

Ecocinema in the Anthropocene Era

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Abstract

The Anthropocene epoch has been proposed as a geological label for the period of Earth's history which began when humans first started to have large-scale influences on the Earth's ecosystems. Ecocinema responds to the ideology that underpins the negative effects of the Anthropocene; the paradigm that humans have dominion over nature and natural resources can be unsustainably exploited for commercial gain. Western culture has defended human mastery of the earth from Plato's conception that the immortal human soul belongs to the world of ideas not nature, to the Judeo-Christian notion that the soul is gifted by an omnipotent God who has given man dominion over all living things, to Descartes' argument that self is separate from matter, and to Locke's (1700) contention that our identity is dependent on our sense-impressions, not our place in the physical world. Modern mainland China has experienced convergent beliefs since Mao's revolution swept away Buddhist, Confucian and Taoist conceptions of human society and its relationship with nature. Since 1979, China's unfettered economic revolution has lifted millions from poverty at catastrophic environmental cost. This paper examines how we moved from animist notions that posited life-force in all entities to our current unsustainable paradigm. It analyzes a number of Western and Chinese films that seek to raise consciousness about the impact we are having on the planet, and finally discusses emergent technologies that could be exploited by ecocinema film-makers to heighten empathy with the non-human other, and reconnect nature with the soul.

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Mind-Body Dualism

The concept of mind-body dualism rests in the distinctions human thought has made between the conscious mind, variously represented as spirit, soul and self, and the seemingly mechanistic actions of the human body and the natural physical world it inhabits. It represents a movement of cosmological thought away from animist beliefs which regard all entities, including humans, as having approximately equal life-force. In Western culture, the origin of the conflictive relationship between human beings and nature can be found in Plato's *The Republic* with his argument that humans possess an immortal soul belonging to the world of ideas. Judeo-Christianity built on this separation by postulating a hierarchy of natural kingdoms predicated on the belief that the human soul is gifted by an omnipotent God. This was in sharp contrast to polytheistic and animist belief systems which saw spirits or gods in every aspect of nature. The new hierarchy posited that there was one omnipotent God under whom humans were in a dominant and exterior position to nature. In this hierarchy, humans hold a special place outside of nature since the divine soul is only present in human beings. Therefore, those who live in cultures steeped in Abrahamic thought perceive themselves as separate from the natural world because it is not their body but their *soul* which characterizes them as individuals (Gilardi, 2008).

This idea found resonance in the Enlightenment approach to how humanity and nature should co-exist. Cartesian philosophy extended the sense that the human soul was separate from the natural world. Evernden (1996) writes in *Ecocriticism's* foundational text *The Ecocriticism Reader*: "Since Descartes [...] we are not a part of an environment, we are not even part of a *body*. We, the 'real' us, is concentrated in some disputed recess of the body, a precious cocoon, separate from the world of matter. Far from extending our 'self' into the environment [...] we hoard our ego as tightly as we can" (p.98).

Batra (2003) adds that: "The most influential modern reinforcement of the dualist position came, of course, from Descartes, whose 1637 *Discours de la méthode* contained the notorious *bêtemachine* theory that animals were mere bodies, no more than automata. Both humans and animals bodies could be considered automata, but speech and the soul separated the human from the animal" (p.156).

Locke (1700) extended the distinction between mind and the physical world by rejecting Descartes' notion of innate ideas, saying instead that we construct our identity throughout our lives from sense perception. Therefore, that which actually leads to self is a conscious memory of self. He argued that although the body changes from baby to adulthood, what does not change, in order to maintain self, is the conscious ability of an individual to link the old sense of self with the young sense of self. The logical conclusion being that someone who has lost this ability to construct a conscious memory of self no longer possesses meaningful identity. Hence, religious and metaphysical conceptions of self moved Westerners away from the sense of belonging to the natural world. With the onset of scientific and industrial revolution, modern man would continue to stress the difference between spirit and body (Gilardi, 2008).

Westerners are not the only ones to reflect on this dislocation from nature. The fracturing of human society from nature has also been one of the consequences of Maoist socialism in China, particularly the disastrous Great Leap Forward, and has

been exacerbated by the unfettered economic development that has taken place in China since Mao's death. In the introduction of *Chinese Ecocinema*, Lu (2009) gives a clear explanation of how Mao Zedong's revolution tore apart the traditional Confucian and Taoist relationships of society and nature. Confucianism showed how humans could reduce conflict by respecting hierarchical social relationships, while Taoism expressed the need for harmony with Tao, which in practice meant seeking to live a peaceful life while respecting the natural world. After Mao's death, economic development replaced class struggle as the organizing paradigm, and the Taoist ideal of harmony with nature receded as development devastated the environment (Lu, 2009).

The most important consequence of this separation of self from nature is the current paradigm, propagated worldwide through globalization, that GDP growth is more desirable than sustainability. Both developed and developing nations have, to varying degrees, policies that view nature as something external that can be owned, transformed, and exploited. Evernden (1996) considers that 'what we really mean when we speak of man/environment relationships' is looking 'on the world as simply a set of resources to be utilized [...] not thinking of it as an environment at all' (p.98).

Our impact on the world has led to the naming of a new geological epoch, the Anthropocene, from the Greek word meaning human. This epoch has been dated back 8,000 years when human-caused deforestation first caused noticeable rises in greenhouse gas emissions (Ruddiman, 2013), but it is since the Industrial Revolution of the late 18th century that anthropogenic effects on the Earth have achieved exponential rates. Consequences that have led to the realization that humans should not be viewed as separate from the natural world. As Evernden (1996) puts it, we must reaffirm the idea of 'man who is in an environment in which he belongs and is of necessity a part' (p.98).

This reconceptualization is an essential aspect of consciousness-raising in ecocinema. We will therefore describe a series of environmental documentaries that show how the idea of human ownership of nature has been criticized in ecocinema. We will then show how different kinds of ecologically minded films have tried to educate viewers toward an animistic relationship occurring between humans and nature. Finally, we will show how new technologies could help ecocinema create immersive experiences that enhance human empathy toward nature and non-human life.

Owning Nature

Humanity's entitlement to dominate nature has been forcefully challenged by a series of documentaries released since the first photo of the earth, taken in 1972 from Apollo 17, raised global consciousness about the uniqueness and fragility of life. This photo showed our blue world as a unified whole suspended in the hostile blackness of outer space. From this period on ecological movements gathered pace in the industrialized world. One of the most important early examples of ecocinema documentary is Koyaanisqatsi (1982), meaning 'Life out of balance' in the Hopi language. This is the first film of the Qatsi trilogy, followed by Powaqatsi (1988) and Naqoyqatsi (2002). It powerfully reinforces the contrast between perceived animist integrity and the peril of mind-body dualism with visually stunning images showing a cycle of civilization from pre-history to the space age. It begins with a view of cave paintings and moves

immediately to a slow motion frame of a powerful rocket taking off. These two ends of the spectrum of human development are then contrasted with eighteen minutes of beautiful uncontaminated landscape ranging from aerial shots of the desert to mountain scenery. Suddenly an explosion occurs – a clear sign of technological humanity. This is revealed to be a controlled mining demolition. An enormous mining vehicle appears and becomes engulfed in clouds of pollution. The mining infrastructure and pipelines are shown, and pylons are tracked as if marching across the desert landscape. The human mark is straight and linear, in contrast with the flowing form of the natural environment. Images of industrialization become progressively more complex. The sense of exponential population growth is heightened by the speeding up of the film, showing crowds of city dwellers commuting. Finally a rocket explodes in a violent fire ball and debris is seen falling to earth for many minutes before the final scenes of the movie revert back to human cave paintings in the desert.

The commentary of this documentary is provided solely by the musical composition of Philip Glass which provides a “guideline” for an interpretation of the images. The combination of electronic, orchestral and choral music with images of the environment imposes a kind of quasi-emotional narrative that seeks to demonstrate that industrialization cannot progress beyond a certain point. Once a certain level of technological achievement is attained disaster will occur and society will revert back to the Neolithic. This is clearly a political statement reinforcing a strongly political ecological agenda. It shows that the rate of human industrialization is representative of ‘life out of balance’; there is no attempt to show an alternative scenario in which sustainable development is achieved.

More recent documentaries explicitly show that we are still very far from this alternative outcome. *Sustainable Table* (Hedges, 2006) and *Food, inc.* (Kenner, 2008) focus on the consequences that our agri-businesses have for ecology and health showing that the GDP paradigm of our contemporary global society, which sees the environment as an external object to be subjugated and exploited, is profoundly unsustainable. However, unlike Koyaanisqatsi (1982), these films argue that a new sustainable conception of human interaction with the environment is required. Al Gore’s *An Inconvenient Truth* (Bender *et al*, 2006) underlines global warming as the most serious result of strip-mining the earth and burning ancient trapped sunlight. The inconvenience of this truth refers to the fact that we require a new paradigm in our approach to energy; ‘business as usual’ will ecologically and economically devastate civilization. Likewise, the contrast between civilization and the environment is powerfully rendered in *Manufactured Landscape* (Baichwal, 2006) which expands and examines the world of Burtynsky’s photographs by collecting real-time footage of the original sites shown. It shows the contrast between the improvement of the quality of life brought about by the human ability to adapt the world to its needs and the deep consequences that this is having in terms of environmental destruction. By doing so, the documentary reiterates the need for a completely new way of thinking about the relationship between humanity and nature. A new approach to this relationship is offered by the documentary *Fuel* (2008). This investigation into the environmental and social damage that fuel processing in the United States creates shows how people could make a difference by switching to alternative renewable energies. The final message is explicit:

The Earth is not a thing. It is not a rock. It is a living being. And we are part of that. If we begin to learn to live by the principles set forth in nature we have an infinite abundance of energy, an infinite abundance of resources. We can sustain every living human being. As well as the human beings that will come. The choice is ours: every single one of us. The rest of the journey is up to you (2008).

This call to arms is also the final message of the French film *Home* (Besson, Carot, Arthus-Bertrand, 2009) that tells Earth's story through contemporary images of human and natural environments. It clearly takes an eco-political position with the opening narration: 'Listen to me, please'. After twenty minutes of beautiful scenery and nature, the mark of humanity appears in the form of positive images of pre-industrial agriculture prior to the discovery of fossil fuels. With the advent of industrialization the images and narration change in tone. Images of destruction, deforestation, and overfishing are interspersed with those of animals in natural environments. The narration calls our attention to the consequences of our anthropocentric view of the world: global warming, climate refugees, species extinction, and the fact that in the past fifty years we have more radically changed the landscape than in all previous generations of humanity. But the final message is a message of hope: 'Culture, education, innovation are inexhaustible resources. Millions of NGOs show that solidarity is stronger than the selfishness of nations.' The examples given are the international treaties implemented to protect the world's territorial waters and Antarctica as a natural park. 'This harmony between humans and nature can become the rule, no longer the exception [...] it is up to us to write what happens next.' (2009).

The message *Home* forcefully asserts is that we 'have created phenomena we cannot control. Water, air and forms of life are intimately linked, but recently we have broken these links'. The conclusion reflects animist conceptions of humanity's role in the world: 'life is a balance which we have failed to consider. A cycle of life and we are just part of this chain.' (2009).

Cycle of Life

Environmental documentaries are not the first films to raise environmental concerns. As David Whitley (2012) shows, Disney animations have a long pedigree of showing the conflict between the natural world and humanity. One criticism of these films is that Disney animations are ideologically suspect due to their capitalist imperative and anthropomorphism of nature. Anthropomorphism, however, is not necessarily used to give an anthropocentric point of view but can also be used as a way of building connections, no matter how superficial at first glance, between the human and the animal worlds. By having animals' replicate human characteristics, these films afford the viewer an opportunity to interpret a world that for such a long time has been considered external to human experience. If read from this perspective, anthropomorphism helps to build a link, a common place of understanding, between human beings and the natural world in order to stress the notion that by damaging nature we are damaging ourselves. The fact that these films can be commercially successful speaks to both the love of an expertly rendered story and an appetite for connection with the natural world.

The classic cartoon *Bambi* (Disney & Hand, 1942) contrasts the lives of animals living in harmony with nature with the hunters that kill them by burning the whole forest. 50 years later *Pocahontas* (Pentecost, Gabriel & Goldberg, 2005) revisits the utopian myth of the noble savage by contrasting Western individualism with the harmonious animism of the Native American. One of the songs in *Pocahontas* is *Colors of the Wind* by composer Alan Menken (1995). The lyrics clearly spell out the contrast between animist thought and the exploitative nature of Abrahamic religious thinking:

You think you own whatever land you land on. The Earth is just a dead thing you can claim. But I know every rock and tree and creature. Has a life, has a spirit, has a name. [...] The rainstorm and the river are my brothers. The heron and the otter are my friends. And we are all connected to each other. In a circle, in a hoop that never ends (1995).

The understanding that all nature is connected is also present in *The Lion King* (Disney, Allers & Minkoff, 1994). This is clear in the discussion the Lion King has with his son: 'Everything you see exists together in a delicate balance. As King you need to understand that balance and respect all the creatures from the crawling ant to the leaping antelope.' In response to his son's exclamation: 'But, dad, don't we eat antelope', the King replies: 'Yes, Simba, but let me explain. When we die, our bodies become the grass and the antelope eat the grass. And so we are all connected in the great circle of life' (1994).

Although this notion is increasingly espoused by some business leaders and politicians, it is those who are traditionally disenfranchised from power, the artists and conservationists, who first chip away at our complacency. This is particularly evident with contemporary Chinese films that criticize over-development and the grandiose engineering projects that have taken place there. One of the most egregious of these projects is the Three Gorges Dam which was designed to control flooding and generate electricity, but has thoroughly transformed the environment and uprooted communities. Jia Zhangke's film *Sanxia haoren/Still Life* (2006) focuses on the loss of traditional ways of life which have resulted. Rapid modernization and commercialization impacting the environment is explored in many recent Chinese films. *Suzhou he/Suzhou River* (2000) depicts an ugly man-made environment near Shanghai which is seemingly being redeemed by the presence of a beautiful blonde mermaid. The viewer then discovers that the mermaid is actually a show girl wearing a blond wig, and the disgust engendered at such vacuous titillation is highlighted by the contrast with the loss of the natural river environment. Many of these films do not so much contrast unspoiled nature with over-hasty development, but traditional pre-capitalistic and pre-industrial ways of life with China's post-1990s economy and the acceleration of environmental degradation. There is thus an element of nostalgia present in many of these films. A yearning to live life in balance; to turn the clock back, not just to pre-globalization of the 1990s, but also in some cases to holistic Buddhist ideals that had been all but extinguished in the socialist revolution (Lu, 2009).

This nostalgia for a lost way to interpret the world around us is a leitmotif in ecocinema productions. As an example, the Italian movie: *Le Quattro volte* (2010), inspired by Pythagoras' ideas that each of us has four lives – the human, the animal,

the vegetable and the mineral – shows the life of an old goatherd, a goat, a tree, and a pile of charcoal.

In bringing the goats, the tree and the charcoal-burning process to the foreground and relegating the humans to a less dominant position than is customary, Frammartino believes he has given the audience ‘a pleasant surprise: the animal, vegetable and mineral realms are granted as much dignity as the human one.’ (French, 2011).

Frammartino’s comments on this film suggest that the development of animist empathy is a key factor for ecocinema. In this movie the choice Frammartino made is a radical one, he records only the essential sounds present during filming in order to reduce, as much as possible, the human point of view. This starkly contrasts with *Koyaanisqatsi* (1982) which, as has been shown above, uses music as a way to “influence” the viewer towards a particular narrative reading. It is important, however, to note that *Le Quattro volte* (2010) necessarily shows an anthropocentric point of view of the natural world. What film does not? Although an ecological film may try to render an experience to give voice to the living environment, it is not possible to create a language that express such otherness without becoming entirely unreadable. What ecocinema must be able to achieve is a kind of compromise between representing such a complex alterity without reducing it to the simply banal.

Building Empathy

In his 2000 book *Green Screen*, David Ingram shows how Hollywood technology can raise viewers eco-awareness and thus in a way work against its own capitalist interest. And, as Sideris (2010) writes, James Cameron’s use of technology in *Avatar* (2009) is an expert lesson on the building of empathy as part of moral and spiritual growth, both for the main character in the film and the audience in their immersive experience with Na’vi culture. Rather than being just a marketing gimmick, 3D can aid narrative by using stereoscopic depth to underscore emotional intensity (Higgins, 2013). This can be a particularly powerful way of involving the audience in the narrative and thereby eliciting a heightened sense of empathy. *Avatar* (Cameron, 2009) vividly expresses the link between sentient beings and nature in sequences reminiscent of shamanic and animist Native American cosmology. The sentient creatures (read: Native American) are the Na’vi whose world is being colonized for its resources by humans (read: European settlers). In the most poignant scene to underline the animus of all living things, the Na’vi transfers the spirit of the human hero from his crushed body and places it into his avatar Na’vi body. This movement of spirit from one body to another is not represented as a painful experience but as a liberating and harmonious one, since all living things are linked with a connective life-force. *Avatar*’s building of empathy is so powerful that despite it clearly being based on a counter-factual re-imagining of the European conquest of America, commentators in China have found redolence in their own country’s policies of forced re-settlement (Liu, 2010).

Although 3D movies may improve audiences’ sense of belonging to the world they view, they are still a passive form of communicative media. The next step is to create products that actually allow users to control avatars; films that more effectively induce empathy by giving the viewer the ability to control the main character’s field of vision and actively look around the world through the eyes of the other. Interactive web documentaries integrate various media, such as photos, audio, animation and text,

with web technology. The user becomes an active participant who has to navigate through the story. Unlike a linear narrative, a web documentary enables the user to choose which parts of the audio-visual field to interact with. Visual clues are provided to the user indicating pathways through the narrative, but it is up to the user to decide when to pause and examine or when to pass through.

This has been achieved in the ground-breaking film *Metamorphosis: immersive Kafka* (Kardos, 2010). The project was made using remote-controlled, panoramic cameras to film a linear director's version of the narrative. Computer programs were then used to create a 'spherical film' within which 'virtual cameras' could be placed. The viewer is thus able to watch the default director's cut, but when inclined can use a controller to switch to one of the virtual cameras and view the film from any possible angle (Takacs, 2010). The other aspect of active participation available to the audience is a feature the creators call '*Clickable Content (CC)* [...] In simple terms CC means that whenever the user clicks on the scene the rendering engine "fires a search ray" from the viewing camera' to find an object of interest, such as a character or an item, that can be expanded to reveal more information to the viewer (Takacs, 2010, p. 7). Although this technology could be seen as another individualistic manifestation allowing the spectator to have an anthropocentric mastery over the living environment, it could also be seen as a possible way to build empathy by giving the user the experience of being one with the character. If used in ecocinema, it could open new directions for those seeking to raise consciousness and re-connect the human spirit with the natural world. This is not controlling the other but becoming part of the ecological whole. The experience could be read as offering an opportunity to de-centre the individual's relationship with their own body. This does not bring animal consciousness into the forefront of the experience but rather operates as a key that can be used to momentarily estrange the human psyche and so allow for a brief window onto the natural kingdom.

Conclusion

It is clear that environmental messages are not relegated to documentaries or niche market art house movies, but are also propagated through mainstream productions such as Disney animations and blockbuster movies. Through the use of apocalyptic fear in documentaries, to the emotional resonance induced by *Bambi* (Disney & Hand, 1942) and *The Lion King* (Disney, Allers & Minkoff, 1994), and from philosophical references made by art house movies to the use of 3D technologies in blockbusters and interactive technology in emerging internet products, all these filmic texts seem to have a clear and common goal: to develop empathy with the natural world in order to generate revenue and/or raise environmental awareness. The visionary movies of Walt Disney achieve this on the most fundamental level; perhaps because children are inherently more susceptible to the message that the natural world is important. By contrast, environmental documentaries evince a much starker and more political message since they cater to the needs of the educated adult who feels impotent in the face of global disaster and thus need intellectual and emotional argument to connect the mind with the physical world. The message of such films is often strident; a call to arms; and as such they may, as is the case with *Home* (Besson, Carot, Arthus-Bertrand, 2009) accompany the documentary with educational materials to further their cause. In contrast, art house movies and blockbusters may involve the audience by invoking a sense of nostalgia for a lost 'paradise', either by contrasting modern

civilization with the utopian ideal of the animist noble savage, or by using intellectual and emotional references to favor visions of a pre-globalized world. Internet-enabled Transmedia marketing of such products provides more interactive ways for consumers to engage in the worlds created, and active participation appears to be the emerging trend in ecocinema. But regardless of the technology being employed, the sheer diversity of films that contain eco-cinematic themes is an indication of the appetite for environmental education and emotional connection with the natural world; an appetite that appears to be growing as we question the paradigms that underpin our epoch's most damaging consequences.

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