

*Alexa WEIK von MOSSNER*

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**Larger than Life:  
Endangered Species across Media  
in Louis Psihoyos's *Racing Extinction***

**Abstract:** The article investigates *Racing Extinction* as an argumentative eco-documentary that deliberately embraces intermediality as a visual and narrative strategy to draw attention to a pressing environmental issue: anthropogenic species extinction. Scholars, activists, and artists alike have made the argument that storytelling is an important tool in communicating the threat of large-scale biodiversity loss. The article argues that *Racing Extinction*'s intermedial strategies turn endangered animals into a cross-media spectacle that is highly entertaining but not without some conceptual and political problems. In this context, it also aims to demonstrate that intermedial ecocriticism can be complemented and enriched in meaningful ways by cognitive approaches in the exploration of mixed ecomedia..

**Keywords:** Extinction, narrative, documentary film, endangered species, intermediality.

**Alexa WEIK von MOSSNER**

University of Klagenfurt, Austria  
Alexa.WeikvonMossner@aau.at

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The idea of mass extinction is a powerful one, evoking disturbing images of collective ecocide. But while scientific evidence puts us right in the middle of an unparalleled mass extinction event, most people have no direct experience of the dwindling numbers of elephants, tigers, and polar bears, and many of them only a hazy understanding of what else is endangered or already lost. As Elizabeth Kolbert reminds us in *The Sixth Extinction* (2014), “very, very occasionally in the distant past, the planet has undergone change so wrenching that the diversity of life has plummeted. Five of these

ancient events were catastrophic enough that they're put in their own category: the so-called Big Five" (1). These previous events differed in one important aspect from what we are witnessing today: the Sixth Mass Extinction is man-made, caused by the ever-growing impact of human activity on planet earth in the era we have come to call the Anthropocene. The anthropogenic nature of the ongoing extinction event is scientific consensus (see e.g. Pievani; Sodikoff), as is the insight that it cannot be mitigated without "fundamental changes to the way we produce and consume food, manage and use forests, and build cities" (Bruyninckx qtd. in EEA). Affecting such changes has proven difficult for a variety of reasons – from the cultural to the political and the economic – but an important step on the way is to make the issue accessible and to communicate its urgency.

Mediality is one crucial tool in addressing this problem because it can both expand and focus our sensory and affective experience through image, sound, and storytelling. Not only are "the stories that humans tell about their own involvement with extinction ... critical for understanding the extinction even currently happening all around the globe" (5) as Jonathan Elmore has noted. Since the proclivity to storytelling is hardwired into the human brain (Zunshine; Zak) and serves important evolutionary purposes (Gottschall), the hope is also that narratives can impact our feelings, attitudes, and behavior toward endangered species, thereby mitigating the ongoing extinction crisis. The two burning questions, then, are: What narrative strategies are being used within and across different media to represent the imminent threat of species extinction? And are these strategies effective in turning people's attention to this urgent issue? To these, we must add a third, namely: How are such strategies complemented by non-narrative modes of mediality? As Ursula Heise shows in *Imagining Extinction* (2016) not only "books, films, photographs, websites and other aesthetic artifacts" (13) are primary objects of study, but also scientific renderings of the material world such as biodiversity databases and Red Lists of endangered species. Heise's book is a stark reminder that humans do not only "tell stories" about endangered species in the sense of an account of connected events, but that they also represent them through numbers, sounds, images, and symbols. These multiple modes of mediating extinction often mix and mingle within and across media. Even formats that may seem straightforward – such as a documentary film – use such multimodal interlacing to great effect.

The film I want to consider here – Louis Psihoyos's *Racing Extinction* (2015) – is a case in point. The eco-documentary shares several intermedial features with Psihoyos's earlier film, the Academy Award-winning *The Cove* (2009), among them a "racing" plot reminiscent of an undercover detective story and the on-screen use of sophisticated spy and surveillance technology. Equally important in my context here is the film's intermedial display of gigantic moving projections that introduce endangered species into the urban spaces of American cities and industrial sites. The communication theorist Klaus Bruhn Jensen has differentiated between three conceptions of intermediality: the "combination of different sensory

modalities of interaction”, the “combination of separate material vehicles of representation,” and “interrelations among media” (1). In my discussion of *Racing Extinction*, I will mostly concentrate on the first two conceptions while making an argument that media convergence is employed to extend the film’s impact beyond the immediate viewing experience. Finally, I hope that my analysis will demonstrate that intermedial ecocriticism can be complemented and enriched in meaningful ways by cognitive approaches to film and other media.

### Engaging Visions: Argumentative Eco-documentaries Between Media

The starting point for my deliberations is the insight that the medium of film is the posterchild for the kind of “reference and dependence” that, according to Bruhn Jensen, is a typical feature of intermediality (1). As Jørgen Bruhn and Anne Gjelsvik remind us, literary forms such as the novel were shaping influences on the new medium when it emerged in the late nineteenth century, and “the list of influencing forms goes on, and includes music, opera, magic, architecture, photography and painting” (1). Film – and especially sound film – crucially depends on intermediality to engage viewers in its cinematic storyworlds. Michel Chion notes that when watching a film, we tend to perceive its intricate mixture of sound, editing and camera movements as one coherent whole that moves along with a seemingly organic rhythm (2). This effect is the very purpose of *continuity editing*, a hallmark of classical Hollywood cinema that aims to make cuts, sound design, and other material means of film production “transparent” to enable immersive viewing experiences.<sup>1</sup>

The ability to perceive movies as a rhythmic, organic whole rather than a bunch of mixed media is in fact hard-wired into our bodies and brains. In *Flicker: Your Brain on Movies* (2015), the neuroscientist Jeffrey Zacks offers a detailed overview of possible neurological explanations for why most immersed viewers tend to not notice cuts between shots, ranging from the blinks and saccades that are typical for human vision to various attentional phenomena (163-96). And while movies’ intermedial storyworlds can also captivate us on the comparatively small screens of television sets, computers and, arguably, smart phones, the film scholar Geoff King has explained how the experience of watching a film in the theater adds to viewers’ sense of immersion:

Big widescreen cinema claims to fill the viewer’s vision. Multichannel hi-fi sound ... adds significantly to the impression of immersion in a three-dimensional experience. Viewers are assaulted by a brand of spectacle that might amount to sheer pace and kinetics; to loudness that can be felt as bodily vibration, and brightness that makes the eyes contract.... The viewer is sold the illusion of being transported into the world on-screen. (33)

King here highlights viewers' *physical responses* to specific forms of technical mediation while also reminding us that such technical mediation simply serves to amplify qualities that are intrinsic to the film itself, qualities such as pacing, brightness, or sound.

This brings me to the "combination of different sensory modalities of interaction" (1) that Bruhn Jensen considers one typical aspect of intermediality. As an *audiovisual* medium, film can only ever reach two of our sensual modalities directly – sight and hearing – but it manages to engage all other senses on the imaginary level. Vision, explains neuroscientist Vittorio Gallese, "is far more complex than the mere activation of the visual part of the brain. Vision is multimodal: it encompasses the activation of somatosensory, emotion-related and motor brain networks; these play out in endocrine systems" (4). The multimodality of vision thus also allows for the activation of a range of physical responses: Watching moments of physical touch, for example, "activates the somatosensory cortex" in viewers' brains and thus adds a tactile dimension to the observed (4). That effect is further intensified if it is accompanied by corresponding sound effects and – if we watch the film in a well-equipped movie theater – by the size of screen and quality of the sound system. It is in this way, then, that cinematic conventions – from shooting to editing to exhibition – take advantage of our somatosensory capacities to make watching a movie a deeply visceral, engaging, and enjoyable full-body experience.

However, films also mix media in other ways. With reference to the work of Lars Elleström, Bruhn and Gjelsvik suggest that in any intermediality analysis should pay attention to three interrelated dimensions of media that are often confused and conflated. First, there is the *basic media*, such as "written words, moving images, or rhythmic sound patterns" (9). Second, we must consider *qualified media*, which use one or several of the basic media in combination, such as a film (as in my example above), a literary text, or a radio feature. And finally, there are the *technical media* that display these basic and qualified media, such as a film projector, a hi-fi system, an e-book reader, a television set, or a smart phone interface. Nearly all films will display some of these media dimensions, but those with an explicit thematic focus on *media production* itself are particularly likely to feature a broad variety of them, regardless of whether they are fiction or nonfiction films.

Within the realm of ecocinema, Davis Guggenheim's *An Inconvenient Truth* (2006), Jeff Orlowski's *Chasing Ice* (2012), and Kip Andersen and Keegan Kuhn's *Cowspiracy* (2014) are all examples of documentary films that foreground their own production by prominently featuring basic, qualified, and technical media as central part of their storyline.<sup>2</sup> Just how helpful an intermedia approach can be in the analysis of this type of film has been demonstrated by Bruhn and Gjelsvik's astute reading of *Chasing Ice* (128-33). At its heart, Orlowski's film is a portrait of the *National Geographic* photographer James Balog, who embarks on the ambitious EIS project, which involves placing dozens of automatic cameras across the Arctic circle in order to document via time-lapse photography the dramatic ice loss

due to climate change. The stated aim of the EIS project is to show people around the world through photographic evidence just how bad the situation in the Arctic truly is. However, as Bruhn and Gjelsvik point out, the film's intermedial strategies are much more complex than that: "in spite of Orłowski and Balog's explicit tendencies ... towards a monomedial reliance on (photographic) visuality in order to convey something that may seem scarcely believable, in reality they rely on a complicated, heteromedial cinematic construction to make their point" (130-31). The same is true for Psihoyos's two eco-documentaries, *The Cove* and *Racing Extinction*, which use different narrative strategies but are no less heteromedial.

Like Balog, Psihoyos was a celebrated *National Geographic* photographer before he became a documentary filmmaker, and his films prominently feature photographic visuality along with the act of photographic production. Moreover, like *Chasing Ice*, his films aim to make a powerful ecological argument by giving viewers access to the "behind the scenes' process" (Bruhn & Gjelsvik 32) of the very making of the film they are currently watching. Being highly self-referential, they derive their narrative drive and excitement from foregrounding the dangers and difficulties of their own production process. However, the dangers and difficulties on display are of a very different nature. If Balog and Orłowski face the challenge to somehow keep their cameras functioning in sub-zero Arctic weather, Psihoyos and his team are constantly at risk of getting arrested or worse as they capture their material. As Psihoyos puts it on the *Joe Rogan Experience* podcast, his advice for first-time filmmakers would be "Don't do a movie where people want to kill you," because that's exactly what happened to him and his team during the making of *The Cove*. The clandestine filming practices on display in *Racing Extinction* are similarly daring and transgressive, aimed at exposing people who engage in illegal wildlife trading. However, the film's complex heteromediality does not stop there. Not only does it include a screening of (parts of) itself in the completed film, but it also features an entirely different and new technical medium – along with its recipients – to engage viewers viscerally and emotionally in a story about endangered animals, climate change, and impermissible appetites.

### Between Suspense and Sadness: Intermediality and Emotion in *Racing Extinction*

Already in the opening sequence of *Racing Extinction*, we find all three dimensions of media – the basic, the qualified, and the technical – prominently displayed. The first shot shows a dead bird in a glass jar in the foreground; behind it and out-of-focus is a photographer (probably Psihoyos) with a camera, taking pictures of it. The sound of the camera shutter is audible above the melancholy piano music. From here, the film cuts to an extreme closeup of the dead bird, then to a still image of the hand-written tag attached to the

jar. It reads: “Dusky ‘Orange’ – Last one. Died 16-June 87.” The next shot shows a collection of dead butterflies as the music continues and Psihoyos’s voice-over begins: “I was reading the *Financial Times*, and it was a little, tiny, two-paragraph story that said: ‘Mankind may be causing a mass extinction event.’” While Psihoyos is speaking, a quick succession of shots shows us the following: First, the still photographer with his camera again, but this time it is an over-shoulder shot from behind, allowing us to see the backside of the camera including its monitor display showing one of the butterflies from the previous shot. Next, two eggs from the Carolina parakeet, a neotropical parrot now extinct, along with a human hand touching one of the eggs and a machine-typed catalogue card that tells us the English and Latin name of the bird species along with the date and location in Florida where the eggs were found. Next, two quick closeups of a turtle and the horn of a rhino, both stuffed and mounted, the latter one to a large shelf filled with boxes and packages. Only now does the film cut to a medium shot of Psihoyos, who continues on-screen: “It was, like, buried on, like page six or seven, and I thought this is how humanity is dealing with the issue.” Cut to a shot of another shelf, this one filled with rows of stuffed and mounted heads of tigers and leopards, mouths opened, teeth bared. “They are *not* dealing with it,” comments Psihoyos off-screen.

On the visual level, the film thus starts with what is left when species go extinct: preserved corpses and photographic representations of them. The complex montage reminds us that documentary filmmakers shape their material as much as the directors of fiction films do, as does the choice to introduce an intermedial element, namely the still photographer and his camera, including the camera’s monitor display (along with the written tags and catalogue cards). The choice adds movement and life to the sequence, which is otherwise dominated by stillness and death, but it also prepares viewers for two defining elements of the film. When, in the opening shot, we see the preserved bird in its jar and behind it the photographer, it is impossible to tell whether the objective of his camera is indeed focused on the bird or whether it is not, rather, pointed at *us*, the viewers. This foreshadows one of the film’s central arguments, namely that, individually and collectively, we are responsible for the ongoing mass extinction event. On the more technical level, the presence of the photographer and his camera foreshadows that this is a film that prominently displays the means of its own production. While that may seem unremarkable in the case of still photography, the next sequence shows just how sophisticated and intermedial this production is going to be.

Not even 40 seconds into the film, after finishing up the first sequence with two horrifying shots of cut-off elephant feet and a pyramid of primate skulls, Psihoyos confronts viewers with a very different kind of display. It starts with a fade to black and a voice-over that says “Check your cell phone. You get anywhere near this place it scrambles the signal.” Then, a slow-moving tracking shot reveals a row of tables against a brick wall and, stacked on top of them, an assembly of monitors and other technical equipment. Above it, on the

wall, a hand-written sign says: "You are Being Recorded." As the camera tracks to the right, another monitor comes into view, showing Psihoyos and another man walking into a room. He asks the man "So, how many cameras do you have on you right now ... on your body?" At this point, the film briefly cuts to a closeup of the man's jacket as he opens it and reveals a buttonhole camera on his stomach. "Less than seven," he says, chuckling, "but five more than two." While he speaks, the film cuts to a split screen revealing six different camera feeds, all of them showing the two men and/or the room around them, which we now realize is the very same monitor-filled room we saw at the beginning of the sequence.

The sequence is extreme both in its intermediality and in its self-referentiality. As in the opening sequence, basic, qualified, and technical media are all on display, from the written sign on the wall (basic), to the video footage displayed on one of the monitors (qualified), to the monitor itself (technical). But whereas the purpose of the opening sequence is to establish the central theme of the film – species extinction – the second sequence displays the means of production and the first instance of a visual trick used throughout the film: part of the footage shot for it is displayed indirectly by filming (with a different camera) a monitor showing that part of the footage. The effect of this trick is, on the one hand, that it is visually intriguing and, on the other hand, that it cues viewers' curiosity about what these guys are up to with all their hidden cameras and gadgets.

In *The Cove*, Psihoyos made use of similar recording media to capture and expose the blood-saturated hunting drives of dolphins in the coastal town of Taiji, Japan, a strategy that – apart from being dangerous for the filmmakers – was both very successful and highly controversial. *The Cove* earned over a million dollars at the box office and won the 2010 Academy Award for Best Documentary Feature, but it was also sharply criticized for its ethnocentrism. As Emily Hughes has pointed out,

The filmmakers emphasized the secrecy involved in capturing the footage to establish a "spy movie" quality to the movie and, as a result, draw in a wider audience than the typical documentary film fan. However, this secret filming, in combination with the portrayal of the Japanese people, elicited great controversy surrounding *The Cove*'s release. (2013)

At first sight, Hughes seems to be lumping two things together here that have nothing to do with one another: The filmmakers' use of spy equipment to secretly film cruel fishing practices on the one hand, and the film's stigmatization of Japanese dietary habits on the other. However, the two are in fact intricately related in the film, and *Racing Extinction* is at times marked by a similarly close relationship between its intermediality and the argument it makes about dietary practices in the context of species extinction.

Set up by the opening sequence showing extinct animals, and the following sequence introducing the technical equipment, the third sequence of *Racing Extinction* again starts

with a fade to black (and opening credits displayed) and a voice-over: “So okay, we’re doing an order here. One hat cam, two buttonhole cameras ... sports bra, one bottle cam.” The next shot is shaky footage of two young women who are prepped with all that equipment before walking into the popular sushi restaurant The Hump in Santa Monica, California. It is reminiscent not so much of a spy movie perhaps, but of scenes viewers might have seen in films featuring undercover policemen or journalists on the way to expose some sort of crime. As it turns out, this is precisely who the women are – as is revealed by a closeup of a “Special Agent” police badge worn by one of them underneath her sweater – and what they are up to. Once they have entered the restaurant, they order what they know is its unofficial specialty: endangered Sei whale meat, which is illegal in the United States. The entire scene is captured on their spy cameras and hidden mics, one of the agents also using her cell phone underneath the table to send Psihoyos text messages that are typed out in speech bubbles on-screen. The cognitive effect on the viewer is that of eavesdropping, of witnessing – along with Psihoyos who is positioned outside the restaurant in a van – how the evidence is collected by the two agents. Unlike Psihoyos, however, who at this point only receives sound from the hidden mics and the text messages, the viewer also sees the footage recorded by the spy cameras. Its shaky, grainy, and underexposed nature contributes to the intimacy and suspense of the sequence, which culminates in the display of a television newscast announcing that “the owner and chef of one of America’s trendiest restaurants are facing federal charges tonight – all because of what they put on customers’ plates: an endangered species. And behind the undercover sting? Some moviemakers who went right back to work.”

Psihoyos thus opens his film with an extra-diegetic success: Not only did the owner and chef of The Hump face criminal charges as a direct result of his clandestine filming, but after sustained protests in front of the restaurant involving a video installation showing footage of endangered whales – which are also displayed in the film – the restaurant closed for good “as a self-imposed punishment on top of the fine that will be meted out by the court” (*Santa Monica Daily Press*). However, this is the only time in the film that a target of Psihoyos’s intermedial undercover stings is in the United States. While his film does include the US, and the industrialized West more generally, in its argument about the causal relationship between climate change and species extinction – highlighting the CO<sub>2</sub> and methane emissions produced by livestock, traffic, factories, and thawing permafrost – the secret filming happens once again in Asia, highlighting non-Western dietary and medical practices as drivers of illegal wildlife trade and, ultimately, species extinction.

Compared to *The Cove*, which focuses on one area and issue, *Racing Extinction* is broader in its approach though the emphasis is again on aquatic species. Accompanied by the photographer and ocean activist Shawn Heinrichs, a Chinese interpreter, and the one of the special agents from the Hump bust, among others, Psihoyos sets off to capture illegal wildlife trading in multiple facilities in Hong Kong and Mainland China. One of the most

remarkable episodes in that regard focuses of the trading of shark fins, the central ingredient in shark fin soup. While the traditional dish signals wealth and distinction in the Chinese cultural context, it has been condemned by the Humane Society because “shark finning entails cutting off a shark’s fin, often while the shark is still alive, and dumping the animal back into the sea to die slowly” (*Humane Society Website*). This is illustrated in the film using video footage shot by Heinrichs that shows a “beautiful tawny nurse shark [that] had all its fins cut off, and it was trying to swim but it couldn’t.” Heinrichs’s voice cracks as describes the underwater footage he captured as “heartbreaking because this is what the reality is, this is the thing that nobody gets.” From here, the film cuts to a closeup of the shark with the bloody gaping wound in its side, unable to move and left to die miserably. It thus aims to cue viewers’ empathy and compassion for the shark – an animal that has been vilified in popular media ever since the world-wide success of Steven Spielberg’s *Jaws* (1975). While we do not know much about how exactly humans empathize with nonhumans, neuroscientific evidence suggests that looking at photographic representations of suffering animals activates some of the same brain regions as looking at representations of suffering humans (Franklin et al).<sup>3</sup> By depicting the suffering of the mutilated shark, along with Heinrichs’s own emotional reaction to that suffering, the film thus prepares viewers emotionally for the team’s next undercover sting at a shark trading facility in Hong Kong where they pose as the owners of an American seafood shop who are looking for something “more exciting.”

Again, they are using spy equipment to get the audiovisual evidence they want, some of it tiny and hidden, some deceptively obvious. Heinrichs has a large SLR camera dangling from his neck, tourist-style, looking idle and thus harmless to the shark dealer while discreetly capturing video from his chest the entire time. What they record – thousands and thousands of cut-off shark fins laid out on the roofs of several buildings – is a deeply shocking sight not only for viewers but also for Psihoyos and his team, who visibly fight for control over their emotions as they walk around, filming. The Chinese trader, however, seems utterly unfazed by the horror he is participating in, and yet he feels the need to explain his line of work to the Americans. “A lot of the greenie people,” he tells Psihoyos, “they are misunderstanding our industry. They think we take the fin and let the live shark go down into the sea and die struggling like this. You know, very bad. But that is not the truth. That video is made by the greenies themselves.” He seems to be referring to a widely circulated public service announcement video also shown in the film, which was created by the environmental organization WildAid using the footage of the dying tawny nurse shark shot by Heinrichs – who is now standing right next to the shark dealer, smiling in disbelief.

In terms of emotional engagement, this sequence is meant to accomplish at least two things: cue compassion and concern for the mutilated shark(s), and antipathy towards the trader. The cognitive film scholar Carl Plantinga notes that “the fostering of allegiances and antipathies toward characters” is a “way in which documentary filmmakers characterize

the people they represent.” In argumentative documentary formats, these people are often “slotted into the roles we might expect in a well-made fiction film—as sympathetic protagonists and morally questionable antagonists” (“Characterization” 128). This is precisely what happens in *Racing Extinction*, where the Chinese trader is slotted into the role of the despicable antagonist. This is facilitated not only by his casual attitude toward the bloodbath on his roof, but also by the fact that he is shown to be lying both about the video and the fate of the dismembered sharks, who earlier the film have been revealed as vulnerable animals worthy of protection. “Somebody can tell you that there are 70 million sharks being killed for the fin trade every year,” says Psihoyos in the film, “but when you actually see the evidence and witness this gorgeous animal being reduced to piles of appendages, there’s a horror that becomes rage.” Here and elsewhere in the film, viewers are invited to share both the horror and Psihoyos’s rage. Whether they accept that invitation will depend on several factors, among them their own food preferences (Filippi et al.) and cultural background. Like *The Cove*, *Racing Extinction* is a film that addresses itself to Western viewers and in which most of the villains are Asians. And like *The Cove*, it can be accused of sometimes problematic racial stereotyping in the service of its environmental message.<sup>4</sup> While it is a fact that shark fin soup is an ethically and ecologically problematic dish that continues to be popular in China, the film is much less overtly critical of equally problematic western eating habits, such as the consumption of meat (Morell).<sup>5</sup>

However, not all of the film’s intermedial highlights hinge on dangerous undercover work and the environmentalist critique of non-western tastes. In one of the most affecting scenes in the film, Psihoyos meets with Dr. Christopher W. Clark, Johnson Senior Scientist at the Cornell Bioacoustics Research Program, which owns the largest repository of animal sounds on the planet. In his conversation with Psihoyos, Clark plays a song recording of the male O’O singing on Hawaii. “These birds mate for life,” he explains, “so he would be singing a duet with his mate where he sings, then she sings, back and forth.” As we listen to the recorded voice, we see archival footage of the bird up in a tree, singing, followed by a monitor showing the audio signal’s amplitude. “Here is the male song,” continues Clark, pointing to the monitor, “no response. Here is the male song again.” Then the film cuts to a closeup of his face: “That’s the last male of a species,” he says, a sad smile on his lips, his voice thick with emotion, “singing for a female who will never come. He is totally alone.”

The scene is rich in terms of how intermediality can be used to engage viewer emotions. The video footage of the bird is hardly suited to cue such emotions, since it is shown far away against an evening sky. The voice recording alone also would not do much for viewers unfamiliar with the bird or its story. And so it is Clark’s storytelling that engages the viewer, the way he presents the last O’O’s mating song – and the lack of a response – not only auditory but also visually as a digital amplitude while making us aware of the total loneliness of the singer. Moreover, Clark himself is important for viewer engagement. We may not

know how birds experience loneliness or desperation, but the emotional timbre of Clark's voice, along with his facial expression, suggests that he feels empathy for the bird and his situation. As in the case of Heinrichs's response to the fate of the tawny nurse shark, the film is thus inviting viewers to share the feelings of a human witness to animal suffering via affective mimicry and emotional contagion.<sup>6</sup> It is a contemplative, quiet scene, but for this viewer at least, it was the one that continued to haunt me long after watching the film. Almost inevitably, I felt compelled to imagine what it must be like to be last one of your species and to keep calling out, not knowing or understanding that no one will ever come. The scene touches upon a deep-seated, existential fear shared by all humans, and it allows viewers to understand on a visceral level what the word *extinction* really means. It should be noted, however, that *Racing Extinction* is not – or at least only in part – a depressing film. Although it is packed full with images and scenes that carry a negative affective charge, such as the ones analyzed so far, these darker moments are counterbalanced by scenes that cue positive emotions such as pleasure, admiration, and awe.

### Making a MOVIE: Endangered Species as Intermedial Spectacle

Cognitive film theory suggests that mixing negative and positive emotional cues in a film is not unusual, even imperative, if the goal is to engage viewers. As Plantinga has shown (*Moving*), notorious tear-jerkers such as James Cameron's tragic melodrama *Titanic* (1997) cue a mix of negative and positive emotions in viewers to ensure an entertaining and satisfying viewing experience. And making an entertaining movie was high on Psihoyos's priority list. "Most documentaries feel like you're going to a medical lecture," he has complained, calling his own film "a real-life *Avengers*" (quoted in Farrington) thereby comparing it to a crowd-pleasing popular fiction film. His words seem to echo those of documentary filmmaker Michael Moore, who famously declared that "the first rule of documentaries is: Don't make a documentary — make a MOVIE." Moore argues that whoever makes any kind of film is a filmmaker, and if that filmmaker chooses to make "a \*movie\*, people might actually go see your documentary! .... They don't care whether you make them cry, whether you make them laugh, whether you even challenge them to think — but damn it, they don't want to be lectured, they don't want to see our invisible wagging finger popping out of the screen. They want to be entertained" (Moore). Without question, *Racing Extinction* is meant to entertain (although there is also some finger wagging), be it through cunning undercover work or stunning underwater photography of the marine species that are being hunted to extinction. As Psihoyos puts it in the film: "My hope is that if you can show people the beauty of these animals, there is a chance to save these things."

This stated belief in the power of images to affect people's attitudes and behavior mirrors that voiced by James Balog in *Chasing Ice*. And given that both men first became famous for their powerful photography, we should not be surprised to see beautiful photos and video footage showcased in their films. While *Chasing Ice* includes dramatic images of ice formations and melting glaciers, *Racing Extinction* shows camera-equipped scuba divers swimming with blue whales and manta rays. And like *Chasing Ice*, *Racing Extinction* depicts a screening of some of the footage shot earlier for the film, in this case an underwater shoot showing the majestic floating movements of the manta to a Indonesian community engaged in hunting it in the hope it will affect their view of them.

The most remarkable intermedial element in the film, however, is its spectacular finale. The idea behind it, in Psihoyos's words, is to bring "nature into the cities" in the hope that it will wake people up to the reality of mass extinction. And unlike its darker moments, which are populated by Asians cast in the role of the villain, these final minutes of the film introduce, in an equally problematically celebratory manner, several American "heroes" assisting with the intermedial project. Among them are Travis Threlkel, an interactive digital art installations designer, Tesla-owner Elon Musk, and the race car driver and environmental activist Leilani Münter. With their help, Psihoyos's team retrofits a Tesla with a powerful projector and sound system that brings the moving images and sounds of endangered animals into the heart of New York City, using iconic buildings such as the Empire State and the UN Headquarters as giant screens. They also use a camera that makes CO<sub>2</sub> emissions visible to the human eye and project skulls and crossbones onto the steam and smoke emanating from a refinery. If the first three quarters of *Racing Extinction* were technology-affine, these last minutes of the film take the hyping of digital media technology to a whole new level. The result, however, is nothing short of spectacular. And at least for the moment, it seems to do the trick as crowds of people stop in the streets to watch the spectacle. Faces are shown in closeup, expressing surprise, fascination, and awe, cueing viewers to feel along with them.

According to French philosopher Guy Debord, a spectacle "is not a collection of images. Rather, it is a social relation among people, mediated by images" (2). The finale of *Racing Extinction* demonstrates that such social relations can also reach beyond the realm of the human, engaging not only the people who look and the people who create the spectacle, but also endangered animals who seem to be looking right back at them. Moreover, the mesmerizing effect of the images is amplified as film viewers watch New Yorkers watching the spectacle. One question that poses itself, then, is whether a communicative strategy that aims to "bring nature into the cities" via spectacular mediation and remediation is indeed suited to awaken people to the serious environmental problems. A related question is whether it makes a difference if one is directly exposed to 30-foot projections of endangered animals while standing outside in the streets in a crowd of equally transfixed fellow humans, or if one watches other people being transfixed that way within the intermedial storyworld

of an environmental documentary. In both cases, the animals in question are not only mediated but also aggrandized, larger than life. Yet they are missing important components of physical embodiment, which makes the encounter with them visually overwhelming and sensually impoverished at the same time. The film spectator, however, is once more removed as the film camera captures the projection of the previously produced images along with the responses of people who personally witness the situation.

What kind of difference such remediation makes in terms of efficacy can ultimately only be explored through empirical reception studies. If reviews are any indication, however, then it seems that the film can be an educational tool precisely by being emotionally engaging and spectacularly entertaining. In her review for the *New York Times*, Jeannette Catsoulis writes that “if you’ve ever wondered what a breaking heart sounds like, it’s right here in the futile warble of the last male of a species of songbird, singing for a mate that will never come,” thus responding precisely in the way cued by the film. Writing for the *Hollywood Reporter*, Duane Byrge states that “the film is a captivating, sobering look at the world’s endangered aquatic species, but it’s also a frightening revelation of what methane and carbon are doing to the ocean.” The film’s complex intermedial strategies, then, seem to have “awakened” at least some viewers to the ongoing catastrophe of the Sixth Mass Extinction.

## Conclusion

There are surprisingly few theater-released documentary films with a central focus on the Sixth Mass Extinction. While there is no shortage to television productions on the subject, feature-length films meant to be shown on the big screen are very few and far between, and they tend to focus on the fate of one specific species rather than addressing the issue more generally.<sup>7</sup> This lacuna is somewhat puzzling, given the enormity of the issue; one can only speculate that the topic is so uncomfortable that people would be unwilling to buy a movie ticket to learn more about it. Psihoyos wanted to change that, using some of the same intermedial strategies he had used in *The Cove* while also expanding the type of media used. Despite all his efforts, however, *Racing Extinction* only had a brief theatrical run and then went straight to the Discovery Channel and a range of digital and home media platforms. And while it was nominated for several awards and received praise from reviewers, it was not nearly as sweeping a success (or as controversial) as *The Cove*.

Given the filmmakers’ ambitions, that must have been a disappointment. However, they continue to ensure that the content of their film can live on and engage additional audiences online. While websites providing additional information are almost a default by now for the makers of argumentative eco-documentaries, <https://racingextinction.com> stands out for its remarkable visuality. Most striking, upon first visiting the site, are the extreme

closeups of animal faces – a bear, an eagle, and a wolf – looking directly at the visitor and animated to slightly shift their mimic, thus looking alive. In addition to the trailer of the film, the website features short videos and still photography, along with video portraits of some team members and interviewees featured in the film. The website also offers “Ways to Help,” providing information on-going actions, climate-friendly diets, and the opportunity to sign up for a newsletter or host a screening of the film. But the most remarkable feature is the four “interactive lesson plans” which can be downloaded by educators including thematically selected “*Racing Extinction* video clips to enhance [students’] perspective and insight.” This encourages and facilitates the use of only (pre-prepared) parts of the film in educational contexts, giving it yet another shape and medial environment.

Such “interrelations among media” belong to the third conception of intermediality as defined by Bruhn Jensen (1) and they have also been the focus of two closely related fields, namely transmedia studies and transmedial narratology.<sup>8</sup> As Pat Brereton has shown, one important transmedia dimension of environmental film is the educational bonus features on DVD releases. Given the ubiquity of websites for eco-documentaries, however, it would also make sense to consider how they engage visitors online, both those who have already seen the film and those who are new to it or even its topic. “A key aspect of digital media,” explains Bruhn Jensen, “is that they facilitate distributed processes in which users interact with texts, and with each other through texts” (4). Further studies in intermedial ecocriticism might investigate how exactly the websites of eco-documentaries facilitate such interaction. It also seems imperative to explore whether watching an intermedial film, or engaging with its website online, can have any real-world implications, and whether those implications are helping or hurting conservation efforts. A combination of intermedial and cognitive ecocriticism can help us along in that process by teasing out the complexity with which such texts aim to engage audiences.

## End Notes

1. From D. W. Griffith’s infamous *Birth of a Nation* (1915) onwards, an increasingly standardized set of filming and editing techniques has been working in concert with technological innovations towards creating the illusion of spatial and temporal unity and achieving transparency with regard to the cinematic techniques themselves. On continuity editing techniques in early film, see also Bordwell and Thompson (2001).
2. As I have argued elsewhere, a cognitive ecocritical analysis of such films can give us a better understanding of how they engage viewers on the visceral and emotional level in their environmentalist stories. I have analyzed these three films in three separate publications (“Emotions of Consequence?” “Touching?” and “Feeling Bad?”).
3. Franklin et al.’s fMRI study focuses on representations of dogs. As the researchers point out, the results must not be the same for all animals.

4. For a discussion of Asian stereotypes in *The Cove*, see chapter 4 of my *Affective Ecologies*.
5. It should be pointed out that Psihoyos is vegan and that his most recent film, *The Game Changers* (2018), is a vegan advocacy film. But even though it has also been called “a vegan documentary” (*Best Vegan Documentaries*), *Racing Extinction* does not take on meat consumption anywhere in the world in the way it takes on the consumption of endangered fish and in Asia, nor does it discuss at the length how meat consumption affects species extinction.
6. On the role of the closeup in cueing viewer empathy, see Plantinga, “The Scene” 239ff.
7. Films focusing on the endangered status of honeybees and coral reefs, respectively, are Markus Imhoof's *More than Honey* (2012) and Jeff Orlowski's *Chasing Coral* (2017).
8. For an introduction to transmedia studies and transmedial narratology, see Freeman & Gambarato and Thon.

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