final sequence powerfully confirms the filmmakers' tendency to invest the mundane with deep significance: after the second passage of narration, an insect—most viewers, I would guess, are not clear at first what insect this might be—emerges from water and undergoes several astonishing and beautiful transformations to the accompaniment of orchestral music. At the climax of the passage, we realize that the amazing process we've witnessed was the growth of a common mosquito.

While visual beauty is an aspect of many nature films (the True-Life Adventures are full of beautiful shots, and the long vistas of the Sonoran desert in Sonoran Desert are gorgeous), in Microcosmos the filmmakers are at considerable pains to confirm their respect for the insect world by consistently creating lovely visual compositions and using a sumptuous palette of color. But often it is the mythical dimension of "the people of the grass" that seems to determine the directors' decision to include the images they choose. The sequence of a dung beetle pushing its ball along the ground, only to have it get stuck on a thorn, and then struggling to free the ball until it can once again continue on its way is positively Sisyphean; the pheasant that attacks the ant colony, seen sometimes from inside the anthill, is reminiscent of many mythological giants from the Cyclops to King Kong; and the emergence of the mosquito at the end of the film evokes, as Pérennou has indicated, the mythological Venus, "rising out of the water." Indeed, it is this mythological character of the world of insect life that justifies the loving attention the filmmakers dedicated to the film. Like some of Painlevé's films, Microcosmos is as much interested in what we can learn from the activities that take place in its "underworld" as it is in what we can learn about them.

The implication of the National Geographic series title "Last Great Places" is that the subjects of these films are among the few remaining "edenic" wilderness environments on earth—"edenic" meaning, apparently, not interfered with by humanity. And yet, to maintain what is essentially a fantasy, director Sean Morris needs to go to great lengths to hide the human presence in the Sonoran desert (some of Sonoran Desert is shot on the grounds of the Desert Museum, now Arizona's second biggest tourist attraction, drawing nearly half a million visitors each year). Nuridsany and Pérennou, on the other hand, do not participate in the kind of romantic fantasy promoted by Morris and National Geographic. They are interested in using cinema to rediscover the complexity of the real life that surrounds us, to alert us to an astonishing world, "Beyond anything we could imagine/And yet almost beneath our notice," as they explain in the narration that leads into the final sequence of Microcosmos. The life forms they reveal to us have clearly adapted to life as successfully as we have, and precisely in a "neighborhood" they share with human beings. The message here is not one of fear and disgust, but one of empathy, respect, and appreciation.

One context for thinking about the two very different attitudes reflected in the films discussed in this essay is postcolonial theory. The Disney films and Sonoran Desert are similar in their refusal to allow the creatures they depict anything like their own voice. In both, narration and interpretive music are relentless. That is, in these films the creatures are treated like colonial subjects—subjects that are fully understood by the experts who have come to record them and whose exotic lives can and must be explained to the viewer. Further, the creatures are understood within a set of stereotypes supplied by those who have come to document their lives: the filmic interpretations of many of the actions of the animals and insects in the Disney films are clearly projections of stereotypical middle-class American family experiences, and many of the events in Sonoran Desert reflect conventional stereotypes of the violence and brutality of the exotic animal and insect life depicted.

One final conjecture... In her video The Head of a Pin (2004), independent film/videomaker Su Friedrich intercuts between wide shots documenting a vacation near the Delaware River in northern New Jersey (Friedrich and several others are staying in a small cabin and walk to the river to enjoy swimming and picnicking) and in-close shots of a spider subduing and wrapping a wasp that has gotten caught in its web. During the shots of the spider and mayfly, the vacationers discuss the strange, grisly spectacle. At one point, they admit to each other that "what we know about Nature" would fit "on the head of a pin." Near the end of the video, the final in-close shot of the spider and the now entangled wasp concludes when the camera pulls back and up, revealing that this tiny saga of predation has been occurring underneath the kitchen table in the cabin. As in A Divided World, we see that what can seem to be two different worlds are simply two aspects of the same space; but whereas Sucks dorff emphasizes the differences between two mysterious realms, Friedrich's concluding gesture suggests that there is a relationship between what happens below the table and what occurs on top of it: both spiders and humans live by means of the periodic exploitation of other life forms. Intelligence lies in recognizing the intricate relationships between what may at first seem separate worlds.

In the present context, The Head of a Pin can serve
as a metaphor for the gap that has formed between the humanities and the sciences in the current American academic environment. While educators generally recognize that anything like a sensible liberal arts education requires experiences with both the sciences and the humanities, the tendency for many faculty and students is to see one of these areas as primary and the other as, for all practical purposes, a strange, hidden world. This gap has produced one of the more remarkable paradoxes of modern intellectual life: the seemingly contradictory nature of recent conclusions/discoveries in the humanities and in the sciences.

The major conclusion of many scholars working across the humanities during recent decades has been that the categories that earlier generations assumed were biological givens—gender, race, sexual preference, even individual identity itself—are in fact social constructions. Our ways of understanding the world around us and of coming to terms with one another are not biologically intrinsic to us—not essential dimensions of us—but rather the social fabrications of postmodern capitalism. On the other hand, one of the most remarkable conclusions of many scholars working in the sciences during recent decades is that our DNA charts our physical being from the moment of conception. This DNA mapping is so distinct for each of us that anyone with the right tools to read it can distinguish each human individual from every other, and various classes of humans from each other, on the basis of even the tiniest molecule of the human body, living or dead. In other words, however much our socialization constructs predictable, conventional, often problematic patterns of action and thought, there is an essential identity within each of us.

Of course, I recognize that I am oversimplifying very complex issues, but I cannot help but wonder whether the tendency on the part of the first generation of academic film teachers and scholars to ignore the history of cinema devoted to scientific exploration and explanation might be, at least in part, a reflection of a repressed fear of confronting those dimensions of the physical world around us that might frustrate our desire for an unambiguous, stable political consciousness, and for definitive theoretical solutions to complex social questions. Obviously, the humanities and the sciences need each other more than they sometimes realize, and the wide world of cinema, including the long history of films devoted to depictions of the natural world, remains one of those dimensions of culture that may yet help us come to terms with this interdependence.

In any case, I hope it is evident that bringing nature film—and science film in general—into the mainstream of film-historical thinking and teaching has a variety of potential benefits. Most obviously, of course, it will help us become more aware of the full range of cinematic accomplishments. Certainly the best nature films—of course, we will need to define what “best” means in this genre—should be recognized alongside the best dramatic narratives, the best animations, the best avant-garde films, the best films of any kind. And we can learn from, and enjoy, the ongoing evolution of this genre. Just as the modern histories of the horror genre and film noir can help us think about the developing power of women to deal with their social
marginalization, the evolution of the nature film can help us think about our relationship to other species and to the environment we all share. And perhaps, as suggested above, it can help us consider the complex, puzzling relationship between our biological nature and our psychological/sociological development.

At its best, the evolution of the nature film—and here there can be no better example than March of the Penguins (2005)—reveals an astonishing level of filmmaking courage and persistence, a commitment to species other than Homo sapiens, and an interest in ways of living other than ours that may have things to teach us. Luc Jacquet’s feature has received generally grudging accolades from serious film critics, many of whom are understandably put off by the film’s overuse of sentimental music and narration—and perhaps by its Disney-like marketing in the U.S., where the film was touted as the family film of the summer. Of course, March indeed is a family film, but ultimately more in the Painlevé sense than in the Disney sense: once the emperor penguins mate, they are monogamous, and focus on producing an egg and raising a chick—but this union lasts only for one year; for nearly every emperor penguin, each year brings a new monogamous relationship. The advertising for the film, and many of the critiques of it, also ignores the film’s implicit environmentalist politics. March creates considerable empathy for one of many forms of life placed in danger by global warming (the film’s official Website—http://wip.warnerbros.com/marchofthepenguins/—makes the danger of global warming to emperor penguins explicit).

My guess is that neither the reticent critics nor the sentimental advertising campaign entirely obscure what I expect is evident to most viewers—especially those who watch the film’s final credits. For most of March of the Penguins, the filmmakers are resolutely invisible, entirely in the service of the emperor penguins and the viewers who will see the finished film. But during the final credits, we see imagery of the filmmakers and their utterly unimposing equipment and realize that, like these penguins, the filmmakers have created something fascinating and memorable with very humble means. It’s a realization that has any number of ideological implications.