ADRIAN IVAKHIV

Green Film Criticism and Its Futures

As ecocriticism develops in scope and in influence, it is spreading beyond its original home in literary studies and colonizing new niches in related fields. Among these is film criticism. Many ecocritics have taken an interest in film and visual media: there have, for instance, been a number of discussions on the ASLE listserv about environmental films, and several courses in environmental literature include screenings of films. Yet most references to film among ecocritics have tended to focus on films that are considered "environmental," especially those that portray nature and its defenders positively, as, for instance, *Gorillas in the Mist*, *Koyaanisqatsi*, *Never Cry Wolf*, *On Deadly Ground*, and *Erin Brockovich*. Rarely has cinema in general been viewed through an ecocritical lens, nor has there been much evidence in the main venues of ecocriticism of the sustained application of ecocritical strategies to film and cinema studies.[1]

In the last six or seven years, this situation has begun to change, with the appearance of extended monographs examining wildlife and nature documentary (Gregg Mitman's *Reel Nature* and Derek Bousé's *Wildlife Films*), environmental themes in experimental cinema (Scott MacDonald's *The Garden in the Machine*), critical analyses of the representation and use of animals in film (Jonathan Burt's *Animals in Film*), and green perspectives on film more generally (David Ingram's *Green Screen*, Pat Brereton's *Hollywood Utopia,* and Sean Cubitt's *EcoMedia*). This article will review the main directions and achievements of ecologically minded film criticism to date and will suggest some as-yet-underexplored strategies for a green film criticism, or *eco-cinecriticism*. Its movement will proceed by following four primary themes rooted, for heuristic purposes, in different epistemological traditions. I will proceed from a realist understanding of the relationship of cinematic representation to reality, through emancipatory or critical-theory traditions, culturalist-constructivist epistemology, to a more phe-

nomenological and postmodern appreciation of the capacities of film and visual media to express and expand environmental perception, understanding, and consciousness. In the final section, I will draw on a model developed in the field of cultural studies for analyzing the cultural life of texts, and will tweak this model in the direction of possible eco-cinecritical applications.

Documented Nature: Film Versus Reality

The most popular literary genre for ecocritical exploration and celebration has been that of nature writing. To the extent that there is a cinematic equivalent of nature writing, it would arguably be the wildlife film or nature documentary. It should therefore not be surprising that ecologically informed film critics have focused on these formats from a variety of perspectives (Wilson, Siebert, Armbruster, Mitman, Bousé). Gregg Mitman's *Reel Nature* and Derek Bousé's *Wildlife Films* present the most sustained and probing book-length analyses of wildlife or nature documentaries, and their conclusions—which are in broad agreement with each other—suggest that the film medium, despite its promise of a photographic realism not available to the literary medium, comes up short compared to the latter in its representational approximation of the reality of nature.

In *Wildlife Films*, Bousé argues that wildlife/wilderness/natural history films and television present an image of nature that is "molded to fit the medium" (4), whose "market-driven, formulaic emphasis on dramatic narrative and ever-present danger" (5) results in a natural world full of "movement, action, and dynamism" (4), but one in which decontextualized subjects, especially those of charismatic megafauna, dwell in visually magnificent settings but well outside human history or the vagaries and complexities of social and scientific practice. As a result of conditioning by television documentaries, Bousé suggests, visitors to national parks commonly complain "that the animals don't seem to *do* anything; they just lie there" (6). Many elements of the medium, including the use of telephoto and telescopic lenses to bring distant objects closer, of remote and simulated sounds to perpetuate the illusion of being there, the seamless insertion of stock images and of technical effects such as slow or speeded-up motion, and even the use of trained animals to simulate wild ones, ostensibly bring viewers a sense of unmediated reality based in an epistemology of documentary realism. But, as Bousé and Mitman both demonstrate, they do these things in deceptive ways, conveying a perception of nature that is very different from that which can actually be found "out in nature."

In nature documentaries, as Karla Armbruster argues, viewers are commonly encouraged to identify with an omniscient narrator and all-seeing camera, assuring an "innocence of involvement in the forces affecting the natural world" even while being allowed a penetration of that world's most inaccessible reaches (232). Coupled with the ideological tendencies imposed by the political economy of documentary production, what we get is a situation in which, as Bill McKibben describes it, "The upshot of a nature education by television is a deep fondness for certain species and a deep lack of understanding of systems, or of the policies that destroy those systems" (79).

In an analysis broadly analogous to Bousé's, Mitman, in *Reel Nature*, examines the tensions between filmmakers' ostensible mandate of scientific accuracy/authenticity and the industry-based imperative of commercial success as this manifests in various ways, including controversies over the staging of scenes, or "nature faking," in such documentaries as the television series *Wild America* (1982-96) and the ways in which the voyeuristic portrayal of wild animals as spectacle objectifies them and naturalizes a view of animals as being "there for us." Assessing the relationship between nature and wildlife films and changing American ideas both of wilderness and of other forms of social categorization (race, class, gender), Mitman argues that Walt Disney's sentimental portrayal of animals "sanctified the universal 'natural' family as a cornerstone of the American way of life" (11). Ultimately, Disney's "framing of nature as entertainment," Mitman writes, "reinforced a tourist and recreational economy that places a much greater demand on the very areas that conservationists were trying to protect from the influx of people and the values of consumer society" (130-31).

For all their pretensions to bringing viewers closer to a "nature" that may not be close at all, then, most nature documentaries are found by these analysts to present a severely crippled or distorted view of *real* nature. And yet, it is possible to judge some films as much more successful in this respect than others. Recent popular features such as *March of the Penguins, Winged Migration*, and *Wild Parrots of Telegraph Hill* not only bring natural phenomena closer to viewers, they make accessible aspects of animal lives that confound expectations and expand the human capacity to understand and empathize with species quite different from our own. *March of the Penguins*, for instance, presents itself as a kind of ethnographic portrait of the lives of a society of biped avians living on a part of the planet that may (in terms of the experience of most viewers) as well be another planet from our own. While it has been critiqued for anthropomorphizing its penguin subjects, and while the question of the reliability of the film's portrayal of these subjects'

lives must ultimately, as with all films, be answered outside of the film text itself, the film provides glimpses of the animals' social lives that are rarely presented in any form, let alone that of documentary film.

In an insightful analysis of the BBC documentary series *The Blue Planet*, Sean Cubitt examines the ways this series employed high-end production and post-production technologies as well as skillful sound-track and montage techniques to convey a sense of joy and wonder in the "subjectless creativity" of the blue planet. For Cubitt, there is a tension between the intrinsic-value ethic represented here and the scientific and technological mastery required to deliver it. Neverthe-less, it would seem that film and video media are capable of bringing viewers closer to dimensions of nature that would otherwise remain inaccessible. Cubitt's reference to joy and wonder (to be remarked upon further below) suggests that the value of nature documentaries can be approached from diverse epistemological positions. Documentaries are presumed by many viewers to be a window on the world, a portrayal, however selective, of something quite real. But documentary makers and theorists have long known that their films are as dependent on production decisions—on selectivity, craft, judgment, and so on—as are fictional films. They may therefore be more appropriately studied through a constructivist lens that admits of the creative nature of filmmaking and of a viewer's capacity for making meaning of what is shown. Such an epistemological shift takes us outside the documentary/fiction dichotomy and raises questions of the usefulness—the positive or negative virtues and effects—of particular depictions of people and nature. The most effective form of cinema in terms of the extent of its reach has no doubt been that of Hollywood, and so it is not surprising that Hollywood has attracted the attention of ecocritical film theorists asking precisely such questions.

Green Representations: Positive Versus Negative Images

The first book-length study of environmental themes in mainstream cinema, and the most synoptic and broad-based treatment to date, has been David Ingram's *Green Screen: Environmentalism and Hollywood Cinema*. Ingram takes on the broad task of analyzing "the interplay of environmental ideologies at work in Hollywood movies" (x), with a par-ticular focus on "environmentalist" films, which he defines as those "in which an environmental issue is raised explicitly and is central to the narrative" (vii). Among those environmental ideologies or discourses, Ingram identifies conservationism and preservationism, reformist and

radical wings of the environmental movement, including deep ecology, social ecology, and ecofeminism, as well as the "cult of wilderness," animal rights, the romanticism of the "ecological Indian," and the Promethean (anti-environmentalist) impulse to mastery of nature. The book finds all of these scattered across a range of films but almost always articulated in incomplete and ambiguous ways, compromised as they are, except in the case of Prometheanism, by the constraints of the Hollywood industry. "Hollywood's environmentalist movies often use their concerns with non-human nature," Ingram writes, "as a basis for speculation on human social relationships, thereby making those concerns conform to Hollywood's commercial interest in anthropocentric, human interest stories" (10). Ultimately, Ingram shows that Hollywood's efforts to be green fall flat to the extent that the industry is incapable of extricating itself from its own commitment to the consumer capitalism and liberal individualism which Hollywood itself has helped make into central pillars of American culture.

But Hollywood's efforts are not viewed by Ingram as monolithically and universally disappointing. Where Disney blockbusters such as *FernGully*, *The Lion King*, and *Pocahontas* are derided for their greenwashing of environmental concerns through the creation of evasive, simplistic, and apolitical understandings of environmental problems, others like *Thunderheart*, *At Play in the Fields of the Lord*, and *Country* are assessed more positively. Ingram draws insightfully on critiques of realism, melodrama, apocalyptic fantasy, and pastoral and sublime portrayals of nature, but balances these out with discussion of their more positive potentials. Melodrama, for instance, with its tendency "to construct environmental issues as individualized, Manichean conflicts between one-dimensional villains and heroes" is said to simplify "the complex, often ambiguous allocation of blame and responsibility in such matters," its resolutions always remaining too pat and glib (2). On the other hand, citing Richard Slotkin, Ingram suggests that even in their simplification of issues, popular fictions can "dramatize ideological contradictions and work out possible resolutions to them," as, for instance, with images of protest serving as signifiers and reminders that collective dissent is possible (4).

Green Screen is rich with suggestive, though not always well developed, ideas. In contrast to the ecocentrism or biocentrism that may be the dominant position within ecocritical discourse, Ingram describes his own approach as critical realism, which he opposes both to the poststructuralist overemphasis of the social constructedness of representation and to romantic deep-ecological environmentalism, with its beliefs in a harmonious balance of nature and its nostalgic and often technophobic anti-industrialism. His analysis, as a consequence, con-

sistently favors a left-leaning, social-ecology and social-justice perspective as against a biocentric one, to the extent that he at times appears to diminish the latter on somewhat cursory grounds.

In marked contrast, Jhan Hochman, in *Green Cultural Studies: Nature in Film, Novel, and Theory*, embraces an unabashed and incisive biocentrism. Hochman describes the task of green cultural studies as "the examination of proliferating cultural representations of nature—i.e., lexical, pictorial, and actual manipulations of plants, animals, and elements—for their potential to affect audiences affecting nature-out-there or … *worldnature*" (2; emphasis in original). Green cultural studies, for Hochman, critiques culture as a force which affects nature (though not necessarily the other way around) and thus is built on the presumption of a fairly clear-cut distinction between culture and nature. Like other biocentrists (such as those in Soulé and Lease's polemic volume *Reinventing Nature? Responses to Postmodern Deconstruction*), Hochman opposes the "poststructuralist-deconstructionist blurring of the nature/culture boundary" (11) and instead advocates a stricter policing of this boundary. While this prevents him from theorizing the ways in which the practice of filmmaking directly engages with nature for its materials, Hochman retains an interest in the intersection of parallel discourses, such as the ways in which nature is mapped over and against cultural categories of race, gender, class, and species. The three films he analyzes, John Boorman's *Deliverance*, Jonathan Demme's *The Silence of the Lambs*, and Julie Dash's independent feature *Daughters of the Dust*, readily lend themselves to such analyses: *Silence* is critiqued for the ways human and animal characteristics are mapped onto each other, resulting in the naturalization of the "slaughtering and butchering" (40) of the latter, *Deliverance* is read in terms of economic class and the urban-rural distinction, with the forest depicted as a dangerous environment full of human ("hillbilly") threats, and *Daughters* is analyzed as a film in which the human relationship to land as mediated by the organization of labor, leisure, and community structure is successfully interrogated and revisioned. As one might expect of a biocentric approach, all three films fall short of Hochman's hopes. Even in the case of *Daughters,* which gains his sustained praise for its portrayal of the "beautiful subsistence of a small society that labors less yet with ample reward" (156), the communal ethic of sharing, for Hochman, "still implies owning," which is not quite up to the standard that would allow for "nature's wild flourishing" (154).

Despite their theoretical differences, Ingram and Hochman share an interest in examining the portrayal of nature and environmental issues and actors. On the simplest level, sympathetic or positive representations are celebrated, while unsympathetic or negative ones are

critiqued. Such an approach is similar to the kinds of feminist or anti-racist cultural critique that judges images of gender or race based on whether they portray specific groups in a positive or negative light. While useful, such an approach is ultimately limiting, as it assumes that environmental issues can always be read in good guy/bad guy terms. Such analyses can nevertheless be insightful, especially when they are sensitive to the complex tensions to be found in such representations and their relationship to the social and ecological realities portrayed. For the most part, Hochman, Ingram, and other critics operating in this vein are aware of these complexities (e.g., Retzinger, Light). Andrew Light's analysis of the portrayal of Chico Mendes in *The Burning Season* results in a rich discussion of the nature of identity politics, and his critique of the trope of "urban wilderness" in a series of Los Angeles-based films usefully distinguishes between the more progressive and the politically (and ecologically) conservative potentials of such representations. This kind of analysis of landscape tropes falls into a broader tradition, developed especially by cultural geographers, anthropologists, and art historians, of critiquing representations of places, landscapes, and regions from critical social perspectives (e.g., Crawford and Turton, Gold and Revill, Mitchell, Godfrey, Morris, Cohan and Hark, Brass). The best of this work not only analyzes cinematic representations vis-à-vis the realities of the places they depict, but also situates them within discussions of changing visual cultures, philosophical styles, and political economic regimes (e.g., Gandy, Vivanco).

In a similar manner to Hochman and some of the others discussed, Stacy Alaimo's ecofeminist analysis of monster movies provides a generally negative assessment of this genre. Movies like *The Beast*, *The Island of Doctor Moreau*, *DNA*, *Congo*, and *Mimic*, Alaimo concludes, articulate a "vertical semiotics" which polices the boundary between humans and nature by reasserting the hierarchy between the two, often through the use of visual metaphors involving clearly demarcated underground/overground worlds, technological flight which elevates humans above biological threats, and so on. Alaimo contrasts these with films like *Habitat* and *Safe*, which "dramatize the impossibility of demarcating protected places" (289) and provide no transcendence or reassurance. At the same time, however, Alaimo recognizes that despite the reassuring closures of films in which humans are ultimately shown transcending the monstrous nature that threatens them, "in the muddled middles of these films," viewers might be able to "experience a kind of corporeal identification with" the monstrous and hybrid creatures portrayed. She concludes, "Perhaps the horrific but pleasurable sense of the 'melting of corporeal boundaries' [...] can catalyze some sort of resistance to the desire to demarcate, discipline and eradicate monstrous natures"

(294). In this tentative suggestion, Alaimo approximates the argument made by Gilles Deleuze and Felix Guattari, according to whom certain representations of animals and monsters afford the possibility of an experiential or affective "becoming-animal," a kind of resistant "line of flight" away from modernity's dichotomous understanding of the human and towards a closer intimacy or embrace of animal others.[2]

Spectacle, Affect, and the Ecological Sublime

Alaimo's suggestion of an affective response to cinematic representations which has the potential to resist or contest the overt message of films, instead drawing out a more liberatory or ecological sensibility, is an idea that is developed much more extensively in Pat Brereton's *Hollywood Utopia: Ecology in Contemporary American Cinema*. This book-length study of ecological themes in popular cinema is infused by an interest in recovering the "utopian residue or surplus" to be found in popular culture (22), a notion derived from Frankfurt School political theorist Ernst Bloch's *The Principle of Hope*. Brereton seeks to show how "Hollywood draws on the therapeutic power of raw nature and landscape and how this becomes more ecologically charged and potent when coupled with human agency" (38). He pays particular attention to cinematic spectacle and the construction of a romantic sublime, for instance, through "extended moments of almost Gothic visual excess" (14), the "kinetic depth effect" (borrowing David Bordwell's phrase) created by camera movement across static landscape vistas (41), and the "transgressive potential and vision of excessive scenography and agency" (213).

Brereton's analysis takes in a wide range of films, from westerns and road movies to science fiction, conspiracy thrillers, and blockbuster epics. While cognizant of many film critics' deep-seated critiques of the mainstream motion picture industry, he insists there are progressive potentials in popular cinema that are generally missed by such academic critics. For instance, where 1950s science fiction B-movies like *Them*, *The Thing from Another World*, and *Invasion of the Body Snatchers* are conventionally read as reflections of the "red menace" paranoia of Cold War discourse, Brereton suggests these films also "initiated [the] cultural process of charting the expression of ecological issues" and "helped construct a universal, if nascent, eco-consciousness through the growing understanding and fear of (non)natural forces and their resulting threats to human nature" (141-2). The paranoid 1950s genre is thus read as a veiled representation of "a new ontological threat," that of "the real possibility of the extermination of all life forms on the planet"

through the development of the nuclear bomb (142). While other critics interpret the nuclear mutant killer ants of *Them* as ideological stand-ins for the perceived communist threat, Brereton reads them as a representation of a nature gone awry through human actions. Similarly, where *The Incredible Shrinking Man* is often read along psychoanalytic lines as a "parable on emasculation" (148), Brereton sees the film providing a "nascent ecological 'learning space'" for audiences "to oscillate between identification with this diminutive human agent and his awe-struck inclusive speech and identification through the expansive nature of the stars as the camera pans across the heavens" (151).

In the more consciously eco-dystopian visions of the 1970s and 1980s such as *Soylent Green*, *Logan's Run*, *Silent Running*, and *Blade Runner*, Brereton identifies an "extreme and excessive visual representation of decay and environmental corruption" (218) that he sees as ecologically potent. In *Soylent Green,* with its bleak vision of an overpopulated and underfed humanity, Brereton's attention is drawn to the way the bleakness is "ruptured" by an extended sequence of "sublime" and "utopian" nature spectacle, as the dying Sol Roth (Edward G. Robinson) elects to undergo a funeral ritual involving a planetarium-like visual spectacle of colorful nature imagery (flowers, streams, mountains, flocks of sheep, all indicative of what the grey dystopic reality lacks) to the accompaniment of pastoral classical music (170). Such moments of visual sublimity, for Brereton, "dramatically articulat[e] ecological and ontological tensions within the *mise-en-scene*, embedded particularly within the film's closure" (203).

This interest in closure leads Brereton to focus on concluding sequences, including the final suicide ride of *Thelma and Louise* in which the heroines leap into the Grand Canyon pursued by police officers and, figuratively, by a male-dominated society in which they could find no place, and the finale of Lawrence Kasdan's *Grand Canyon,* which, we are told, demonstrates a "spatial excess" that "affords the audience a place to engage with and connect with their universal ecological selves" (121). Discussing Ridley Scott's *Blade Runner,* Brereton focuses on the debate over the film's variable endings. In the original version Scott, reportedly under pressure from his Hollywood backers, had the protagonists, Deckard and the replicant Rachel, escaping from the depressingly noirish metropolis that had dominated the film toward an Edenic sanctuary which is visually at odds with everything previously seen in the film. In the later "director's cut" of the film, Scott eliminated this happy ending, purportedly so as not to deflect the gritty realism of the film's vision of a future Los Angeles. Yet Brereton prefers the "return to nature" denouement in which "the dystopian *mise-en-scene* […] becomes displaced by this sublime evocation of pure nature" (214-

5), with the aerial helicopter long shot of the wilderness providing a "climatic space" (sic) "to contemplate the importance of the earth's holistic beauty, while also affirming its ethical benevolence" (215).

One wonders, however, if such a preference for sublime nature is anything more than an extended plea for visual spectacle and feel-good endings. Reiterating his general argument, Brereton writes that "the creation of easy pleasures need not necessarily preclude otherwise unresolved elements being embedded in moments within the *mise-en-scene*, which often includes a surfeit of ecological utopianism" (203). The argument gets put to interesting use in a lengthy defense of director Steven Spielberg, whose "phenomenon and corpus of work" he reads as "the most successful embodiment of nature and ecology on film" (67), their special effects permeated by "philosophical and even ecological questions" (72) which "allow […] audiences to grapple with evolution-ary and interactive nuances of 'nature'" (77). Examining Spielberg's blockbuster *Jurassic Park*, Brereton focuses on the viewer's identifica-tion with the awestruck observer of spectacular natural phenomena: the film begins with "expert witnesses […] regress[ing] to the awed wonder of children," kneeling in "a reverent posture […] hypnotized by the sublime vision as they gaze into the lake and observe herds of dinosaurs roaming about freely, signaling the collapsing of time and space to produce the ultimate (chronotope) nature reserve." Brereton celebrates *Jurassic Park*'s transformation of the protagonists "innocent gaze" at the descent onto the island that opens the film to a "final ascent" which "registers firsthand experience and ethical knowledge of the primary laws of nature" (77-8)—that is, the laws, according to which interference, or "playing God," with nature results in an un-leashing of Frankenstein-like disruptive force. By the end of the 1997 sequel *Lost World*, the protagonist Hammond endorses "an ecological position that supports 'a new policy of non-intervention'" (80) with the island on which the (re-engineered) dinosaurs have staked their ecological claim. Another instance of this awestruck observer could be the mesmerized attendees at the descent of the alien mothership in *Close Encounters of the Third Kind* and the celebratory musical exchange that follows. Brereton's argument seems to be that such images instill or tap into a fascination for natural spectacle and thus carry a utopian charge, to which jaded film critics remain oblivious.

Brereton's willingness to go out on an interpretive limb is admi-rable, and one can hardly quibble with his point about the "pliability rather than the fixity" of spectacular images of nature—as in the first encounter with simulated dinosaurs in *Jurassic Park*—but ultimately his readings sound somewhat strained and tendentious. With his argument that "audiences often find ways to subvert their controlling ideologies"

(72), Brereton suggests that the escapist narrative closure and status quo conservatism of Spielberg's discourse may be resisted in favor of an affirmative ecologism; yet this argument remains theoretical, with no documentary or audience-ethnographic evidence provided to support it. Some would doubt that an appreciation of "spectacular nature" is all that much to celebrate (see Davis), even from an ecological perspective, as ecological understanding is hardly reducible to a sensation of *wow*. In the same way, we might celebrate tourist brochures as a source of utopian representations of people and nature, but this bears little relation to tourism's environmental and social impacts.

The problem is that Brereton does not seem to have fully developed Bloch's distinction between "abstract" and "concrete" utopias. The first of these encompasses escapist forms of "compensatory wishful thinking," while the second maintains a transformative impact, "with images driving forward action to a (real) transformed future" (23). Following this logic, if Spielberg is to be taken as the foremost director of "nature and ecology" films, as Brereton suggests, he would have to have contributed to revolutionary changes in ecological consciousness. But as many critics have pointed out, Spielberg's films celebrate not so much the power of nature as the power of cinema, with its sounds, lights, and spectacular effects, and its godlike creator as an indulgent puppet-master behind the screen. Spectacle on its own, even a spectacle ostensibly celebrating the power of nature, is hardly guaranteed to generate social mobilization. Some, like Situationist theorist Guy Debord, have argued that spectacle may be one of the most powerful mechanisms of social control ever developed—one designed to render a passive and self-satisfied audience, not one capable of mobilizing for social or ecological change. In the case of Spielberg's 1970s films such as *Close Encounters* and its follow-up *ET,* one could certainly argue that their feel-good alien-friendliness was more benign to "the other" than the Red Scare-like threatening aliens of the Reagan era *Independence Day,* but leftist critics have argued that one trend was followed smoothly by the next and that, if anything, *Close Encounters* reflected a retreat into the depoliticization and even irrationalism of the late 1970s, paving the way for the Reaganite 1980s (see Wood; Ryan and Kellner).[3]

In contrast to Brereton's celebration of *Jurassic Park*, Sarah Franklin's analysis of this film takes in not only its images and their reception by the critic, but also the cultural and economic contexts surrounding its production and consumption. For Franklin, the message of moral denunciation of the commercial abuse of biotechnology by the fictional creators of "Jurassic Park" *the theme park* is thoroughly undercut by the gee-whiz celebration both of genetic science and, perhaps more insidiously, of the cutting-edge technology, including state-of-the-art digital

animation techniques and full-scale robotics, used in the creation of *Jurassic Park* the *movie*. Following the Walt Disney "theme park model of consumption" (Langer 75), the movie is "structured as a ride": it "offers a movie of a theme park which in turn becomes the main attraction of [real-life] theme parks" in a process that doubles in on itself to generate revenues upon revenues premised on the magic of Hollywood spectacle in making possible anything imaginable (Franklin 202-03). *Jurassic Park* the *movie* became Jurassic Park the *global brand*, eliciting a multi-billion-dollar industry of "dinomania" and contributing to a "spur for unparalleled general interest" in paleontology that biologist Stephen Jay Gould worried may ultimately be the kind of "commercial flood that may truly extinguish dinosaurs by turning them from sources of awe into clichés and commodities" (cited in Franklin 212). The film's "axis" and "central invitation," as Franklin reads it, is "the invitation to 'go behind the scenes'" and "share in the secrets of its own making" (216), thus inviting the audience to celebrate the technologization of life itself, by which the secrets of life are opened up and made available to the human consumer for the cost of admission.

Leaving aside the industrial and kinetic dimensions of Hollywood filmmaking, Brereton's arguments in effect resuscitate a debate over representations of monumental nature, made famous in the nineteenth century and critically deconstructed in such books as art historian Albert Boime's *The Magisterial Gaze*. Boime argued that this elevated, panoramic gaze enabled a possessive and dominating approach to the North American landscape as it was being colonized by Euro-American railroad and tourist interests, always with the accompaniment of photographers and landscape artists. There is no doubt that the nineteenth-century monumental landscape art of Thomas Cole, Thomas Moran, Albert Bierstadt, photographer Carleton Watkins, and others provided much of the impetus for the creation of the nation's first national parks, opening up practices of visual appreciation of natural scenery that still condition the responses of many park and wilderness visitors. Finis Dunaway's *Natural Visions*, a history of the visual culture of American environmentalism, shows how these traditions continued through the twentieth century, affecting the documentary films of Pare Lorentz and Robert Flaherty, among others. Lorentz's striking New Deal documentary *The Plow that Broke the Plains*, according to Dunaway, mobilized wide-angle cinematography to present ecological catastrophe as a new expression of the sublime. For Lorentz, the lessons of the new science of ecology on the Dust Bowl of the Great Plains was portrayed in terms of a Puritan narrative of a fall from grace, with panoramic visions establishing the grasslands as ideally suited to the Midwestern climate, but farmers shown as ignor-

ing ecological realities and, in the process, causing ruin. And yet the film's ambivalent reception, seen by the political Right as government propaganda and by the Left as dangerously ignoring the social realities of capitalism, showed how risky the visual sublimation of nature can be. In his follow-up, *The River*, Lorentz managed to continue the ecological strains of *Plow* while paradoxically portraying the vast dam-building projects of the Tennessee Valley Authority as a new mode of redemptive technological sublime.

Debates on the political impacts of visual modes such as the sublime and the beautiful are far from being resolved. Some argue that by aestheticizing and reifying natural landscapes, they condition a sentimental and nostalgic attitude to nature, an attitude more conducive to possession and consumption than for understanding ecological dynamics or human relationships with the natural world; while others suggest that such visual representations encourage an attachment that can trigger resistance and action if the object of attachment is found out to be under threat (see Oravec, Hitt). This debate can only be resolved through detailed ethnographic studies of audience perceptions, an option that participants on either side have rarely attempted. Bringing together this interest in visuality with the previous discussion of the factual basis of documentary film raises the question of how films can help shape public opinion, both through the dissemination of powerful images and stereotypes and through the distribution of information and the setting of agendas for public discussion. Matthew Nisbet's evaluation of the impact of the blockbuster movie *The Day After Tomorrow* on public perceptions of global climate change is an excellent example of how this kind of work can be done, while Kevin DeLuca's *Image Politics* and Robbie Cox's *Environmental Communication and the Public Sphere* provide extensive resources for nuanced analyses of environmental communication strategies using film and visual media. The work of Brereton and others can add immensely to this literature by opening up the question of cinema's *visceral* effects, that is, those which may elude consciousness but which carry an emotional and affective charge capable of engendering deep responses.

Andrew Ross's discussion of "images of ecology" is pertinent here. Ross lays out the clichés of environmentalist imagination:

> belching smokestacks, seabirds mired in petrochemical sludge, fish floating belly-up, traffic jams in Los Angeles and Mexico City, and clearcut forests; on the other hand, the redeeming repertoire of pastoral imagery, pristine, green, and unspoiled by human habitation, crowned by the ultimate global spectacle, the fragile, vulnerable ball of spaceship earth. (171)

As this list indicates, environmentalist visuality commonly counter-poses a positive or ecotopian imaginary to a negative, dystopian or apocalyptic one (Bak and Holbling, Podeschi). Utilizing such depictions for political goals can no doubt be effective in specific circumstances, but at some point it is necessary to ask the larger question of whether a reliance on visuality can ever be enough for eliciting the kind of change in consciousness that many environmentalists would like to see.

Visuality: Enframing the World, or Expanding Perception?

Many environmental critics of film, including Brereton, tacitly assume that the popular arena is the only one capable of delivering social and environmental change. Where Brereton considered the films of Steven Spielberg as representing "the most successful embodiment of nature and ecology" not just in Hollywood but, in his sweeping terms, "on film" (67), the potentials he seeks in cinema have been more boldly embodied in the experimental and independent filmmaking of such artists as Maya Deren and Stan Brakhage, and in the auteurist art cinema of Andrei Tarkovsky, Michelangelo Antonioni, Theo Angelopoulos, Werner Herzog, and others. (Tarkovsky's *Solaris,* a science fiction film premised on the uneasy psychic relationship that unfolds between a group of cosmonauts and the planet around which they are in orbit, is perhaps a paragon of the science fiction ecology film, a more biocentric, and more spiritually probing, Soviet-era analogue to Stanley Kubrick's *2001: A Space Odyssey.*)

Scott MacDonald's *The Garden in the Machine: A Field Guide to Independent Films about Place* begins from the assumption that the real potentials for cinematic expression of nature and of ecology lie precisely with avant-garde, independent and experimental filmmaking. Richly informed by debates in art history, landscape architecture, and environmental philosophy, MacDonald's book is a tour de force of nuanced and detailed, culturally and historically contextualized readings of cinema. But it is first and foremost a labor of love, documenting dozens of films which MacDonald considers "instances of an endangered cinematic species," both in that their "economic viability is seriously in jeopardy," many existing in only a handful of copies and made for 16mm screening facilities which are increasingly rare, and because of the inherent fragility of the medium itself, which fates them to an inexorable process of decay (xxiv). Delving into nineteenth-century panoramic paintings and the landscape aesthetic of the Hudson River School, MacDonald reads Thomas Cole's four-part series of massive

paintings "The Voyage of Life" against Larry Gottheim's seasonally structured 1973 film *Horizons* and contextualizes his analysis of films by Marie Menken, Carolee Schneemann, Kenneth Anger, Stan Brakhage, and the "ecological cinema" of Rose Lowder within a discussion of the history of gardens and landscape architecture. In the case of Brakhage's wonderfully inventive two-and-a-half minute film *The Garden of Earthly Delights*, MacDonald details the filmmaker's process of painstakingly assembling collage-like arrangements of montane-zone vegetation, including seeds, flowers, leaves, and blades of grass from nearby his Colorado home, directly onto the 35mm filmstrip. The result is a flickering kaleidoscope of visual intensity by which viewers are drawn in to the very act of seeing the light of projected "nature," not from the panoramic distance of a "magisterial gaze," but as if we were caught in the midst of the teeming, animated intensity of living process itself.

MacDonald's primary focus is on films that challenge our viewing habits and alter our perceptions of natural (and human) processes. They may do this through long takes, extended durational formats, unusual montage and editing techniques, the use of silence and natural sound, and the foregrounding of subjects—places, landscapes, rivers, changing seasons, and everyday visual and sensory occurrences—that usually serve only as backdrop in mainstream cinema. Occasionally, he includes reference to mainstream films (*Twister*, *Natural Born Killers*) or auteurist documentaries (Claude Lazmann's epic Holocaust documentary *Shoah*, Werner Herzog's post-Iraq War film *Lessons of Darkness*). And while his broad definition of "films about place"—which ranges from the American West, gardens, and the sublime to cities, domestic space, and apocalypse—may appear to frequently deviate from strictly environmentalist concerns, the interplay of culture and nature and the issue of our perception of the environments around us remain central to his study. In a 2004 *ISLE* article entitled "Toward an Eco-cinema," MacDonald elaborated on these concerns and proposed the "fundamental job of eco-cinema" as being "a retraining of perception, as a way of offering an alternative to conventional media-spectatorship, or [...] a way of providing something like a *garden*—an 'Edenic' respite from conventional consumerism—which the *machine* of modern life, as modern life is embodied by the apparatus of media" (109, emphasis in original).

The films of James Benning can be used to illustrate what is at stake in such a task. Benning has made a series of films focused on the American West and, most recently, a trilogy of films focused on the landscapes of California. Each of the latter is a feature-length film made up almost entirely of two-and-a-half minute long, tripod-mounted

outdoor shots, utilizing only natural, diegetic sound. Benning's films eliminate all the features of conventional narrative cinema, such as human characters and storylines, point-of-view shots, and the rest. They provide only a lengthy series of languidly paced landscape images, to be viewed as they are, unadorned by music or other extra-diegetic sound, and together making up an ambiguous narrative of environmental change. The films focus on land use activities, from forestry to mining to military uses. (Benning's earlier Utah-based film *Deseret* included a spoken series of environmentally focused texts about Utah taken from news stories in the *New York Times*.) For Benning, as for many of the other filmmakers examined by MacDonald, the medium—in this case, a series of slow and deliberate visual meditations crafted in ways antithetical to Hollywood film—is very closely intertwined with the message, which here is the changing human relationship to nature. As MacDonald writes:

> Ultimately, [Benning's] unusual cinematic structures […] *are* his fundamental argument. So long as we follow the Hollywood model and continue to repress the complex realities of geography and history on the assumption that there are no real alternatives, we will not find our way out of the dilemmas that face us. (*Garden* 349, emphasis in original).

Such an unusual style requires some work from the audience, however, and to add to the difficulty, Benning is committed to showing the California trilogy as a single, extended event. As a result—and this is the case for the majority of films examined by MacDonald—the films are rarely screened for the public and thus remain limited in their societal impact.

Despite their inaccessibility to broad audiences, however, experimental filmmakers have been influential in the development of mainstream cinema. Techniques developed by Brakhage, Kenneth Anger, Jean-Luc Godard, and others—from handheld camera movement and high-speed cutting and editing techniques to direct address of the audience and even writing directly onto the film—can today be found in mainstream films, television series, music videos, and even commercials. And while some may argue that any radical implications of such techniques have been rendered impotent by the time they enter the mainstream, to the extent that a technique itself can, in MacDonald's words, retrain perception, its potentials remain worthy of critical consideration. This brings us to the longstanding debate over the nature and ontological effects of photography and film as media that both transform perception and alter the world being perceived. A line of notable critics, from Martin Heidegger to Susan Sontag to ecophi-

losopher Neil Evernden, have written influential exegeses on how the camera serves as an instrument of distancing, even of domination, enabling an objectification, decontextualization, dehistoricization, and commodification of the things that make up the world, making us spectators rather than participants and ultimately spreading a danger-ous sense of irreality in our midst. In *Green Screen*, Ingram delves into these arguments and presents his own analysis of the ways in which wide-angle aerial tracking shots in such films as Robert Redford's *A River Runs Through It* construct a "Christianized sublime" and extend a "magisterial gaze" onto the North American pastoral landscape (27-28). In this sense, one can argue that cinema only accentuates what Heidegger called the "enframing" and "conquest" of the world "as picture," and its subsequent setting-upon as a "standing reserve" to be objectified, measured, dominated and parceled out for human uses ("Age of the World Picture").

In a series of detailed analyses of the films of British director Peter Greenaway, Paula Willoquet-Maricondi has focused on this aspect of representational and visual (as well as linguistic) framing, techniques which historians have situated as key to the nexus of conceptual and cultural changes undertaken by Western society in the seventeenth- and eighteenth- century transition to scientific and capitalist modernity. According to Willoquet-Maricondi, Greenaway successfully challenges this tradition by revealing its action, including his own self-conscious and ambivalent complicity within it, while disrupting it from within, for instance, through the allegorical figure of the Green Man in *The Draughtsman's Contract*, or through pursuing these logics to their own ends in *A Zed and Two Noughts* (even as the logic itself results in the death of the two male protagonists). Willoquet-Maricondi reads Greenaway's *Prospero's Books*, a stunning experimental adaptation of Shakespeare's *The Tempest*, as a "postmodernist 'visual essay' that critically investi-gates […] the hegemonic role of vision, the rise of transcendental reason, and the concomitant Cartesian subject's colonization and mastery of the world" ("*Prospero's Books*, Postmodernism, and the Reenchantment of the World" 178).

While Willoquet-Maricondi's focus on enframing is more closely linked to an analysis of still photography, the moving camera adds the construction of "kinetic landscapes," which can make nature into "an object of kinetic pleasure for the spectator," as in the quick cutting and hand-held cameras of the down-river action scenes of *Deliverance* or *The River Wild* (Ingram 30ff.). Action sequences are among the most universally pleasurable for Hollywood audiences, and the question of whether these in fact enframe the world in a taming and ultimately anthropocentric gesture or not remains an open one. Brereton would

have us believe that such audience delights provide a taste of utopian bliss. Ingram wisely balances out his discussion of photography with a critique of the formalism and apparent technological determinism of Sontag and Heidegger, opting ultimately for a more context-sensitive, culturalist approach to the interplay of cinematic meanings (30-35). It may be, for instance, that the sublime or magisterial gaze enables a sense of possession and mastery of landscape, but for some it also elicits feelings of humility in the face of nature's grandeur and gives rise to a desire to act on behalf of the preservation of the landscape in question. The Sierra Club's uses of the photography of Ansel Adams and Carleton Watkins are cases in point. The only way to properly assess whether such enframing of nature results in a sense of mastery or in a humbled recognition of natural beauty is to conduct careful, contextual analysis of audience responses.

That said, both photography and film do have inherent characteristics: they decontextualize their subjects, disembedding them (rather like the capitalist market economy does to the materials it converts into commodities) and making it possible for them to travel, with their powerful immediacy as visual images, and to be incorporated into new contexts and narratives. It should be of interest what use audiences make of these images and narratives. Ingram's survey in *Green Screen*, the most extensive of the books examined here, moves so quickly through diverse themes and films that it rarely explores the contradictions, ambiguities, and potential multiple readings, let alone contrasting audience receptions to be found with even a single filmic text. A deeper or more holistic eco-cinecriticism, however, would closely analyze not only the representations found in a film but the telling of the film itself—its discursive and narrative structures, its inter-textual relations with the larger world, its capacities for extending or transforming perception of the larger world—and the actual contexts and effects of the film and its technical and cultural (entertainment industry, art world) apparatus in the larger world. Other critics have looked at various moments within this process—a process that, in the cultural studies literature, has been referred to as "cultural circulation."

Ecologizing the Cultural Circulation of Meanings

For an approach that names itself after the scientific study of the natural world and that overtly looks for connections between culture and material nature, it is surprising how little ecocriticism has dealt with the material aspects of cultural production. Much ecocritical writing has pursued an idealist focus on philosophies and ideologies rather

than a materialist concern with the things, processes, and systems that support and enable the making and disseminating of cultural texts. With literary texts such issues are arguably less substantial than they are with films, photographs, and digital images, which are all produced through technological effort, engineered within systems that transform the natural world into chemical and synthetic compounds and in turn transport, distribute, and consume these, producing substantial material waste and ecological change in the process. On another level, the movement of images across physical and electronic networks also depends on a certain "social" or "political ecology" of interactions among producers, distributors, consumers, and others.

The first book of eco-cinecriticism to seriously delve into such issues is film historian Sean Cubitt's short (145-page) but erudite treatise *EcoMedia.* This welcome addition to the literature ranges freely across the full range of concerns mentioned so far—including environmental ethics, philosophy of technology, film phenomenology, the cinematic sublime, and the politics of representation—and adds uncommon insight into the production mechanics of cinema and, what is even more rare, a disciplined concerned with the ontology of nature. On the latter, Cubitt goes beyond a view of technology as mediating between an active humanity and a passive nature and instead develops the more radical conception of a shared communicative relationality, in which technology serves as a connective medium bringing together and mediating between inherently communicative human and nonhuman worlds. Cubitt pushes beyond the apparent tension between Jurgen Habermas's idealized communicatively-rational (and anthropocentric) public sphere and Niklas Luhmann's notion of functionally differentiated (social, media, technological) systems, toward such posthumanist approaches as Bruno Latour's actor-network theory—that is, towards a broadened understanding of the "polis" that includes and blurs the boundaries between human *socius*, inhuman *physis*, and unnatural *techne*. Jettisoning the post-Renaissance conception of nature as hypostasis, a non-subjective and non-signifying other that provides science with its object and art with its ineffable beyond, Cubitt articulates a nature that is inherently communicative: "To be a world," he writes, "is to effervesce with an excess of signification" (118). And human communication, for Cubitt, "is only comprehensible in relation to the universe of communication that enfolds, contains and speaks with it" (145).

With this conception in mind, Cubitt advances somewhat on Brereton's examination of the cinematic sublime, distinguishing between a sublime that is "outside of time" and "renders the spectacle incommunicable" and, by contrast, what he calls wonder, which "thrills to [time's] perpetual emergence" and is the principle according to which

the world subsumes the human into itself" (67-68). The mechanism by which a visual image maintains a connection to an emergent and communicative world is not made entirely clear by Cubitt, but he provides intriguing clues. His discussion of animation, notably Hiyao Miyazaki's *Princess Mononoke*, distinguishes between animal drawing (marking, signifying through gesture, scent, etc.), human drawing of animals, which moves between anthropomorphic projection and zoomorphic introjection (the animals providing an "other subjectivity" that makes possible "trans-species identification" (31)) but which makes possible a severance of figure from ground as drawings become mobile and reproducible, and "machine drawing," which by eliminating gesture eliminates continuity with the physical, turning knowledge into array and data. While he seems critical of the decontextualization brought about by the latter, Cubitt excels at reading the data made possible through film and the systems that produce it. His analysis of Peter Jackson's *Lord of the Rings* trilogy delves into issues of national cultural industries (New Zealand's), the film's obsessive respect for borders and boundaries, and contradictions between its high-tech "world picture" production machinery and its "green mythology," characterized by a Heideggerian nostalgia for traditional craftsmanship and a critique of the "dark magic" of instrumental technology (12ff.). Cubitt's writing is at its most evocative when he describes the ways in which film technology, as in David Attenborough's *Blue Planet*, provides "a mode of looking that encourages the world's unmotivated upsurge to well up into us, clasp itself to us, merge with the salt water in our veins," where "the ocean as a whole looks back, feels us as surely as we feel it." Techne, he writes, "is the only route through which we now can sense the world, most especially that part of the world's conversations which are not conducted in wavelengths we can hear, see or otherwise apprehend" (59).

Visual technology, then, has the capacity to productively and communicatively mediate between audiences and the world, a world which extends beyond what is immediately perceivable. The choice of what to make available from that world, of how to organize it, where to distribute it, and so on, takes us beyond the notion that media are extensions of perception and into the realm of culture as perception, reception, representation, and interpretation. Raw materials are turned into cultural products, which are distributed and consumed, their consumption leaving behind its effects in society and in the material world. All of this makes up the production cycle. In this sense, Marxism—which has traditionally focused on modes of production as means of engaging with and transforming the material world—and environmentalism, the main lesson of which could be summarized not only with the platitudinous

"everything is connected to everything else" but with the more useful "everything comes from somewhere and goes somewhere"—share an obvious respect for the broader metabolism within which humans and nature are mutually entwined.[4] Cultural studies, with its grounding in the Marxist-inspired Birmingham School, is thus a logical place to take a discussion of ecological cultural criticism (something that British ecocritics seem aware of, with their keen appreciation for Raymond Williams's *The Country and the City* as a point of historical reference.) The model of cultural circulation developed by cultural studies scholars Stuart Hall, Richard Johnson, and others, provides a useful template for gathering together the different themes looked at here so far.

Cultural circulation, or "cultural circuit," models distinguish a series of "moments" in the production and consumption of cultural texts and meanings. Critical analysis can be focused on the *production* of cultural products and texts, in which meanings are "encoded" into them; on the *texts* themselves, including both their form and content; on the *consumption*, reception, use, or "decoding" of their meanings by audiences; and on the subsequent *reproduction* of these meanings as they affect everyday life, which then serves as the ground for further production. At each moment, the object is connected to a larger social and technological world: its production, transmission, and reception are enabled and constrained by available media and production net-works, financial capital, audience mobilization mechanisms, as well as available cultural discourses, hopes and expectations shaped by recent "successes" in the medium, and so on. Crucially, as Hall argued, the moment of decoding does not "follow inevitably from encodings" but rather provides audiences with the option of a range of "negotiated" or "oppositional" readings to the dominant reading of a text (136).

At each moment in the cultural circulation of meanings, critical questions can be raised. Regarding production and distribution, for instance, one could explore the political economy of the film industry, the constraints and possibilities inherent in the medium and in its operative codes, and so on. At the level of the text, a variety of analyti-cal traditions have developed to probe into the form, the content, and the discourse of film—its representation of gender, race, class, ethnic-ity, nation, sexuality, power and agency, normalcy and deviance; the generic, semiotic, and ideological codes by which these meanings are mediated; inter-textual relations between this film and others of the same genre, author, or cinematic tradition; and so on. And at the point of reception and consumption, one could ask questions of the audience, its uses of the media product in the context of their everyday lives, is-sues of identification with actors, spectatorship, gaze and psychological

formation, and the formation and development of specific reception cultures (youth subcultures, "fans").

To these more generic questions, ecocriticism can add several of its own. Regarding production and distribution: What is the ecosystemic impact of the production systems utilized in making, marketing and distributing, exhibiting, and conserving (or eliminating) the film object? Are ecological relations (resource consumption, production of waste, effects on socio-ecological relations) taken into consideration by the producers, and, if so, to what extent are these relations different from normal practices? Regarding the text itself: How are nonhuman animals, landscapes, and "nature" (environments and places, ecological relations, "the Earth") portrayed and represented? How are relations between humans and nonhuman nature represented? How are intra-human and human-nonhuman shown or assumed to interact (if at all)? What meanings are conveyed about environmental issues, environmental action and practice, and about who bears responsibility and agency for resolving such issues? What is represented as natural and unnatural, and how are these ethically inflected? What narrative and semiotic traditions do these fall into and/or deviate from (e.g., pastoral, romantic, apocalyptic, et al.)? And regarding reception and consumption: What are the short- and long-term effects of these media in social and ecological relations? Do they tend to reproduce existing forms of subordination or oppression and serve to coopt or "contain" social ambitions for change? Or do they enable or facilitate the questioning or reframing of existing relations, opening them up in terms of desire and the imagination of alternative possibilities?

With respect to the questions around production, it is worth emphasizing that film is and has always been, since its appearance, among the most heavily *mediated* of media: its reliance on a complex and integrated array of producers, artists, agents, actors, marketers, et al., an immense and sophisticated technological apparatus, colossal sums of money and capital, and the consumption of tremendous material resources (and production of waste) is unparalleled in all the arts. MacDonald, in "Toward an Eco-Cinema," points out the poignant fact that the screening and viewing of films helps to bring about their physical demise—paralleling the ecological fact that the use of nature's resources can bring about irreversible changes to the systems which they make up.

The process of filmmaking has noticeable and sometimes powerful effects on the people, animals, and places in which it occurs, both in real terms as the production process occurs, and in its mediated effects. It can contribute to the popularization and overuse of certain places or to their neglect, to the construction of a certain aura around them or

to the dispersion of an existing aura. Its truth-effects, as such, can be educational or not. Don Gayton ("In film, out of place") argues that the "indiscriminate" and interchangeable use of "places, landscapes and regions" to stand in for others conveys a sense that place "is a mere commodity, to be traded and substituted at will" (8). Yet one could also argue the opposite: that (to use Gayton's example) the treatment of Nelson, BC, as a proxy for Bainbridge Island in the making of *Snow Falling on Cedars*, or for that matter of any place in the American West to stand in for the "mythical West," *elevates* that place not only by providing jobs and revenue to the local community but also by valuing that particular landscape for the qualities which it may share with the landscape being referred *to*. Both, of course, are being treated as places in quotation marks—place-images rather than places-in-and-for-themselves. Gayton's critique of "landscape duplicity" rings true, however, in the example he gives: "When midway through *Romancing the Stone*, the setting changes dramatically from South American canefields and tropical forests to California coastal scrub with no corresponding change in plot, we are expected not to notice or, if we do, not to care." In this and countless other cases, the filmmakers are counting on an audience as ecologically illiterate as they themselves are. However, this is more clearly a critique of the current state of the industry, not of the technology of cinema per se.

The development of "green" cinematic practices is an area that has hardly even registered for most filmmakers; yet it exists. The Environmental Media Association (EMA) was formed at the end of the 1980s by a group of Hollywood producers, directors, actors, and agents to "promote 'greener' practices in Hollywood film production," including by promoting recycling and waste management by the studios, and "to educate people about environmental problems and inspire them to act on those problems" (cited in Ingram 21). Similarly, the Shambhala Ranch was founded by producer-director Noel Marshall and actress Tippi Hedren to care for animals used in Hollywood film production (Ingram 124). Strengthening and promoting such efforts should surely be one of the prongs of environmental commitment among film artists at the level of Hollywood and of small-scale independent work.

Conclusion

There is much work to be undertaken by ecocritics interested in unpacking the environmental meanings carried or enabled by, and the constraints and potentials inherent in, film and visual media. Like photography, film represents features of the world to us in ways that

become independent from those features. Representations of places and landscapes, as well as of people and issues, become severed from the real places which they denote, though, as Cubitt carefully points out, not necessarily from the world in which we engage with those places. With its spectacular, kinetic as well as kinesthetic qualities, film is capable of "transporting" viewers in ways that other media are not, and can thereby elevate viewers' appreciation for the things and activities depicted. The phenomenological and psychoanalytic dimensions of film viewership have both been much pursued by academic film critics, but these have largely remained unexplored by ecocritics. There remains much that environmental philosophy, phenomenology, psychoanalysis, and visual culture and media studies could teach and learn from each other.

Film, of course, can be used for educational purposes and for environmental consciousness-raising. But the nature of film production industries shapes what can be done with the medium, and so it is important, in an era of expanding media universes, that critics look at mainstream as well as alternative uses of visual media. Ethnographic work on audience reception, including on environmental subcultures (such as environmental justice movements, radical environmentalists, "eco-girrrls," and so on) as well as mass audiences, could contribute toward clarifying the issues that critics have debated for some time. Finally, it is important to attend not only to "images of ecology" but, as Andrew Ross argues, to the "ecology of images," that is, to the ethics, politics, economics, and "ecologics" of the ways images are produced, circulated, and consumed in our society. The latter might best be thought of as consisting of three interconnected dimensions or levels: the material, the perceptual, and the social. Cinema's material ecologies, or its *ecologics*, concern the technologies by which images are made and the ecologies from which resources are extracted to make them, and to which waste materials return following their use. Its perceptual ecologies, or its *epistemologics*, concern its effects on perception and on culture, including changing aesthetic and visual cultures as these affect and shape philosophies and ideologies relating humans to the nonhuman world. Finally, its social ecologies concern questions of differential access to production (including its production costs in human and environmental health), consumption, and interpretation and control. Looking at cinema according to these multiple dimensions will allow for the emergence of a more full-fledged and mature ecological cinema criticism to develop. The books and articles described above take us well on our way to that goal, but there remains much work to be done.

Notes

1. The only articles focusing on film in *ISLE* have been Jhan Hochman's "*Silence of the Lambs*: A Quiet Bestiary" (1.2, 1993), Diane Freedman's "A Whale of a Different Color—Melville and the Movies: *The Great White Whale* and *Free Willy*" (4.2, 1997), Paula Willoquet-Maricondi's "The Exploitation of Human and Nonhuman Nature in Peter Greenaway's *A Zed and Two Noughts* (10.3, 2003), and three articles by Scott MacDonald: "Ten (Alternative) Films and Videos about American Nature" (6.2, 1999), "Ten+ (Alternative) Films about American Cities" (8.1, 2001), and "Toward an Eco-Cinema" (11.2, 2004).

2. Work in this vein includes Norris, *Beasts of the Modern Imagination*; Baker, *The Postmodern Animal*; and Thompson, *Becoming Animal: Contemporary Art in the Animal Kingdom*. Burt's wonderful book *Animals in Film* examines some of the ways in which animals have helped shape film history, and in turn how the filmic portrayal of animals has shaped the recent history of relations between people and nonhuman animals. I have left this book out of the present review, since it is entirely focused on animals and not on the environments within which human-animal relations occur.

3. Unfortunately, *Hollywood Utopia* is also marred by an editorial sloppiness that has resulted in stylistic inconsistencies (in capitalization, italicization of titles, etc.), a remarkable overuse of scare quotes, obvious errors in details (e.g., utopian theorist Ruth Levitas becomes philosopher "Immanuel Levinas," N. Katherine Hayles repeatedly becomes "H. K. Hayley"), and a glossary that is full of grammatical and semiotic incoherence.

4. Lance Newman argued this in extremely articulate terms in "Marxism and Environment," *ISLE* 9.2 (2002).

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