

“A World of Wonder:” *Planet Earth II* and the Operational Aesthetic

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“I dream of a new age of curiosity. We have the technical means for it.”

- Michel Foucault, *“The Masked Philosopher”*

The first episode of *Planet Earth II* (BBC Nature 2016),² the celebrated follow up to the 2006 nature documentary series, opens on the striking, emerald green island of Escudo, home to the three-toed pigmy sloth. David Attenborough’s narration introduces the character and stages the major drama of the sequence: “he needs a mate.” The sloth appears to doze lazily in the lush greenery, clinging to a mossy tree branch, when a high-pitched cry sounds off screen: “that’s an enticing call from a female. Somewhere out there.” Through a spectacular series of shots, we see the sloth swing between branches, swim across a crystal-clear stretch of turquoise water, and finally arrive at a cluster of trees. A medium shot captures the sloth treading water as he looks up, followed by a point of view shot that gazes up at the tree tops where another sloth appears perched in the branches: “could this be her?” He climbs up the tree, making his way toward the mystery female, culminating in dramatic close up of the sloth whose gaze is directed upward, off screen [Figure 1]. “But she’s not the one,”

Attenborough reveals, with the programme's cut to the female sloth who looks down at the male and swings her arm to reveal a baby clinging to her furry chest.



FIGURE 1: The sloth's "look" ("Islands," *Planet Earth II*, BBC Nature 2016)

Attenborough's narration combined with continuity editing helps to give the sloth a sense of personality: he has a motivation, obstacles to overcome, and a final climactic resolution.³ The "exchange of gazes" between the two sloths makes for a dramatic end to the sequence, leaving viewers questioning his fate. For the creators, a simulated point of view was central to locating viewers in the environment and inspiring empathy for the animal-characters.⁴ Producer Elizabeth White claims, "we really tried to capture things through storytelling so people would be able to empathise with the animals and feel like they've experienced *their* world, even though they don't speak the same language. We tried so hard to portray the animals' behaviours and show details so people can really get into that animal's world."⁵ Producer Mike Gunton adds, "Once you're with those creatures almost looking at it

through their eyes you can tell a slightly more emotional⁶ connecting story.”⁷ In other words, point of view helps viewers identify with the animals as they become immersed in their dramas. Gunton and White articulate a familiar logic of empathy: point of view shots allow viewers to step into the animal’s position, see the world through their eyes, and thus understand animal life on this planet.⁸

The use of point of view in *Planet Earth II* is tied to the affordances of emerging technologies. Camera operators and producers have attested to the close relationship between the simulated point of view and new digital cameras: “[new technologies] meant we could take the camera off the tripod and get into the animal world and see our planet’s landscape through their eyes.”⁹ Ultra-high definition cameras with high frame rates and low light capabilities, combined with stabilizers and rigs allowed creators to swing through the jungle tree tops like a sloth, get down low to the ground like a crab, or soar through the sky like an eagle. Combined with classical continuity editing techniques, the viewer hypothetically steps into those positions and experiences the world like a sloth, crab, or eagle.

The climactic exchange of glances between the male and female sloths is thrilling. His upturned gaze creates a sense of anticipation, and the reveal is all the more tragic as a result. We are undoubtedly *invested* in this drama and in the sloth’s fate. But a focus on narration ultimately overlooks one of the central pleasures of this opening sequence: the spectacular quality of the image.

This article explores the logic of wonder and curiosity in *Planet Earth II* to argue against an empathetic reading of the series. While Attenborough’s narration often transforms the animals into characters, and editing helps create the perception of entering into the animal’s point of view, I argue the show’s use of super high definition cameras, stabilizers and shallow focus interrupts identification in favor of a curiosity about the underlying technologies and production processes *and* the animals on

screen. This experience of wonder and curiosity promotes an ecological message of coexistence between human, animal and technology.

I begin by examining the ways in which wonder is produced through the show's use of cinematography. *Planet Earth II* uses magnification, slow motion, scalar juxtaposition and recreations of animal point of view to highlight the novelty and rarity of the imagery. Viewers are treated to ultra-high definition shots following birds as they glide through the air, extreme close ups of tiny insects transforming before their eyes through time lapse photography, seemingly impossible encounters between animals captured in the dark of night through new night vision technologies, among many other visual feats. Encountering these spectacular images does not leave viewers marveling at mere spectacle, or halted in astonishment.¹⁰ Rather, the experience of wonder, or the sensation of being struck or momentarily overwhelmed by an aesthetic encounter,¹¹ produces a keen sense of curiosity. This logic resembles descriptions of scientific inquiry from the seventeenth-century Enlightenment: “wonder sparked curiosity, shaking the philosopher out of idling reveries and riveting attention and will to a minute scrutiny of the phenomenon at hand.”¹² For philosophers like Sir Isaac Newton, René Descartes, Robert Boyle and Thomas Hobbes, marveling at the novel and extraordinary could prove to be a powerful catalyst for knowledge production.¹³ Ideally, this rush of sensation—this passion—could prompt a curiosity capable of explaining away the sense of the unknown attached to the experience of wonder.

In *Planet Earth II*, wonder sparks a curiosity simultaneously aimed at the animal subjects *and* the underlying technologies and production techniques. Turning to reviews, I demonstrate how the series' use of cinematography and narration prompts viewers to marvel at the spectacular beauty and strangeness of the natural world, but also wonder, “how did they capture this?” The series' final “making of” episode and the extensive archive of promotional articles dedicated to the show's

production attest to a persistent fascination with understanding “how they captured that camera movement” or “that image in such detail.” In this sense, the show extends Oliver Gaycken’s theorization of early popular science cinema, where “various techniques for producing revelation” created “experiences that invigorate and activate the sense of wonder.”¹⁴ For Gaycken, these “devices of curiosity” incite what Neil Harris terms the “operational aesthetic,” or an appeal to the modern fascination with “seeing how things work.”

While the experience of wonder and the operational aesthetic may direct attention to the underlying production, viewers do not lose sight of the animal world. Rather, I argue imagery and technology work hand in hand to incite a curiosity about the ecological relationships between animal, human, and technology.¹⁵ In other words, wonder does not operate in service of knowledge production or empathetic identification, but instead toward a concern for the ecology of the human, technological and animal relations in the modern world.¹⁶ This is not the aestheticization of nature by means of technology; alternatively, I argue, the show embraces the wondrous possibilities of emerging technologies in service of the show’s environmental message.¹⁷ Technology doesn’t simply destroy nature; it can be a way to discover nature and produce new connections with respect to the rapidly changing world around us.

The wondrous experience of the sloth sequence, and of *Planet Earth II* as a whole, is tied to the novelty of the show’s content *and* its form. Autonomous cameras rigged with motion sensors capture rare animal encounters, and long lenses get us closer to the animal subjects and reveal unseen microscopic creatures. Wonder isn’t simply located in the showcasing of new animals and environments, but also in the striking clarity, colors, and perspectives afforded by the latest technologies. For example, when the male sloth is first revealed, we can discern the texture of his fur coat, see the individual strands of the shaggy hair covering his back, and marvel at the striking contrast

between its green-brown hue and the surrounding forest landscape. New cameras and rigs may help creators simulate point of view, but the quality of the footage simultaneously dazzles viewers as they see the natural world in super high definition. The world of *Planet Earth II* is immensely detailed and highly saturated; Viewers are treated to views from above and below, they move through environments with ease.¹⁸ This is a world so vivid, so full of new events and unseen phenomena that one can hardly believe the images on screen.

Planet Earth II juxtaposes a variety of visual scales, narrative patterns, and locations in order to reinforce the novel viewing experience. The show frequently oscillates between sweeping aerial views and tightly framed close ups and point of view footage. Shot with wide angle lenses and elaborate stabilizers, cameras track through seemingly impossible terrains: the thick blankets of powdery snow high in the Rocky mountains, a maze of spiny cacti in the American southwest. The high definition cameras capture the sharp points of the dangerous foliage and the dense clusters of plants in alarming detail, leaving viewers to question how these cameras were able to traverse such treacherous landscapes. The episode “Islands,” for example, highlights the spiny forests of Madagascar, home to the sifaka lemur. Attenborough narrates the survival of a mother lemur and her child in a desert landscape cloaked in a thick forest of thorns. Low angle shots move through the forest, backlit against the blinding sun to emphasize the dangerous spikes protruding from the branches: “here, nearly all the plants are covered in ferocious spines.” The camera glides through the forest canopy and close ups show the lemur’s hands grasp at the thorns, leaving viewers questioning the position of the operator throughout the sequence: where are they and how did they manage to capture this angle, this scale?

Time and time again, the show reveals perspectives that not only showcase novel animals, plants and landscape, but also framing and camera movements that appear impossible. The resulting images produce a sensation of disbelief, which Colin Williamson very concisely describes as a

“dissonance between the eye and mind [that] shapes the dialectic of uncertainty associated with the experience of wonder.”¹⁹ Viewers of *Planet Earth II* continually find themselves encountering images that appear too smooth, too detailed, too bright to be real. This uncanny sensation²⁰ is related to the inherent fallibility of sight and the sensation of encountering new optical technologies. Captured using the newest technologies, likely unseen by many of the viewers in their homes, the images appear unfamiliar, almost unreal to those not yet used to the sharp details and color spectrum of the high-speed, 4k cameras. *Planet Earth II*'s ultra-high definition images provide a kind of perceptual shock, rupturing the standards of vision previously associated with moving images on screen. “I'd never seen such bright, astounding shades of blue sky, green tree leaves, and orange-brown dirt,” writes one reviewer, “Fruit hanging from trees, fur glistening in the morning sun, elephants' shiny stone hue—I better remember those colors by closing my eyes and imagining than by looking at old photos.”²¹ In this sense, the series offers a particularly vivid example of the impact of emerging technologies on our senses. It is not so much that *Planet Earth II*'s images are the “first” of their kind, as much as it is likely the viewer's first encounter with ultra-high definition imaging technologies at home. Unfamiliar with the detail and color palette of 4K, the experience of *Planet Earth II* feels like an entirely new view of the world.²²

While the perceptual thrill of the show's HD imagery is common to experiences of technological modernization,²³ *Planet Earth II* employs tactics to intensify this sensation. Like the graceful navigation of Madagascar's spiny forests, sequences are designed to highlight the variety of perspectives afforded by the new technologies. This is perhaps best seen in the show's use of extreme close up, celebrated across reviews and promotional materials. Nearly every sequence in the series uses extreme close ups to dramatize the action: a tightly framed shot of an eye gazing off screen or a claw grasping its prey. But these magnifications are also used to reveal minuscule dramas with striking

clarity, often beautifully lit and framed to emphasize the scale and depth of the image. “Jungles,” for example, combines slow motion and magnification to create a spectacular portrait of rain at the insect-level scale. Shallow shots of giant water droplets topple and splatter across bright green leaves, where magnified red and green frogs, and spiny speckled grasshoppers sit perched in the shower. The slow motion, shallow focus montage dramatizes massive water droplets dangling from the end of sagging blades of grass, tumbling into sparking pools, a winged beetle and bright blue hummingbird shake the water from their wings, throwing a spray of mist up in the air.

“Jungles” is rife with novel imagery, including dolphins swimming through a flooded Brazilian forest, a Wilson’s bird of paradise attracting a mate with a plume of iridescent green feathers, and glowing jungle fungi coming to life through time lapse photography. But the most striking revelation is perhaps the minuscule Costa Rican glass frog. *Planet Earth II*’s cameras offer impossibly close images in alarming detail. “Tiny, no bigger than your fingernail,” the glass frog is shown from a variety of angles, each captured in shallow focus, emphasizing his translucent, slimy skin [Figure 2]. We can see the pulsating sac on his neck, slight outlines of his organs beneath the surface. The patterns of the leaves show through the thin, skin of his hands and feet: only the shiny yellow and black eyes stand out. If this display of scale wasn’t enough, Attenborough reveals: “he’s a father.” The glass frog leaps in slow motion to a new leaf covered clusters of transparent shiny orbs, and the camera moves closer to reveal the tiny tadpoles wriggling inside [Figure 3]. The tiny frog must protect his eggs from predators. A wider shot reveals a wasp hovering near the nest, and Attenborough continues, “it’s noticed the wriggling tadpoles at the bottom of the leaf.” The father frog remains still at the top, forced to protect the youngest eggs as the wasp descends. The drama is punctuated through an extreme close up of a single egg where a tadpole rotates inside. The wasp punctures the shell, shoving its head inside and grabs the moving tadpole, devouring it next to the nest. “But these tadpoles are not as helpless as they

may appear.” Suddenly, in slow motion, an opaque tadpole breaks free of the egg, flails in the air and falls into a nearby puddle, just escaping danger.



FIGURES 2 & 3: Glass frog magnified in shallow focus, and his tiny tadpoles (“Jungles,” *Planet Earth II*, BBC Nature 2016)

This sequence offers an alarmingly clear and well-lit minuscule drama. Attenborough's narration aids in staging the stakes and scale of action and imagery: "no bigger than your fingernail" helps the viewer imagine the size of the world on screen and marvel at the scale of magnification. The shallow focus helps direct attention but also emphasizes the textures of the sticky egg sacks, the ribs of the leaves: details entirely inaccessible to the naked eye. In the glass frog sequence, and throughout the series, magnification and narration mutually reinforce one another to produce the sense of spectacular novelty. These are not the flattened views of a microscope, rather incredible magnifications shot like a Hollywood film. The spectacle here lies as much in accessing the world of the glass frog as the cameras capable of capturing them, reviving Gaycken's discussion of reflexivity in early microcinematography: "so while 'nature's closest secrets' designate imaging views of unfamiliar phenomena...in another sense 'nature's closest secrets'" are also the cinema's unique representational possibilities."²⁴ Likewise, *Planet Earth II* reveals the tiny dramas of the natural world and the marvelous possibilities of the novel technologies capable of capturing it.²⁵

Just as magnification invokes the spectacles of early popular science film, *Planet Earth II* participates in a long history of scientific display on screen. From the use of slow motion to time lapse photography, the series draws upon strategies that date back to the advent of cinema.²⁶ However, the show repeatedly amplifies these techniques, getting closer, shooting in lower light conditions, reviving the wondrous thrill of the camera's manipulation of time and scale. The rain montage and frog sequence may use slow motion and magnification, but the use of shallow focus and high-speed cameras capable of showcasing the emerald greenery and subtle textures of the environment create a spectacular sense of novelty. Everything appears a bit more vivid, a bit brighter, and clearer than we've ever seen before: *Planet Earth II* boasts "the most vivid, life-like image you've ever seen on your TV

screen, with a spectrum of colors so rich you'll have to invent names for some of them (plain old "red" doesn't really describe the uncanny hue)."²⁷

Wonder in *Planet Earth II* is thus tied to the experience of the new. However, knowledge of novelty doesn't necessarily need to precede vision in order to create wonder: "the 'Ah!' of wonder is unreflective and immediate."²⁸ In other words, novelty is often felt in the apprehension of the show's imagery, and only then reinforced by the narration, not unlike Descartes' account of wonder as, "a sudden surprise of the soul which makes it tend to consider attentively those objects which seem to it rare and extraordinary."²⁹ Novelty is often felt before it is understood while watching the series. An endless stream of spectacular color and texture continually leaves viewers caught up in the imagery, propelled through Attenborough's narration.³⁰

For Hobbes, Descartes, and other Enlightenment thinkers, curiosity encourages one to search out cause-effect relationships, to understand the encounter with the new and rare—the encounter with wonder. In their historical account of wonder, Loraine Daston and Katherine Park claim wonders sit at "the outermost limits of the natural. Wonder as a passion registered the line between the known and the unknown."³¹ It often pointed to a moment of seeing without understanding, a precipice or gap in knowledge that could be traversed³² or left unknown. Wonder is thus signaled a gap in knowledge that could incite curiosity in pursuit of knowledge or understanding.³³ For Enlightenment thinkers, wonder functions to initiate a process of discovery, the curiosity essential to scientific inquiry, an "appetite [that] proves essential to the project of modern science."³⁴

In *Planet Earth II*, the unknown is often felt and located in the spectacular imagery. Indeed, the footage is so high definition it frequently left viewers in a state of disbelief, spurring online debates

over whether the footage is in fact real [Figure 4].³⁵ Numerous online discussion threads, twitter posts, and articles have debated the legitimacy of the show's HD footage:

I had to pause and rewind, I actually said “huh, I guess they use CGI on things they can't film.”

If I had seen those albatrosses in a film, I would have thought they were awfully animated. The gradient of their fur was too smooth³⁶

These humming birds are so high def they don't even look real - like not used to seeing things like these moving up close! #PlanetEarth.³⁷

“We see a camera hover behind a pygmy three-toed sloth, and its fur, so close to the brightly lit water, glows with an incredible blue-green sheen. "Can't be real," you might say in response.³⁸

Curiosity is thus often directed toward the underlying production process. The uncanniness of the super high definition viewing experience inspired viewers to question the technologies and techniques behind the camera:³⁹ “Planet earth two could easily be CGI it's truly remarkable. Like howwww???” Across reviews and online commentary, viewers link the experience of wonder to the desire to understand how things work:

It's gorgeous to look at, and you sit there in awe, marveling at how, exactly, those images can even exist.⁴⁰

The one thing we find ourselves repeatedly asking when watching *Planet Earth II* is how? How?!⁴¹

Explanations can be found in countless articles dedicated to describing the production process and technologies.⁴² The vast archive of production background ranges from statements that reinforce the legitimacy of the show's images—producers insist the hummingbird is *not* CGI⁴³—to detailed specs on specific cameras, rigs, or lenses.⁴⁴ Articles are designed for a variety of audiences and published across wide range of sites, newspapers and blogs. A casual reader may turn to a listicle providing brief

accounts of the “6 sneaky ways they filmed their animal stars,”⁴⁵ while an avid nature photographer may turn to a more technical interview with a drone operator featured on a cinematography blog.⁴⁶ The sheer number and range of articles points to a widespread interest in understanding the spectacular images on screen, a desire to explain the techniques and technologies mediating the wondrous viewing experience.⁴⁷



FIGURE 4: The albatross offers a particularly good example of a sequence that sparked online debate. (“Islands,” *Planet Earth II*, 2016)

Viewers’ curiosity about the show’s production revives the “operational aesthetic” attributed to works of early cinema.⁴⁸ Adapting Harris’ work on P.T. Barnum, scholars have argued that encounters with early cinema incited a desire to know “how things work.”⁴⁹ The new perspectives and views afforded by the cinema incited curiosity about emerging optical technologies and techniques. In the

twenty-first century, *Planet Earth II*'s operational aesthetic directs spectators' attention to emerging digital technologies and innovative camera techniques. The show is capable of inspiring viewers to learn more about high frame rate and low light cameras, stabilizing rigs, and drone technologies.

Consequently, some reviews have criticized the series,⁵⁰ claiming its emphasis on technology fails to educate viewers on the animals and realities of the rapidly changing environment. However, technological wonder is often central to the process of knowledge production. In his analysis Descartes' theory of wonder, Philip Fisher demonstrates how wonder is in fact inextricable from emerging optical technologies. Descartes' wonder, he argues, is directly tied to "the technological production of newness—the moons of Jupiter that Galileo could show with his telescope or the new details within objects that had always been known...worked side by side with the newness produced by mathematical techniques."⁵¹ In other words, the wonder and subsequent knowledge produced, was intimately bound up in the new perceptual experiences afforded by emerging optical technologies.⁵² Likewise, *Planet Earth II*'s message is inextricable from the production processes and technologies. The series pedagogical possibilities are enfolded in the production of wonder. The operational aesthetic doesn't efface the natural world; rather it is part of the show's investment in representing the ecology of the natural world, human, and animal alike. Technology becomes an important source of *connection* between audiences and nature, a connection not to be obscured but acknowledged in the hope of recognizing the relationships between animal and human environments.

The operational aesthetic thus pushes back on an empathetic or identificatory reading of the series.⁵³ Encountering super high definition images and elaborate camera movements in fact ruptures any sense of immersive identification, undermining any possibility of empathizing with the animals on screen. Indeed, the operational aesthetic aids in avoiding the traps of simulating or theorizing animal perception. Following Jacques Derrida, Luce Irigaray, and Thomas Nagel,⁵⁴ many scholars within

Animal Studies/ Human-Animal Studies argue⁵⁵ we should abandon the project of theorizing animal consciousness for, as humans, we will never be able to access or understand how animals perceive the world. The wonder produced in *Planet Earth II* disrupts potentially anthropocentric forms of identification in favor of wondering at the underlying technologies and animals on screen. Moreover, the supplementary materials often foreground the interactions between the animals, technology, and humans responsible for the spectacular footage.⁵⁶ Considering the broader constellation of media surrounding the series, in addition to the final making-of episode, demonstrates the show's vested interest in the ecology of human, animal and technological relationships.

The final episode makes this evident through behind-the-scenes footage detailing some of the most challenging sequences, from tracking a rare swarm of locusts, to rigging camera traps to capture the nearly extinct snow leopard.⁵⁷ The golden eagle sequence focuses on the attempt to recreate the point of view of a diving eagle using footage captured by a paraglider. The birds are capable of making sharp dives at up to 200 miles per hour alongside the jagged peaks of the Alps. In an effort to simulate the dive, BBC Nature used trained paragliders, one of the few aircrafts capable of navigating the mountainous terrain and swift downward movement. The behind the scenes footage shows the experimental filming process required to capture this novel point of view as they try out a number of different camera rigs and encounter the challenges of unpredictable weather patterns. Attenborough's narration chronicles how the pilots studied the flight patterns of the eagles, trying to get into the mindset of the bird: "To fly like a bird, he must think like one, too." However, the first flight's footage using GoPro cameras strapped to the pilot's helmets proves unusable. To navigate the dangerous mountain terrain, the pilots had to turn their heads back and forth, resulting in swift, blurry pans. To fix this issue, the crew designs a tandem flight with a camera operator strapped to the front of a trained pilot [Figure 5]. As the two men descend, emphasis is placed on the human body at odds with

the harrowing descent: the camera operator complains he may be sick as they swoop toward the ground and they land in a tangle of trees and snow. Attenborough concludes, “They might not be as majestic as a golden eagle, but they do capture a unique perspective that conveys an eagle’s life as never before.”



FIGURE 5: Tandem flight to capture the golden eagle’s “point of view.” (“Mountains,” *Planet Earth II*, BBC Nature, 2016)

Attenborough’s narration points to the show’s awareness of its limitations. The goal of the footage is not to seamlessly integrate the spectator into the position of the eagle, but rather to offer a viewing experience—a “perspective”—that allows viewers to wonder at the unique way in which the bird navigates the surrounding environment. Indeed, the final edit of the golden eagle sequence in the “Mountains” episode repeatedly denies a sense of identification by combining footage captured by the

paragliders, autonomous cameras mounted to the back of an eagle, and wider shots gliding alongside the birds. Vertigo-inducing wide-angle aerial views of the Alps and Attenborough's narration help create a sense of anticipation for the dive, detailing the eagle's search for food in a mountainous, snowy environment. "She is not the only one looking for food. When she spots a chance, she must move fast." A wide shot shows the eagle dive by the side of a steep cliff, her elegant movement follows the curvature of the mountainside. Suddenly, there is a cut to a high angle shot in which the camera rapidly descends toward the snowy mountainside, twisting and turning as it falls. Bright blue skies contrast with the white snow and grey rocks jutting out from the mountainous terrain [Figure 6], all rushing at the camera at an alarming pace. The sequence returns to the camera placed on top of the eagle's head, the background moving so quickly that it is hard to discern the location speed. As the music swells, a medium shot appears to show the eagle glancing off camera, cutting back to the downward camera movement and back to the camera mounted on the eagle's back.



FIGURE 6: Eagle "point of view." ("Mountains," *Planet Earth II*, BBC Nature, 2016)

The combination of shots rapidly edited together produces the wondrous sensation of flying between the peaks of the Alps. However, this falling sensation is not a continuous, immersive decent through a space—akin to a forward tracking shot⁵⁸—but rather a thrilling descent that overtly acknowledges technological mediation, leaving audiences curious about the underlying production process: a curiosity later indulged by the behind the scenes episode. The footage shot from the eagle’s back foregrounds the relationship between the bird and the camera.⁵⁹ The framing clearly locates the GoPro device: we sense the mechanics of the shot, the presence of the apparatus affixed to the eagle’s back. At the same time, the downward thrust of the paraglider footage, the sheer speed and proximity to the mountainside, creates a wondrous sense of disbelief. The quality of the imagery—the pristine, powdery texture of the snow, the rough rocky outcrops, the glittering sunlight reflecting off the surrounding peaks—rushes at the camera at such speed, and in such detail, it feels almost unreal.⁶⁰

The eagle footage and corresponding making-of featurette illustrate the entangling of animal, technology and human present throughout the series. While the operational aesthetic directs attention to the autonomous cameras and the production process, this does not efface the eagle, or the environment captured on screen. The landscape is central to the production of wonder and curiosity in the sequence’s production: how did they capture such a fast and steep dive in that mountainous environment? Curiosity is simultaneously aimed at the eagle, the camera operators and the technology capable of navigating the harsh terrain of the Alps.⁶¹ The lesson is not a return to nature (a lesson that is perhaps more closely aligned with a message of empathy); it is a message of ecological coexistence. *Planet Earth II* uses wonder and the operational aesthetic to disrupt our ordinary viewing experience, allowing us to see the *connections* between humans, technologies, animals, and the environment.

Across reviews and interviews with the show’s creators, there is a consistent investment in the relations between humans and animals. As Gunton explains, “our programmes are the only window

on nature, the only way they can make that reconnection.”⁶² “We were purely looking at the natural world and that sense of connectedness [with humanity],” adds White. Reviews echo their sentiments, celebrating the show’s investment in thinking productively about the relations between humans and the natural world:

Simply put, *Planet Earth* is the most important program of our generation...[it offers a vision] where we work mightily to contemplate, understand and admire the mysterious natural world around us...as an instrument of love and affection for the multitudes of life on the fragile world, it is indispensable.⁶³

“Planet Earth” knows better than to emphasize what divides us. It’s here to bring us together in veneration of our shared world⁶⁴

Its deepest, most resonant visual and narrative preoccupations are about interconnectedness and universality, and of understanding the importance of the individual while also recognizing the broader picture.⁶⁵

While hyperbolic, each of these accounts stresses how the series emphasizes connections. None of these reviews suggests that the show is capable of simulating animal perception or engendering empathy. Instead, reviews often celebrate the capacity to reveal human and nature intertwined: the “interconnectedness,” “shared world,” “natural world around *us*.”

My analysis of *Planet Earth II* demonstrates how the show combines emerging technologies and animal dramas to produce wonder, inciting a curious attention to these connections.⁶⁶ In spite of using wonder to mobilize viewer’s interest in the ecology of the human and natural world, this lesson is not knowledge in the Cartesian sense: wonder doesn’t lead to a comprehensive understanding of the animal subjects.⁶⁷ Indeed, Descartes would likely accuse viewers of “blind curiosity...[seeking] out things that are rare solely to wonder at them, and not for the purpose of really knowing them.”⁶⁸ But *Planet Earth II* doesn’t aim to extinguish wonder, to explain away the unexpected, the novel and the rare. Nor does the show seek merely to indulge in spectacle. Rather, it uses wonder to encourage

viewers to remain curious and attend to “difference in a shared world,” and the connections between its inhabitants.⁶⁹ This curiosity is thus perhaps more closely aligned with the use of the term in the late work of Michel Foucault.⁷⁰ For Foucault, curiosity wasn’t simply the will to knowledge, the desire to rationalize the novel, the wondrous or the spectacular; rather, curiosity “evokes ‘concern:’ it evokes the care one take for what exists and could exist; a readiness to find strange and singular what surrounds us.”⁷¹ Contextualized within Foucault’s theorizations of criticism and subjectivity, curiosity was a means of disrupting the normative or “casual” disciplinary structures of power. The wonder of *Planet Earth II* may inspire a curiosity that doesn’t “[seek] to assimilate what is proper for one to know, but that which enables one to get free of oneself:”⁷² a curiosity that disrupts an anthropocentric or even technological view of nature in favor of attending to the ecology of humans, animals and technology in the modern world.

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Notes

¹ Michel Foucault, “The Masked Philosopher,” *The Essential Works of Michel Foucault 1955-1984* (New York: New York Press, 1994), 325.

² The title of this article comes from the special, “World of Wonder,” an edited version of *Planet Earth II* that combines all of the most spectacular footage from the series into a single ninety-minute episode.

³ *Planet Earth II*'s anthropomorphic techniques could be compared to Paul Wells' theory of ‘bestial ambivalence’ in *The Animated Bestiary*, where he sketches how animated animals often oscillate between the facts of animal behaviors and the fictions of animal cultures. Paul Welles, *The Animated Bestiary: Animals, Cartoons, and Culture* (New Brunswick, N.J.: Rutgers University Press 2009).

⁴ There is often the assumption that anthropomorphism reinforces anthropocentric models of thought. However, through their historical analysis of animals in pre-modern texts, Lorraine Daston and Gregg Mitman have advocated for a decoupling of the terms: “if anthropomorphism is decoupled from anthropocentrism, the former can still be criticized as arrogant and unimaginative.” Lorraine Daston and Gregg Mitman, *Thinking With Animals: New Perspectives on Anthropomorphism* (New York: Columbia University Press, 2005), 4.

⁵ Katie O'Malley, “Elle's Exclusive Interview with the Women Behind *Planet Earth II*,” *Elle UK*, 12 February 2016, <https://www.elle.com/uk/life-and-culture/culture/longform/a32864/bbc-planet-earth-female-producers-elizabeth-white-emma-napper/>

⁶ In contrast, Gunton has also said, “In the old days, you became the camera, because the camera's in your position. Now the camera becomes you. You're in that world, you're sensing and seeing.” Ultimately, the relationship between becoming the camera and identification for Gunton is unclear, however it's worth noting that he doesn't necessarily see the camera as a substitute for animal experience. Mike Pierce, “The Crazy Camera Tech That Made *Planet Earth II* Possible,” *Wired*, 26 March 2017, <https://www.wired.com/2017/03/crazy-new-camera-tech-made-planet-earth-2-possible/>

⁷ Will Huntsberry, “Nature's Ready for her Close Up: ‘Planet Earth II’ Returns in Ultra High-Def,” *NPR*, 17 February 2017, <https://www.npr.org/2017/02/17/515461598/natures-ready-for-her-close-up-planet-earth-ii-returns-in-ultra-high-def>

⁸ Point of view and identification has been discussed extensively in Film Studies, perhaps most famously in Laura Mulvey's “Visual Pleasure and Narrative Cinema.” Laura Mulvey, “Visual Pleasure and Narrative Cinema,” *Film Theory and Criticism: Introductory Readings*, Eds. Leo Braudy and Marshall Cohen (New York: Oxford UP, 1999), 833-44.

⁹ John Merli, “The Epic Production of Planet Earth II,” *TV Technology*, 14 February 2017, <https://www.tvtechnology.com/news/the-epic-production-of-planet-earth-i>

¹⁰ Here I invoke René Descartes' criticism of wonder as astonishment. For Descartes, wonder was always in danger of morphing into astonishment, which prevented rational knowledge production. Philip Fisher, *Wonder, the Rainbow, and the Aesthetics of Rare Experiences* (Cambridge, Mass: Harvard University Press, 1998), 46.

¹¹ Variations of this definition of wonder have appeared across histories of philosophy. It has close ties to René Descartes' description of wonder as a “passion” or a “sudden surprise,” and has been linked to the Immanuel Kant's sublime: The sublime and wonder depend “on moments in which we find ourselves struck by effects within nature whose power depends on their not being common or everyday.” In their historical account of wonder and Enlightenment, Lorraine Daston and Katherine Park describe wonder as an experience produced through objects “at the outermost limits of the natural.” Lorraine Daston and Katharine Park, *Wonders and the Order of Nature, 1150-1750* (New York: Zone Books, 1998), 13; Quoted in Fisher, *Wonder*, 1.

¹² Daston and Park, *Wonders and the Order of Nature*, 304.

¹³ Daston and Park argue a logic of wonder that breeds curiosity, which in turn, produces knowledge only existed during a brief period of the Seventeenth Century. By the Eighteenth Century, the two flipped: curiosity lead to wonder. Oliver Gaycken's discussion of early popular science film demonstrates the persistence of this logic, where he argues “curious experiences...invigorate the sense of wonder.” Daston and Park, *Wonders and the Order of Nature*; Oliver Gaycken, *Devices of Curiosity: Early Cinema and Popular Science* (New York, NY: Oxford University Press, 2015), 4.

¹⁴ Gaycken, *Devices of Curiosity*, 4.

¹⁵ Indeed, Attenborough's narration repeatedly returns to a message of coexistence: “Could it not be possible to build cities more in harmony with nature?” Attenborough asks in the final episode of the series, “Cities:” “We are the designers to this environment...Whether we choose to make it home for others is up to us.” The goal isn't to explain away the wonders of the natural world nor merely to marvel in its splendor, but to provoke greater attention to our relationship with it.

¹⁶ This follows scholarship in ecocriticism, which “shares the fundamental premise that human culture is connected to the physical world, affecting it and affected by it.” Cheryll Glotfelty, “Introduction,” *The Ecocriticism Reader* (Atlanta, GA: University of Atlanta Press, 1996), xix.

¹⁷ My reading thus offers an extension of Belinda Smail's work that illustrates the intersection of environmentalism and technological modernization in the twenty-first century. For Smail, "This increase across cinema, television, and the Internet has occurred alongside growing awareness of unprecedented anthropogenic changes to the environment and the precariousness of the world ecosystem." *Planet Earth II's* use of technology, I argue, encourages its ecological message of coexistence, attesting to Smail's historical claim, and indeed, foregrounds it through the experience of wonder. Belinda Smail, *Regarding Life: Animals and the Documentary Moving Image* (New York: SUNY Press, 2016), 149.

¹⁸ The emphasis placed on the aesthetics of nature aligns with Derek Bousé's "blue-chip" genre within wildlife films. "Blue chip" describes the immaculate, pristine presentation of natural splendor, devoid of human presence. Eleanor Louson has extended Bousé's work to describe the first series of *Planet Earth* and subsequent "blue chip renaissance," or the rise of TV documentaries using high budget, HD aesthetics. Derek Bousé, *Wildlife Films* (Philadelphia: University of Pennsylvania Press 2000); Eleanor Louson, "Taking Spectacle Seriously: Wildlife Film and the Legacy of Natural History Display," *Science in Context*, vol. 31(1), 2018, 15-38.

¹⁹ Williamson, *Hidden in Plain Sight*, 35.

²⁰ Drew Ayers used "uncanny" to describe the experience of watching *Planet Earth II* in his presentation, "Lions, Tigers, and Drones: Intimacy and the Nonhuman Image Technology of Planet Earth II" at the 2018 Society for Cinema and Media Studies Conference. However, Ayers ascribed this sensation to nonhuman vision. I'd argue that it is perhaps less related to nonhuman perspective and more to the novelty of the image quality.

²¹ Sam Machkovech, "Planet Earth II is 'need new TV' propaganda—if you get the right edition," *ArsTechnica*, 28 March, 2017, <https://arstechnica.com/gaming/2017/03/planet-earth-ii-is-need-a-new-tv-propaganda-if-you-get-the-right-version/>

²² Importantly, this experience of wonder is historically contingent. It's unlikely the show will produce such sensations in just a few years' time. In fact, if one returns to the original *Planet Earth* series, it is likely that one will find images that appear incredibly banal and low quality in contrast to the sensational reviews surrounding its original release.

²³ Walter Benjamin most famously argued that perception is historically conditioned and technological modernization has the possibility to rupture normalized patterns of seeing. This claim has been reinforced through Miriam Hansen's work on Benjamin as well as in that of many other historians of cinema, including Gaycken in the context of popular science film. Walter Benjamin, "The Work of Art in the Age of Mechanical Reproducibility, Version 2," *The Work of Art in the Age of Mechanical Reproducibility and Other Writings on Media* (Cambridge, MA: Belknap Press, 2008), 19-55; Miriam Bratu Hansen, "The Mass Production of the Senses: Classical Cinema as Vernacular Modernism," In *Disciplining Modernism* (Palgrave MacMillan, 2009), 242-258.

²⁴ Gaycken, *Devices of Curiosity*, 37.

²⁵ Jordan Schonig uses the language of wonder to describe the experience of "contingent motion forms," like wind, fire, and dust captured in cinema, claiming they encourage viewers to marvel at the medium itself: "Our wonder at these moving images is less a result of their augmenting or extending our perception than it is their reframing of perception, a limiting and delimiting of it. As such, we learn more about the habituated perceptions of our situated selves than data about the hidden operations of the material world." Jordan Schonig, "Contingent Motion: Rethinking the "Wind in the Trees" in Early Cinema and CGI," *Discourse: Journal for Theoretical Studies in Media & Culture* 40, no. 1 (Winter 2018), 53.

²⁶ Slow motion, magnification and time-lapse have been discussed in relation to popular science films in the work of Oliver Gaycken, Colin Williamson, and Kirstin Ostherr. Gaycken, *Devices of Curiosity*; Williamson, *Hidden in Plain Sight*; Kirstin Ostherr, *Cinematic Prophylaxis* (Durham, NC: Duke University Press, 2005).

²⁷ Rene Rodriguez, "Planet Earth 2' startles in 4K UHD," *Miami Herald*, 31 March 2017, <https://www.miamiherald.com/entertainment/movies-news-reviews/reeling-with-rene-rodriguez/article141920469.html>

²⁸ Fisher, *Wonder*, 40.

²⁹ René Descartes, *Passions of the Soul*, trans. Stephen H. Voss (Indianapolis: Hackett, 1989), 56.

³⁰ For Descartes, wonder was often associated with the experience of astonishment, a shock to the sensorium capable of paralyzing the viewer. Consequently, he remained skeptical about the epistemic possibilities of the wonder, which often lead to inattention, marveling at the novel without rigorous engagement. Likewise, Martin Heidegger saw the startling possibilities of wonder, claiming it created an "openness...attending to being as they come into presence." In contrast to Descartes, Heidegger celebrated the arresting qualities of wonder as a site to disrupt ordinary perception. Daston and Park, *Wonders and the Order of Nature*, 317; Martin Heidegger, *Basic Questions of Philosophy: Selected "Problems" of "Logic,"* Trans. Richard Rojcewicz and Andre Schuwer (Bloomington: Indiana University Press, 1994), Chapter 5.

³¹ Daston and Park, *Wonders and the Order of Nature*, 13.

³² Hobbes' economic theorization of curiosity helped reinforce the notion of "propulsion" or the acquisition of knowledge: "The rhythms of curiosity were those of addiction or consumption for its own sake, cut loose from need and satisfaction." Indeed, it was the relationship between curiosity and consumption that led Martin Heidegger to be skeptical of the concept. Heidegger dismissed curiosity as destructive consumption merely explained away any possibilities for openness produced through wonder. Thomas Hobbes, *Leviathan*, 1.3, 96; Corey McCall, "Some Philosophical Ambiguities of Curiosity," *Journal of the British Society of Phenomenology*, 42:2 (2011), 184.

³³ Similar to Daston and Park, Fisher argues "wonder is the middle condition between unawakened intellect and a systematic knowledge so complete that there no longer exists anything unexpected." Fisher, *Wonder*, 58.

³⁴ McCall, "Some Philosophical Ambiguities," 177.

³⁵ Skepticism about the series can also likely be tied to controversy surrounding BBC Nature's *Frozen Planet*, where producers admitted to "faking" a scene of a polar bear. Jesus Diaz, "BBC's Frozen Planet Crew Fakes Scene in a Zoo," *Daily Gizmodo*, 12 December 2011, <https://gizmodo.com/5867337/bbcs-frozen-planet-crew-fakes-polar-bear-scene-in-a-zoo>

³⁶ User: Speech500, "Planet Earth II: Islands Episode," *Reddit.com*,

https://www.reddit.com/r/television/comments/5bho8f/planet_earth_ii_islands_episode_discussion/

³⁷ Rory O'Connor, "Planet Earth II: Viewers accuse 'amazing hummingbird footage' of being CGI," *Express*, 20 November 2016, <https://www.express.co.uk/showbiz/tv-radio/734464/Planet-Earth-II-Viewers-accuse-hummingbird-footage-CGI>

³⁸ Machkovech, "Planet Earth II is 'need new TV' Propaganda."

³⁹ Interestingly, the original *Planet Earth* was celebrated for a turn away from CGI in nature documentary. Using the latest high def cameras, the series was able to rely solely on the imagery rather than supplementary animated forms of communication. For example, BBC Producer Martin Davidson claimed, "After *Planet Earth*, people expect you to be there. CGI is no longer the kind of gift it used to be." Quoted in Louson, "Taking Spectacle Seriously," 26.

⁴⁰ Kathryn VanArendonk, "Planet Earth II is a rare story to Reflect both Individual and Universal Experience," *Vulture*, 20 February 2017, <http://www.vulture.com/2017/02/planet-earth-ii-review.html>

⁴¹ Emily Badiozzaman, "27 Mind-Blowing Facts about the Making of *Planet Earth II*," *Short List*, n.d.,

<https://www.shortlist.com/entertainment/tv/making-of-planet-earth-ii-david-attenborough-how-they-made/71586>

⁴² Similar to Williamson's account of optical illusions, the online debates around CGI birds in the show circle around the problem of vision, particularly mediated through technology. Like magic tricks, Williamson argues, "optical devices like photographic and cinematic cameras harbor an uncanny potential to defamiliarize both what and how we see." *Planet Earth* creates new ways of looking that can leave us questioning the reality of the natural world captured on screen. Williamson, *Hidden in Plain Sight*, 36.

⁴³ Abigail Chander, "Planet Earth 2 is more Real than you Realise: We Speak to the Producers and Find out How it's Made," *Gizmodo*, 28 November 2016, <http://www.gizmodo.co.uk/2016/11/planet-earth-ii-is-more-real-than-you-realise-we-speak-to-producers-to-find-out-how-its-made/>

⁴⁴ Merli, "The Epic Production of 'Planet Earth 2'."

⁴⁵ Hanh Nguyen, "Planet Earth II Producers Reveal 6 Sneaky Ways They Filmed Their Animal Stars," *Indiewire*, 15 February 2017, <https://www.indiewire.com/2017/02/planet-earth-2-filmmaking-amc-sundance-bbc-america-1201783604/>

⁴⁶ Steven Flynn, "Drones in Planet Earth II: Interview with Wildlife Filmmaker Michael Sanderson," *skytango*, 2 May 2017, <https://skytango.com/drones-in-planet-earth-ii-interview-with-wildlife-filmmaker-michael-sanderson/>

⁴⁷ Michele Pierson offers a similar account of technological modernization and wonder in her discussion of digital special effects between 1989-1995. During this period, she argues, audiences encountering emerging digital technologies often experienced the sensation of wonder, resulting in a question of the underlying production processes. *Planet Earth II*, however, locates that wonder not in the production of imaginary or fantastical worlds, but the cinematography of the series. Michele Pierson, *Special Effects: Still in Search of Wonder* (New York: Columbia University Press, 2002), 93.

⁴⁸ Gaycken illustrates how the wondrous effects of the microscopic image or time-lapse plant film inspired curiosity in "the apparatus itself and its perceptual capabilities." Similarly, Williamson argues modern magic displayed the operational aesthetic for "the figure of the spectator detective, whose viewing practices are defined by a search for evidence of how tricks work." As the magician moved on screen toward the end of the 19th century, the illusions of the magician and the apparatus coincided, allowing spectators to delight in the fallibility of sight and wonder at the technologies capable of deceiving the human eye. "In fact, the pursuit and discovery of knowledge through illusions are at the heart of the wonder associated with beholding the effects of the innovative techniques and technologies that have changed (and continue to change) how we see and experience the cinema." Gaycken, *Devices of Curiosity*, 11; Williamson, *Hidden in Plain Sight*, 22; 32.

⁴⁹ Alison Griffiths describes a similar phenomenon in the presentation of visual spectacle in *Wondrous Difference*, which creates a “revered gaze,” or “a response marked as much by recognition of the labor and effort involved in creating the spectacle as the spectacle itself.” Louson likens the *Planet Earth Diaries* or making-of featurettes of the original to the “revered gaze.” However, Louson extends this gaze to claim it “reinforces wildlife filmmaking’s mastery of nature.” While the drone aesthetics of the original series certainly invoke a powerful gaze over nature, I’d argue this is perhaps less clear in the second series, where the show is much more concerned with articulating the environmental relationships between animals, technologies, and humans. Alison Griffiths, *Wondrous Difference: Cinema, Anthropology, and Turn-of-the-Century Visual Culture* (New York, NY: Columbia University Press, 2002), 286; Louson, “Taking Spectacle Seriously,” 33.

⁵⁰ Some reviews, steeped in the rhetoric of technophobia and skepticism of visual pleasure, criticize the show for its excessive spectacle, claiming it undermines any possibility for environmental criticism. Dickey, Colin. “A View to Kill: by focusing on high definition thrills, nature documentaries obscure more than thrill,” *The New Republic*, 14 January 2017, <https://newrepublic.com/article/140252/view-kill-planet-earth-ii-review-bbc>; Robert Lloyd, “Planet Earth II’ is packed with wonders, stories, and finally warnings,” *LA Times*, 17 February 2017, <http://www.latimes.com/entertainment/tv/la-et-st-planet-earth-2-review-20170217-story.html>

⁵¹ Fisher, *Wonder*, 44.

⁵² Descartes’ investment in the primacy of vision and the “single step” from seeing to knowledge, effectively erases the act of technological mediation. Daston and Galison have discussed this formation extensively in their work on “mechanical objectivity.” Lorraine Daston and Peter Galison, *Objectivity* (Cambridge: MIT Press, 2008).

⁵³ Indeed, Hobbes and Augustine both saw curiosity as that which separates human from animal: “CURIOSITY, which as is in no living create but *man*, so that man is distinguished, not only by his reason, but also by this singular passion from other *animals*.” Hobbes, *Leviathan*, 31.

⁵⁴ Jacques Derrida, “The Animal that I Therefore Am (More to Follow),” *Signature Derrida* (Chicago: University of Chicago Press, 2013), 380-435; Luce Irigaray, “Animal Compassion,” *Animal Philosophy: Ethics and Identity* (London: Continuum, 2004), 195-201; Thomas Nagal, “What is it like to be a Bat?” *What do Animals Think?* (Princeton: Princeton University Press, 2013), 84-105.

⁵⁵ It’s worth noting that some scholars in Animal Studies advocate for the ethical use of anthropomorphism as a way to understand or theorize animals. For examples see the work of Jane Bennett and Marc Beckoff. Moreover, Georgina Evans advocates for a positive use of identification and anthropomorphism in nature documentary in her discussion of the film, *Microcosmos*. Marc Beckoff, *The Emotional Lives of Animals*. (California: New World Library, 2007); Jane Bennett, *Vibrant Matter. A Political Ecology of Things* (Durham, NC: Duke University Press, 2010); Georgina Evans, “A Cut or a Dissolve? Insects and Identification in *Microcosmos*,” *Animal Life and the Moving Image* (London: BFI, 2015), 107-119.

⁵⁶ This message is in line with Keith Beattie’s claim that technologically enhanced spectacle in documentary is capable of offering new forms of immersive understanding. Keith Beattie, *Documentary Display: Re-viewing Nonfiction Film and Video* (London: Wallflower Press, 2008).

⁵⁷ In the UK, the behind the scenes footage was showcased in a complete episode. The behind the scenes footage appears as featurettes at the end of each episode on the DVD and Blu Ray editions. Brett Mills claims the “making of” featurettes in the original *Planet Earth* functions to reinforce the documentary authority of the series. While I agree that they function as a way to reinforce BBC Nature’s authority, they simultaneously satisfy a curiosity about the technologies and production process. Brett Mills, “Towards a Theory of Documentary Representation for Animals,” *Screen*, vol. 56:1, 2015, 102-107.

⁵⁸ Scott Richmond, *Cinema’s Bodily Illusions* (Minneapolis, MN: University of Minnesota Press, 2016).

⁵⁹ Some audiences were very upset to learn this footage was captured using a trained, rather than wild eagle. Unity Blott, “BBC’s incredible eagle footage was FAKE!...” *Daily Mail*, 14 November 2016, <http://www.dailymail.co.uk/femail/article-3935556/Golden-eagle-star-Planet-Earth-II.html>

⁶⁰ This experience is akin to Florian Leitner’s analysis of underwater sea turtle footage, which articulates a hybrid of human, animal, and technical actors. In other words, the eagle footage is not necessarily “posthuman,” but a combination of gazes expressed simultaneously in the flight sequence. Florian Leitner, “On Robots and Turtles: A Posthuman Perspective on Camera and Image Movement after Michael Snow’s *La region central*,” *Discourse*, 35:2 (Spring 2013), 272.

⁶¹ Indeed, the “Cities” episode makes this project explicit: “In the last six thousand years, a new habitat has suddenly appeared, entirely designed and constructed by one species for their own purpose. This manmade landscape seem alien to animal life, but for the bold this is a world of surprising opportunity.” Rather than showcasing how industrialization has eroded the natural environment, the episode seeks to show how humans and animal adapt to shifting infrastructures.

⁶² CW Contributor, “Interview.”

⁶³ Sonia Soraiya, "TV Review: BBCA's 'Planet Earth 2'," *Variety*, 16 February 2017,

<https://variety.com/2017/tv/reviews/planet-earth-ii-david-attenborough-bbc-america-1201990587/>

⁶⁴ Ben Travers, "Planet Earth 2' Review," *Indiewire*, 18 February 2017, <https://www.indiewire.com/2017/02/planet-earth-2-review-ii-bbc-revival-documentary-1201784486/>

⁶⁵ VanArendonk, "Planet Earth II is a rare story."

⁶⁶ This is distinct from other theorizations of the animal or animality that are often used to distinguish between the human and animal. From Hobbes, Augustine, to central discussions in Animal Studies, drawing continuities and connections is often central to how the animal and animality is defined. As Cynthia Chris notes in the introduction to *Watching Wildlife*, "representations of animals articulate and reinforce new understandings of not only animal life but also human behavior. We look not only at animals to learn about them, but we also look through animals for ourselves." While this question may still be present in the viewing experience, I would argue the show is much more concerned with the *interactions* and connections between the two. Steve Baker, *Picturing the Beast: Animals, Identity, and Representation* (Champaign: University of Illinois Press, 2001); Cynthia Chris, *Watching Wildlife* (Minneapolis: University of Minnesota Press, 2006), x.

⁶⁷ It should be noted that the filming expeditions resulted in numerous zoological discoveries. Stuart Winter, "Planet Earth 2 and the 10 new scientific discoveries made while filming," *Express*, 11 December 2016,

<https://www.express.co.uk/news/nature/742337/planet-earth-2-david-attenborough-discoveries-history>

⁶⁸ René, Descartes, transl. Elizabeth Sanderson Haldane, and G. R. T. (George Robert Thomson) Ross, *The Philosophical Works of Descartes* (Cambridge, Eng.: The University Press, 1931), 365-366.

⁶⁹ In other words, *Planet Earth II* illustrates the possibility for viewing experiences to produce modes of attention that acknowledge human and nonhuman difference while still attending to the interconnections between discrete beings and environmental ecosystems. For Smaill, Cinema and Media studies has the possibility to showcase this possibility. However, I locate this in the experience of viewing the television series, where the viewer is caught up in the wonder of technology and the natural world. Smaill, *Regarding Life*, 20, 155.

⁷⁰ This message could also be compared to Donna Haraway's discussion of kinship in *Staying with Trouble*, where she invokes curiosity to discuss ethical scientific practices and farming. Haraway's use of the term, however, is not tied to theories of epistemology. Rather her analysis remains more focused in the methodologies of speculative feminist analysis. Donna Haraway, *Staying with Trouble: Making Kin in the Chthulucene* (Durham, NC: Duke University Press, 2016).

⁷¹ Foucault, "The Masked Philosopher" 305.

⁷² Michel Foucault, *The Use of Pleasure* (New York: Vintage Books, 1990), 8.