

Critical practice and the public pedagogy of environmental and conservation media

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Abstract

This article addresses the reluctance of mainstream corporate and commercial media to critically address major environmental and conservation issues. The resulting public pedagogy largely reproduces the neo liberal ideology informing much conservation practice and discourse. Nonetheless, the media retains an unrealised critical educative potential that needs to be drawn upon by critical media practitioners and educators. To do this educators need to be cognizant of the phenomenological experience of spectatorship, the aesthetic form and relational contexts of media consumption, production and informal learning. Referring to the work of Vivian Sobchack, Henry Giroux, Pierre Bourdieu and Gilles Deleuze, the article argues that if critical practitioner-educators apply an analytic framework informed by critical realism, counter hegemonic elements found within corporate and independent media productions and conservation initiatives may be rearticulated and re-presented in a more positive manner. For this to occur, critical media practitioners-educators need to recognise that feasible political and normative alternatives are both available and practically possible. The article ends by discussing some relatively recent non-fiction productions that express a commonality between human and non human animals and so form the basis of a critical environmental education-media practice.

Keywords: media, public, pedagogy, critical, environment, conservation

Introduction

It is now almost a truism that we learn as much, if not more, outside formal learning environments than within them. Media analysts, theorists and critics have explored media effects, agenda setting, cultivation, para-social interaction, edutainment and the pedagogic implications of non-fiction and fiction productions. Educationalists have written extensively about both old and new media literacy, the educative value of TV programming and the re-emergence of a McLuhanesque concern with how new media technologies may be reshaping our culture and our minds (McLuhan, 1964; Lum, 2006). Neil Postman (1986) and Henry Giroux (2001) have questioned the media's potential to offer either critical or progressive learning opportunities to

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3 audiences although for some commentators they underestimate the active
4 processes of interpretation and re-articulation occurring among individual media
5 consumers and interpretative communities. Public education and communication
6 campaigns have used film, photography, television and now the internet for many
7 years with considerable success. Even so, some critics have been insisting for many
8 years that image based media deflect attention away from the more serious or
9 deeper logocentric arguments (Postman, 1986; Mander, 2002; Winn, 2002).
10 However, as Mitchell (2002) notes, image based communication is by no means one
11 dimensional or lacking in analytical import. All media are actually mixed media
12 employing varying ratios of sense impressions and sign-types.
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23 Conservationists, environmental activists and critical educators are often innovative
24 and creative users of image based media. They can communicate clear messages
25 that may nurture public concern and stimulate further learning and sometimes
26 effective action (Author, 2010). Their field of reference is vast but in this paper
27 environmental and conservation filmmaking will refer to broadly those productions
28 that address the frequently negative ecological impacts of human socio-economic
29 development whereas wildlife and natural history filmmaking is understood as taking
30 animal behaviour, ecological adaptation and evolution as its primary concern. Such
31 media practice constitutes a form of public pedagogy but importantly rigorous critique
32 does not generally characterise mainstream/corporate environmental and
33 conservation media productions although many do have an overt educative remit
34 (Cottle, 2004). Conservation and environmental scientists frequently advise on,
35 feature in, write and/or present natural history television series, 'specials' and
36 documentary films. Rarely though will production companies commission evaluative
37 research on whether learning has actually taken place.
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51 The BBC's long running Natural World series and National Geographic
52 documentaries offer ample evidence of this. Indeed, some natural history producers,
53 such as Steve Nichols (2010) maker of *Drain the Oceans* (2009) for National
54 Geographic view their programme making as a form of public outreach for science
55 but admits, "even though the most you can hope for is that they [the audience] come
56 away with a few facts or factoids" rendering the educative influence of natural history
57 programming on audiences a perennial interest of filmmakers and conservation
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3 practitioners. For George McGavin (2010), a former Oxford academic and presenter
4 of the BBC documentary series *Lost Land of Volcanoes*, films are made to inspire
5 but it is hard to know what learning actually takes place although anecdotally he can
6 cite a number of individuals who became conservation scientists through being
7 inspired by TV programmes. Similarly, environmental filmmaker and professor of
8 Environmental Filmmaking at the American University in Washington DC Chris
9 Palmer (2010) told aspiring filmmakers at the 2010 Wildscreen Film Festival that
10 television executives are predominantly concerned with basic audience ratings and
11 ratings remain the major influence on what gets funded and distributed¹. These views
12 simply illustrate common knowledge within the industry, that is, critical environmental
13 or conservation programmes are frequently viewed by major commissioning editors
14 as unattractive and undesirable commercial propositions (Bouse, 2000; Chris, 2006;
15 Author, 2010; 2011).

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28 When making a pitch to commissioning editors at festivals or trade fairs new
29 filmmakers are frequently advised to avoid the 'c-word' (conservation). It is often
30 something to be avoided when making a pitch as audiences frequently avoid,
31 distance themselves or selectively deny uncomfortable, disagreeable or inconvenient
32 truths (Zerubavel, 1997; Norgaard, 2006). However, there is some evidence that
33 television natural history does have some positive impact on attitudes and
34 behaviours (Chris, 2002 & 2006; Holbert et al, 2003). Fortner and Lyon's (1985)
35 study of a Jacques Cousteau television special noted that audiences were clearly
36 receptive to new information but although producers were successful in altering
37 viewer attitudes in their preferred direction, that is against the culling of harp seals,
38 attitudinal changes were short lived. Interestingly, Cousteau combined an
39 "ecologistic" with a "moralistic" attitude and the success or otherwise of his
40 documentaries, often directly conceived as public and pedagogic interventions, were
41 largely dependent on the pre-existing knowledge, values and life experience of his
42 audiences (Shaheen, 1987). Fiction films can have a positive pro environmental
43 influence on audiences too. A study of the Hollywood narrative film *Medicine Man*
44 (1992) concluded that viewers "became significantly more favourable in their
45 attitudes toward forest preservation" (Bahk, 2011:8-9). Largely through immersion in
46 story and character, viewers become highly receptive to filmic techniques leading the
47 author to conclude (Bahk, 2011: 10),
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It is plausible that narrative films with their suspenseful presentations of events involving human characters could facilitate constructive learning in “education for sustainability” through eliciting intense emotional, empathic reactions to environmental issues portrayed.

More Than a Representation and Less than a Thing

Just as all media are mixed media, images are more than just pictures. They impact upon thought and perhaps constituting a shock to, or even a form of, thought ‘communicating vibrations to the cortex’ (Deleuze, 1989: 157). For the Soviet filmmaker Sergei Eisenstein, montage is a dynamic process creating a product or ‘intellectual cinema’ that has as its correlate ‘sensory thought’, its own emotional intelligence as well as conscious concepts. Additionally, as Deleuze explains, the figure-image, say a person or an animal, may embody an affective charge creating a new or intensifying an existing shock. Film theorist Vivian Sobchack (1992; 2004), drawing on the existential phenomenology of Maurice Merleau-Ponty, refers to images as having an affective materiality arguing that a pre-reflective bodily responsiveness to films is a fundamental characteristic of the viewing experience. She writes (Sobchack, 2004: 63-64).

... we do not experience any movie only through our eyes. We see and comprehend and feel films with our entire bodily being, informed by the full history and carnal knowledge of our acculturated sensorium. Normatively, however, the easy givenness of things for us to see at the movies and vision’s overarching mastery and comprehension of its objects and its historically hierarchical sway over our other senses tend to occlude our awareness of our body’s other ways of taking up and making meaning of the world - and it’s representation.

With the powerful sensory impact of IMAX 2-D, and particularly 3-D, ‘viewer’ experiences have become increasingly immersive and totalising. Science Centre’s, Aquaria and Natural History Museums frequently promote large format digital 3-D environmental, natural history and wildlife films as a stunning sense experiences.

In his article on immersion cinema Tim Recuber (2007) argues that 3-D IMAX projection on screens that may be up to the equivalent of eight stories and,

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3 combined with the effects of auditorium architecture including stadium style seating
4 and digital surround sound, offers audiences a lived experience that amplifies the
5 first-person perspective to a new level of simulated participation. He writes (2007:
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12 With powerful base notes and explosions providing a visceral rumbling,
13 curved screens enveloping one's peripheral vision; and increasingly, 3-D
14 images literally jumping off of those screens, contemporary film exhibition
15 represents a bodily discipline, a technological interface between narrative and
16 reality that blurs many distinctions between lived bodies and screen space.
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20 For Recuber (2007) such visceral participation is not necessarily the same as
21 meaningful audience interaction but recognises that such immersion cinema has the
22 largely unrealised potential to become a 'thirdspace' allowing for openness, flexibility
23 multiplicity and far more agency or embodied interactivity than are afforded by other
24 media technologies. Keith Beattie notes in a complementary fashion that the size of
25 the image, relatively slower rate of cutting and a higher incidence of (often aerial)
26 travelling shots than usually experienced in conventional 2-D movies, functions as a
27 mode of cognition or a technologically-enhanced revelatory 'showing'. The result is
28 the production 'of a documentary display which radically enhances the basic premise
29 of documentary as a mediation of the real world capable of generating knowledge
30 and understanding' (Beattie, 2008: 150). Thus, films such as *Ocean Wonderland* (d.
31 Mantello, 2003) and *Dolphins and Whales – Tribes of the Ocean* (d. Mantello, 2008)
32 show marine animals moving effortlessly from positive (behind the screen plane) to
33 negative space (in front of the screen plane) seemingly making real the marketing
34 invitation to join the creatures in their natural adventures. Thus, the spectator
35 experience becomes one of 'presence', that is a subjective perception in which the
36 viewer largely or wholly fails to acknowledge that current experience is being
37 essentially produced or induced by a technological apparatus (Lombard & Ditton,
38 1997). As Noel Carroll (2003) writes, emotions help manage and direct attention
39 enabling individuals to organise the details of their experience into significant
40 gestalts, values patterns and cultural meanings.
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59 In a narrative fiction film, and some documentary forms, the spectator's emotional
60 responses are organised through each scene, sequence, narrative event, plot line,

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3 character and an array of visual and aural effects articulated according to
4 prefocussed generic codes, that is aesthetic techniques intended to elicit a specific
5 response or interpretation in the viewer. In other words, to be effective the criterially
6 prefocussed, or encoded, film text must become aligned with the emotive focus of
7 the audience and, to ensure that this is so, the filmmaker must invite the audience to
8 invest in the film's issues, characters, stories and experiences. All this requires
9 educators and researchers to seek more holistic and connective understandings of
10 how the media may, and do, shape social cognition, affective knowing,
11 environmental perception, contribute positively to formal and informal learning and
12 realise the potential of large screen immersive cinema to be a 'thirdspace' (Recuber,
13 2007; Apley, 2008; Griffiths, 2008).
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24 Theoretical research on audience's apprehension of still and moving image texts
25 have incorporated recent findings from neuroscience such as Torben Grodal's
26 (2006) PECMA flow model incorporating perception, emotion, cognition and motor
27 action. In *Embodied Visions* Grodal (2009) argues that films provide scenarios for
28 living through vital aspects of human experience. Using evolutionary theory, Grodel
29 shows that films often reflect human beings' universal embodied nature and may
30 help offer new resolutions to these problems. Similarly, Anna Munster (2006)
31 explores the interaction of science and art showing how digital culture is
32 reconfiguring bodily experience. Digital artists, in particular, often place the human
33 body in a sensory physical interaction with technology. New artefacts are being
34 created from a range of different physical and virtual ingredients coming together in a
35 process that Deleuze termed 'folding'. The mediascape is simultaneously converging
36 and diverging, one being imprinted on the other – small screen 2-D, massive screen
37 3-D. Film texts are interacting with other media texts and being transformed through
38 their differential conditions and contexts of consumption, use and re-production. New
39 media technologies such as the internet, ipod or iphone offer social, as oppose to
40 individual, models of cognition and creativity although the form technological
41 interaction may take remains resolutely one of isolation. Thus, I may view the trailer
42 for *Wild Ocean* on my iPhone listening to the sound through earphones but in a
43 social public space. I may interact with other viewers, animal lovers or
44 conservationists, in a variety of different spatial and temporal locations diachronically
45 or synchronously. The trailer becomes more than a text and the tweet or blog
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3 becomes more than a message as informal e- or mobile learning platforms become
4 increasingly baroque in their affects, contingencies and differential affordances. All
5 this enables the user to generate a multiplicity applications, repurposing and
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becomes more than a message as informal e- or mobile learning platforms become increasingly baroque in their affects, contingencies and differential affordances. All this enables the user to generate a multiplicity applications, repurposing and reversioning.

For Deleuze (1995: 149) “the brain’s organised like a rhizome”, seemingly a botanic metaphor referring to a mass of laterally growing roots of shoots, and the cinema “screen can work as a brain”. With the advent of new media technologies and with an emerging micro-politics of new media culture, the cinema and the smart phone are themselves enfolded in a new constellation of mediated images and learning. This suggests that the rhizome, as a conceptual tool, connects with other artistic, social or everyday fields and, in so doing, metamorphoses into other figurations that are not purely representational (Colombat, 1991). The cinematic, and by extension the new media image, as Rodowick (2009) notes in the *Afterimages of Gilles Deleuze*, is an image of thought and a new way of thinking thought, of undertaking practical critique. New media ecology is changing human social relationships and our relationships to the ‘natural’ environment and to the ever declining numbers of non domesticated animals (Watson, 2011). In her discussion of digital technologies media texts and environmental awareness Ursula Heise (2003: p.71) writes that if the digital environment becomes conflated with that of the physical, including its actual and imagined wildlife then,

The lack created by diminishing nature and disappearing species (...) may come to be filled in the cultural imagination of computer literate societies by alternative life forms on the global Web.

The gap will be filled by digital image archives and electronic zoos made possible, perhaps necessary, by the onward momentum of capitalist economic development, world trade, and technological innovation and business opportunism. Criticality is not the same as expression or communication and the learning process needs to distinguish between them. This presents serious and important critical challenges to environmental educators, conservationists and media practitioners. Learning, creativity and expression often involve resisting, of linking signs, events, life and vitalism to wider social and ethical responsibilities. Deleuze writes (1995: 131),

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Different modes of expression may have different creative possibilities but they are all related insofar as they must counter the introduction of a cultural space of markets and conformity - that is, a space of “producing for the market” - together.

Classic blue chip TV series such as BBC’s *Planet Earth* (2006) or National Geographic’s *Great Migrations* (2010) presents the audience with a montage of attractions, an exhibition of awe and wonderment, a media exercise in what may be termed ‘scopophilic biophilia’ – a love of looking at nature. There is movement - animals react to circumstances and seek to overcome them instinctively. As Gilles Deleuze writes (1986), the relations between images are key and when perception becomes purely optical the image(s) relate most closely to the action. When they become thought rather than seen, they become legible rather than simply visible creating a pedagogy of the image. For Deleuze (1989), the movement-image and the time-image have the capacity to create fluid movements and temporalities mobilising and inducing particular logics of affect towards heterogeneous political ends. As Sobchack (2004) argues, documentary space is constituted as the perceived conjunction of the viewer’s lifeworld and the space of the film text activated and subjectively judged, or inscribed, as ethical for it is a world that has been called into being, and shared, by the visual responsiveness and responsibility of the viewer and filmmaker combined. Film and the moving image, in this context, is therefore a mediator by which learners may express and constitute themselves and by which things, that may otherwise remain hidden, come into view. This will be developed in a later section.

Critical Realism

The public pedagogy of environmental and conservation media constitutes part of the wider socio-cultural environment. It may either disclose or foreclose various conditions and possibilities for learning, agency and cultural practice. Critical practice, which is at least in part also constituted through material and symbolic relationships, links capabilities to the abilities of groups and individuals to undertake action. Consequently, knowledge and desire, being inextricably connected to forms of technologically mediated modes of address, need to become a central focus for

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3 critical educators. The radical educator Henry Giroux (2000: 354) argues that “public
4 pedagogy is defined through its performative functions, its ongoing work of mediation
5 and its attentiveness to the interconnections and struggles that take place over
6 knowledge, language, spatial relations, and history”. In this context, teaching and
7 researching public pedagogy is part of a critical practice that aims to uncover lived
8 relations of power, their discourses, representations, structures of affect, networks of
9 diffusion and socio-economic conditions and contexts of production. Giroux states
10 (2004) that the ideological dominance of neo-liberalism over the last twenty years
11 has meant that the educational import of culture has undermined some important
12 foundations for critical agency. However, certain models of higher education remain
13 “one of the few sites where students can be educated to understand, engage
14 critically and transform those dominant spheres of public pedagogy that are largely
15 shaping their beliefs and sense of agency” (Giroux, 2004: 498) but higher education
16 itself is becoming increasingly dominated by the logic of market. As Pierre Bourdieu
17 (Bourdieu and Wacquant, 1992) reminds us, academics, particularly social scientists,
18 tend to be located near the dominated pole of the field of power.
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33 Critical educators, of which sustainability practitioners ought to be included, need to
34 embrace a pedagogy of intervention that relates everyday experiences to the wider
35 material circumstances of their generation. Such a politicised critical pedagogy is not
36 about indoctrination but rather an exploration emphasising norms of social
37 responsibility, democracy and ecological justice. It requires the development of
38 analytical skills, an ethics and an articulation of concepts and percepts that
39 recognising culture to be a domineering force but seeing learning as potentially
40 emancipatory. Thus, a critical pedagogic practice should not devalue or ignore the
41 heuristic possibilities afforded by various hegemonic cultural forms as sites of
42 exploration, contestation, resistance and transformative learning (Ellsworth, 2005;
43 Savage, 2009). However, in many instances this will be dependent on educators
44 researching and being able to draw out, and on, difference. The critical theorist
45 Nikolas Kompridis (2005: 332) writes,
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58 Critique does not aim at truth but at the reflective disclosure of possibility, the
59 ‘truth’ or ‘correctness’ of which can be verified, to the extent that possibility
60 can be ‘verified’, only by the addressees of critique and only retrospectively, in
the course of time. In other words, critique is unavoidably ‘utopian’; not in the

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3 sense that it depends on the availability of a determinate utopia, but in the
4 sense that it depends on the openness and receptivity of the future to utopian
5 thought – to the genuine possibility that things might be otherwise than they
6 are.
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10 For Denzin (2003), when critical imagination is framed as an interventionist ideology
11 it is necessarily hopeful of change, improvement and challenging of hopelessness
12 and quietism. Hope is ethical, moral and peaceful. It confronts cynicism and the
13 belief that change is either impossible or too costly. Critical researchers and
14 educators therefore live, or perform, these 'utopian' ethics through their practice and
15 many have done so by co-opting the educational force of popular culture and
16 everyday lived experience (Tisdell & Thompson, 2007; Wright & Sandlin, 2009).
17 Critical pedagogic practice acknowledges environmental and conservation media as
18 being part of a complex constellation of contexts each with their own imprinted
19 values and ideological politics, debts and relationships to the wider socio-economic
20 and political fields. The public pedagogy of commercially produced wildlife and
21 natural history films generally purvey a view of the natural world that is actually far
22 from natural with its ideological occlusions rendering the images of nature pristine,
23 unspoiled, pure, sublime and basically false (Foale & Macintyre, 2005). The same
24 economic and financial processes that drive the destructive palm oil industry, agri
25 business, factory farming and dragnet fishing deforestation, species extinction,
26 economic development also drive the media industry - the market, profit,
27 commodification, capital accumulation and so on (Harvey, 1996; 2006). Sharon
28 Beder (2006) has meticulously documented, global corporations have, over the last
29 thirty years, successfully established an hegemonic supremacy in all areas of social,
30 economic, environmental and political policy making. Environmental and wildlife film
31 festivals often include trade fairs exhibiting new technologies and provide an
32 interface between art and finance, business and conservation, text and context.
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53 What is invariably absent in the public pedagogy of mainstream wildlife and natural
54 history films, including the DVD 'extras', is this politico-economic production context
55 but it is this very context that needs to become a key focus of critical research and
56 pedagogic engagement. To lift the ideological veil from these media productions,
57 researchers and educators must work within a framework of philosophical realism
58 (Bhaskar, 2008; Soper, 1995) where 'nature' refers to the deep structures, powers
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3 and processes that operate constantly within the physical world conditioning the
4 ways humans may, or can, intervene in, reshape, exploit, understand or interact with
5 the environment. What we see are basically surface appearances, empirically
6 observable natures like the tailored countryside, the clearcut forest, palm oil
7 plantation, game reserve or luxury ecotourist resort. Normative standpoints are
8 embedded in the ideological representations of these appearances. So, being able to
9 critique these standpoints becomes a stage towards conceiving, identifying,
10 examining and realising feasible 'realistic' alternatives (Sayer, 2000). For
11 geographers like Noel Castree (2003; 2008a; 2008b), Marxist normative standpoints
12 and alternatives are the most convincing. Although elements of nature are privatised
13 and commodified, nature as a whole is not. Complex ecosystems such as the
14 Indonesian rainforests have been split and commodified to create legally definable
15 and tradable properties.
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28 Following the financial crises of 2008, there has been a systemic deepening of the
29 operational space of advanced capitalism in the global South and North (Sassen,
30 2010). For centuries CO₂ has been simply dumped into the atmosphere.
31 Atmospheric pollution and climate change can be ascribed to market failure and the
32 metabolic rift between capitalist accumulation and the Earth's natural ecologies
33 (Benton, 1989; Foster, Clark & York, 2010). All commodities are ultimately
34 monetised and commensurable with any other type of good - the Indonesian
35 rainforest and the Discovery Channel documentary on that disappearing forest.
36 Nature is itself 'produced' (Smith, 2010) as a means to the end of capitalist economic
37 growth. Human beings, plant seeds and chickens are elements of a commodification
38 process that conceals the entwined processes of labour exploitation and ecological
39 degradation. Ecotourism, carbon trading permits and the very concept of "ecosystem
40 services" are aspects of this produced, commodified nature which, apart from
41 harming 'the natural world', invariably disempowers local human and non human
42 communities.
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Public Pedagogy and Critical Practice

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3 For a critical media and environmental education practice to assert itself, the
4 educator seeks to combine a range of cross disciplinary analytical skills, eco-political
5 and media literacies and knowledge(s) that will inform the selection, presentation,
6 production and dissection of specific media texts, contexts and ecologies. The
7 methodological criteria informing the discussion of the media texts and interventions
8 below has as its starting point one recognising that human and non human animals
9 have co-evolved and are biologically, socially and ethically interdependent. This is
10 clearly the case with Jacques Cousteau's films and books which, although may be
11 fading from public memory, do also offer explicit and powerful critiques of capitalist
12 market forces and the uncontrolled actions of large corporations. A number of them
13 such as *The Warm Blooded Sea: Mammals of the Deep*, *Mediterranean: Cradle or*
14 *Coffin* from *The Odyssey* (1978) series and his final book, *The Human, the Orchid*
15 *and the Octopus*, present a clearly oppositional perspective. He writes (Cousteau
16 and Schiefelbein, 2007: p.159),
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30 The depleted Third World waters, the fish sold for swine feed, the
31 squandering of unprofitable fish - all point to the fact that we deplete world
32 waters not in the quest for food, but in the quest of profits.
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35 Rachel Carson, although no revolutionary, famously wrote a treatise that was clearly
36 treated as dangerous by the large corporate interests threatened when the effects of
37 nature commodification became too apparent. The PBS American Experience
38 documentary *Rachel Carson's Silent Spring* (1993) made this plain offering critical
39 educators an opportunity to review the chemical corporations' concerted efforts to
40 undermine a series of public education and environmental justice campaigns. Writing
41 in 1962 Rachel Carson (1999: p29) informs her readers in a prescient pre-echo of
42 many of today's GM debates,
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51 There is still very limited awareness of the nature of the threat [of chemical
52 pesticides]. This is an era of specialists, each of whom sees his own problem
53 and is unaware of or intolerant of the larger frame into which it fits. It is also an
54 era dominated by the industry, in which the right to make a dollar at whatever
55 cost is seldom challenged.
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For Igoe, Neves and Brockington (2010), conservation and capitalism are shaping
both the protection of nature and sustainable development industry according to neo-

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3 liberal market logics and the ideology of economic growth and capital accumulation.
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5 Luxury ecotourism resorts define themselves as private sector, profit driven
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7 companies and are frequently the unstated locations for respected natural history
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9 and wildlife films (Christophers, 2006; Duffy, 2010). Indeed, as Brockington, Duffy &
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11 Igoe (2008) have shown the conservation and tourist industries invariably work
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13 together to produce the best possible spectacle for their customers and viewers.
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15 Together with their associated merchandising both are primarily consumptive
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17 experiences involving resource extraction, alienation and commodity fetishisation. An
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19 episode in Blink Production's *Extraordinary Animals* series (2007) for Channel Five
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21 and BBC World Wide featured the Thai elephant Hong who with a number of other
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23 elephants 'earn their living' by entertaining tourists. Hong's special talent is art and
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25 the programme concentrates on this seemingly bizarre curiosity. The episode offers
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27 a keen insight into eco-tourism and tangentially into the cultural heritage of the Thai's
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29 relationship to the elephant. Most importantly, it demonstrates a respect for these
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31 non human creatures derived in part from dignity, spiritual associations and their
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33 earlier crude physical exploitation clearly evident in the narrator's early allusion to
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35 elephants as 'living tractors' employed by the logging companies in the years
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37 preceding logging's ban in 1989. As Duffy and Moore (2010) write in their study of
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39 elephant back tourism in Thailand and Botswana the tourist industry has provided
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41 alternative employment for elephants and their mahouts and in Thailand, thanks to
42
43 the god Ganesha, elephants are seen more than a base commercial enterprise.
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45 They have intrinsic worth and neo-liberal approaches to nature have inadvertently
46
47 served to reinvent some traditional practices. Critical educators can draw upon and
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49 rearticulate these survivals or retrievals to show that even within existing hegemonic
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51 fields there are seeds for change and contestation. In 2008 the owner of a tourist
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53 enterprise Elephant Life Experience organised an elephant fashion show featuring
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55 clothes with patterns taken from elephant paintings to celebrate National Elephant
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57 Day. The show was designed to draw attention to elephant conservation, the Art by
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59 Elephants Foundation and the artificial insemination programme organised jointly by
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61 the privately owned Maesa Camp and the Elephant Hospital at the Thai Elephant
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63 Conservation Centre. The event reached television newsrooms and YouTube.

There are films and media initiatives that offer alternative perspectives that are philosophically more profound. *Kalpavriksha* (2000), written and directed by Nina

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3 Subramani and produced by the Indian conservation filmmaker Mike Pandey for
4 UNESCO, emphasizes the importance of traditional ecological knowledge by
5 focusing on the medicinal use of plants by the Irula tribe of Tamilnadu, the Kani tribe
6 of Karela, and other peoples across India. These traditional remedies have been
7 used for over three thousand years but the destruction of plants and the attendant
8 local wisdom is now imminent because of economic development, habitat
9 destruction and the patenting of commercially significant plant products by
10 international drugs companies. Using a gentle aesthetic and an authoritative female
11 voice-over, *Kalpavriksha* demonstrates the dependence of human culture on natural
12 ecosystems by comparing of the lifeworlds of indigenous, “ecosystem peoples”, with
13 those of contemporary urban “omnivores” who devour the produce of the whole
14 biosphere (Gadgil and Guha, 1995). Similarly, Japan’s NHK public television network
15 has produced a series of *Satoyama* documentaries exploring traditional ways in
16 which Japanese people have lived in harmony with the natural world showing how
17 human culture can be attuned to the needs and lives of non human creatures,
18 particularly birds and fish, in a commercially non exploitative manner. The BBC
19 acquired *Satoyama: Japan's Secret Garden* (1999) and *Satoyama: Japan's Secret*
20 *Watergarden* (2004) following the series winning the Grand Prix at the 28th
21 International Wildlife Film Festival in 2005. The Natural History Unit re-edited them
22 into one 50 minute programme narrated by David Attenborough with the title *Japan's*
23 *Secret Water Gardens* and was broadcast for the first time as part of the Natural
24 World series in 2006.

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44 Finally, the South African media company WildEarth TV and its subsidiary
45 organisations including safari.tv have developed an internet based virtual eco-
46 tourism business producing recorded presenter-led programmes and live feeds in
47 both 2-D and 3-D. With a special ‘app’ it is possible to watch a 3-D safari on an
48 iPhone. Whereas traditional tourism relies on increasing numbers of actual visitors to
49 maintain profitability and growth which in turn further stresses the environment, in
50 theory with virtual tourism, where there is just one vehicle and one tourist/camera,
51 there can be any number of virtual internet or television tourists. WildEarth TV’s
52 explicit focus on sustainability and ethics ensures that it will remain local and of
53 genuine economic benefit to local people who have so often in the past been
54 displaced by the ecotourism industry (Duffy, 2010). As the subsidiary companies

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3 reach profitability, the intention is that both the local communities and land owners
4 will become equity partners allowing them to share in the revenues resulting from
5 this global media orientated conservation business (Wallington, 2010). In this case,
6 new media production ecologies are integrally connected to conservation action and
7 informal environmental education within a commercial framework. If successful, it
8 could reshape the very meaning and reality of 'eco-tourism'.
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14 15 16 **Green**

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19 Patrick Rouxel's *Green* (2009), a self-financed 48 minute film about the terrifying
20 destruction of the Indonesian rainforests and the consequent extermination of the
21 orang-utan in order to produce palm oil on an industrial scale, offers critical
22 educators a valuable opportunity to address and research a whole range textual and
23 contextual matters. In *Green* audiences are invited, through its various aesthetic and
24 narrative codes, to understand the situation emotionally by being sutured into the
25 psychic devastation, helplessness and physical suffering that has been wrought on a
26 single individual/animal. *Green* posits the unfolding of time above that of motion or
27 action. The opening shot is of an orang-utan imprisoned within a holdall dumped in
28 the back of a pickup truck. Only the head is free as it bounces in sympathy to the
29 severe bumps and jolts of the vehicle as it swiftly traverses the rough road. In this
30 single shot the image includes the before and the after bringing together the
31 conditions of a new rather than a present time-image or thought. As the narrative
32 unfolds, it takes as its object the perceptions, feelings and reactions of the orang-
33 utan 'Green' to her desolate environment, to her 'hospital bed' attached and to her
34 drips while incomprehensibly searching her memories of times past. She lies still,
35 she ignores her food, she holds on to the wrist of her 'nurse', she looks at the
36 camera lens and into the spectator's eyes and in this image the spectator is invited
37 to 'feel her pain'. The film is almost a direct transposing of Deleuze (1989: 155) when
38 he writes,
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57 It is under these conditions of the time-image that the same transformation
58 involves the cinema of fiction and the cinema of reality and blurs their
59 differences; in the same movement, descriptions become pure, purely optical
60 and sound, narrations falsifying and stories and simulations. The whole
cinema becomes a free, indirect discourse operating in reality.

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3 The audience is presented with a filmic situation that cannot advance through
4 reactions or actions, that is neither animate or inanimate, but which nonetheless
5 offers a new way of understanding and resisting. *Green's* time-images
6 (Deleuze, 1989) are an indicator of something else, of a different ordering and
7 transformation. Cognitive and emotional understanding, empathy and critical
8 questioning are evoked in the spectator/learner through a juxtaposition of sounds
9 and images inviting deep meditation on the suffering of a sentient creature, someone
10 genetically very close to ourselves, a non-human person, who has rights, on
11 economic growth, capital accumulation, consumer materialism and the ideology of
12 sustainable development. Images of Neste Oil tankers, through their resonant
13 association with earlier sequences depicting environmental and wildlife destruction,
14 undermine the credibility and efficacy of WWF's Roundtable on Sustainable Palm Oil
15 Production and the concept of biodiesel as a green fuel (Greenpeace, 2007).
16 Consumerist seductions are destabilised by a montage sequence of everyday
17 products, behaviours and advertising that feels as hollow as it is immoral because
18 the world we see and responsible for is the world we have created.
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33 Thus, *Green* works in the way the film maker intended because, as Carroll (2003:
34 86) notes, "the audience's faculties of cognition and judgement are brought into play
35 in the process of eliciting an emotional response". Thus, documentary interventions
36 like *Green* offers a visual and aural space through which the viewer may start to
37 critique anthropocentric percepts. As Deleuze (1995) writes, the point of something
38 is the measure of a statement's truth because what is being seen or experienced
39 "connects any point to any other point, and its traits are not necessarily linked to
40 traits of the same nature; it brings into play very different regimes of signs, and even
41 nonsign states" (Deleuze and Guattari, 2004: 23). Thus, the public pedagogy of
42 *Green* cannot be thought from the inside but must be conceived as a challenge
43 emanating from the outside that is folded in. Consumer materialism and car culture is
44 imprinted on a montage of desolation where a small troop of orang-utans hold on to
45 life as desperately as they hold on to, and fall from, a single leafless tree. The past
46 and the future is seen in this image too and as Herzog (2000) explains, the image
47 becomes a complex provocation to thought possibly transcending the
48 representational by exploring the interstices between memory and perception
49 thereby introducing the viewer to new feelings, concepts, images of thought and
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3 orientations of oneself in thought. *Green* is also an important tool in the campaign to
4 protect the habitats and lives of the orangutans. It is freely available as a download
5 on www.grethemovie.com and so can be screened in its entirety, forwarded via
6 social network media applications, recut for specific educational or campaigning
7 activities and viewed on various fixed or mobile devices. Philosophically, it visually
8 articulates this non reductionist naturalism, this commonality between human and
9 non-human beings. There is no dialogue, no voiceover, no interviews and apart from
10 those in a short song extract, only a single word heard - 'Green' - plaintively uttered
11 by the dying orang-utan's carer. The (sound) images therefore serve as palpable
12 shocks to sensory thought. This point is aptly summed up in a collective email I
13 received during the writing of this article,

24 I'm sending you a link to a film that deserves to be watched. It's about 50
25 minutes long.

28 Because of what happens to her (and the profound effect she has had on me)
29 I feel I owe it to the main/only character to do as much as I can to ensure her
30 life was not in vain.

33 For those of you with children please encourage your children to watch it with
34 you. I hope you will acknowledge that I rarely send emails of this type and,
35 therefore, please understand that this is a bit special.
36 With love and determination

38 Caroline x

39 PS. Perhaps you might like to tell other people about it.

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43 As Benton (1993) argues this commonality and continuity between humans and non
44 humans does not gainsay human specificity or, for that matter, deny the imperative
45 to live with and alongside them as fellow natural beings. Winner of the 2010
46 Wildscreen Natural History Museum Environmental Award, *Green* left the festival
47 audiences shaken, tearful, desperate and angry. As an independent media
48 intervention *Green* may therefore do far more than, as a senior executive from
49 National Geographic opined, 'bear witness' to avoidable and unnecessary
50 destruction inferring that the international media markets and modes of finance,
51 production and distribution allow for little else. At the time of writing it has not been
52 broadcast on the major satellite channels like Discovery or Animal Planet suggesting
53 that either its aesthetic or its politics is seen by commissioning editors as unattractive
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4 to viewers, commercial sponsors and potential advertisers. However, it has been
5 sold to public broadcast channels SVT Sweden, NHK Japan, France 5, RAI Italy and
6 Canal+ Poland, RTBF Belgium and Oasis HD Canada.
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10 **Conclusion**

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14 What these media texts, contexts, pedagogic and conservation interventions have in
15 common is a recognition that human and non human animals have co-evolved and
16 are biologically, socially and ethically interdependent. Both have needs relating to
17 the living of their species-being but only humans can take into account, mitigate or
18 address the needs of other creatures when capitalist development, scientific interest,
19 amenity, corporate entertainment, resource extraction, economic benefit or habitat
20 destruction adversely effects the lives of animals. Ted Benton (1993: 211) writes,
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29 Where populations of non human others are cut off by human practices from
30 the conditions under which they are able to autonomously meet their needs
31 and so live the life of their species, the consequences are either extinction,
32 local or global, or some form of human intervention deliberately to sustain
33 suitable habitat by checking the offending social practices or imposing some
34 kind of artificial, compensatory mode of need-meeting through incorporation
35 within human social forms. Where dependency in either mode is a
36 consequence of human activity, there is a place for a notion of acquired
37 responsibilities on the part of humans for the animals affected.
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42 In exploring the public pedagogy of environmental and conservation media critical
43 educators should elucidate, refine and promote these 'acquired responsibilities' and
44 be mindful of the largely unrealised pedagogic capacity of new and old media to
45 promote more sustainable practices through fashioning new modes of engaged
46 learning and connective understanding. This requires critical environmental
47 educators to become media researchers and even media ecologists as the media is
48 unarguably an important element of our produced environment, our produced
49 (human) nature and all of our futures.
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