognition whereas negative emotions narrow this scope. Similarly, other theorists have shown that having followed a positive emotive experience, an individual exhibits a broad-minded coping style, and also commits to heuristic processing of the message (Fredrickson & Branigan, 2005; Griskevicius,

Shiota, & Neufeld, 2010). Fredrickson and Branigan's (2005) study showed that participants who had watched two films that generated positive emotions had more thought-action urges compared to a neutrally emotive film. In comparison, films that had produced negative emotions had encouraged viewers to narrow their scope of attention. As a result, they had experienced restriction in their thought-action tendencies (Fredrickson & Branigan, 2005).

In environmental campaigns and films, it is hard to resist the temptation of stressing the importance of an issue through shocking images and negative, emotionally laden, images. It is important to note that while negative images in some cases are effective, viewers, when exposed to such material, can respond with the common human strategy of avoidance. Through a broad-minded coping style, positive emotions may be just as effective. It is evident that further research into the role that positive emotions can play in delivering persuasive messages is urgently required.

While above I have discussed the role that emotions have on facilitating persuasion in the most basic of contexts, little attention has been given to the function of emotions in conservation behaviour. In environmental media, a common goal is to not only acquire viewers' attention but also for them to get invested and initiated into a cause.

The amount of research associated with conservation psychology and pro-environmental behaviours has increased over the year and it continues to garner significant attention (Kaiser, 1998; Stern, 2000). Within this domain of research, the question of 'What predicts pro-environmental behaviours' is one that is asked frequently. In the pursuit of an answer to this question, researchers have identified a

number of different variables that could influence whether an individual commits to pro-environmental behaviour or not. Kals, Schumacher, and Montada (1999) suggest that conservation behaviour cannot simply be explained using a pure rational or cognitive approach. As Kals et al (1999) indicates, empirical investigations representing either the promotion of knowledge or specific models of environmental behaviour are only successful as precursors to environmental behaviour when they take the motivation power of emotions into account. However, specific research regarding emotion as a predictor of conservation behaviour has diminished and the subject has recently received very limited attention.

Smith et al (2004) proposed that compared to other cognitively based attitude measures, emotions may play a more significant role in predicting behaviour due to the altruistic nature associated with conservation behaviours. Vining and Ebreo (2002) similarly suggested how both positive and negative emotions have a strong potential to be predictors of conservation behaviour. Kals et al (1999) study suggested that both positive and negative emotions serve as predictors of conservation behaviour. This study found that an 'emotional affinity' towards nature, was a more powerful predictor of pro-environmental behaviour than indignation and interest in nature (Kals et al 1999).

The emotional attraction that humans have to nature is, some would argue, an advantage when conservation is being promoted. The term *biophilia*, used to describe the innate love that humans have for nature, has been identified as a fundamental force in human psychology (Kellert & Wilson, 1993). Positive emotions associated with biophilia may be imbued with survival values, engrained in them through their

evolutionary roots (e.g., love, joy, interest/ curiosity). The emotion of interest could be linked with the term biophilia, as both are associated with aesthetic enjoyment of the environment. Our evolutionary link to landscape features underlines this possibility, as at that stage in our development water features or savannah like landscape providing views and refuges and sustenance were crucial to our survival (Ward, 2008).

Kellert (1996) explained, after an analysis of American values, that aesthetics were important in predicting public support for environmental protection. In some documentaries, the landscape is often depicted as a spectacle and something to be admired from a distance (Willoquet-Maricondi, 2010). They serve as a way of implicating the viewer in the issues framed in the film and lead them to consider their relationship with the land and the communities affected by these issues (Willoquet-Maricondi, 2010). Nature documentaries are lauded for creating just that – a spectacle of nature. However, some critics regard nature documentaries as having ultimately missed the opportunity to communicate environmental issues (Mills, 1989). Mills (1989) suggests that natural history films encourage complacency due to the exhibition of images consisting of a world still “bustling with animals”, seemingly hiding any destructive human effects on wildlife and habitats. Others have glorified the popularization of nature documentaries. Blight (2007) in reference to the David Attenborough *Life on Earth* series, wrote:

Everywhere they [the programs] have been shown, they have had a demonstrable impact. In Italy for example, where there was a tradition of

shooting ... especially birds, these films are credited with a significant shift in public attitude that began to nurture a conservation ethos. (p. 183)

Nature documentaries like the *Life on Earth* series are typically tailored for entertainment purposes and generate a positive emotional response through their depiction of nature. Some environmental films have adopted a similar filmmaking approach. *State of the Planet* was a series commissioned by the BBC and was also fronted by David Attenborough. It looked specifically into potential crises that threaten the planet. *State of the Planet* still presented nature as stunning and inspiring but differed from *Life on Earth* in that it had a strong conservation narrative. In a similar manner, the BBC produced two series, one named the *Elephant Diaries* (2005) and the other, *Orangutan Diaries* (2007). *Elephant Diaries* goes behind the scenes of a sanctuary that houses orphaned elephants. *Orangutan Diaries* was filmed at the Borneo Orangutan Survival Foundation and shows the lives of rescued orangutans. Compared to other hard-hitting environmental films that depict scenes of destruction and are overtly negative in nature, all of these series were more positive in their approach. After the BBC series *Elephant Diaries* was transmitted, a UK-based elephant charity received 10,000 pounds and over a thousand new members were initiated (Blight, 2007). Similarly, after the transmission of the *Orangutan Diaries* in 2007, the charity involved with the program received more than 100,000 pounds in online donations (Blight, 2007).

Kellert's (1999) analysis also found that a greater predictor of environmental support was through phylogenetic relatedness and through feelings of attachment to the organism in question for protection. Similarly, Czech, Krausman and Borkhataria

(1998) found that while aesthetics were an important factor in determining which species received protection, ecological importance and rarity were more influential. While these studies signify that environmental aesthetics may be important in fostering pro-environmental practices and in encouraging biophilia, this area of research is rather under-developed. We can further infer from these studies, that if emotional attachment to the organism warranting protection is a predictor of environmental support, the same may be true for emotional attachment in documentary film. The implications of emotional attachment through character in environment film and its impact on the persuasiveness of the message will be discussed in a later chapter.

Other studies have also shown how positive emotional experiences can influence nature conservation behaviour (e.g. Finger 1994; Kals et al., 1999). A specific example by Berenguer (2007) illustrated how, by encouraging students to try to imagine how [a bird or tree] feels, it is possible to increase emotions associated with empathy. Consequently, this empathic response generated a greater willingness to extend personal resources to an environmental protection organization.

Environmental media campaigns often aim to change attitudes and encourage pro-environmental behaviour. These campaigns are typically aware of the empathic bond we have with nature and so utilise this relationship to assist them in the delivery of their persuasive messages. This is particularly evident when we consider the many nature mascots associated with these campaigns. The polar bear, for example, has become the poster-child for climate change campaigns. Research has implied that animals, especially those with a mega-fauna status, can be useful in helping people

connect with nature. Vining's (2003) review for instance, explored the extensive evidence that showcases the strong emotional bonds that exist between humans and animals. Marseille, Elands and van der Brink (2012) give some evidence that the creation of sympathy for animals and the environment can subsequently lead to positive changes in attitudes. The depiction of positive images invoking our affinity with nature and the cognitive based responses that positive emotions stimulate in the viewer's mind seems to indicate that the use of positive images in environmental films has been underutilized to date.

Conversely, because of the proposed emotional affinity we have for nature, negative emotions may be evoked when we see environments or animals are threatened. Disgust-evoking visuals are often used in an attempt to persuade people to act environmentally. Investigations and media exposure of animal cruelty, for example, has been thought to have a powerful impact on viewers. Nabi (1998) aimed to explore the effect of disgust as the dominant emotion evoked by a video depicting animal experimentation on attitude change. She found disgust produced an inhibiting effect. As disgust increased, support for a critical position based on the images decreased (Nabi, 1998). Ultimately she concluded that the persuasive video was counterproductive, leading to a decrease in support for the position desired, in this case opposition to animal experimentation.

Taking a different approach, Tiplady, Walsh, & Phillips (2012) examined the impact of media coverage of animal cruelty through public surveys. They found that the most common immediate reaction to the visuals was pity for the cattle, perhaps indicative of the emotional affinity we have for animals and that led to feelings of compassion

and concern for the suffering animal (Tiplady et al., 2012). Disgust was another reaction observed from viewers. However, they found that this emotional response did not translate into a significant behavioural change. As the end of the video resulted in the death of the cattle, many of the viewers felt powerless to help the cattle. In contrast, studies have also demonstrated the role that other negative emotions play in risk communication. For example, Meijnders, Midden, and Wilke (2001) showed that by provoking fear in the risks posed by CO₂ emissions, they were able to create more favourable attitudes towards energy conservation.

An example of the use of negative emotion in environmental communication is an advertising campaign by *Plane Stupid* and developed by the advertising agency *Mother* (directactioncam, 2009). The short film depicts CGI polar bears falling from the sky, falling past shimmering glass buildings in the city, and then graphically landing on pavements and cars. All the while, a high-pitched jet engine sound can be heard in the distance. The film ends with text on screen over black saying – ‘an average European flight procures over 400kg of greenhouse gases for every passenger’; ‘that’s the weight of an adult polar bear’. Robert Saville the director of *Mother* said of the film “We used polar bears because they are a well understood symbol of the effect that climate change is having on the natural world.” (Sweney, 2009, para. 6) As a symbol of climate change, the use of polar bears in the advertisement had important implications in terms of the viewer’s emotional response. As a mascot for climate change the polar bear attracts feelings of sympathy from viewers. Using the polar bear and our affinity for that creature, and slamming it into the pavement accentuated the shocking nature of the advertisement.

When exposed to such strong emotional material such as this, a common response may be to turn away from the offensive stimulus. In the literature, it is hypothesized that certain strong negative emotional responses such as fear, despair, or a sense of being overwhelmed and powerless can inhibit thought and action (Moser, 2007; Nicholson-Cole, 2005). One study focused on the use of not only negative emotions but also positive emotions in an environmental setting. The study involved presenting messages about the importance of water consumption, energy conservation and recycling (Obermiller, 1995). People were exposed to either a “sick baby” appeal that stressed the severity of the problem or a “well baby” appeal that highlighted people’s ability to solve the problem. Results from the study showed that sick baby appeals were useful only when people were not aware of the problem (in this case, water and energy consumption). If people were aware of the problem and were highly concerned by it, the authors suggested that using a sick baby appeal may have been counter productive, as it increased people’s sense of helplessness (Obermiller, 1995). In contrast, participants who received the well baby appeal rated themselves as more able to address the problem when the issue was salient (recycling). These results are in accordance with those evaluated throughout the rest of this chapter. Obermiller (1995) suggests that based on these results “green” advertisers should consider ‘well baby’ alternatives.

The research discussed in this chapter suggests that while negative images can be effective when attempting to persuade viewers, moderation may be the key to their effectiveness. If one is to produce an environmental film, resisting the temptation to use overtly shocking images may be a wise decision based on this research and the examples cited throughout the chapter. In contrast, according to Obermiller’s

research, the use of positive images may be effective if they are appropriate and pertinent to the issue under discussion. Using positive images may also be important in generating empathetic responses towards characters and environments.

It is therefore critical that the valence of the image is evaluated in an environmental film in order to better understand the potential impact it can have on viewer's attitudes and behaviour. However, the use of emotion-laden images is just one facet of emotional engagement. The examples highlighted in this chapter mainly focussed on short messages where narrative involvement and character identification were likely to be limited. In environmental film, the way the emotions elicited interact with the story and the characters involved, can be of immense significance for a viewer. These elements may largely determine whether the viewer is engaged in the film throughout its duration. It is therefore important to consider both the importance of the narrative and nature of the characters involved on the capacity of the film to be persuasive.

VISUAL NARRATIVES AND PERSUASION

In discussing the role that emotive visuals have in facilitating persuasion, it is important to consider their impact within the context of a narrative. A still image or a frame from a film may illustrate a particularly emotive event, but without knowing the context in which the event has occurred, there may be a lack of understanding and a lack of emotional involvement. As discussed in Chapter Two, still images provide a less immersive experience than other multi-sensory media. When viewing a complete narrative with a beginning, middle, and end, we are more likely to think in terms of causality as opposed to viewing a snapshot of an event where the causality is less evident (Green, 2006). As a result we become immersed in the visual and auditory narrative and this has, to date, proved to be an experience that usually surpasses any other multi-media experience.

Narrative can be described as, “any cohesive and coherent story with an identifiable beginning, middle, and end that provides information about scene, characters, and conflict; raises unanswered questions or unresolved conflict; and provides resolution.” (Hinyard & Kreuter, 2007, p. 778). Narratives have been established as being able to transform real-world beliefs and attitudes (e.g. Appel & Richter, 2007). Termed, “narrative persuasion”, research has shown that a narrative experience can indeed influence the persuasiveness of a message (Green 2004; Green & Brock 2000).

The majority of research papers on persuasive messages, such as those discussed in Chapter Two are guided by traditional theories of persuasion (e.g., the Elaboration Likelihood Model; Petty & Cacioppo, 1986). These basic theories of persuasion are commonly employed under circumstances in which the recipients of the persuasive message are aware of the message's intent. They are of most relevance in regard to overtly persuasive topics such as advertisements, editorials and public service announcements (Green, 2006). These persuasion theories, however, are irrelevant to, and inadequately represent, the subjective experience of engaging in a story. Green and Brock (2000), in recognizing this issue with traditional persuasion models and their lack of ability to explain narrative persuasion, developed the *transportation-imagery model*, which is limited to narratives that evoke or utilize vivid imagery. According to their model, narrative persuasion is the result of being 'transported' into the narrative. Through watching a narrative, viewers can become immersed into the story world and the events that take place within it. Thus, according to this model, images are at their most powerful when they are enmeshed in a story, rather than viewed in isolation outside this context.

Transportation is defined as "an integrative melding of attention, imagery and feelings, focused on story events" (Green, 2004, p. 247). Green's (2004) study provided evidence for the persuasive effects of narrative and the role that transportation has in mediating this effect. Being transported into a story can potentially lead to persuasion in two main ways. Firstly, individuals transported into a story are so absorbed in the narrative that they are less likely to engage in a counter-argument and less likely to process the story content critically (Green 2004; Green & Brock 2000). Secondly, viewers are engaged through identification with, and through

the development of strong emotional ties with the characters involved in the narrative (Green 2004). This would suggest that when a viewer is 'transported' into a visual narrative they are much less likely to counter-argue the persuasive content on screen.

In contrast, transportation may, in some contexts, be suppressed in viewers. This may lead to a more critical evaluation of the narrative instead of the desired transportation into the narrative. Given the findings detailed in Section 2.2 it is likely that overtly negative images, such as those capable of eliciting the emotion of disgust, could lead to the suppression of the viewer's ability to transport themselves into the narrative. Aversive reactions associated with some negative emotive stimuli may pull the viewer out of the narrative. As a consequence they may be motivated to argue against or question the messages presented. This has important implications for filmmakers attempting to create a persuasive message through an environmental film. If the narrative of the film fails to allow for, or evoke, an emotional response, or if it has a flawed narrative, then the filmmaker is likely to fail to transport the viewers and critical analysis of the film may be the outcome (Busselle, Ryabovolova, & Wilson, 2004). In consequence, the acceptance of the persuasive message by the viewer may be seriously impeded. Conversely, according to the above research, if the viewer is kept in the transported mode, a story can provide an excellent opportunity to influence individuals who, under other circumstances, would be resistant to persuasion.

Bypassing critical analysis through an enthralling, emotionally engaging narrative raises important ethical implications - especially if the film is considered to be propagandist in intent rather than just a form of entertainment. The 1940 film *Der Ewige Jude* (The Eternal Jew) is an example of an anti-Semitic, German Nazi

propaganda film. Created under the guidance of Joseph Goebbels, the film expressed the Nazi ideology of that time. The themes emerging from the narrative were highly anti-Semitic suggesting for example that Jews should be viewed as a 'plague'. Nonetheless, it was aimed at exploiting irrational emotional responses in viewers. This example illustrates the moral implications involved when creating an emotional appeal that attempts to persuade viewers. It is however, outside the brief of this thesis to canvass the moral implications of the use of the techniques under discussion.³

I previously mentioned that the possibility of transportation might be enhanced through a viewer's identification with a character and through the development of an emotional attachment with the characters in the narrative. In a narrative, attention is often given to characters and their unfolding relationships, as well as their pursuit of a definitive goal and the events and challenges central to that process. Attitude change can possibly result from a viewer's emotional identification with characters in the story.

³ Hartman (2000) discusses the film in and its emotional appeals in *A Psychoanalytic View of Racial Myths in a Nazi Propaganda Film: Der Ewige Jude (The Eternal Jew)*.

CHARACTERS AND EMOTION

Characters are a core component of narrative films and viewers tend to identify with them, sympathise and empathise with them. Smith (1995) described the component of character as fulfilling a “fundamental role ... in our engagement with fiction” (p. 17). In both fictional and non-fictional films, as a viewer, we react directly to facial expressions. Compared to fictional films, documentaries present real characters on screen as opposed to scripted actors. The significance of this is that the viewer perceives the emotional responses from these characters, produced as a result of the experiences they face in the narrative, as genuine and real (In Chapter Two, I discussed the concept of perceived reality in documentary). As a result, some scholars argue that documentaries have the capacity to tap into our emotions in a way that fictional films cannot (Eitzen, 2005; Nichols, 2001).

The relationship between the viewer, and the characters within a narrative, has been seen as crucial in terms of a film’s persuasive effect. Slater and Rouner (2002) highlighted the importance emotional involvement and identification with characters has on behaviour change. Identification can be broadly defined as adopting the perspectives of a character. Cohen’s (2001) description provides a more apt definition; “[identification is] a process that consists of increasing levels of self-awareness and its temporary replacement with heightened emotional and cognitive connections with a character” (p. 251). By this definition, identification should create appropriate emotional responses. For example, positive emotions such as happiness,

joy, and love, could be associated with the successful achievement of the character's goals. Similarly, negative emotions such as sadness, anger, or guilt, could be the result of the failure to achieve those goals.

Identification has been proposed as one of the mechanisms through which narrative can change attitudes (Green, 2006; Slater & Rouner, 2002). In addition, de Graaf, Hocken, Sanders, and Beentjes (2011) showed, in their investigation of the role of identification with story characters in narrative persuasion, that identification could indeed be a mediating mechanism for narrative persuasion. Identification is also related to audience perceptions of liking, similarity, and affinity to characters (Cohen, 2001). Factors like these could make it easier to identify with characters on screen, facilitate transportation and should lead to changes in behaviour.

Research suggests that pre-existing similarity between the viewer and the character can increase not only transportation (Green, 2004) but also identification. Similarity is important as it influences how we empathize with and for the characters. We are more likely to have empathic feelings for people similar to us and to whom we are emotionally attached (Batson, Ahmad & Tsang, 2002). I would suggest from these findings that as a filmmaker, we must carefully consider our audience and the characters portrayed within the narrative. If the relationship between audience and character becomes frayed due to conflicting or contradictory feelings stirred in the viewer, then it is likely that viewers will fail to identify or empathize with the character effectively.

Creating emotional, empathic connections with characters can help yield changes in attitudes through narrative transportation (Heath, Bell & Strenberg, 2001; Oatley, 1999). As explained throughout these chapters, emotions can be a useful mechanism through which changes in behaviour can be achieved. Environmental films often endeavour to make the audience feel a certain way about a character: negatively or positively. As discussed by Plantinga (1999) films use human faces to “elicit empathetic emotions in the spectator” (p. 239). In human interactions – whether through direct contact or through film – we can experience the emotions displayed (through facial expressions and voice) by the other. Hatfield, Cacioppo, & Rapson (1993) labels the term ‘emotional contagion’ to define the way in which we mimic and synchronize our movements, expressions and postures with those of another person – consequently converging emotionally. In film, this can be done through close ups of the character. Through the facial expressions, the postures and the movement of the characters we can get a sense of what the character is feeling. The suffering of a human character triggers a shadow of the same emotional responses in us. The filmmaker’s ability to stimulate ‘emotional contagion’ through their film is therefore a crucial attribute if the viewers are to be encouraged to identify with a character in the film.

The same can also said for the depiction of animals in environmental documentary. This is of special importance particularly when the animal is an integral part of the narrative. When committing to this type of narrative it is important to align human emotional views with that of the animals. Kahn (2003) argued that people see nature and animals as part of the moral domain and also under some instances consider them to have human characteristics. If some animal suffers in a manner similar to human

suffering, then we can empathise with that animal when we witness that suffering (Harre, 2011).

It is common for environmental documentaries to document suffering in order to encourage the viewer to empathise with the characters. For example, the film *Green* (2009) depicts the last days of a dying orangutan. To work as a persuasive and moving film, the film depends largely on the emotional attachment the viewer develops with the character of the orangutan. An example of a human character is Layefa Malemi in the documentary, *The Age of Stupid* (Armstrong, 2009). We see Layefa's personal struggle with poverty and in the process come to understand the impact that Shell Nigeria has had in this area. Layefa's personal story strengthens the link between viewer and character, allowing viewers to empathize and sympathize with her. If such a relationship does not develop, we are less likely to be transported by the narrative and in both these films the capacity of the film to deliver its message would be seriously impaired if no identification occurred.

In conclusion, these results would suggest that the use of character is a vital component in the successful creation of an environmental film. As a filmmaker, it would be wise to identify and endeavour to overcome any perceived dissonance or dislocation that could occur between viewers and characters within the narrative. Any dislocation may result in a less than positive, or negative response from the viewer. Identifying characters that can engage an audience, who can elicit an empathetic response from an audience, and with whom the audience can identify all are crucial necessities for any environmental documentary filmmaker.

A REVIEW OF ENVIRONMENTAL DOCUMENTARIES

In Chapter One, I examined the persuasive power of images and their use in documentary films. The visual aesthetic of film is not only what draws us to them – they prove to be a powerful way of influencing attitudes. Environmental films are often visually constructed to elicit emotional responses in viewers. The rhetoric of committed documentaries tends to accentuate this response – a response reinforced by the viewer's awareness of the non-fictional nature of the scenes depicted. As a result environmental documentaries can be particularly persuasive.

In Chapter Two, I indicated that emotional responses could be used to support or elicit pro-environmental behaviour. The rhetoric vision of the many documentary filmmakers leads them to include scenes that will evoke such emotional responses. Shocking images are commonly used in persuasive appeals but may inhibit positive responses if used too liberally. I therefore argued for the careful and moderate use of negative images and appeals. Conversely eliciting positive emotions may be important when the objective of the filmmaker is to generate empathetic responses to the documentary's scenes and characters. It is therefore critical to evaluate the valence of the image – negative or positive – and its potential impact on viewers when constructing the documentary.

In Chapter Three, I argued that narrative was another important weapon in the armoury of a documentary filmmaker as it is capable of inducing strong responses

from the viewer. Its value lies in the narrative's capacity to transport the viewer: a state, which often leads the viewer being less likely to process arguments or ideas critically. By looking at ways in which a viewer's absorption into the narrative is impeded or aided, within the context of a documentary, we can better ascertain and evaluate the persuasive power of the film to capture and persuade its viewers.

As discussed in Chapter Four, characters are a core component of narrative film and our identification with them helps involve us in the documentary and can lead to empathetic and sympathetic responses towards characters by the viewers. Identifying with characters on screen can help facilitate the delivery of a persuasive message. If a relationship between viewer and character is not well achieved (e.g. through conflicting interests) a positive emotional response may fail to be elicited. In addition, transportation may fail leading to critical processing and analysis of the film.

Using these findings I now plan to evaluate four environmental documentary films by asking the following questions of each.

- How overtly is emotive imagery used and what are the likely implications of their use on the viewers of the film?
- What are the implications of the film's narrative approach and what elements in this approach may impede narrative 'transportation' and therefore the acceptance of the films message by the viewer?
- How effectively and easily can the viewer identify with the characters in the film? Do the characters presented impede or promote an emotional response appropriate for the content of the film?

I have selected four environmental documentary films that present a range of different approaches to presenting an environmental issue. They are:

- *The Cove* (2009)
- *Vegucated* (2011)
- *Green* (2009)
- *Earthlings* (2005)

The creative component of this thesis, the co-produced film *Bluewater*, will also be evaluated in terms of the questions outlined above. In addition I will discuss decisions made during the production of that film that may have had an impact on its overall effectiveness as an environmental documentary – the film's ability to initiate action. Each evaluation will be preceded by a brief synopsis of each film.

5.1

THE COVE

Synopsis

Winner of the ‘Best Documentary Feature’ at the 2010 Academy Awards, *The Cove* (2009) documents the Japanese dolphin hunting culture. The film follows former *Flipper* dolphin trainer Ric O’Barry and his quest to stop the annual dolphin drive hunt in Taiji, Japan. He is soon joined by Louie Psihoyos, co-founder of the Oceanic Preservation Society (also the director of the film). Together they assemble a team of activists, filmmakers and freedivers as they embark on a covert-styled operation to document and expose the dolphin slaughter in a hidden cove in Taiji. The film is also an exposé of the dolphin trade, the existence of poisonous mercury in dolphin meat and the nature of Japan’s involvement with the International Whaling Commission (IWC).

Emotive Imagery

Two particularly negative, emotive scenes stand out from the rest of the film. The first scene is the initial encounter with the fisherman at the cove. The scene is being told from the perspective of Mandy-Rae Cruickshank (38:18). The scene cuts between a two shot interview (herself and Kirk Krack) and the lone straggling dolphin that Mandy is describing. The lone dolphin, having escaped the nets, swims towards the camera as its blood trails behind it. The interview is intercut with the dolphin footage, though an extreme close-up of Mandy now replaces the previous two shot used. She continues to describe the event. The dolphin eventually tires and does not resurface.

The scene ends with a shot of Mandy and Kirk embracing while four fishermen behind them are seen laughing.

This scene is particularly effective in a number of ways. Firstly – the death throes of the lone dolphin evokes a variety of emotions. At first there is hope that it might somehow survive, but eventually sadness, as we identify with its plight and the emotional response of Mandy. We see it struggle all by itself – there is nothing else in the frame other than water and the nets. This further amplifies the emotions as we get a sense of how alone the dolphin is. Disgust might also be a viewer's response to the scene – the blood coming from the dolphin could be disturbing for some viewers or they may be disgusted by the whole operation of which this death is a part. By intercutting Mandy as she describes the scene, with the footage of the death of dolphin, the filmmaker heightens the scene's emotional impact through both her emotional description of the event and her facial expressions. The inclusion of the shot of the fisherman seemingly laughing at her response and certainly not affected by the death of the dolphin, has the capacity to evoke negative emotions like anger towards the Japanese fisherman. I will discuss the Japanese fisherman in more depth in the *Character* section.

The second and most obvious scene to address is the dolphin drive slaughter, which serves as the film's climax (1:13:55). The scene begins at sunrise – the nets are thrown out – and the boats lead the dolphins into the cove, effectively trapping them. We see the fishermen killing the dolphins using spears. Dolphins begin thrashing around once speared. The water immediately turns bright red from the blood of the dolphins. Towards the end of the scene, a lone diver is seen swimming in the bloody

water. Ending the scene is a shot of the beach – a fisherman has a cigarette while dead dolphins wash up on the shore. There is no doubt that the scene is shocking and consists wholly of negative imagery. The scene is central to the film's intentions. As Louie says, "we want to capture something that will make people change". According to the research presented in Section 2.2 a shocking sequence like this may provoke a strong negative emotional response leading to viewers experiencing a sense of being overwhelmed and feeling powerless to help (Tiplady et al., 2012).

In stark contrast, the scenes where dolphins are shown in the wild are depicted in a much more positive manner. The cinematography is stunning and more in tune with natural history documentaries in comparison to the raw, journalistic style used throughout most of the film. When Mandy and Kirk are first introduced, they describe the physiological traits shared by dolphins and humans (33:45). Showing both divers in the water and interacting with the whales and the dolphins was an effective way of reducing the emotional distance some viewers might previously have felt when viewing dolphins. Here they are seen playing and being like us. In addition, the freedivers use monofins, which also helps to make them appear more dolphin like and helps the viewer to identify dolphins as a bit like us. All these elements help to confirm the similarity that exists between the viewer and dolphins, making them easier to empathise with. Through these scenes positive emotions towards dolphins are evoked. As a result the viewer can start to care more for these dolphin characters (Vining, 2003; Marseille et al., 2012).

Narrative

The Cove's effective narrative approach stems from the blending of an archetypal espionage thriller with a documentary formula. The plan to capture footage of the dolphin massacre is set out and presented in a way that is analogous to contemporary Hollywood blockbusters such as *Mission: Impossible* (1996) and Steven Soderbergh's *Ocean's Trilogy* (2001, 2004, 2007). In *The Cove*, Louie Psihoyos even describes the assembling of the team as "this sort of Ocean's 11 team". As with the archetypal structure of the Hollywood blockbuster, the first act of *The Cove* covers the gathering of the conspirators and their introduction to the plan and the location. In one scene (29:03), for example, a swooping animation shows the layout of the cove with Louie describing the features – "the secret cove is a natural fortress ... surrounded on three sides by steep cliffs ... high fences surrounded by razor ribbon". Louie's narration also refers to the main phase of the project as "the second mission ... full orchestra" – where all the cameras and hydrophones are placed in the cove. Kirk Krack also refers to the plan as a "secret-ops mission". By adopting these elements of a familiar Hollywood narrative, *The Cove* is effective in producing an easily identifiable narrative that will assist the viewer to engage in and be transported by the story.

In contrast to the main expedition narrative, Ric O'Barry's sentimental story of his conversion from dolphin trainer to dolphin activist serves as a supporting 'substory'. In his narrative thread, the focus is on mourning for Kathy, the *Flipper* dolphin, who Ric claims committed suicide in his arms. Ric's narrative is focused on stressing his own guilt while at the same time seeking some form of redemption through the film's main expedition narrative. There is a moment in the film where Louie recognizes Ric's plight saying, "My heart goes out to him". Ric's conversion narrative not only

serves to kick-start the train of the film but also allows us to identify with a man who has made a mistake – as we all do – and is seeking to rectify or pay for that mistake in some way. In a sense the viewer is invited to care for and empathise with Ric in the same way Louie has. The film’s narrative approach generates a wealth of emotions through the depiction of dolphins as being ‘much like us’ and through our identification with Ric’s plight. We are also involved through the espionage element produced by the “secret-ops” mission that raises the ultimate curious questions – will they be successful or will they be found out? This sort of emotional engagement seems highly likely to assist in the transportation of the viewer, positively reinforcing narrative persuasion (Green, 2004; Green & Brock, 2000).

The use of a familiar espionage and thriller narrative has an appeal for western audiences. However, that appeal may fail to extend to audiences outside of this culture set. In addition, having the narrative based around a covert operation in a small community has its problems. The story could have been told by tackling Sea World, who, as the film denotes, drives the demand for dolphin captures. Alternatively, as shown in the film and addressed by Louie, the story might have been told from both sides, involving both the activists and fishermen. Attempting to get both views of the story, Louie and his team attempted to negotiate with the Taiji fishing union and the local authorities about allowing their film crew to film in the area. After two days of negotiations Louie was told they were not allowed to film in certain areas. Louie implies that this was not an option as he states, “they were hiding something”. By producing the film in this manner, they fail to offer any other perspective on the culling, for example, from the point of view of the fisherman or the residents of Taiji. By tailoring the message only for a western audience the film is

limited in its overall effectiveness. In fact, the film is likely to offend and alienate the Japanese people – the very people whose behaviour the film wants to change.

Character

The three groups of characters I would like to assess are the dolphins, Louis and Ric's team, and the Japanese people. In *The Cove*, dolphins are portrayed in an extremely anthropomorphic manner. There are several notable examples of this throughout the film's narrative. When we are first introduced to Mandy and Kirk, we see a montage sequence of Mandy diving with the dolphins. Throughout this scene, the dolphins are described by Kirk as having "some of the same physiological traits ... we are all air breathing mammals" (33:48). When describing her experience of diving with whales and dolphins, Mandy states, "You really feel on some level you are communicating with them".

A similar example occurs when Dr John Potters talks about the intelligence of dolphins. (56:44) He describes his interaction with dolphins, saying:

When I see a dolphin looking at me and it's eyes tracking me and I lock eyes with that animal there is a human response that makes it undeniable that I am connecting with an intelligent being.

The film is successful in its attempts to anthropomorphise the dolphins – creating an emotional affinity with the animal which aids identification and consequently persuasion (de Graaf et al., 2012). If viewers have become emotionally aligned with the dolphins during the film, the climax serves as a powerful scene. However, it

should be noted that these positive emotions associated with emotional attachment, with the dolphins, might not overcome the negative emotions elicited from the shocking slaughter sequence.

For the mission, the team enlisted is what could be seen as homogenous, but it reflected only one part of our society. All members of the team are white males, and from their introductions, one might deduce they are relatively wealthy citizens. The one exception is Mandy-Rae Cruickshank. Her role in the film is limited to her emotional view and connection with nature and in particular dolphins. The only time we interact with her on screen is during the montage where we see her swimming with the whales and dolphins and her emotional retelling of the death of the escaping bleeding dolphin (described in *Emotive Imagery*). During this retelling, the camera cuts to close-ups of her in the interview (38:55). Through her facial reactions (she is also the only person in the film to cry on screen) and her demeanour, the viewer can come to understand and empathise with the emotions she experienced when witnessing this heart-wrenching event. Generating empathic connections can help facilitate attitude changes (Health, Bell & Stenberg 2001; Oatley 1999).

In contrast, the Japanese people are largely portrayed in a negative light. Their time on screen is often used to evoke anger and resentment from the viewer towards them. The fishermen are often depicted as aggressive and abusive on camera. Ric's introduction of 'Private Space' for example, shows him screaming at the camera, followed later by a shot of, what is presumably a Taiji fisherman, pointing his finger at the camera. Joji Morishita, the IWC delegate for Japan, is shown smirking while delegates from other nations are expressing their condemnation of Japan's request to

engage in cetacean hunting, further eliciting negative emotions towards Japanese people.

Concluding remarks

The Cove succeeds as an effective environmental documentary in a number of ways. It succeeds in generating empathetic responses towards the dolphins through character identification. Secondly, the adoption of a familiar, gripping narrative archetype appeals to audiences and aids in transportation. However, its greatest asset is its greatest downfall. It is a crowd-pleasing film and succeeds only as a form of entertainment. Its shocking finale may disturb viewers but result in a feeling of powerlessness; a realisation that they are unable to help the dolphins or, it seems, to influence the fisherman. The negative portrayal of the Japanese characters will no doubt offend Japanese audiences and in so doing, impede the ability of the film to deliver a persuasive message to that audience. The decision of the filmmaker to ignore the perspective of the Japanese fishermen is the flaw that tends to undermine the effectiveness of *The Cove* as an environmental documentary.

VEGUCATED

Synopsis

In *Vegucated*, a recently converted vegan Marisa Miller Wolfson (writer and director) seeks out three meat-eating volunteers and invites them to adopt a vegan diet for six weeks. The film follows the three volunteers (Brian Flegel, Tesla Lobo, Ellen Mausner) as they adapt to the vegan lifestyle. Along the way, the healthy benefits of veganism are discussed, the viewer is exposed to a critical analysis of the nature of the meat and dairy industries, and we find out if the volunteers are able to commit to a change to veganism.

Emotive Imagery

In the segment labelled as “Week 3 The tough stuff” Tesla, Brian and Ellen are invited by Marisa to watch a presentation of undercover footage showing the practices and conditions in the meat and dairy industry (25:55). Marisa describes the motivation for this presentation in a voice over saying “it was images like these that were the catalyst for me to go vegan and I was curious to see how they would react”. The viewer is then shown an edited version of what was shown to Tesla, Brian and Ellen. The images are shocking, disturbing and likely to evoke disgust as an emotional response. A particularly potent example of such images, ones that are likely to evoke disgust, is the sequence when a number of chicks are being transported from a conveyor belt into a grinder and killed (29:06).

Similarly, there is a scene in the film where Tesla, Brian, and Marisa, are being led around an abandoned slaughterhouse by Cayce Mell (co-founder of Oohmahnee Farm Animal Sanctuary), while she explains the process that every animal has to endure in such a facility (53:42). As Cayce describes certain aspects of the production process the film cuts to archival footage, complementing and illustrating Cayce's description of the events. This archival footage is consistent with the previous example – i.e. disgusting and disturbing imagery is employed.

The likely response to these images, based on the research examined, would be one of inhibition and withdrawal. However, the context in which these images are presented is worth a special mention. The film has constructed these scenes in such a way as to suggest that what we observe, is exactly what Tesla, Brian and Ellen have just experienced. By sharing the experience and similar emotional reactions with the characters a likely response could be one of greater absorption or transportation into the narrative. However, if viewers don't identify with the characters they may be more likely to become critical of the messages presented due to the disgusting imagery (Tiplady et al., 2012; Busselle et al., 2004).

Contrary to the negative imagery employed, positive imagery is also used to good effect. The central cast rehabilitate 2 hens at the Oohmahnee Farm Animal Sanctuary. The entire scene is entirely devoted to presenting a positive view of, as Marisa describes it, "a haven where rescued farm animals can live out their lives with no threat of becoming someone's dinner". By including this scene, we develop an affinity for the rescued animals and it is likely that positive emotions will be elicited.

According to the research presented by Fredrickson and Branigan (2005), a positively emotive scene like this one is likely to generate thought-action urges.

Narrative

Vegucated adopts a similar narrative to Morgan Spurlock's *Super Size Me* (2004). Like *Super Size Me*, *Vegucated*'s narrative engagement is through the evolution and development of the characters. As indicated earlier, Marisa chooses to base the narrative around three average citizens. In doing so the possibility of viewer identification is theoretically increased (I will elaborate more on this in the next section). Thus, their development throughout the film makes for absorbing viewing for a wider audience.

A particular note worthy example is when Brian, Tesla and Marisa trespass on a farm and view a couple of dead pigs infested with flies (56:40). Their pieces to camera after witnessing this, sum up their transformation. Tesla makes this point quite clearly by stating, "We were meat-eaters like, three weeks ago ... and now ... we don't even care about getting arrested to make an effect". It is a defining moment in the film, where both characters become extremely passionate about what they are trying to achieve (57:23). Brian takes an aggressive stance, and exclaims, "This is a real fucking issue", making this the only time anyone swears on screen during the film and hinting at the transformation that has taken place. The success of the three in achieving their goal of being vegan for six weeks and surviving this change elicits positive emotions in the viewer – a challenge has been met, a journey survived, they have been successful. According to the research outlined in Chapter Three, this would suggest that such a response could create thought-action urges. For example,

we may respond with some self-reflection – ‘how can I better myself?’ ‘If these people can do this why can’t I?’

Character

The most important aspect of *Vegucated* is Marisa’s choice of characters. Each of the central characters is from a different demographic, and all are working class citizens. Brian Flegel is a 27 year old, white Caucasian and single. Tesla Lobo is a college student with a Honduran and Peruvian ancestry. Ellen Mausner is a single mother with no time to cook. Each of the participants has grown to love and eat meat and as Marisa describes them “didn’t know much about the environmental or ethical reasons for being a vegan”. In *The Cove*, the central characters reflected a more homogenous, high-class section of society. In comparison, *Vegucated* presents its central characters as average citizens attempting to adopt a different way of life. In doing so, Marisa has made the film more accessible to the average viewer, and as a result it is more likely that viewers will identify with the characters.

Marisa further strengthens the viewer and character relationship by presenting several supporting characters that have embraced a vegan or vegetarian lifestyle, for instance; the vegan bodybuilder Kenneth; Stephen, the chairman of the Christian Vegetarian Association; former cattle rancher Howard Lyman; Cayce, co-founder of Oohmahnee Farm Animal Sanctuary, who is also pregnant; heart attack survivor, Julia Spagnoli. Each individual cast member has his or her own different background and ideology, further enhancing the possibility of identification from a wide and disparate audience. In addition, Marisa explains her own story as well – from a child growing up eating bushels of bacon to a fully-fledged adult vegan. By telling her own story, she

becomes an ideal person to narrate the film as we deem her as credible because she has done it. By including a varied additional cast whose lives seemed to have been changed for the better, the filmmaker increases the likelihood that viewers will find someone in the film with whom they can identify.

Identification with the central characters may also generate similar emotional responses in the viewer. When Tesla, Brian and Ellen experience the presentation on animal production (see *Emotive Imagery*), we witness their responses to it, both verbally and through their physical actions (25:43). For example, Tesla brushes her tears away while watching the presentation. After the presentation, Marisa captures their responses. Tesla's response is "It gets me mad cause I'm like, how is this allowed?" Marisa also summarizes the information that Tesla, Brian and Ellen received through a montage of disturbing imagery. The importance of this is that our responses to viewing the disturbing images could well be similar to the responses of the characters. This would no doubt lead to greater identification with the characters and thus assist transportation into the narrative.

Concluding remarks

Vegucated's strengths lie in its characters. Compared to some of the other films critiqued in this thesis, *Vegucated* presents a cast with whom the average viewer can easily identify. By identifying with the characters in *Vegucated*, narrative transportation is likely to occur and thus help facilitate persuasion. For viewers who are not fully immersed in the narrative, witnessing the shocking imagery used in the archival footage sequences, may lead to the inhibition of transportation. This could be due to the initiation of the *defensive cascade* outlined in section 2.2 (Bradley 2000;

Lang et al 1997). As a result, the ability of the narrative to persuade may be impaired. In addition, by presenting a wholly positive story, behaviour change might develop through the activation of thought-action repertoires (Fredrickson & Branigan, 2005).

5.3

GREEN

Synopsis

Green documents the final moments of a dying orangutan (named Green). The film begins with Green, a victim of deforestation, as she attempts to recover with the aid of the people that found her. As she struggles to survive, Green relives her recent memories through a series of flashbacks, which indicate how her habitat was before and after deforestation began. Through these flashbacks, the process, causes and effect of deforestation are presented.

Emotive Imagery

The imagery in *Green* is particularly powerful. The film juxtaposes images of the rainforest with the desolation created by its clearance as it is replaced with palm oil ‘groves’. The beginning of the film reveals scenes of the still and tranquil exotic rainforest (01:42). We are an observer of the pristine landscape and the camera makes our presence clear – the framing of the deer for example is captured with foliage in the foreground, suggesting perhaps that we are present as a viewer and witnesses of this change. The aerial shot shows an unspoiled rainforest landscape. These first scenes involve us appealing to our visceral enjoyment of nature. We develop an affinity with the rainforest and the inhabitants within it. It could be said that through the framing of these shots, we are encouraged to become immersed into this idyllic setting.

Having developed or reinforced our affinity towards the rain forest, negative emotions are evoked when the rainforest is threatened and destroyed. After presenting the serene rainforest, the film jolts the viewer with a montage of trees being felled. This is followed by a shot of unsettling beauty as the area, in which a newly felled tree lies, is showered in leaves (11:50). The immediacy of these shots given the previous scenes of unspoiled nature, is jarring. These sequences effectively shock the viewer, generating feelings of despair and loss.

The very first scenes of the film are unsettling and disturbing. Green is seen in a sports bag on the back of truck, barely alive and being jolted about as the truck speeds along an unsealed rough road (00:01). Another example of a similarly emotive scene is the sequence showing how and where Green was found – covered in mud, unable to walk and barely alive (41:15). Another particularly disturbing scene involved another orangutan seen sprawled out on the bare ground with ropes attached to it (30:54). These images are too disturbing to ignore largely due to the humanization of Green's image. Close-ups of Green's hands and feet, her interaction with the people taking care of her all help to generate empathetic responses towards Green. Due to our attachment with Green, the disturbing images work on a visceral level to create an emotional response.

A particular scene worth mentioning is where two orangutans remain in a lone dying tree amidst the remains of the rainforest (37:02). At this point, the orangutan stands as a symbol for the fight against deforestation – similar to the 'stranded polar bear' image that surfaced in 2007, which served as a symbol for climate change. By association this sequence further identifies Green as the victim of a destructive act.

The most intriguing aspect of *Green* is the absence of narration. Given the research detailed in Chapter Two (LeDoux, 1986) it seems likely that the film is thus processed wholly on an emotional level. The images are left to speak for themselves. This also makes the film widely accessible to the world, as there are no language barriers to breach.

Narrative

Green presents a non-linear narrative, an unconventional approach for an environmental documentary. The film is presented in a series of flashbacks, after each time we come back to Green resting on the bed. Green's surroundings, while resting, trigger the flashback sequences. For example, the sound of a weed hacker triggers a memory of Green's, in which loggers with chainsaws are felling the forest. The film is similar in its presentation to other image-montage produced films such as the 1983 film *Koyaanisqatsi*, which rely on the power of suggestion through the visual and contemporary aesthetic, rather than through a traditional narrative.

While the visual and aural aesthetics of the film are particularly grand and moving, the unconventional format risks may impede the viewer's transportation into the narrative. There is no language to guide the way. The film relies on the viewer reflecting on the significance of what is being shown on screen. While this could prove rewarding for some, it does not reflect the traditional environmental documentary approach (that is with voice-over and linear narrative) and thus may leave viewers feeling less immersed in the film and therefore come to process it critically (Busselle et al., 2004). However, it should be noted that according to research, the images are the surest route to our emotions (LeDoux, 1986). I would

suggest that the power of the images is likely to overcome any impediment to the transportation of the viewer presented by an alternative production approach.

Character

The presentation of Green's rehabilitation allows viewers to identify with her and understand her plight better. Character identification is achieved through the careful humanising of Green's image. A woman attendant uses a stethoscope on her, a man couples Green's hand into his, Green's facial expressions, the fact that Green is placed on a bed and given nappies, a pillow and a blanket, these all imply a humanity with which the viewer can identify. Close-ups of Green's eyes and hands help not only generate an empathetic response, but we can begin to understand how Green might be feeling (Batson et al., 2002; Hatfield et al., 1993). This is further accentuated through POV shots from Green's perspective of the room she is housed in. As a result Green develops into a charismatic and anthropomorphised character.

Compared to *Earthlings* and *The Cove*, the animal's death is rather peaceful, if not noble, until Green is unceremoniously placed in a rubbish bag and taken away in a wheelbarrow. If, by the end, the viewer feels responsible for the cause of Green's death a number of negative emotions may be evoked. Despair, guilt, and sadness, may inhibit thought and action based on the research examined in the body of this thesis (Nabi, 1999; Frijda, 1986). This raises the question that if Green were to recover, what would be the associated response and would this mean we would be more likely to lend support? Could it be that such an ending would result in the viewer being satisfied and relieved by Green's survival and then conclude that everything was actually 'okay'?

While there is no direct engagement with the human ecologies of people working in the industries, it is worth addressing how humans are portrayed in the film. It is implied that consumerism and corporate greed are responsible for the deforestation. However, the film also implies that the viewer is also partly responsible for Green's demise. The film demonstrates this in a number of ways. Each sequence that begins with the exploitation of the rainforests resources ends with the consumer. For example, when the trees are felled, the conclusion to the sequence is consumer orientated - furniture being shown in the stores, people lounging about in deck chairs at a café. Additionally, through carefully placed shots or sequences, the viewer may be prompted to think about his/her role in contributing to the destruction of the rainforest.

An example of this is when the paper pulp industry is examined. It is shown that the industry is a cause of deforestation, through the production and purchase of books. Through a POV shot, a book on orangutans is picked up and looked through. Concluding this sequence, a man is shown to be reading a magazine in the room that is housing Green. The intent behind these scenes would seem to be to hold the viewer accountable for the events – eliciting guilt and remorse in the viewer for causing Green's misery and eventual death. The question is whether this will lead to an appropriate response in terms of the persuasive message contained in the film. As detailed in Chapter Two, emotions of guilt can be assessed in two main ways. An individual can either address the guilt in a self-resolving manner or deny responsibility for the violation and transfer the blame (Lazarus & Smith, 1991).

Concluding remarks

Green hinges its emotional power on the titular character. However a hybrid of negative emotions such as grief, anger, and guilt, caused by the death of Green could cause feelings of helplessness and a perception that the viewer is unable to deal with the problem. The way the story is told in the absence of narration means all attention is focused on the emotions. The result could be that, in response to certain aspects of the film, we react purely emotionally without critical analysis of the messages.

EARTHLINGS

Synopsis

Earthlings demonstrates five ways in which animals have come to serve mankind, as pets, food, clothing, entertainment, and subjects for scientific research. Joaquin Phoenix narrates. It employs the use of archival footage to chronicle the many ways that humans abuse animals for self-interest.

Emotive imagery

Excluding the brief opening and ending sequences, *Earthlings* primarily consists of disgusting and shocking imagery. Each segment of the film presents animals being abused in an assortment of ways. A particularly disgusting example is in the segment indicating how animals are exploited for their fur. A mutilated and bloody wolf is seen struggling to survive having just been skinned (55:22). The scenes no doubt work on a visceral level and are likely to stick in the mind of the viewer. However, by incorporating scenes depicting mutilated animal corpses, this is likely to elicit the innate emotional response of disgust, resulting in an aversive reaction. (Nabi, 1998)

The film is likely to also initiate the *defensive cascade* in some viewers, particularly due to the running time of the film (95 minutes). Having been exposed to highly arousing, disgusting images, for such a long time, I would suggest that some viewers would respond with a defensive cascade i.e. begin to exhibit defensive responses and as a result are likely to turn away from the stimulus. Based on research by Nabi (1998) and Tiplady et al (2012), I would expect that the film would lead to a

decreased interest in and support for the films message as a result of the audience viewing the disgusting images.

Narrative

Earthlings is more of an anthology so does not adhere to a traditional narrative format. The film demonstrates five ways in which animals have come to serve mankind under five sub headings: Pets, Food, Clothing, Entertainment and Science. In the traditional sense, it does not present a coherent or cohesive story. Rather, it shows isolated events of animal abuse which are chained together only by their abusive commonality. There is no conflict and no resolution. It does not adequately present an engaging story. As a result, narrative persuasion is less likely to occur (Green, 2004; Green & Brock, 2000). In addition, in the event that transportation were to occur, it is likely that this would be suppressed by an aversive reaction to the disgusting images. This could potentially lead to a critical evaluation of the message (Busselle et al., 2004).

Character

As the narrator, Joaquin Phoenix provides a ‘running commentary’ for the images on screen. Joaquin’s time as narrator is largely devoted to arguing for the cessation of our abusive treatment of animals. Parallels are drawn in the script between racism, sexism, Nazism, and species-ism. However, the poetically styled narration is likely to go unnoticed due to the powerful images with which we are confronted. As discussed in Chapter One, these powerful images are likely to overwhelm the message contained in the narration. (LeDoux, 1986)

Other than Joaquin as the narrator, the majority of humans seen on screen in *Earthlings* are depicted as violating moral codes. For example, during the Shechita ritual slaughter (24:30), Joaquin comments on the scene suggesting that; “inverting frightened animals for the slaughterer’s convenience is also a violation.” Another example is the verbally and physically aggressive elephant trainer (1:04:45). The footage shows the trainer constantly beating one of the elephants. The wrong perceived by the viewer is likely to evoke feelings of anger and hatred towards the person depicted as responsible for the constant beating. If anger is the elicited response, then a mobilization of behaviour may occur towards the offending agent (Frijda, 1986; Lazarus & Smith, 1991). But given that disgust could also be a response to the scene any action responses may be inhibited (Izard, 1977; Lazarus & Smith, 1991; Rozin et al., 1993).

Concluding remarks

Earthlings endeavours to persuade its audience by using shocking and offensive stimuli. Based on research examined in Section 2.1 (Nabi, 1998; Tiplady et al., 2011), it is unlikely that viewers would be persuaded by the message that *Earthlings* presents. I would suggest that *Earthlings* is more likely, not only to offend viewers, but also to lead them to develop aversive responses to the overtly negative images contained in the film.

5.5

THESIS FILM: BLUEWATER

Synopsis

Held in Coffs Harbour, Australia, the Bluewater Classic competition attracts spearfishers, not only from around Australia, but also from around the world. Mark Kallman and his dive partner Michael Featherstone entered the 2012 competition. However, this year could be the last chance either has of winning the title of Bluewater Classic Champion. In early 2012, a report was released which detailed proposed changes to the Solitary Islands Marine Park, an area which plays host to the Bluewater Classic every year. The changes made could increase the protection of the beautiful and diverse marine life that the marine park holds. Public response to the changes was divided with some lauding and some criticizing the proposed changes. *Bluewater* explores the impact of these changes on the fishing industry, user activity and marine species.

Emotive imagery

In shooting and writing the script for *Bluewater*, our objective was to encourage viewers to engage with the marine life in the reserve. By developing an interest and an affinity with the marine life, our aim was to persuade people that the marine park was worth protecting. To this end, we included in our film, sequences showcasing the uniqueness and diversity of the marine life. Footage showing the diverse fish life, manta rays, and whales, are examples of sequences we included with this objective in mind (10:57 – 11:34; 12:39 – 13:21). Our intention was to elicit a positive emotional response to the beauty and diversity of the marine life displayed. In section 2.2 of this

thesis, the role that positive emotions have on persuasion was discussed. In particular Fredrickson and Branigan's (2005) study showed that positive emotive scenes like this one are likely to generate thought action urges. In addition, positive emotional experiences involving nature, similar to the ones we hoped to elicit with these sequences, are known to positively influence conservation behaviour (Finger 1994; Langeheine & Lehmann 1986).

During post-production, we had initially extended a scene in which Mark begins to vigorously stab a fish in the gills causing blood to spill out of the fish. In the part of Mark's interview used over this sequence, he confirms that spearfishing is a blood sport (6:45). In the end, we chose to make the sequence shorter, as we thought it had the capacity to disturb viewers. We believed that the viewer might have an aversive response to the images and thought this could potentially lead to negative feelings towards Mark and spearfishers in general. Negative emotions such as anger, or disgust may be associated with the scene, leading to viewer avoidance (Izard, 1997; Nabi, 1999).

Narrative

The difficulty in postproduction was to find a balance between telling the story of what was probably Mark's last chance of winning the Bluewater Classic and the story of conservation in the Solitary Islands Marine Park. Initially, we had developed a film in which the Bluewater Classic did not take up as much screen time as it does in the final version. At the beginning of pre-production, our aim was to centre the film on the marine park itself and show how people's lives were affected by it and the proposed changes. During the film's rough-cut viewing with peers, their response was

that there needed to be more clarity regarding the overall objective of the film - whether it was about the marine park or about the spearfishing competition. Thus, we decided to create a strong central narrative based around Mark's goal of winning the spearfishing competition as we believed this would engage the viewers more successfully than a more discursive look at the arguments for and against the changes proposed for the marine reserve.

In making this decision we realised that some eco-minded viewers, who are part of our target audience, might feel alienated by this choice. By centring the film on a spearfishing competition we had adopted a more anthropocentric view of the marine park rather than an eco-centric one. Scientists and conservationists that we had talked to about the film could be disappointed knowing that we had decided to create drama out of a spearfishing competition rather than focus more on the issues at hand. If such members of the audience do feel alienated in this regard, transportation into the narrative would be less likely to occur.

Making Mark's story the central narrative resulted in further problems. His story is his quest to win the Bluewater classic and beat his rival Michael Featherstone. The success of this narrative relies on identifying and empathising with Mark and his pursuit of his goals. As I will explain in the *Character* section, identification with Mark is an issue in itself. Failure to identify with Mark would mean that there was no just reason for the viewer caring whether Mark won or lost.

The central narrative, that is, Mark's pursuit of his own goals, also had the capacity to be in conflict with the rest of the film. His desires are limited to the Bluewater Classic

and rarely drift into the story of the conservation of the marine park. Thus, the film still suffers from the criticisms levelled at it at the rough-cut screening. The story coheres in terms of Mark's perspective but it still feels as if it consists of two components that have not been successfully made to cohere - the story relating to the fate of the marine park and story regarding Mark's attempt to win the competition.

Characters

In production, we had thought carefully about whom to include in our cast. Our aim was to present a balanced view of the environmental issues involved. We sought to present these views in a manner appropriate for a wide general audience. In an attempt to achieve these objectives, we interviewed various individuals who could represent their respective fields and views in the film, e.g. marine scientists, commercial fishermen, spearfishermen.

Danny Stewart, a commercial fisherman, was an important character for us. We wanted viewers to empathise with his position – that his business could suffer if he was excluded from some fishing zones. We wanted viewers to understand that commercial fishermen could be adversely affected by this proposed change. In an attempt to generate empathetic responses, certain shots were included. For example, when we come back to Danny for the last time (23:12) he states, “there is only certain areas where I can work and if those areas get taken away from you, it basically leaves you with nowhere to work so yeah... I hope it doesn't get to that point, I really do”. The shot is then held for a few seconds on a close-up of Danny's face to capture his sorrowful expression. In doing so, we hoped to generate an empathetic response towards him, and helping the viewer to identify with him and his plight

With Mark as our main character, it was important that people identified with him as soon as possible. We hoped that the rivalry with his diving partner would help the identification process, as friendly sporting rivalries of this sort are relatively common experiences. By building up this rivalry between them both, and stating in the film that this could be the last chance for Mark to win the classic, we had attempted to evoke empathy for him and his objective.

With the benefit of hindsight, I have come to realise that this is unlikely. Mark's 'issues' – winning and entering the competition next year - may not be deemed by viewers as being as important as the other the issues raised in the film relating to the Marine Park. Mark even acknowledges this in the film, saying “for us it's a question of using the marine park for recreational purposes, I don't derive an income out of the marine park”. As a result, identification may be weakened in this regard.

There is another reason why our decision to use Mark as our central character may have been flawed. He stands as an exemplar of 'hunting and fishing' masculinity. His primary challenge is one-dimensional - to win the Bluewater classic trophy. His involvement with the marine park stops there. In addition, Mark is a South-African involved in an Australian competition, featuring in a film that has been made to influence an Australian audience. As a result, only a limited portion of the audience is likely to identify with him. It is in light of these issues, that I suggest that viewer identification is less likely to occur and empathetic responses are less likely to be aroused (Slater & Rouner, 2002). As a result it is less likely that the film will change attitudes.

There is one more important issue. There are no female characters in the film. It is likely that a female's perspective is likely to be radically different from a male perspective. The spearfishing competition is more or less a masculine sport. In addition, we failed to include a female's views on not only the competition but also on the marine park. Without a female representative, woman viewers may feel angry, shut out or ignored, finding it difficult to relate to, or identify with, anyone on screen. As a result, it may be difficult for female viewers to be transported into the narrative of the film.

Concluding remarks

Our aim was to produce a film that did the following: engage viewers in the narrative, persuade viewers that the marine park needed protection and convince them that changes to the marine park would affect the entire community. Including characters with different backgrounds, and beliefs, was important to us as filmmakers as it promised to provide a balanced view rather than a partisan one. This objective was largely achieved. The film fairly presents different viewpoints and doesn't become a just a platform for one viewpoint. By telling the story from a spearfisher's perspective, we believed we had identified a novel way of discussing an environmental issue. This was in attempt to appeal to an audience who were less likely to be involved with environmental issues and less likely to watch environmental films. As a result it doesn't unnecessarily alienate certain parts of the potential audience. I would suggest that by including footage showcasing the diversity and beauty of the marine life in the reserve, positive emotions are elicited that will help convince viewers that the marine park warrants protection.

However, by concentrating on an engaging narrative, we didn't adequately integrate the issues relating to the marine park. I believe by trying to appeal to a wider audience, the film did not successfully clearly delineate all the issues involved. Mark's story feels slightly divorced from the rest of the film. As a result the cohesiveness of the film is impaired.

In retrospect a different approach to the narrative might have proved beneficial. If we had shot sequences of Mark engaging in activities in the marine park outside of the competition, and talking with others with different points of view regarding the park's future, we would have integrated the two parts of the documentary more successfully and may have witnessed a change in Mark's position. He may have questioned himself regarding his primary goal of winning the Bluewater Classic and seen the changes proposed for the reserve in a different light. Had that been the case we could have documented an inner conflict and perhaps its resolution at the end of the film. In hindsight, we could also have recast the main character altogether choosing someone who was more directly affected by the proposed changes and whose plight would attract a stronger empathetic response from the audience.

CONCLUSION

Gregg Mitman, author of *Reel Nature*, said that when environmental filmmaking is done right, the artistry can engage an audience, create hope and inspire mobilization (Evans, 2007). As environmental filmmakers we want to do more than just provide entertainment, we want results. How can an environmental film be ‘done right’ and how can it produce results? This thesis attempted to address these questions. In addition, this thesis examined the ways in which the various components of an environmental documentary can influence viewers. This thesis also attempted to examine whether the creative component of the thesis, the film *Bluewater* worked as an effective environmental documentary.

Emotive imagery in environmental documentaries is often used to emotionally persuade viewers. Many of the films that were analysed used images in this manner. In fact, every film that was examined used some type of shocking or disturbing imagery. From an examination of the films selected for analysis and based on the research outlined in this thesis, I would suggest that such images could reduce the effectiveness of an environmental film. This was particularly the case in *Earthlings* where an aversive response to this film would be likely given its disturbing content. The research suggests that filmmakers should refrain from using overtly negative images in environmental documentary films. Conversely positive images are currently under-employed in environmental documentary, and their effectiveness, largely under-researched.

A compelling narrative makes a film entertaining and without this, viewers are likely to counter-argue against the persuasive content on screen. *Vegucated*, *Green*, and *The Cove*, all presented emotionally engaging narratives. In contrast *Earthlings* fails to engage the audience in a narrative and as a result is less likely to involve the viewer. Viewer involvement can also be influenced by their identification with the film's characters. Filmmakers should also be aware of how their characters can affect a viewer's transportation into the narrative and influence the overall effectiveness of an environmental film. *Vegucated* is an example of a film where the characters have been used to good effect. The film's characters, Tesla, Brian, and Ellen, are likely to engage a wide audience through the aspects of these three people's lives with which a viewer can identify. We witness their change, and a largely carnivorous audience can empathise with them as they face the challenges of a vegan lifestyle over a six-week period.

In undertaking this investigation of environmental film, I have developed a better understanding of what is required to succeed in making an effective film in this genre, that is, one that inspires action. We need to carefully consider how we use filmic components such as emotive imagery, narrative, and character work, to spur audiences into action. As a result of this investigation I believe our thesis film *Bluewater* is impaired in terms of its use of narrative and character, to the extent that it is less likely to produce the empathetic reactions we desired and ultimately is less than successful as an environmental film. Having said that, such learning experiences in our first film have proved invaluable.

If filmmakers want to make a change and influence social thought and decision making, this thesis offers a guide as to what may work best, and what is best avoided, when attempting to persuade viewers with an environmental film. If the thesis film *Bluewater* were to be made again, for example, I would endeavour to find a more engaging central character. A character who viewers could feel more empathetic towards and whose goals were ones with which a general public could easily identify. Such a character would enhance the possibility that viewers would be transported into the world of the character. Such transportation would make the film more likely to succeed as an environmental documentary film.

This is not to say that by creating an effective environmental film that inspires action, definitive social change will be the result. If considered as a lone entity, the power of the film is likely to be short-lived. Viewers may express the intent or the motivation to commit to environmental change after leaving the theatre or living room, but will it last? An environmental film is only one stimulus among a plethora of others that can help turn emotional energy into action.

In addition, while emotive imagery, narrative and character are important predictors of a film's persuasive power there are other factors that contribute to the viewing experience. The soundtrack for instance is likely to assist in stimulating and possibly determining an emotional response to certain scenes. Other cinematic components such as colour and the editing style should also be considered in future.

Interest in documentary filmmaking has grown. We need only look at the proliferation of university courses in filmmaking and the establishment of NGOs such as

Filmmaking for Conservation to confirm this assertion. By harnessing, the power of film, there is potential for filmmakers to make a measurable and long-lasting impact on the world, but only if they know how.

APPENDIX 1. ETHICS OF ENVIRONMENTAL FILMMAKING

Questions regarding the ethical considerations that underpin environmental films and the ethical dilemmas facing the makers of environmental films arise here – questions that could, in and of themselves, become the basis for a significant and lengthy thesis.

The ethical foundation upon which environmental films rest is a view of planet earth as a finite resource and the concern that the behaviour of our own species is having a significant and negative effect on that finite resource. As that impact is based on verifiable scientific evidence the ethical basis for such documentaries is firmly based. (UNDESA, 2011; UNEP, 2013).

The ethical dilemmas facing the environmental filmmaker are, however, more complex in nature. Can environmental films be little more than propaganda or what some writers have described as ‘docuganda’ – ‘[an] attack piece posing as an impartial documentary report’? (Hampe 2007, p22) To avoid the ‘docuganda’ tag a number of principles need to guide the environmental filmmaker for example: is the material presented in the documentary plausible and is that plausibility based on careful logical argument and verifiable evidence, is that evidence and argument presented fairly and is it made clear to the audience if and/or when the ideology of the filmmaker is driving the film?

However such principles are themselves debateable and deserve a fuller and more robust analysis in a thesis that focuses on them. I have chosen to remain focussed on

the effectiveness of environmental films and trust that my thesis may stimulate in another master's students the desire to thoroughly investigate the ethical issues inherent in environmental films.

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