

Natural aesthetics: environments and perspectives in contemporary film theory

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Cinema's Natural Aesthetics Dossier

'Natural Aesthetics: Environments and Perspectives in Contemporary Film Theory'

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From the earliest descriptions of film as 'living pictures' to the 'crystal-images' evoked by Gilles Deleuze, cinematic media have long been likened by critical observers to the organic processes of natural creation. During the periodic revivals of philosophical vitalism that Inga Pollmann describes in her recent book, this ambiguous affinity would fuel ontological speculations about filmic 'nature' and the vital forces of technology.¹ Propelled by a strong Deleuzian wind, a vitalist current has only lately washed over academic film studies, where it tended to dissolve the specificity of cinema *per se* within a greater ecology of animated media, while breaking down distinctions between subject and object, nature and history in a plasmatic sea of animacy. Opting for more specificity and more perspectives in such vital matters, the current dossier attempts to rearticulate moving images' involvement with nature in terms of aesthetic mediation—by which we hope to designate a historically-determined range of formal structures and sensible environments, neither fixed nor arbitrary, that condition how moving-image work can be created and experienced.

The perception of cinema as 'natural aesthetics' is as old as film theory itself and surprisingly non-denominational in its cast of advocates. In 'Ontology of the Photographic Image' (1960), André Bazin proclaims that 'photography affects us like a phenomenon in nature, like a flower or a snowflake whose vegetable or earthly origins are an inseparable part of their beauty.'² This intimation—one hesitates to call it an observation—reappears in the late writings of Theodor Adorno, who declares in 'Filmic Transparencies' (1966) that 'the technological medium *par excellence* is...intimately related to the beauty of nature.'³ As Miriam Hansen has suggested, the question of natural beauty (*Naturschönen*) in film theory can be traced further back to Walter Benjamin, for whom that dense concentration of mechanical processes required by film production did not preclude 'the vision of immediate reality,' but rather made that vision 'the Blue Flower in the land of technology.'⁴

At first glance, the category of natural beauty seems anachronistic if not downright reactionary, evoking the kind of nineteenth-century romantic vista that has become synonymous with conservative taste. The term appears to suggest that aesthetics—judgment, quality, value—has an ahistorical foundation in eternal nature. This is, presumably, why little attention has been paid to the recurrent invocations of natural beauty in film theory, despite the critical endorsement this term has received from such progressive intellectuals as Benjamin, Adorno, and the filmmaker Alexander Kluge.⁵ A contemporary dossier devoted to cinema's *natural* aesthetics may strike many readers today as an untimely undertaking, especially when ecology has become

the standard model for our understanding of art's engagement with the non-human world, superseding an allegedly naive and obsolete idea of nature.⁶

Despite—and perhaps because of—the term's extensive outreach and intensive circulation, it is difficult to define what an ecological approach to the study of moving image media ought to generically propose. In some scholarly accounts, ecology stands for a concern with the material conditions and environmental impact of cinema as a mass-based industrial medium, while in others it signals a commitment to post-human ontologies and affect theory, sometimes in opposition to socio-semiotic modes of interpretation.⁷ Similarly, the production category of 'eco-cinema' has been largely held together by topical concerns rather than by any coherent approach to film form. Works that receive this institutional label run the whole gamut of styles from expository environmental documentary to experimental film and gallery art installation. Whether filmmakers could, or should, depart from the normative findings of environmental science when working in an 'ecological' mode of aesthetics—and if so how—remain important questions for screen theory.⁸

This much, however, must be true: ecology cannot be *both* the problem *and* the solution in contemporary cultural praxis. As editors of this dossier, we admit to sensing a certain danger that the sheer urgency propelling contemporary ecological critiques can lead to a form of political presentism that oversimplifies complex historical debates about moving images, their mediation of natural phenomena, and the critical possibilities of aesthetic experience. In the arts and letters, nature has had a longer history than ecology. Precisely because of the imminent challenge posed by global ecological crises, this intellectual history should be treated as a critical resource for our own times rather than a moral liability. As things stand, we perceive that the institutional development of 'eco-film studies' in academia has left untapped critical moments of thought *within* film theory and film aesthetics, currents that already engage with the concept of nature in philosophically sophisticated and politically unexpected ways. Rather than restricting its circumference to contemporary discourses of ecology, *tout court*, we would like this dossier to revitalize some of these obscured intellectual traditions and forgotten aesthetic practices, while exploring emergent patterns in the interplay between cinema, aesthetics, and material nature.

The Frankfurt School provides us with an important critical model of how to redeploy the idea of natural beauty for film theory.⁹ Instead of naturalizing beauty, the vision of film aesthetics espoused by Benjamin, Adorno, and Siegfried Kracauer emphasizes the political potential of art to historicize the world of nature. While their designation of technology as second nature generally implies a negative judgement, the possibilities of cinema as an aesthetic experience enhanced by technology but still akin to natural beauty derive from a different critical matrix, described by Hansen in relation to Adorno as one in which 'nature—a site of possible happiness—holds out the promise that art seeks to keep.'¹⁰ This view of nature as unfulfilled promise is at one with Kracauer's famous description of photography as the 'go-for-broke game

of the historical process,' which was for him a 'game that film plays with the pieces of disjointed nature.'¹¹ If photography embodied the alienated condition of matter, then film represented the potential of art to 'stir up the elements of nature' into new and meaningful configurations.¹² Similarly for Adorno, what cinema recreates objectively is not the external world of reality but the inner realm of images; and it is as the objective mediation of a subjective experience that he likens film aesthetics to natural beauty.¹³ So rather than a precious relict of romantic nature, Benjamin's blue flower may have signaled genuine hope of a technology reappropriated for the emancipatory struggle against natural teleology.

A dossier organized around the framework of 'natural aesthetics' inevitably invites comparison and dialogue with the critically-related concept of 'natural history,' as explored by (amongst others) Alex Bush, Nicholas Baer, Sean Cubitt and James Leo Cahill, who presents the natural-historical approach as one in which 'photographic media render visible the dialectical relationship between nature and history.'¹⁴ This dossier likewise argues for the importance of attending to the historical dimension of media technologies and their theory in a discourse that by its focus on the natural, the affective, and the non-human frequently resists historicization. Nevertheless, 'natural aesthetics' signals a shift in emphasis here, away from cinema's ability to throw into relief the historical construction of nature, and towards *a study of how cinema situates historical subjects in relation to the natural world*.¹⁵ Specifically, the framework of 'natural aesthetics' unites two distinct topics of research in contemporary film theory: 1) the genealogy of medium, or environment and 2) the politics of perspective.

The conception of film as an environmental medium distinguishes the concern of this dossier from vitalist philosophies of media that embrace the identity of film and nature as an ontological fact. It is not, in our view, on the basis of a cinematic 'nature' that the question of film aesthetics can be understood. Adorno, echoing Benjamin, observes that 'the cinema has no original which is then reproduced on a mass scale.'¹⁶ Instead, what cinema brings into focus is the experience of natural aura that Benjamin describes as 'the unique appearance of a distance' between subject and object—the origin of which has been traced back by Hansen to his early experiments with hashish.¹⁷ We know from the work of Antonio Somaini in particular that the shifting conceptions of medium in Benjamin's writing belonged to a genealogy in which nineteenth and early-twentieth century theories of environment, *milieu*, *Stimmung*, aura, and *Umwelt* intersected with concurrent discourses about new forms of media and industrial technologies of mass reproduction.¹⁸ In this historical context, photography and film became privileged ciphers for an environmentally mediated regime of experience, in which the natural and the historical, the psychic and the somatic, the scientific and aesthetic forms of knowledge are intricately entwined.

Next, we hope to show that the determining effect of environmental mediation is further complicated by the perspectivalism of modernity, which fractures the subject of media along

particularly situated sightlines. At its inception, the philosophy of aesthetics was a materialist theory of receptivity concerned with the interaction of mind and nature through sensory mediums of perception. In *Aesthetic Theory*, Adorno argues that the tradition of idealist aesthetics extending from Schiller to Hegel actively ‘repressed’ the category of natural beauty to make way for an absolute subject. It was subsequently from the transcendental perspective of this idealist subject that nature assumed its reactionary form as romantic landscape. Yet, the very possibility of aesthetic experience in the realm of nature presupposes the displacement of transcendent perspective by a post-sacral worldview where ‘the center is everywhere and the circumference nowhere.’¹⁹ To emphasise cinema’s activity as an aesthetic medium, as this dossier sets out to do, is to foreground the immanent and partial—hence inherently political—perspectives that constitutes the relationship of subjects to such a world. As Gertrud Koch vividly states: ‘The nature that speaks to the camera is different from the nature of the squeaking laboratory rat; what the scalpel (Benjamin’s camera) cuts free are points of view and not facts.’²⁰

Koch’s account of film as perceptual experiment, which works on the subject as well as the object, complicates contemporary philosophies of life that holds the world of matter to be inherently aesthetic and vital. Aesthetics, insofar as it does not veer off into the celebration of absolute subjectivity or absolute objectivity, cannot be seen as either wholly materialist or wholly immaterial. We therefore regard the five essays collected in this dossier as a set of *immaterial histories*, ones that uncover critical perspectives embedded in the material flesh of nature. They variously capture the cinematic incorporation of non-human environments into anthropocentric frames *and* the simultaneous decomposition of this order into a myriad of shifting and contentious viewpoints—perspectives that may or may not add up into a coherent image of the world. The five authors are all in dialogue, directly or otherwise, with film theoretical traditions that identify in the medium a particular (and for some surprising) closeness to non-anthropogenic effects and phenomena; but they also complement this recognition with a critical awareness of nature’s instability and contingency, bringing to bear a contemporary awareness of what we might call nature’s ecological character.

Discussions about the long (proto-ecocritical) tradition of environmental film theory tend, for good reasons, to give special prominence to the ideas of Siegfried Kracauer, who celebrated cinema’s attachment to the world of ‘physical reality’.²¹ The nomination of Kracauer as an ecological thinker, however, has also raised questions about the syncretistic logic of his ‘realist’ film theory, which mobilizes in a loose and creative fashion such philosophically loaded concepts as ‘nature’, ‘matter’, ‘life’, and ‘reality’. As a scholar who has read Kracauer both in relation to and as a dissident of the Frankfurt School, Gertrud Koch is eminently well positioned to interpret the philosophical lineages of thought running through Kracauer’s postwar writing on film. Her essay in this dossier specifically takes up the influence of Alfred Whitehead’s process philosophy upon Kracauer’s famous formulation of film as a medium of physical reality. Koch argues that Kracauer uses Whitehead to reinvigorate the concept of reality by replacing the

philosophical distinction between first and second nature—better known to us as nature/culture—with a living environment composed of complex relationships that encompass the material singularities of things, the activity of cognition, and the technicities of human culture; but she also maintains that Kracauer does not follow Whitehead into a romantic cosmology, because he reserves for cinema the function of aesthetic reflection, which mediates our experience of the physical world and constitutes the necessary condition for critical knowledge and political transformation.

Paraphrasing Adorno, for whom ‘imagination is not contemplation that leaves beings as they are but an intervention’, Koch contends that in ‘in the course of contemplation, film intervenes imperceptibly in beings, achieving their configuration into an image.’ The special task of cinema as a technical media is to ‘redeem’ empirical reality, in the Adornian sense of reconciliation with nature, through its amalgamation with the physical environment, a process likened by Kracauer to a blood transfusion. Kracauer’s ‘curious realism,’ as expounded by Koch, sheds light on the work of ecological film theory today. It suggests that we can no longer approach cinema solely on the level of materiality *qua* materiality, or wholly on the level of its representations, since filmic media already subverts the concept of nature as defined in opposition to culture, an opposition that perpetuates the western metaphysical division of being into mind and matter. Its complex materiality requires further theoretical elaboration as well as concrete historical studies. Against the theoretical parameters set out by Koch, the four remaining essays will then take up these questions of materiality and medium through their investigation of specific case studies.

The habitual association of materiality with solid bodies melts literally into air in Antonio Somaini’s genealogy of medium, which looks specifically at László Moholy-Nagy’s theory of light as an agent of plastic expression. As an enthusiastic exponent of photography and film, Moholy-Nagy prophesized in the 1920s a development ‘from stasis to motion, from opaqueness to transparency, and from different kinds of materials towards a state of progressive dematerialization’. Reading Somaini’s account of Moholy-Nagy’s writings and experiments, we are reminded of how aptly his terms speak to postwar and contemporary trends in art and avant-garde film practice, including the works discussed by Georgina Evans and Selmin Kara later on in this dossier. ‘In Moholy-Nagy’s work,’ write Somaini, ‘film’s inherent affinity with light is raised to a higher level. Rather than simply recording light onto the light-sensitive support of celluloid and projecting light onto the flat, opaque surface of the screen, the new forms of light projection envisioned by Moholy-Nagy were supposed to dissolve the materiality of both the spatial *dispositif* and of the film screen into the surrounding atmosphere’. Somaini compares Moholy-Nagy with Benjamin, to the extent that both were ‘convinced that vision and sensory experience in general had a history, and that art forms had the possibility of actively intervening in such a history’. But it must be said that the discourse of Moholy-Nagy tends further toward the techno-utopian, and it is the capacity of light to *transcend* the material support of technology that

captures his imagination. How to reconcile his aesthetic program of dematerialization, which had set out to challenge the standardized conditions of industrial Fordism, with the manifest tendency of late capitalist economies to dematerialize labor and divest from the material realm of social reproduction, will surely provide fodder for another discussion.

Moving away from a photographic conception of cinema, Daniel Morgan invites us in his essay to reconsider the aesthetic of moving images from the perspective of animation, which broke grounds as an industrial art form during the 1930s and 40s. Revisiting Sergei Eisenstein's unpublished writing on Disney, Morgan takes notice of Eisenstein's vocal disappointment with the inertness of backgrounds in Disney animations: while admiring the flowing diversity of form that he himself identifies as a principle of imagistic thought, Eisenstein was dismayed 'that Disney is unwilling to elevate plasmaticness into a principle governing the film as a whole.' This failure, while justified by economic considerations in industrial practice, has an undeniably ideological dimension. As Morgan reminds us, 'the background in animated cartoons is the place of nature'. The decision to activate the figure at the expense of the background reinforces a voluntarist theory of the subject and perpetuates all the familiar oppositions involving culture/nature, activity/passivity, etc. that a committed revolutionary artist such as Eisenstein would naturally wish to overthrow. In his other late theoretical writings, Eisenstein had formulated a much more progressive vision of cinema's 'non-indifferent nature,' synthesizing Romantic natural philosophy with dialectical materialism, which would 'align simultaneously with the laws of the natural world, the laws of the construction of artworks, and the laws of the human mind.' In Morgan's account, natural history becomes an apt metaphor – thanks to its abiding capacity 'to produce flexible reorientations of seemingly fixed terms' – for understanding what is at stake in Eisenstein's passionate critiques of Disney. From the work of the Fleischer brothers, he offers up vivid and detailed examples of Eisenstein's longed-for plasmatic landscapes, atypical but almost visionary sequences 'where cracks show, where the separation of foreground and background disappears and the possibilities that Eisenstein imaged in his writings on landscape and animation begin to emerge.'

The contrast between infinitely malleable animated subjects and inanimate minerals is, at first glance, extreme. But Georgina Evans finds in Werner Herzog's *Cave of Forgotten Dreams* (2011) a characteristically audacious and textually complex response to the challenge of filming natural history, and more specifically the impermanence of millennia-old rock formations. The film, Evans reminds us, is more than aware that its subject is 'not assimilable to cinematic representation', but by inviting its viewers to register a sense of the fluid and the fleeting in this most apparently solid and eternal of subjects, *Cave* demonstrates some of the ways that cinema can hope to illustrate what Evans describes as the enclosure of human activity. She also adopts the particular concept of 'deep time'—through its recent influence on the work Jussi Parikka and others—to explore the film's techniques, revelations and blind spots. 'The images associated with deep time,' writes Evans, 'offer a fantasy of excavatory visibility'. Although the filmmakers

and his researcher-subjects do not excavate as such, they are ‘nonetheless concerned with asserting temporal phases through the identification of material layers’, and one of the film’s most compelling qualities is that it demonstrates the importance of interpretation—of making aesthetic and heuristic claims in the face of geological matter—to the project of natural history.

In the dossier’s concluding essay, Selmin Kara, although similarly alert to the temporal challenges of a cinematic natural history, places her critical emphasis on the intersection of space and time, the globe and the archive, particularly as it conceived in relation to the Anthropocene. Kara explores an uncomfortable irony at the heart of certain post-cinematic and transmedia projects (and in particular *The Anthropocene Project*, staged at the Art Gallery of Ontario in 2018), and their tendency to ‘feverishly project the unfolding drama of the Anthropocene onto an increasingly splintered and diversified media landscape, with the seeming desire to render the human imprint on ecology readable’. Not only must we wonder for which future ‘readers’ these archives-in-the-making are being developed, but we must also interrogate the political aesthetics informing these projects. For, as Kara notes, in their attempt to capture the scale of anthropogenic planetary change, such media often lean on a visual rhetoric (in which aerial imagery plays a key role) that Caren Kaplan, Paul Virilio and others have shown to be anything other than outside social structures and prejudices. Crucially, Kara concludes the dossier with one of the most crucial questions we can ask of cinema’s natural aesthetics: who is watching, and how? *The Anthropocene Project*, she worries, ‘configures the audience as a universal subject, expected to have not only the intuitive power to extrapolate from visceral imagery a pathway for countering climate change but also the political/economic agency to follow it, regardless of the global structures of inequality that distribute agency unevenly.’

Kara’s project invites us to consider how artists and filmmakers can redeploy their medium’s aesthetic capabilities to both inform and reform our understanding of nature and environmental relations. In support of such a project, *Cinema’s Natural Aesthetics* seeks to complicate the demand for normative representation that assumes representational processes, including cinematic media, can either ‘succeed’ or ‘fail’ at capturing an empirical reality existing outside of any relationship with the discursive act of inscription. This imperative unfortunately perpetuate the dualistic opposition of nature and culture, while reinstating a transcendental perspective in representation—Donna Haraway calls it the ‘gaze from nowhere’—from which one could behold the social totality as an imaginary whole.²² Despite calling the nature/culture division radically into question, the specter of the Anthropocene has in many ways exacerbated this retreat into a realistic model of representation in discussions of screen media.²³ The fabled ‘wind-in-the-trees’ revelatory spectatorship of early filmgoing is probably the most familiar example of this model—an ideal of medium and nature as mutually contingent. But it is one that has perhaps cast too long a shadow over what can be said about their interrelation. *Cinema’s Natural Aesthetics* introduces some additional film-nature metaphors—the light show, rubberized landscapes, excavation and archive—all of which offer alternative perspectives on the

processes of cinematic mediation to machinic revelation. They strive to describe not just representations of nature, but medium-specific aesthetics.

¹ Inga Pollmann, *Cinematic Vitalism: Film Theory and the Question of Life* (Amsterdam: Amsterdam University Press, 2017).

² André Bazin, 'Ontology of the Photographic Image' in *What is Cinema? I.*, trans. Hugh Gray (Berkeley: University of California Press, 1967), 13.

³ Theodor W. Adorno, 'Transparencies on Film,' translated by Thomas Y. Levin, *New German Critique*, no. 24/25 (1981): 201.

⁴ Walter Benjamin, *The Work of Art in the Age of Its Technological Reproducibility, and Other Writings on Media*, ed. Michael W. Jennings, Brigid Doherty, and Thomas Y. Levin, First Edition (Cambridge, Massachusetts: Harvard University Press, 2008), 35.

⁵ See Miriam Bratu Hansen, 'Natural Beauty, Language Character' in *Cinema and Experience: Siegfried Kracauer, Walter Benjamin, and Theodor W. Adorno*, First edition (Berkeley: University of California Press, 2011), 229-236; Daniel Morgan, 'Nature and Its Discontents' in *Late Godard and the Possibilities of Cinema* (Berkeley, California: University of California Press, 2013), 69-119; Nora M. Alter, Lutz Koepnik, and Richard Langston, 'Landscapes of Ice, Wind, and Snow: Alexander Kluge's Aesthetic of Coldness,' *Grey Room* 53 (Fall, 2013): 60-87.

⁶ Timothy Morton, *Ecology Without Nature: Rethinking Environmental Aesthetics* (Cambridge, Massachusetts: Harvard University Press, 2007).

⁷ For a materialist account of film's relationship to the natural environment, see Nadia Bozak, *The Cinematic Footprint: Lights, Camera, Natural Resources* (New Brunswick, N.J: Rutgers University Press, 2011); Richard Maxwell and Toby Miller, *Greening the Media*, 1 edition (New York: Oxford University Press, 2012); Lisa Parks and Nicole Starosielski, eds., *Signal Traffic: Critical Studies of Media Infrastructures*, 1st edition (Urbana: University of Illinois Press, 2015). For eco-film theories effected by the turn to affect and post-humanism see A. J Ivakhiv, *Ecologies of the Moving Image: Cinema, Affect, Nature* (Waterloo, Ontario: Wilfrid Laurier University Press Environmental Humanities Series, 2013); Alexa Weik von Mossner, ed., *Moving Environments: Affect, Emotion, Ecology, and Film* (Waterloo, Ontario, Canada: Wilfrid Laurier University Press, 2014); John Durham Peters, *The Marvelous Clouds: Toward a Philosophy of Elemental Media*, 1 edition (Chicago ; London: University of Chicago Press, 2015); Janine Marchessault, *Ecstatic Worlds: Media, Utopias, Ecologies*, (Cambridge, MA: MIT Press, 2017); Thomas Lamarre, *The Anime Ecology: A Genealogy of Television, Animation, and Game Media*, 1 edition (Minneapolis; London: Univ Of Minnesota Press, 2018).

⁸ For a comprehensive overview of the academic discourse on "eco-cinema," as well as more extensive discussions of particular topics, see Stephen Rust, ed., *Ecocinema Theory and Practice*, 1 edition (New York: Routledge, 2012).

⁹ An important step has been taken by Daniel Morgan in this direction in his analysis of Godard's late films. See Morgan, *Late Godard and the Possibilities of Cinema*, 70-72.

¹⁰ Hansen, *Cinema and Experience*, 230.

¹¹ Siegfried Kracauer, 'Photography' in *The Mass Ornament: Weimar Essays*, translated and edited by Thomas Y. Levin (Cambridge, MA: Harvard University Press, 1995), 62-3.

¹² *Ibid.*, 62.

¹³ Adorno, 'Filmic Transparencies,' 201.

¹⁴ James Leo Cahill, 'Cinema's Natural History,' *JCMS: Journal of Cinema and Media Studies* 58: 2 (Winter, 2019), 155. See also Alex Bush, 'Moving Mountains: Glacial Contingency and Modernity in the Bergfilm,' *JCMS: Journal of Cinema and Media Studies* 59: 1 (Fall, 2019); Nicholas Baer, 'Natural History: Rethinking the Bergfilm,' in *Doch ist das Wirkliche auch vergessen, so ist es darum nicht getilgt: Beiträge zum Werk Siegfried Kracauers*, ed. Jörn Ahrens, Paul Fleming, Susanne Martin, and Ulrike Vedder (Wiesbaden: Springer, 2017); Sean Cubitt, 'Film, Landscape and Political Aesthetics: *Deseret*,' *Screen* 57:1 (2016), 21-34.

¹⁵ Without specifically intending to, our decision to move away from "natural history" to "natural aesthetics" doubles the turn made by Adorno himself from his early work in "The Idea of Natural-History" (1932) to his later vindication of natural beauty in *Aesthetic Theory* (1965-9) and "Film Transparencies" (1966). In his introduction to the English-language translation, Bob Hullot-Kentor suggests that the mature Adorno grew skeptical of "natural-history" as a critical term because it lacks historicity and therefore remains too much of a neologistic invention in the Heideggerian mode that Adorno had by then rejected. In contrast, his late-in-life defense of natural beauty is a carefully grounded intervention into the political history of the enlightenment. See Theodor W. Adorno, 'The Idea of

Natural-History,' trans. Bob Hullot-Kentor, *Telos* no. 60 (1984), 111-24; Bob Hullot-Kentor, 'Introduction to Adorno's Idea of Natural-History,' *Telos* no. 60 (1984), 97-110.

¹⁶ Adorno, 'Filmic Transparencies,' 200.

¹⁷ Hansen, *Cinema and Experience*, 104.

¹⁸ See Antonio Somaini, 'Walter Benjamin's Media Theory: The Medium and the Apparatus,' *Grey Room* 62 (January 1, 2016): 6-41.

¹⁹ Michael Serres, *Le Système de Leibniz*, vol. 2, Paris: Gallimard 1968, pp. 675ff; cited in Christine Buci-Glucksmann, *Baroque Reason: the Aesthetics of Modernity*, trans. Patrick Camiller (London; Thousand Oaks, Calif.: Sage Publications, 1994), 134.

²⁰ Gertrud Koch, 'Film as Experiment in Animation: Are Films Experiments on Human Beings?' in Beckman Karen, ed., *Animating Film Theory* (Durham, NC: Duke University Press, 2014), 137.

²¹ For example, Jennifer Fay, *Inhospitable World: Cinema in the Time of the Anthropocene* (New York: Oxford University Press), Chapter 5; Adam O'Brien, *Transactions With the World: Ecocriticism and the Environmental Sensibility of New Hollywood* (New York: Berghahn, 2016), Chapter 2.

²² Donna Haraway, 'Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective', *Feminist Studies*, vol. 14, no. 3 (1988), p.581.

²³ Nicholas Mirzoeff offers a particularly enlightening discussion of what he calls 'Anthropocene visuality' in 'Visualizing the Anthropocene', *Public Culture*, vol. 26, no. 2 (2014).