



Meadow and Apocalypse

Constructions of Nature in the Early
Works of Miyazaki Hayao

Abstract

Title: *Meadow and Apocalypse: Constructions of Nature in the Early Works of Miyazaki Hayao*

Author: Viktor Eikman

Institution: Department of Culture, Aesthetics and Media, at Göteborg University

Advisor: Marina Dahlquist

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Abstract: Ecological awareness and environmentalist themes are often noted in writings on Oscar-winning Japanese animation director Miyazaki Hayao, but previous attempts to examine those features in detail have typically focused on stated intentions and religious symbolism. Using close textual analysis and the theoretical framework of ecocriticism, this essay problematizes presentations of the physical environment in Miyazaki's early work from a more general environmentalist perspective. Aspects of analysis are the prominence and inflections of pollution, pastoral themes, apocalypticism, wilderness, animals and the Earth itself in Miyazaki's first three productions as a director: the often neglected TV series *Conan*, *The Boy in Future* (1978), the feature film *Lupin III: Castle of Cagliostro* (1979), and *Nausicaä of the Valley of the Wind* (1984), which was presented by the World Wide Fund for Nature. Ideological readings are used to estimate the usefulness of Miyazaki's early work in raising awareness of real environmental problems for common agendas. Environmental themes relevant to an understanding of the director's oeuvre as a whole are also charted from their inception. The analyses reveal that while some constructions of nature in Miyazaki's early work are in line with elements of environmentalist thought, the three titles are not generally suitable for didactic use except as a source of examples for in-depth discussion of problematic cultural traditions.

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Introduction

Academy Awards represent the US film industry and are influential throughout the Western world. The West, a contested term, here means countries with a dominant culture descended from Western Europe, which excludes Japan. No Japanese production has ever won an Academy Award for “Best Foreign Language Film”, except in a marginal, honorary capacity. It is therefore especially significant that in 2003, Miyazaki Hayao received one for “Best Animated Feature”. He is still more popular in Japan than anywhere in the West, but Miyazaki's films are prominent examples of *anime*¹ entering the Western mainstream. Critics and audiences quite consistently adore his work.

With great success comes a degree of power. Miyazaki's films have an influence, albeit small and unquantifiable, on how his varied audiences experience the world. This is important because natural environments play a considerable part in his films, as his commentators generally note with approval.² We do not live in an age of monolithic, unavoidable environmental apocalypse, but humankind is threatening its own quality of life through instances of environmental degradation, ranging from global climate change to rusting backyard junk. The current distribution of wealth aggravates a scarcity of nutrition and clean water in many parts of the world, leading to unnecessarily destructive forms of agriculture while the human population continues to rise. Only some diseases evolve to match our technology. Other forms of biodiversity are in rapid decline, with unpredictable effects.

It may seem out of the ordinary, or even irrelevant, for a student of the humanities to foreground environmental concerns. An essay about culture does not clean up after an oil spill, but a spill has countless causes, and is bound to happen again unless the assumptions that underpin environmental degradation are exposed to consciousness and remedied. Profound cultural traits have led to many of our problems, and can be reinforced through entertainment. Film scholar David Ingram provides some fairly straight-forward examples: The unrealistic, negative depiction of great white sharks in *Jaws* (Steven Spielberg, 1975) is widely thought to have contributed to increased hunting in the late 1970s, actually helping to endanger that species, whereas a similarly unrealistic, positive portrayal of dolphins in *Flipper* (James B. Clark, 1963) had the opposite effect, helping to secure protection for endangered animals.³ Such causal relationships between film narratives and the actions of their audiences have not been proven beyond all reasonable doubt and have their share of sceptics, much like the precise impact of human activity on global warming. I certainly

1 In this essay, anime means animation creatively controlled by Japanese people, regardless of style.

2 Examples include Nigel Andrews, “Japan's Visionary of Innocence and Apocalypse”, *Financial Times*, 2005-09-20; Mikaela Kindblom, “Skilda världar”, *Dagens Nyheter*, 2005-11-09; Ivevi Upatkoon, “Mononoke Hime”, *EX: The Online World of Anime & Manga* (vol. 2, no. 7): http://www.ex.org/2.7/08-exclusive_hime.html, 1997.

3 David Ingram, *Green Screen: Environmentalism and Hollywood Cinema*, Exeter: University of Exeter Press, 2000, 88-89, 93.

don't feel inclined to kill great whites after watching *Jaws*, nor do I believe that my lack of bloodlust makes me a suitable protector of any mythically weak-minded general public. It would also be absurd to think that a film like *Jaws* really represents a deliberate rhetorical effort to have all sharks killed. Nonetheless, on a societal level, the effects of culture seem strong enough to merit close attention to our descriptions of nature as a means of protecting it and ourselves. There is in fact a minor branch of the humanities studying stories that are thought to illuminate and influence the way institutions and individuals deal with the environment. Ingram is just one scholar of this recently emerged “ecocriticism”. *Green Screen*, his book on Hollywood environmentalist cinema, stands as the most significant ecocritical study of fiction film to date.

I will be using ecocriticism to examine the way nature is presented, and how its meaning is thereby constructed, in three early works by Miyazaki Hayao. Hopefully, I will contribute to a useful understanding in two contexts. The first is when activists and teachers on all levels look for films to show for reasons related to environmental concerns, whether the intent is simply to raise interest with general audiences in an undemanding fashion, or to spark debate on complicated cultural issues as part of advanced courses. This is not a novel effort, as I am preceded for instance by Mayumi Kozo and other ecological economists. They found ways to highlight the messages of their field of research: “By reading Miyazaki's films as case studies, they become material for rich discussions about the imposition of environmental costs onto groups with less access to information and means of protecting themselves.”⁴ With the methods of film studies I hope to show some potential pitfalls in such applications. However, this essay is merely a set of ideological interpretations, not a lesson plan. I point out what may not be apparent to the untrained eye, using the academic framework of ecocriticism. I leave it to teachers with their own priorities to decide whether a given audience is suitable, and what sort of discussion is appropriate.

The other major purpose of this essay is to find themes, in order to show which constructions of nature Miyazaki's great success might generally promote among his fans, many of whom seek out titles from his younger days. *Mirai Shounen Conan / Conan, The Boy in Future* (Miyazaki Hayao, Nippon Animation, NHK, 1978) is one such early work which has been overlooked by film scholars, in part because it is a television series. Excerpts from it may be suitable for the didactic context outlined above, and it marks the first occurrence of many themes repeated throughout Miyazaki's oeuvre. *Rupan Sansei: Kariosutoro no Shiro / Lupin III: Castle of Cagliostro* (Miyazaki Hayao, 1979) is generally considered Miyazaki's first theatrical feature, and although it has much in common with his recent work, it is much less complicated than *Conan* and will be dealt with only briefly. By contrast, *Nausicaä of the Valley of Wind*, Miyazaki's most

4 Mayumi Kozo, Barry D. Solomon and Jason Chang, “The Ecological and Consumption Themes of the Films of Hayao Miyazaki”, *Ecological Economics*, vol. 54, no. 1, 2005, 6.

famous *manga*, is intimately concerned with nature and human attitudes toward it.⁵ Miyazaki produced it intermittently over a period of 13 years, and it is widely regarded as his most serious and intricate work. A part of its story was altered and filmed as the more accessible *Kaze no Tani no Nausicaä / Nausicaä of the Valley of the Wind* (Miyazaki Hayao, 1984), which is studied in this essay. Together, those three productions constitute Miyazaki's first great challenges as a director. My conclusions about them may be of use to further research on Miyazaki and on environmental themes in the field of anime more generally.

The question I pose here is: What constructions of nature are prominent in *Conan*, *Cagliostro*, and *Nausicaä*, and how are they used? Each work will be subjected to a fairly traditional ecocritical analysis, centered on Greg Garrard's theoretical overview of study and debate about constructions of nature, such as pastoral and wilderness, layed out in *Ecocriticism*.⁶ While ecocriticism is indeed a theoretical framework for analysis, not simply a form of criticism, it has no consolidated methods of its own. David Ingram has adapted traditional humanist methods to serve the discipline, and I will generally borrow those. Ingram's brand of close textual analysis in particular will be the main instrument in this essay, with some reservations. As he says, it's a traditional method suited to “exploring the polysemic complexity of a small number of films”, and the number here is certainly too small for the type of survey he also performs. Like Ingram, I will try to refrain from championing a particular theory of environmentalism, from judging artistic value – as opposed to ideological correspondence – and from espousing the “extreme social constructionist tendencies of some poststructuralist thinking.”⁷

There have been other studies of environmental themes in Miyazaki's work, but among the best examples there is a strong tendency to focus either on his stated intentions, like the ecological economists mentioned above, or on narrowly delimited aspects of ideological content. Cinema-studies Ph.D. candidate Lucy Wright's “Forest Spirits, Giant Insects and World Trees”⁸ is a fine example of the latter tendency, but the religious traditions she studies so well are not widely known – and therefore not optimally useful – in the Western world. I look at shared ideas, hopefully providing a service to my cultural sphere, which is most responsible for environmental degradation. I do not foreground Miyazaki's biography or stated intentions, partly because questions of divided authorship undermine such an approach to *Conan* and *Cagliostro*, but also to see what the tools of

5 Miyazaki Hayao (1982-1994), *Nausicaä of the Valley of Wind: Perfect Collection* (transl. vols. I-II David Lewis and Toren Smith, vols. III-IV Matt Thorn), San Francisco: Viz Communications, 4 volumes, 1995-1997.

6 Greg Garrard, *Ecocriticism*, London: Routledge, 2004.

7 Ingram, ix-x.

8 Lucy Wright, “Forest Spirits, Giant Insects and World Trees: The Nature Vision of Hayao Miyazaki”, *Journal of Religion and Popular Culture*: <http://www.usask.ca/relst/jrpc/art10-miyazaki-print.html> (hosted at the University of Saskatchewan, originally published in vol. X), 2005.

ecocriticism can produce given what audiences encounter directly. A more extensive overview of methodology and existing research follows.

Ecocriticism

The discipline of ecocriticism is a young one, particularly in film studies, and in Sweden. A brief historical survey might be in order. Harold Fromm, a professor of English, writes that ecocriticism emerged after a varied group of relatively isolated scholars became aware of one another's shared interests in the late 1980s and early 90s.⁹ Fromm edited *The Ecocriticism Reader*,¹⁰ which has been called “a foundation document” of the consolidated movement by Sven Birkerts, one of its critics in the more traditional humanities.¹¹ Since that consolidation, many older texts have been recognized as part of ecocriticism's scattered prehistory, however that widely accepted term for the movement is actually defined. The term is “often credited”¹² to one of the older essays reprinted in the *Reader*, William Rueckert's “Literature and Ecology: An Experiment in Ecocriticism” from 1978. Rueckert, an experienced theorist, suggests accessible relevance rather than elegance as the basis of an experiment in literary theory, and he recommends ecology as the basis of relevance today.¹³ Donald Worster has charted the history of ecology at length in *Nature's Economy*; since about 1919, that discipline has defined itself as the science of the development of communities, studying “the social relations of the natural world”.¹⁴

Rueckert's theory, likening the arts to ecological energy, was not itself successful, and the idea of letting conventional notions of relevance into the humanities was certainly nothing new. The oppressive marginalization of women and of ethnic groups are studied on the basis of relevance. However, they are securely understood as cultural problems, and the traditional humanities are nothing if not focused on culture. Cheryll Glotfelty, the other editor of the *Reader*, sees literary theory in general as equating the world with the social sphere,¹⁵ which is still true. It is also true that, unlike threatened habitats, women and minorities can describe their own experiences and

9 Harold Fromm, “Preface”, *The Ecocriticism Reader: Landmarks in Literary Ecology*, Cheryll Glotfelty and Harold Fromm (eds.), Athens: University of Georgia Press, 1996, ix-x.

10 *The Ecocriticism Reader: Landmarks in Literary Ecology*, Cheryll Glotfelty and Harold Fromm (eds.), Athens: University of Georgia Press, 1996.

11 Sven Birkerts, “Only God Can Make a Tree: The Joys and Sorrows of Ecocriticism”, Association for the Study of Literature & Environment: <http://www.asle.umn.edu/archive/intro/birkerts.html> (originally published in *The Boston Book Review*, no. 3.1), 1996, 2 of 7.

12 Fromm, x.

13 William Rueckert, “Literature and Ecology: An Experiment in Ecocriticism”, *The Ecocriticism Reader: Landmarks in Literary Ecology*, Cheryll Glotfelty and Harold Fromm (eds.), Athens: University of Georgia Press, 1996, 106-107.

14 Donald Worster, *Nature's Economy: A History of Ecological Ideas* (2nd edition), Cambridge: Cambridge University Press, 1994, 204.

15 Cheryll Glotfelty, “Introduction: Literary Studies in an Age of Environmental Crisis”, *The Ecocriticism Reader: Landmarks in Literary Ecology*, Cheryll Glotfelty and Harold Fromm (eds.), Athens: University of Georgia Press, 1996, xix.

defend themselves within the field of culture. Steve Baker, who works for animal liberationism through media criticism in *Picturing the Beast*, accepts the possibility that claiming to represent the interests of another group, such as animals, is a rhetorical imposition which implies a proprietary interest.¹⁶ Kate Soper, a philosopher who wrote the aptly titled *What Is Nature?*, holds culture and nature to be indispensably antithetical.¹⁷ It is no wonder that Birkerts voices some typical concerns of purism in the humanities, arising from such complications. He suggests that ecocriticism's analytical focus on nature will actually make it unnatural, and that using works of art to discuss topics other than art, no matter how important, will lead to a loss of “integrity” and a fallacious admixture of politics.¹⁸ In the next chapter I will develop a definition of nature that does not dissolve in ecocritical applications. As for politics, gender studies are no more vulnerable to such accusations. Nature doesn't speak our languages, but human culture would be impossible without nature, since it is the source of our food and of countless other substrates of the humanities. To preserve nature is therefore to preserve the possibilities of culture, not necessarily to speak on behalf of silenced subjects. Just as surely as there is a relationship between culture and the treatment of sexes, there is one between culture and the treatment of nature in a wider sense. Natural sciences can describe the environment, but the study of culture is necessary to explain why we are damaging that environment.¹⁹

Definitions and Practice

Glotfelty defines ecocriticism as “the study of the relationship between literature and the physical environment.”²⁰ Lawrence Buell, an equally prominent ecocritic, more recently wrote *The Future of Environmental Criticism* for a series of “Manifestos”, where he defines ecocriticism as “the environmentally oriented study of literature and (less often) the arts more generally, and [...] the theories that underlie such critical practice.”²¹ Broad definitions aside, ecocriticism began with a heavy concentration in studies of Romantic poetry and a type of non-fiction called nature writing, including such American authors as Henry David Thoreau and John Muir, whose representations have been influential in the construction and management of wildlife preserves and parks. There was a focus on language itself, and the analyses often used a great deal of philosophy and intellectual history. Neither cinema nor television were entirely absent from the 1990s consolidation however, and motion pictures have received more attention since the turn of the century, along with a variety of other subjects in a continuing expansion of the practice. Buell ascribes part of this

16 Steve Baker, *Picturing the Beast: Animals, Identity and Representation*, Manchester and New York: Manchester University Press, 1993, 232.

17 Kate Soper, *What is Nature?: Culture, Politics and the non-Human*, Oxford: Blackwell, 1995, 15-16.

18 Birkerts, 4-5 of 7.

19 Donald Worster, *The Wealth of Nature*, New York: Oxford University Press, 1993, 27.

20 Glotfelty, xviii.

21 Lawrence Buell, *The Future of Environmental Criticism*, Oxford: Blackwell, 2005, 138.

change to a second wave of socially oriented younger ecocritics, but I maintain the first wave's focus on preserving nature rather than treating the more immediately social problems of environmental justice. Unnatural urban environments, science fiction and fantasy authors like J.R.R. Tolkien, computer games, intersections with gender and ethnicity, and nationalities other than the English and American have all been addressed in prominent anthologies. One such anthology includes Stacy Alaimo discussing the genre of monster movies.²² As mentioned earlier, Ingram's work on fiction film is still the most substantial of its kind, and of great importance to this essay. To sharpen the analytical focus on visual culture I will be referring briefly to Susan Sontag's classics *Against Interpretation*²³ and *On Photography*.²⁴

In his guide to the discipline, Greg Garrard describes occasionally contradictory insights on half a dozen current and traditional ecocritical topics, calling them “tropes” and “large-scale metaphors” which are thought to have political impacts, sometimes on behalf of “particular social interests.”²⁵ In the same series of books, literary scholar Terry Gifford takes a longer look at one trope, *Pastoral*.²⁶ Garrard develops Gifford's simple system for dealing with that contested term a little further, adding it to a general overview of ecocriticism with attention to its diversity of perspectives. The primary purpose is not to lay out a unifying abstract framework, but *Ecocriticism* is still an excellent point of departure for analysis of ideological contents. In this essay I limit myself to a relatively ordinary environmentalist perspective, in order to make myself useful to a broad range of interests. However, like most ecocritics I see flaws in mainstream environmentalism,²⁷ so I will glance at more radical theorists and the facts they emphasize, to show some of the misconceptions relevant to popular glamorization of Miyazaki as an environmental guru. Petra Andersson's recently published doctoral dissertation in philosophy explicates and attempts to unify a set of relevant “holistic” environmentalist ideologies.²⁸ Uncommon ecocritical points of view are certainly attractive with Miyazaki. A revolution of the working class in *Conan* coincides with the overthrow of a profoundly unnatural dystopia, which is one of many narrative features in his oeuvre that are likely to interest social ecologists.²⁹ Film scholar Susan J. Napier includes a feminist perspective on Miyazaki in her prominent *Anime from Akira to Howl's Moving*

22 Stacy Alaimo, “Discomforting Creatures: Monstrous Natures in Recent Films”, *Beyond Nature Writing: Expanding the Boundaries of Ecocriticism*, Karla Armbruster and Kathleen R. Wallace (eds.), Charlottesville: University Press of Virginia, 2001.

23 Susan Sontag, *Against Interpretation and Other Essays*, New York: Farrar, Straus & Giroux, 1966.

24 Susan Sontag, *On Photography*, New York: Farrar, Straus & Giroux, 1977.

25 Garrard, 7.

26 Gifford, Terry, *Pastoral*, London: Routledge, 1999.

27 Garrard, 18-20.

28 Petra Andersson, *Humanity and Nature: Towards a Consistent Holistic Environmental Ethics*, Göteborg: Acta Universitatis Gothoburgensis, 2007.

29 Garrard, 27-30.

Castle, which also discusses apocalypse in *Nausicaä*.³⁰ Feminism can productively be combined with closer attention to depictions of nature,³¹ though I won't do it here. In feminist film studies, theories of “the gaze” are often used to illuminate constructions of gender, with the sort of complex psychoanalytical underpinnings outlined by Robert Stam and his associates in *New Vocabularies in Film Semiotics*.³² Like John Berger, a problematic postmodern critic who wrote *About Looking*,³³ I will apply some gaze theory to constructions of nature instead.

While it diversifies, the practice of ecocriticism is also spreading internationally. The first anthology of Swedish ecocritical essays was just published.³⁴ Despite its growth, the discipline remains peripheral. In 1996, Glotfelty remarked that a “recent, authoritative guide to contemporary literary studies” contained no mention of an “ecological approach”.³⁵ Ecocriticism is similarly absent from the latest Blackwell guide to major theoretical disciplines.³⁶ An underdog mentality is therefore common, exemplified by ecocritic Michael P. Cohen who urges aspiring ecocritics to prepare for ridicule. He also comments on a widespread subtle fear that the discipline is “fuzzy”, not formal enough in its organizational aspects to sustain properly structured academic thinking.³⁷ Time will tell.

William Rueckert wrote about making “a contribution to human ecology”.³⁸ As a subject in its own right, human ecology was only nascent at the time. It can now be defined as studying how nature becomes a part of human reality, according to an introductory anthology of Swedish human ecology.³⁹ Similarly, Garrard defines ecocriticism at its broadest as “the study of the relationship of the human and the non-human” and as being about “the demarcation between nature and culture, its construction and reconstruction.”⁴⁰ In the shared tradition of these two closely related disciplines, I will draw upon a variety of sources external to the humanities, introduced throughout this chapter and the next. One such source, Jared Diamond, won a Pulitzer Prize for his overview of why Europeans were able to subjugate others, without resort to Eurocentrism.⁴¹ He has also written about

30 Susan J. Napier, *Anime from Akira to Howl's Moving Castle: Experiencing Contemporary Japanese Animation*, New York: Palgrave Macmillan, 2005.

31 Garrard, 23-27.

32 Robert Stam, Robert Burgoyne and Sandy Flitterman-Lewis, *New Vocabularies in Film Semiotics: Structuralism, Post-Structuralism and Beyond*, London: Routledge, 1992, 162-174.

33 John Berger, *About Looking*, London: Writers and Readers, 1980.

34 *Ekokritik: Naturen i litteraturen: En antologi*, Sven Lars Schulz (ed.), Uppsala: CEMUS, 2007.

35 Glotfelty, xv. See also Buell, *The Future of Environmental Criticism*, 129-133.

36 Gregory Castle, *The Blackwell Guide to Literary Theory*, Oxford: Blackwell, 2007.

37 Michael P. Cohen, “Blues in the Green: Ecocriticism Under Critique”, *The History Cooperative*: <http://www.historycooperative.org/journals/eh/9.1/cohen.html> (originally published in *Environmental History*, vol. 9, no. 1), 2004, 2, 6 of 31.

38 Rueckert, 107.

39 Henrik Bruun and Tom Gullberg, “Inledning”, *Humanekologiska perspektiv på människans tillvaro*, Henrik Bruun and Tom Gullberg (eds.), Nora: Nya Doxa, 2002, 14-15.

40 Garrard, 5, 179.

41 Jared Diamond, *Guns, Germs and Steel: The Fates of Human Societies*, London: Random House, 1997.

the foundations of human nature,⁴² a subject even closer to his own professional areas of expertise as an evolutionary biologist and biogeographer. For readers interested in a consolidated source on regional and global environmental issues, I recommend the UN-commissioned Millennium Ecosystem Assessment project.⁴³

Miyazaki Hayao

Miyazaki was born in 1941. There are several Western monographies and essays about him, and more in Japanese, but only a small number of studies are peer-reviewed academic work by affiliated scholars. I have not found any published ecocriticism in the consolidated tradition outlined above. A professor at MIT has apparently presented a conference paper in that tradition,⁴⁴ though I have not obtained a copy. Certainly the best English-language introduction to Miyazaki's work is written by Helen McCarthy, whose customary inversion of Japanese names into Western order shows in the title of her *Hayao Miyazaki*.⁴⁵ It refers to a variety of interviews and Miyazaki's own writings in a scholarly fashion, but focuses on production details, plot summaries and thematic analyses of his major films up to 1997. McCarthy has also written *The Anime Encyclopedia* with John Clements, containing some additional observations.⁴⁶ Dani Cavallaro's monography, *The Animé Art of Hayao Miyazaki*,⁴⁷ is less coherent and less scholarly in its approach, but adds some useful details. John Grant's *Masters of Animation* has yet another account of the man's life and career.⁴⁸ Miyazaki is relatively reclusive considering his fame, but interviews with him are easy to find and he has written some essays; McCarthy and Cavallaro both have useful bibliographies. Miyazaki's stated intentions can certainly illuminate his work, and while I do not aim to contradict him here or to disparage existing scholarship, this essay takes a different approach, which I will describe below. Readers of French may be interested to know that there is a maîtrise-level thesis in film studies on a related topic: *Le traitement du thème de l'homme face à l'environnement dans l'œuvre d'Hayao Miyazaki*, by Gersende Bollut.⁴⁹ I gather that Bollut's study is not aligned with the academic practice of ecocriticism, despite its “theme of man face to face with the environment”. Because of

42 Jared Diamond, *The Rise and Fall of the Third Chimpanzee: How Our Animal Heritage Affects the Way We Live*, London: Vintage, 1992.

43 Millennium Ecosystem Assessment: <http://www.maweb.org>

44 Anthony Lioi, *Saint Francis the Robot: Reconciliations of Nature and Technoculture in the Work of Hayao Miyazaki*, presented at the MLA national (US) conference, 2004.

45 Helen McCarthy, *Hayao Miyazaki: Master of Japanese Animation: Films, Themes, Artistry*, Berkeley: Stone Bridge Press, 1999.

46 Jonathan Clements & Helen McCarthy, *The Anime Encyclopedia: A Guide to Japanese Animation since 1917*, Berkeley: Stone Bridge Press, 2001.

47 Dani Cavallaro, *The Animé Art of Hayao Miyazaki*, Jefferson: McFarland, 2006.

48 John Grant, *Masters of Animation*, London: B.T. Batsford, 2001.

49 Bollut, Gersende, *Le traitement du thème de l'homme face à l'environnement dans l'œuvre d'Hayao Miyazaki*, mémoire de maîtrise en filmologie, Lille: Université Charles de Gaulle (UFR Arts et Culture), 2004. Published online by its author: <http://frames.free.fr/memoire.miyazaki.doc>.

my poor French and different theoretical perspective, I will not attempt to draw on Bollut as a source.

Seriousness and Animation

McCarthy's filmography traces Miyazaki's career from humble in-between animation starting in 1963 – mostly for television – to key animation, storyboarding, and eventually writing and directing theatrical features at Studio Ghibli, a production company he co-founded after *Nausicaä*. Having promised to retire soon since about 1993, he is still a director and hands-on animator to this day.⁵⁰ Miyazaki's medium, animation, has traditionally been regarded as a frivolous spectacle for children. Paul Wells, perhaps the best known historian of animation, notes this in the introductory *Animation*, where he focuses on production processes and authorship.⁵¹ There is no doubt that Miyazaki's films welcome children, though not always with Western preconceptions as to what is appropriate for them to see. The densely plotted and occasionally gory manga version of *Nausicaä* is perhaps unsuitable for children, but could instead be a good way to reach the small demographic that reads comics and eschews anything traditionally family-friendly. Swedish teachers interested in applying Miyazaki in primary schools may want *Zoom*, a national journal of film and education. Its writers have recommended *Tonari no Totoro / My Neighbour Totoro* (Miyazaki Hayao, 1988)⁵² and *Sen to Chihiro no Kamikakushi / Spirited Away* (Miyazaki Hayao, 2001),⁵³ with suggested points for classroom discussion, though environmental themes are not critically examined in those guides.

I have yet to encounter any compelling reason to believe that animation as a medium is particularly unlikely to affect opinions. For instance, Disney's popular *Bambi* (David Hand, 1942), once used as a fire-fighting mascot, contributed to horrified public incomprehension of the decision not to fight a natural fire in a national park.⁵⁴ It is also not necessary for animation to be significantly less realistic than live action, except on the most superficial level, as Studio Ghibli's *Umi ga Kikoeru / Ocean Waves* (Mochizuki Tomomichi, 1993) amply demonstrates. Some may even consider that superficial lack of realism a saving grace. Live-action wilderness films shot on location can attract tourists, creating an ecological hazard.⁵⁵ Photographs have the appearance of reality, and can therefore lie. *White Wilderness* (James Algar, 1958), ostensibly a documentary, lies about the behaviour of lemmings and has been a crucial contributor to the myth of their mass suicides.⁵⁶ Paintings are obviously interpretations, they are not said to describe physical reality the

50 McCarthy, 46, 217-229.

51 Paul Wells, *Animation: Genre and Authorship*, London: Wallflower, 2002, 1. See also Grant, 171.

52 Agneta Danielsson, "Min granne Totoro", *Zoom*, Swedish Film Institute: http://www.sfi.se/sfi/images/_pdf_files/se_pa_film/skolbio/filmhandledning/totoro72.pdf, 2007.

53 Andreas Hoffsten and Clas Österholm, "Spirited Away", *Zoom*, no. 4, 2003. There is an official on-line copy: http://www.sfi.se/sfi/images/_pdf_files/se_pa_film/skolbio/filmhandledning/spiritedaway.pdf.

54 Ingram, 19-20. For some examples of overtly environmentalist animation, see Wells, *Animation*, 68-69.

55 Ingram, 30.

56 Garrard, 151.

way it really is, so they cannot lie in quite the same way.⁵⁷ What they can do is reproduce cultural constructions more easily and more directly than live action. As for children, they tend to be most easily influenced and thereafter quite influential, as the cases of *Bambi* and *Flipper* demonstrate, so their importance is actually great. However, I do not believe that the “emphatic ideological stances” of Disney and other traditional Western children's entertainment, mentioned in an essay Paul Wells wrote for *Art & Design* magazine,⁵⁸ is the best long-term path to efficient environmentalism, nor that entertainment for its own sake should be discouraged until our environmental problems have somehow been resolved. Nonetheless, films portraying constructive thinking and action have their uses. As Wells says of Miyazaki, “The 'openness' of his characters with their deceptively simple 'child's eye' perspectives, have a degree of emotive suggestion *and* political relevance largely unavailable in the Disney canon.”⁵⁹ The specifics of the issue would be another essay, but protagonists like that seem ideal for letting a young audience discover real issues without giving them the illusion of having all the facts and only one course of action. On a less cheerful note, Mayumi's team of economists praises “violence and coercive power” as motifs in Miyazaki's recent work.⁶⁰ Without such traditional indicators of mature audiences, they apparently feel that complicated real-world problems cannot be addressed, but not all serious environmental issues involve coercion.

Auteur Status and Meaning

Ecocritics believe that attitudes to nature are frequently subconscious or unexamined, so it is easy to argue for one position while using deeply problematic traditions to communicate. One example from Steve Baker's research is a tabloid newspaper openly supporting animal rights while condemning radical activists as “The *REAL* beasts”.⁶¹ The deliberate use of “beast” as an insult belies a functional understanding of the struggle for animal rights. Lucy Wright has found that Miyazaki's actions can similarly, though not as seriously, contradict his words.⁶² A fictional narrative can certainly contain conflicting meanings, but it would be unwise to blame Miyazaki if he is not actually the author or *auteur* of a given work.

Conan is entertainment on TV, itself a weak reason for some traditionalists to consider it unworthy of serious study.⁶³ It's also science fiction, similarly once held in low esteem but increasingly re-evaluated as relevant over the past few decades. I agree with Lawrence Buell that

57 Sontag, *On Photography*, 4, 86.

58 Paul Wells, “Hayao Miyazaki: Floating World, Floating Signifiers”, *Art & Design* (Profile no. 53, *Art & Animation*), vol. 12., no. 3/4, 1997, 23.

59 Ibid. Italics in the original.

60 Mayumi et al., 5-6.

61 Baker, 208-209. Italics in the original, which is a quote from the *Daily Mirror*.

62 Wright, 3 of 12.

63 Christine Geraghty and David Lusted, “General Introduction”, *The Television Studies Book*, Christine Geraghty and David Lusted (eds.), London: Arnold, 1998, 3-4.

“No genre potentially matches up with a planetary level of thinking 'environment' better than science fiction does.”⁶⁴ Prejudice against children, TV and science fiction help explain why *Conan* is so rarely studied, but the conditions of production do undermine authorship. Miyazaki normally exerts an unusual degree of control over his projects. When making the extraordinarily popular *Mononoke Hime / Princess Mononoke* (Miyazaki Hayao, 1997), he supposedly revised or touched up at least 80,000 of the 150,000 cels.⁶⁵ Even if that monstrous figure is hard to believe, he was an actual animator as well as concept artist, sole writer and sole director of *Mononoke*. He appears to have had no assistants on the *Nausicaä* manga, an unusual practice according to respected critic Frederik L. Schodt.⁶⁶ One historian of animation concludes from studying the conditions at Warner Bros. in the 1940s that animation is the ultimate auteurist cinema, and Studio Ghibli surely concentrates power even more efficiently.⁶⁷

Wells considers Miyazaki an auteur, albeit with roots in older artistic traditions.⁶⁸ The concept of an auteur, a single predominant creator imbuing her work with meaning, is certainly applicable to Miyazaki's level of input in recent projects. However, even commercial theatrical animation is a cooperative medium, to say nothing of lengthy and episodic television animation on a tighter schedule, like *Conan*. Miyazaki had limited control at that point in his career,⁶⁹ so a degree of conflict in that is probably inevitable. He made *Nausicaä* with far greater control, surrounded by many of the people who went on to form Ghibli. The film was so widely believed to represent environmentalism that the World Wide Fund for Nature presented it. It also earned Miyazaki the nickname “Mr. Environment” according to Midhat Ajanović, scholar and author of the bilingual *Animation and Realism*.⁷⁰ However, on a biographical note, Miyazaki stated a few years later that his films are intended as entertainment without any message, implying that he doesn't even try to inspire protection of nature.⁷¹

Film scholar David Bordwell has constructed four categories of meaning, and he considers them to be exhaustive.⁷² The first, referential meaning, deals with concrete worlds, whether real or fictional. The second, explicit meaning, is conceptual but obvious, inferred from unambiguous features of a film. The third, implicit meaning, is even more abstract and cannot be proven so

64 Buell, *The Future of Environmental Criticism*, 57.

65 Grant, 161. For indicators of *Mononoke*'s popularity, see McCarthy, 185-186.

66 Frederik L. Schodt, *Dreamland Japan: Writings on Modern Manga*, Berkeley: Stone Bridge Press, 1996, 277-278.

67 Steve Schneider, *That's All Folks!: The Art of Warner Bros. Animation*, London: Aurum, 1989, 30; cf. McCarthy, 46.

68 Wells, *Animation*, 17.

69 McCarthy, 40. See also Grant, 162-163. Some relevant credits from *Conan* can be found on page 53 of this essay.

70 Midhat Ajanović, *Animation and Realism* (English transl. Mirela Škarica), Zagreb: Croatian Film Clubs' Association, 2004, 262.

71 McCarthy, 89. Similar sentiments are repeated in more recent interviews, but contradicted elsewhere. McCarthy has an example of such a contradiction (185).

72 David Bordwell, *Making Meaning: Inference and Rhetoric in the Interpretation of Cinema*, Cambridge and London: Harvard University Press, 1989, 8-9.

conclusively as the referential or explicit kinds, but is still supposedly intentional. Finally, symptomatic meaning is unintentional and conflicts with the other kinds, as in Baker's tabloids. Miyazaki's habitual centralization of power could help counteract the strong tendency towards self-contradicting "ideological agglomerations" that Ingram contends to be a unifying feature of Hollywood's environmentalist cinema, on account of its production system.⁷³ However, I see such agglomeration in *Conan* and some of it in Miyazaki's recent work as well. In Bordwell's system, themes are units of implicit meaning, which I will contrast against symptomatic problems. As for Miyazaki's claim not to be sending messages, that is an accurate description of the explicit level, where very little happens.

Tenkuu no Shiro: Rapyuta / Castle in the Sky (Miyazaki Hayao, 1986) has so much in common with *Conan*, even though Miyazaki was quite free to do what he wanted at that point, that analysis of *Conan* seems indispensable even to a believer in auteur theory. Whether we use the label of auteur or not in a given case, it is at least clear that Miyazaki has great personal *fame* as a powerful environmentalist creator. Fans are likely to seek out work that bears his name, and to look for commonality therein, which is reason enough to start with *Conan*. Andrew Osmond, who has applied close textual analysis efficiently in "Nausicaa and the Fantasy of Hayao Miyazaki", sees repetition from both *Conan* and *Cagliostro* in *Nausicaä*.⁷⁴ In this essay's conclusion (page 50), I demonstrate an objectionable motif from Miyazaki's early work recurring in his most recent film, *Hauru no Ugoku Shiro / Howl's Moving Castle* (Miyazaki Hayao, 2004).

To describe Miyazaki himself rather than to criticize his work would heighten the risk of falling into sermonizing and celebration, traditional flaws in auteur studies as well as ecocriticism.⁷⁵ Greg Garrard's tropes are outlined in the next chapter. Complex and deeply ingrained in culture, they can bring both symptomatic and implicit meaning to a film, even without an auteur. I believe that such traditions influence audiences more than Miyazaki's own declarations of intent, which are not as widely read as his films are viewed.

73 Ingram, viii. Ingram takes the term "ideological agglomeration" from Stephen Prince.

74 Andrew Osmond, "Nausicaa and the Fantasy of Hayao Miyazaki", Nausicaa.net: http://www.nausicaa.net/miyazaki/nausicaa/article_ao_foundation.txt, 2000, 4 of 18. The expanded on-line version I am using is not dated, but Osmond has stated in correspondence with me that it was submitted in 2000. The original article appeared in the journal *Foundation*, no. 72, 1998.

75 Cohen, 15-16 of 31.

Ecocritical Concepts

As in any rigorous comparison of audiovisual text to theoretical framework, several terms need to be defined and discussed to ensure solid and accessible analyses. I do not assume that the reader is already familiar with the specific environmentalist issues which I think are most relevant to constructions of nature in Miyazaki's early work. I will therefore employ the traditional ecocritical method of introducing points of current, interdisciplinary thought to explain certain terms, while moving on to the more immediately cultural traditions at the focus of my analyses.

Every community and individual, regardless of species, has its own “environment”, but in this essay the word means every material object except all people, and especially our surroundings on the Earth. “Nature” is a very similar concept, usually denoting a subset which can be expressed as the environment except “the work of humanity.”⁷⁶ Under such a definition, everything but humans and human influence would be natural. This includes non-living entities that have not been affected by human activities, such as the skylines of many mountains. Artificial features of the environment, such as plastic utensils, are “unnature”.⁷⁷

The United Nations has projected that one year from now, in 2008, half of the world's human population will be urban for the first time,⁷⁸ so most people will soon be surrounded by unnature. By coincidence, 2008 is the year of the apocalypse in *Conan, The Boy in Future*, the year when all cities are destroyed. Far more than half of all people are already urban in the wealthier countries where Miyazaki's films have had such great success. In this everyday environment, it is easy and dangerous to believe that nature is our unnecessary opposite. Ecocritic Neil Evernden, constructing an extensive and sometimes radical interdisciplinary assault on profound cultural attitudes in *The Natural Alien*, points out that each of us is actually a community of very different natural organisms, down to the subcellular level.⁷⁹ These communities emerged through natural selection in the same manner as all other current forms of natural life. Sexual selection seems to have created our “racial” variations, but those changes are of little genetic importance, and sexual selection is not unique to us.⁸⁰ Humans remain animals, albeit with asymmetric power. Common cinematic portrayals deny that fact, trying to reaffirm arbitrary epistemological borders between

76 Soper, 15.

77 Consider that an unnature corresponding to ours has been generated by other species. For instance, some ants practice remarkably advanced agriculture, taking care of special fungi crops and genetically adapted aphid livestock (Diamond, *The Rise and Fall of the Third Chimpanzee*, 164-165), though we can hardly accuse ants of having an unnecessarily destructive philosophy, or power like ours.

78 United Nations (Department of Economic and Social Affairs, Population Division), *World Urbanization Prospects: The 2005 Revision*, official site: http://www.un.org/esa/population/publications/WUP2005/2005WUPHighlights_Final_Report.pdf, 2006, 9.

79 Neil Evernden, *The Natural Alien: Humankind and Environment* (2nd edition), Toronto: University of Toronto Press, 1993, 38-39.

80 Diamond, *The Rise and Fall of the Third Chimpanzee*, 95-105.

humankind and non-human nature, a distinction theorized to contribute to environmental degradation.⁸¹ For the purposes of this essay, humankind itself is largely natural, though our effects are not. This still makes for a common definition of the word.⁸² Like most ecocritics, I will use the term “animals” in its ordinary sense, excluding humans, because there is regrettably no better term yet.

A wool sweater is natural and unnatural: nature should not be understood as a binary quality. Some argue that nature is not an objective quality either, that it is always and only a cultural construction. It is true that there can be no reference to nature except in discourse. However, as Kate Soper insists, nature is nonetheless real outside of discourse. It is on the basis of that material reality that cultural constructions of nature are founded.⁸³ As evolutionary psychologist Steven Pinker notes in *The Blank Slate*, nobody could criticize something like “an old movie that shows slaves leading happy lives” without such an idea of substance.⁸⁴ Unfortunately, Soper herself has been criticized for conflating language and physics.⁸⁵ One might think that studying a fundamental level with strict scientific methods would help, but in reality as quantum physics conceives of it, the idea of nature as defined above is virtually inapplicable. Influence is unavoidable and untraceable: all elementary particles of a given type are literally indistinguishable from one another and cannot be tracked, even in principle.⁸⁶ Nature becomes identifiable only on a greater scale, and so does culture. Scientific observers have and are subject to culture, at the very least to culture as a term for the “socialization-effect of particular roles”.⁸⁷ There is no unmediated or infallible observation: a degree of construction is necessary for thought, though stereotypes are not.⁸⁸

I assume that natural sciences are methodologically equipped to generally develop a good understanding of material reality, though ecology has been particularly vulnerable to cultural constructions. Significantly, ecological ideas from the early 20th century are still perpetuated by many mainstream and radical environmentalists, as a dogmatic “pastoral ecology” where ecosystem maturity, stability and diversity correlate.⁸⁹ Postmodern ecology as a whole has moved on to a more dynamic paradigm, but Worster also notes that many ecologists have returned to stable models time

81 Alaimo, 292. See also Garrard, 143; Ingram, 35.

82 Buell, *The Future of Environmental Criticism*, 143-144.

83 Soper, 6-8. See also Garrard, 9.

84 Steven Pinker, *The Blank Slate: The Modern Denial of Human Nature*, New York et al.: Viking, 2002, 214.

85 Garrard, 167-168.

86 J. J. Sakurai, *Modern Quantum Mechanics* (Revised Edition), Tuan San Fu (ed.), Reading: Addison-Wesley, 1994, 357.

87 Buell, *The Future of Environmental Criticism*, 17-21, 136. See also William Howarth, “Some Principles of Ecocriticism”, *The Ecocriticism Reader: Landmarks in Literary Ecology*, Cheryll Glotfelty and Harold Fromm (eds.), Athens: University of Georgia Press, 1996, 78-81.

88 Baker, 217.

89 Garrard, 56-58.

after time, chronically unable to determine their value.⁹⁰ Broad condemnation of science itself, rather than such reasonable doubt, will be considered contradictory to practical environmentalism.

Distortions of Influence

I will be using the adjective “anthropogenic” to refer to any and all aspects of the environment that have been “caused by humans”, regardless of the purpose, mode and extent of our influence.⁹¹

“Domestication” refers to substantial human control in an intentional mode. Aspects of nature that seem not to have been influenced at all will be described as “pristine”, in accordance with the main body of ecocritical practice. As Bill McKibben explains in *The End of Nature*, all life on Earth is now somewhat anthropogenic, mainly because of our impact on global warming.⁹² Consequently, environmentalism with the ambition of preserving pristine natural life is unrealistic,⁹³ though of course pristine nature still exists as an important relic on the cultural level, in fiction.

Dani Cavallaro is one critic of Miyazaki who shows a lack of ecocritical training by offering only flowers in a domesticated landscape as a good example of nature in *Cagliostro*.⁹⁴ A lot of the things we intuitively believe to be very natural are instead very anthropogenic. In general, domestication for the purpose of serving relatively basic human needs is excused through such self-deception.⁹⁵ An environmental historian of Japan reports that closely related misapprehensions are similarly strong in that country's history.⁹⁶ As one example of unnature, consider cows: artefacts of selection for docility, excess milk production, high volumes of meat and other properties that are useful to us but hinder an autonomous existence for them. As artificial selection became more conscious and far-reaching over the course of history, cattle and their pastures became part of our technology, unfit to exist without us.⁹⁷ If we disappeared, natural processes would gradually reassert themselves; cows would die out and their meadows would soon be overgrown. Direct genetic manipulation of cows in modern laboratories and ten millennia of virtually continuous artificial selection can have results that are different in kind, but arguably not very different. Ecocritics believe that before we learn to make out anthropogenic features of any kind, we cannot really see or protect the relatively pure nature around them. Indeed, some environmental ethicists consider our

90 Worster, *Nature's Economy*, 249-250, 388-420.

91 Garrard, 183. There is no simple metric, but one could try to measure some forms of human influence to determine degrees of nature. For example, Andersson suggests a system of four different aspects, most of them gradual in themselves, weighted against one another and considered in aggregate. She also admits that this is flawed (123-124).

92 Bill McKibben, *The End of Nature*, London: Viking, 1990.

93 Andersson, 100-101.

94 Cavallaro, 37.

95 Soper, 181-184.

96 Conrad Totman, *The Green Archipelago: Forestry in Preindustrial Japan*, Berkeley and Los Angeles: University of California Press, 1989, 179.

97 Andersson, 118-119, 121.

living tools unworthy of protection.⁹⁸ Widespread ignorance of actual nature, whatever its ultimate causes may be, carries an element of ecological risk in the present. Ecocriticism draws a parallel between this state of affairs and the situation facing early feminist criticism. The proper first response, in either case, is to expose stereotypes and call attention to distorting absences.⁹⁹

Ecological risk-taking is not a new feature of modern life. We have exterminated other species at an accelerating pace for 50,000 years.¹⁰⁰ According to a recent biology textbook, only 20 species – a high but plausible estimate of how many others go extinct on the average day – provide 90% of our food. Expending human labour to favour life-forms like those 20, which are themselves genetically anthropogenic, is a major cause of extinctions and other problems.¹⁰¹ We do it to feed ourselves, and it became necessary for that purpose long ago. Natural living things make too poor crops and livestock for six billion human mouths. One possible means of preserving both humans and nature is conversion to vegetarianism, according to human ecologist Henrik Wallgren.¹⁰² Two of his colleagues, Carl-Adam and Eeva Hægström, have studied ecological crises in pre-industrial agriculture.¹⁰³ It follows from such work that glamorization of careless or unnecessary agricultural expansion and domestication is at odds with environmentalism, although the precise definition of “unnecessary” varies with the agenda. Complete demonization of agriculture would be inadequate¹⁰⁴ – abolition cannot be achieved in our lifetimes, if it is desirable at all – but virtually all environmentalists would still agree with Danielle Nierenberg, a Worldwatch Institute writer who condemns modern industrialized husbandry. She cites indiscriminate distribution of antibiotics to densely packed animals as one danger because it generates epidemics, some of them capable of spreading to humans.¹⁰⁵ What she doesn't mention is that many of the deadliest diseases now plaguing only humankind would never have afflicted us if Eurasian livestock had not been tamed for food production in the first place.¹⁰⁶

98 Ibid, 84-85.

99 Glotfelty, xxii-xxiii.

100 Diamond, *The Rise and Fall of the Third Chimpanzee*, 323.

101 Clive Hamblen, *Conservation*, Cambridge: Cambridge University Press, 2004, 19, 26, 52. Hamblen defines a species as “a group of organisms which can interbreed to produce fertile offspring”, admitting that this is problematic and noting that under his definition, there is believed to be around 5 to 15 million species on Earth (12-14). He also lists some reasons why extinctions ought to be avoided (19-37). For an example of how domesticated species contribute to greenhouse gas production, see McKibben, 15. See also Worster, *The Wealth of Nature*, 53-54.

102 Henrik Wallgren, “Kan livsmedelsförsörjningen tryggas?”, *Humanekologiska perspektiv på människans tillvaro*, Henrik Bruun and Tom Gullberg (eds.), Nora: Nya Doxa, 2002, 93-107.

103 Carl-Adam Hægström and Eeva Hægström, “Finns det ett hållbart naturutnyttjande?”, *Humanekologiska perspektiv på människans tillvaro*, Henrik Bruun and Tom Gullberg (eds.), Nora: Nya Doxa, 2002, 67-92.

104 Ingram, 26.

105 Danielle Nierenberg, “Rethinking the Global Meat Industry”, *State of the World 2006: A Worldwatch Institute Report on Progress Toward a Sustainable Society*, Linda Starke (ed.), New York and London: W.W. Norton & Company, 2006, 32-35.

106 Diamond, *Guns, Germs and Steel*, 206.

Susan J. Napier writes that Miyazaki tends to focus on good things we have lost – including “a world in which nature is not yet dominated by humanity and exists as a powerful force in itself, strong in its identity as the nonhuman Other” – and on “*what could be*”, not so much on what is.¹⁰⁷ “What could be” includes a glamorized return to intense manual agriculture in *Conan* and an equally glamorized abolition in one of the *Nausicaä* manga's cultures. More gentle challenges against domestication may lead towards a realistic middle ground. The headquarters of Studio Ghibli provides one example; their main building reportedly features an undomesticated rooftop garden where “weeds” are allowed to grow freely, in natural competition.¹⁰⁸ The very idea of weeds is a cultural construct, subject to arbitrary change, and can neatly symbolize the need for cultural reorientation in larger issues.¹⁰⁹ Cavallaro speculates that the same policy of non-intervention applies to the rooftop garden of the Ghibli Museum in Mitaka as well,¹¹⁰ but I have spent too much time observing its gardeners to believe that.

Tropes and Techniques

Now we come to Greg Garrard's points of ecocritical study and debate. He borrows the stylistic term “trope” from rhetoric to discuss an inexhaustive set of “large-scale, underlying cultural metaphors of nature”,¹¹¹ including pollution, pastoral, wilderness, apocalypse, animals and the Earth itself. Those are all invoked in Miyazaki's early work, in various ways, to give meaning to nature. I will be referring to them throughout the subsequent chapters of this essay, which is not to say that my sources are always the same as Garrard's.

In the West, “pollution” was a theological term until the 17th century, an internal moral contamination which may still echo in modern thinking.¹¹² This development has parallels in traditional Japanese culture, where physical and spiritual pollution are closely related.¹¹³ According to Buell, “toxic concern” by other names, about pollution as a feature of the environment, actually dates from late antiquity. He outlines a genre of “anxiety arising from perceived threat of environmental hazard due to chemical modification by human agency”.¹¹⁴ I will return to this “toxic discourse” in the analysis of *Nausicaä*, but pollution is not among the more persistent tropes in Miyazaki's work. His mechanical designs always look environmentally friendly.¹¹⁵

107 Napier, 153. Italics in the original. See also Cavallaro, 176.

108 Cavallaro, 42.

109 Garrard, 5-6.

110 Cavallaro, 44.

111 Garrard, 184.

112 Ibid, 8.

113 Wright, 4 of 12.

114 Lawrence Buell, *Writing for an Endangered World: Literature, Culture, and Environment in the U.S. and Beyond*, Cambridge: Belknap Press of Harvard University Press, 2001, 30-32.

115 Ajanović, 264.

The pastoral is the most deeply entrenched construction of nature today, and prevalent in most of Miyazaki's oeuvre. It originated as a genre in antiquity, preceding “the perception of a general crisis in human ecology by thousands of years”, yet composed for urban audiences.¹¹⁶ According to Gifford, it was a stylized literature of “retreat and return”, often in the literal sense of letting characters retreat from and then return to urban life, but also giving alleged insights back to audiences as another form of return. It began with the *Idylls* by Theocritus, in the 3rd century BCE. He wrote about shepherds, from nostalgic memories of Sicilian song competitions.¹¹⁷ The classical tradition evolved from there over the centuries, but Garrard sees one sharp break. He contends that a new, Romantic pastoral arose as a response to industrialization and mass urbanization in the late 18th century, basing itself on and transforming the classical model. This new pastoral suggests that progress and modernity can be confronted, while maintaining the older pastoral's construction of nature as above all “a stable, enduring counterpoint to the disruptive energy and change of human societies.” If nature means stability, then it will endure in spite of human abuse, so the pastoral can work against environmentalism; it is “infinitely malleable for differing political ends”. A specific, unrealistic rhetorical device associated with the pastoral genre is the “pathetic fallacy”, wherein the environment is portrayed as having feelings.¹¹⁸

A general sense of “pastoral” arose out of the formal genre, celebrating the countryside or any piece of nature with “an implicit or explicit contrast to the urban.”¹¹⁹ Gifford writes about Western literature but there are many homologous forms of pastoral art, both in media such as motion pictures, and in non-Western traditions, identifiable in *Totoro*.¹²⁰ I will be using “pastoral” to describe glamorized, stable landscapes with at least a rural degree of natural presence. A landscape will be understood as glamorized when, for instance, it receives substantial screen time with pleasant music, good weather, the enjoyment of sympathetic characters – particularly as a refreshing retreat from an urban environment – and no predators or other such hazards to immediate human pleasure.

In Gifford's system, there is a pejorative third sense of “pastoral” beyond the genre and the broader class of content. According to many environmentalists and other users of the term in this sense, “what is ‘returned’ by retreat is judged to be too comfortably complacent to qualify as ‘insight’”. Some art is felt to oversimplify, to the point of ecologically or economically harmful idealization, such as concealment of ownership.¹²¹ I will not be using this pejorative definition, but I

116 Garrard, 34; Gifford, 15.

117 Gifford, 1-2, 15.

118 Garrard, 34, 36, 40, 56.

119 Gifford, 2.

120 McCarthy, 123. Information is regrettably scarce on Japanese pastoral; the strong presence of Western culture in Miyazaki's work arguably makes that less of a problem.

121 Gifford, 2, 8.

support the idea that any stylization of nature is also a misrepresentation insofar as it may obscure facts and methods which could help audiences deal effectively with environmental problems. Stylization may also help introduce or popularize an environmental cause to the point where a less glamorous truth can also spread and inform effective action in favour of that cause. Perhaps the most salient example of the latter possibility is Rachel Carson's *Silent Spring*, where she uses pastoral and apocalyptic poetic devices in a “fable”, as a prelude to hard science.¹²² Her book had enormous environmental effects, leading to the ban on DDT and other poisons, and playing a key role in the formation of modern environmentalism. Her stylization proved to be beneficial; it did not discourage active efforts to study and solve environmental problems. In this essay, any unrealistic portrayal of possible problems or solutions that does ultimately gloss over objectionable facts will be considered “escapist” to some degree. Fantasy does not have to be escapist; *Mononoke* is not.¹²³

Wilderness and Apocalypse

When McKibben writes that “Nature's independence *is* its meaning; without it there is nothing but us”,¹²⁴ he shows an impractical belief in pristine nature as the only proper form. McKibben's construction of meaning attached to wilderness is partly a luxury of societies adjacent to large areas of sparsely populated land. Garrard connects its modern use in environmentalism to the Western “settler experience in the New Worlds”, when colonists imagined a “renewed, authentic relation of humanity and the earth, a post-Christian covenant, found in a space of purity, founded in an attitude of reverence and humility.” Those Judaeo-Christian connotations of wilderness derive in part from older ones that are present in the very earliest literary traditions and which may date as far back as the unsafe beginnings of agriculture, which Garrard claims were necessary for a cultural concept of wilderness to emerge at all.¹²⁵ Consequently, it makes sense that the great forests of *Mononoke's* pseudo-historical setting are clearly wild in a sense that remains richly appealing to both Japanese and Western viewers. While Japan lacks a mythical Garden of Eden, there is still a modern “cultural myth of an idealised, paradisaical existence in ancient Japan”¹²⁶ which may account for some of the similarities. The mountainous terrain of the Japanese islands has also kept a lot of land uninhabited.

On the subject of mountains, most Westerners seem to have thought they were ugly a few hundred years ago.¹²⁷ Then, as productive lands around the mountains were domesticated by industrial means, the Romantic movement created popular appreciation for an aesthetic known as the sublime. Sublime constructions of wilderness emphasize “vastness and overwhelming power”

122 Rachel Carson, *Silent Spring*, Boston: Houghton Mifflin, 1962, 1-3. See also Garrard, 1-2.

123 Napier, 242.

124 McKibben, 54.

125 Garrard, 59-61.

126 Wright, 2 of 12.

127 Evernden, 48.

that inspires awe, in stark contrast to the small and soft “delicacy” of the beautiful. It is a gendered discourse, but also one that made mountains seem attractive.¹²⁸ Soper sees a causal relationship, in which previously despised features of the landscape came to be valued because the old favourites had become too unnatural to please. She contends that nature is intuitively attractive, but more importantly that “the history of the aesthetic of nature has to be thought in relation to the history of human domination”: we especially appreciate the very things we threaten most.¹²⁹

Some say we threaten everything. Garrard supposes it started with the teachings of the prophet Zoroaster in the Middle East, around 1200 BCE. Existence has been just about to end ever since, with a wide range of effects. Aum Shinrikyou, a murderous cult, is one example of a case where apocalyptic rhetoric had disastrous results for everyone involved, yet similarly urgent messages from environmentalists and other secular interests have led to “striking successes”, as well as problems of credibility.¹³⁰ Apocalyptic anime may appear merely spectacular, but Napier contends that they usually contain at least an implicit reason why apocalypse afflicts a given society. That reason is open to interpretation, especially in densely layered science fiction and fantasy like *Nausicaä*, which was a favourite of Aum Shinrikyou's leader.¹³¹ Garrard claims that apocalyptic rhetoric still appears useful to environmentalism, as long as everyone is realistic about the countless possible sources of error in analysing problems like climate change. We also have to remember that real environmental issues do not amount to a single “monocausal” monolithic crisis and will not destroy all life, not even all humans. Traditional apocalyptic misconceptions like that lead to fatalist apathy.¹³² Using rhetorician Stephen D. O'Leary's system from *Arguing the Apocalypse*, Garrard outlines a tragic and a comic frame of apocalypse, finding the comic to be most in tune with environmentalism. Comic evil is merely “error, misunderstanding, or ignorance”, redemption is recognition and plots reveal fallibility, incorporating the guilty into society rather than terminating in sacrifice and isolation as the tragic mode demands.¹³³

Tragic apocalypticism, with its rigid predeterminism and closed concept of time, is indeed unsuitable for environmentalism, but quite common in anime. It takes a holocaust to make an impression on a Japanese megalopolis,¹³⁴ which can of course symbolize popularly perceived negative environmental aspects of modernity. The resulting urban apocalypse is often rendered viscerally beautiful in an “aesthetics of destruction”, as Susan Sontag named the concept in

128 Garrard, 63-64.

129 Soper, 244-245.

130 Garrard, 85, 96-99.

131 Napier, 251, 254.

132 Garrard, 105-107.

133 Stephen D. O'Leary, *Arguing the Apocalypse: A Theory of Millennial Rhetoric*, New York and Oxford: Oxford University Press, 1994, 200-201.

134 Ajanović, 252-254.

reference to American and Japanese science fiction films of the 1950s and early 60s. Such films offer “sensuous elaboration” rather than scientific realism.¹³⁵ Sheer aesthetics may well affect public opinion, but are not the main focus here. Comparison of the narratives to ecological and other truths can illuminate their likely effects on audiences, even if the average viewer seeks other attractions. I acknowledge that commercial animated science fiction for children was not produced under conditions supportive of great realism in the 1970s or 1980s, and identifying modes of imagination rather than conflating them is obviously relevant, but a true understanding of imagination must include its basis in reality.

Animals and Cuteness

The use of non-human animals as a trope is intimately connected to their seemingly intermediate status, somewhere between humankind and the rest of the universe.¹³⁶ Baker contends that animals are generally employed to signify that which is not to be taken seriously, and that a specifically visual representation is usually made to construct them as stupid. Neotenous stylization is a relevant example.¹³⁷ In biology, “neoteny” refers to the retention of originally juvenile features in adults.¹³⁸ Neotenous characteristics – including big eyes, short and stubby limbs, and generally rounded features – appear in such diverse objects as human babies, Pekingese dogs and Mickey Mouse, for different reasons. Until recently, human mothers in most cultures would abandon a newborn to die when prospects for raising the child were poor: “The fat cheeks and precocious responsiveness in a baby's face may be an advertisement of health designed to tilt the decision in its favour.”¹³⁹ Fat cheeks, indicating stored energy, contribute to the rounded features that define “cuteness”. Adults without genes for responding positively to such specific visual triggers expend less energy taking care of their children and are consequently less likely to pass on their genes. However, natural selection has failed to engineer a response specific to one's own human babies, which is why neotenous, unnatural things like Pekingese dogs are cute. They exist as permanent proxy children, poorly equipped to fend for themselves.¹⁴⁰ In the case of visual culture, Mickey Mouse has become gradually more neotenous and therefore cute because appealing to instinct makes money. It seems highly unlikely that Mickey's nominal affiliation as a mouse helps real mice.

135 Sontag, *Against Interpretation*, 212-213.

136 Garrard, 140.

137 Baker, 174, 181-184.

138 Evernden, 114. He notes that “paedomorphosis” is traditionally a more correct term for this general case. For a more extensive discussion of neoteny and its links to breeding, see Raymond Coppinger and Richard Schneider, “Evolution of Working Dogs”, *The Domestic Dog: Its Evolution, Behaviour and Interactions with People*, James Serpell (ed.), Cambridge: Cambridge University Press, 1995, 38-43.

139 Pinker, 248-249.

140 Juliet Clutton-Brock, “Origins of the Dog: Domestication and Early History”, *The Domestic Dog: Its Evolution, Behaviour and Interactions with People*, James Serpell (ed.), Cambridge: Cambridge University Press, 1995, 18.

Essayist Daniel Harris analyses aesthetics co-opted by consumerism in *Cute, Quaint, Hungry and Romantic*, lamenting how our instincts conceal the other qualities of cute creatures. In his opinion, we revel in cuteness to feel superior: “Although the gaze we turn on the cute thing seems maternal and solicitous, it is in actuality transformative and will stop at nothing to appease its hunger for expressing pity and big-heartedness, even at the cost of mutilating the object of its affections.”¹⁴¹ Certainly, cuteness can help preserve species, as in the case of the giant panda. Its natural resemblance to neotenus patterns, and its presence in the logo of the World Wide Fund for Nature, seem to have helped in spending more money on pandas than on more promising conservation projects. Another reason for the popularity of giant pandas is believed to be the neotenus teddy bears which precede Western knowledge of the species.¹⁴² When Miyazaki wrote, layed out and key-animated *Panda Kopanda / Panda! Go Panda!* (Takahata Isao, 1972), he let a panda cub disguise itself as an immobile ball of white fur, without realistic power to affect the world; a typically objectionable portrayal.

In Western and literate cultures generally, we have normally imagined nature as silent to exclude the possibility of dissenting thoughts and feelings, according to radical ecocritic Christopher Manes. It is not a literal silence, but mainly a fallacious cultural construction of nature as incapable of experiencing meaning.¹⁴³ John Berger observes that Donald Duck and the other talking animals of traditional Western animation are trivialized and silenced as “human puppets” by their behaviour,¹⁴⁴ a compatible observation. Manes connects the silence of nature to the misconception that humans are somehow important from a natural point of view. Jared Diamond connects it to the false assumption that animal languages are as simple as they sound to us.¹⁴⁵ The “choice” of denying or belittling the subjectivity and pain of animals was apparently made to simplify human lives at the dawn of civilization, then rationalized in an extreme, still influential form by René Descartes and other progenitors of modern science who viewed all animals as simple, unthinking machines.¹⁴⁶ This is no longer considered philosophically tenable and it contributes to such environmental problems as the factory farming mentioned above. Baker perceives a “game’ of looking and not looking, of being permitted or not permitted to see, and of casting doubt on what it

141 Daniel Harris, *Cute, Quaint, Hungry and Romantic: The Aesthetics of Consumerism*, New York: Da Capo, 2001, 2, 6. Still more cynically, he connects the implications to constructions of nature: “the cute worldview is one of massive human chauvinism, which rewrites the universe according to an iconographic agenda dominated by the pathetic fallacy. [...] the cute vision of the natural world is a world without nature, one that annihilates “otherness,” ruthlessly suppresses the non-human, and allows nothing, including our own children, to be separate and distinct from us” (12).

142 Baker, 179-182.

143 Christopher Manes, “Nature and Silence”, *The Ecocriticism Reader: Landmarks in Literary Ecology*, Cheryll Glotfelty and Harold Fromm (eds.), Athens: University of Georgia Press, 1996, 15-26.

144 Berger, 13-14.

145 Diamond, *The Rise and Fall of the Third Chimpanzee*, 130.

146 Baker, 216; Worster, *Nature's Economy*, 39-40. See also Berger, 9.

is that is being seen.”¹⁴⁷ By playing this game with certain strategies, he thinks it may be possible to break down stereotypes about animals without raising new ones, thereby restoring animals to true visibility.

The Gaze and Film

Daniel Harris's transformative gaze upon the cute and Baker's visual game with the animal in pain are accessible applications of popularized psychology. More specifically, they seem to derive from gaze theory in Freudian-Lacanian psychoanalysis, a discipline studying the unconscious. In my interpretation, the methods of psychoanalysis are fundamentally flawed, but it has at least named some useful concepts. One of those is scopophilia, a “general pleasure in looking”, and voyeurism, which is to seek selfish scopophilic pleasure by looking from a privileged, concealed position.¹⁴⁸ Christian Metz, who initiated semiological psychoanalytic film theory, conceives of these concepts as basically sexual.¹⁴⁹ Torben Grodal, a mainstream psychological theorist, points out that sexual desire is implausible as a basis for scopophilia, but also that evolutionary psychology still justifies the general concept.¹⁵⁰ According to the psychoanalysts, cinema pleases because it exalts the voyeur, eliminating all distractions from the illusion that “the screen images are the expressions of the spectator's own desire”. Point-of-view shots, including eyeline matches where an image of something follows upon the image of a person beholding that thing, are an important feature of editing in gaze theory, binding “the viewer's subjectivity” into the audiovisual text¹⁵¹ to make her participate in a game like Baker's. If we entertain this idea, a parallel emerges between the way we create films and other real objects to satisfy scopophilia, and the way we believe that thinking animals are similar objects – dumb and silent, unable to disapprove or look back at us in a meaningful way – which is demonstrably false. The rule of thumb is that staring objectifies aggressively. It is literally a predatory gesture,¹⁵² which could perhaps be the starting point of a gaze theory founded on evolutionary psychology rather than psychoanalysis.

I will pay special attention to “looking”, both of the camera (point of view) and of the characters, in Miyazaki's narratives. This type of analysis has many problems. The relevant formal aspects of films have no intrinsic ideological properties,¹⁵³ so I will be dealing with the sort of traditions critics often take for granted when they haven't actually been studied well enough. The studies that do exist are generally sceptical about the possibility of environmentalism. Sontag's

147 Baker, 217.

148 Stam et al., 124, 160-161.

149 Christian Metz, *The Imaginary Signifier: Psychoanalysis and the Cinema* (transl. Celia Britton, Annwyl Williams et al.), Bloomington: Indiana University Press, 1982, 58-59.

150 Torben Grodal, *Moving Pictures: A New Theory of Film Genres, Feelings and Cognition*, Oxford: Clarendon Press, 1997, 5-6, 41.

151 Stam et al., 161, 167.

152 Evernden, 90. See also Berger, 14.

153 Ingram, 34.

photographs atomize reality and alienate nature.¹⁵⁴ Garrard is as pessimistic as Berger, commenting on the latter's theories that "If the pet is just a mirror, reflecting back our gaze with no autonomy, TV wildlife is powerless to make its gaze register at all against our imperial eye." Among other objections, ecocritics have lamented how nature documentaries frequently show endangered creatures in abundance and elide everyday life for an orgy of hunting and sex, generally distorting reality.¹⁵⁵ Could an unintrusive cinema of nature, without selection for drama or other deliberate distortions, really compete for our attention? Even if we accept the notion that animation does not alienate as much as live action because it doesn't lie, we still have to face the problem that film itself is about looking in a privileged, unilateral way. One might think that staring is the foundation of the medium. Jonathan Burt, an unaffiliated animal historian, is more nuanced in his study of gazes in live action cinema,¹⁵⁶ but a flat rectangular screen with an arbitrary number of loudspeakers does deny nature's true depth, smell, temperature, texture and response. Ingram points out but does not pursue the additional contradiction that virtually any very popular film, no matter how environmentalist in intent, is really "a luxury commodity produced for global mass consumption."¹⁵⁷ Even Miyazaki's work, much of it distributed by Disney, is fed into environmentally destructive consumerism. Purists like Birkerts, and perhaps the late Sontag,¹⁵⁸ would be happy to know that such problems of the medium limit its effectiveness as a tool of environmentalist propaganda, without making it harmless or – I think – useless.

Baker, Burt, Evernden, Garrard and Ingram all theorize that some techniques of representation are more objectifying than others. "The aerial tracking shot in a film, for example, may be considered the cinematic equivalent of the elevated viewpoint in many nineteenth-century landscape paintings", a viewpoint commonly criticized for its implicit endorsement of human domination in its original context.¹⁵⁹ Some types of tracking shot are technically difficult to emulate in cel animation, but there is enough overlap between Western traditions and anime for similar shots to permit similar interpretations. The idea of elevation over a landscape as a signifier of voyeuristic, self-aggrandizing power is appealing as a loose principle in both contexts, although its connection to 19th-century Western bourgeois painting styles can be questioned. Evolutionary psychology indicates that those traditional landscapes with their elevated points of view were based on instinct

154 Sontag, *On Photography*, 23, 97.

155 Garrard, 139, 151-155; cf. Berger, 12-13. For a brief ecocritical history of North American nature documentaries, see Alexander Wilson, *The Culture of Nature: North American Landscape from Disney to the Exxon Valdez*, Cambridge: Blackwell, 1992, 117-155.

156 Jonathan Burt, *Animals in Film*, London: Reaktion, 2002.

157 Ingram, 24.

158 Sontag, *Against Interpretation*, 21.

159 Ingram, 31-33.

rather than ideological fashion.¹⁶⁰ Unfortunately, as with human breeding, we cannot entirely trust instincts to promote ecosystem health in our current predicament.

Of the signature motifs repeated throughout Miyazaki's films, flight is the most prominent.¹⁶¹ For instance, in *Howl's Moving Castle*, a gentle walk through the sky affords a sense of superiority, but only in relation to a city and its people below. There is no natural panorama in that particular scene, so it does not convey anti-environmentalist meaning in the light of gaze theory, certainly not when compared to the iconic helicopter that lifts humans away from dangerous creatures in many unrelated films.¹⁶² A less common recurring motif in Miyazaki's work, which seems to have started in *Conan*, is a gigantic deciduous tree. It is in Nausicaä's memories, it keeps Laputa together and Totoro lives in one. Wright describes the mythology of this motif, which is not specific to Miyazaki or Japan: the tree contains the spirit of the Earth, symbolizing continuity and sacredness.¹⁶³ It has had countless secular applications; Charles Darwin used the symbol of a world-spanning tree to describe a "benevolent order and pattern" in nature.¹⁶⁴

Baker concludes his study with three strategies for positive change.¹⁶⁵ Ingram is not so forthcoming about improving representations. He warns only that the "essentialist and determinist assumptions" of formal theories of photography and film as signs of human chauvinism "make positive or oppositional strategies difficult to envisage." Lacking solid criteria for praise, he certainly doesn't find much to admire in the environmentalism of US cinema. This leads, perhaps unnecessarily, to a loss of hope. Ingram's mode of close textual analysis also feels limited. For instance, he writes of a chimpanzee that "the spectator is aligned with the animal as he is chased [...] and is sympathetic to his plight."¹⁶⁶ This assumption of an idealized spectator mechanically reacting with sympathy because the narrative follows and threatens a friendly animal simplifies the probabilistic realities of reception and may lead to unrepresentative interpretations. Like Ingram, I will try to attend to context to counteract this risk. Where possible, I also compare my interpretations to those of other observers. That's easily done with *Nausicaä* and to a lesser extent with *Cagliostro*, which is less frequently examined from an environmentalist perspective, but in the case of *Conan* in the next chapter, too little has been written.

160 Pinker, 405, 408-409.

161 Grant, 166-167.

162 Alaimo, 283.

163 Wright, 7 of 12.

164 Worster, *Nature's Economy*, 422.

165 Baker, 218-231. The first is to produce pictures of animals in the objectionable situations that are normally excluded from public view, without being so blatant as to sicken readers to abjection. The second is to blur the distinction between humans and non-humans by undermining the traditionally denigrating misconception that animals have only body, which may include showing humans treated like animals. The third and final strategy is to appropriate hegemonic images – specifically of Disney in Baker's examples – for other purposes, because "complicity in the space of the popular is itself a prerequisite for any effective loosening of fixed meanings."

166 Ingram, 33, 120.

Analysis 1: Back to the Earth in *Conan*

Conan is an 11-year-old boy who can dodge machine-gun fire while dancing on the wing of an airborne plane. His tale is post-apocalyptic science fiction for children, with some extra-sensory perception and other unscientific ingredients. The Japanese Animax network has dubbed *Conan, The Boy in Future* into English for Asian markets, and there have been commercial releases in other Western languages, including French, Spanish, Portuguese and Italian. Despite its wide proliferation, including a variety of translations by fans, a licensed English translation of the series has yet to reach our market, which is another reason why few scholars pay much attention.¹⁶⁷ McCarthy mentions mainly that elements in *Conan* prefigure Miyazaki's films, including a "growing ecological awareness".¹⁶⁸ Much of *Conan* does feel very much like other entries in Miyazaki's oeuvre, down to details like a whole squad of human riders in wild wigs and white masks, strongly prefiguring San of *Mononoke* as they madly charge into foes armed with the superior technology of gunpowder. Unfortunately, the modes of ecological awareness in the series make that particular theme deeply problematic.

Each episode starts with the same 2 minutes and 40 seconds of repeated animation, in two parts. That introduction provides the premises of the story and sets the tone, so it will be summarized here. The first shot in almost every episode is of a fleet of flying machines coursing through the dark sky over a futuristic city. Their designation is *dokuga*, literally "poisonous moth", an animal. The camera tilts down from the ominous *dokuga*, over a vertical landscape of fully lit skyscrapers and elevated roads without any nature in sight, recalling *Metropolis* (Fritz Lang, 1927)¹⁶⁹ and other threatened and decadent urban cityscapes. On a thoroughfare, hundreds of people are apparently running out to vehicles caught in a total traffic jam. The scene bathes in sharp white light for a fraction of a second and we cut to a high-altitude shot of multiple radiant explosions in the air around a city. Details of the landscape are imperceptible in their glare. Starting with the next shot's pan across burning ruins, a narrator intones (my translation):

July, 2008 CE. Humankind faced extinction. Far surpassing nuclear arms, super-electromagnetic weapons annihilated half the world in an instant. There were great changes in the Earth's crust, the axis of rotation shifted, and all five continents ruptured, sinking into the sea...

Moments after the blasts, uniformed adults run shouting in the firestorm as debris blows by overhead. They reach their comrades in a cigar-shaped rocket on the ground and climb aboard. As

¹⁶⁷ Even if the English dub had been available to me, the lack of a generally accepted translation would still make proper nouns in *Conan* problematic. The script of the series was very loosely adapted from a novel by Alexander Key, *The Incredible Tide*, Philadelphia: Westminster, 1970. It contains at least approximate matches for most of the important names in my copy of the original version of the anime, though some names have been significantly altered for no apparent reason. Simple transliterations of Japanese changes, if any, are therefore attached in parentheses after names from the novel, using a common variant of the revised Hepburn system.

¹⁶⁸ McCarthy, 39.

¹⁶⁹ Ibid.

the rocket lifts off, a great crack appears in the earth below. The passengers stare in dumbstruck terror as smoking debris falls through the air all around, easily punching through the hull.

The next shot is of the entire Earth, covered in titanic spirals of wind and dust, recalling the “Blue Marble” photo which was taken from the moon by US astronauts in 1972, with the planet fully illuminated as a disc in infinite darkness. That ubiquitous image is often used to invoke isolation, fragility within finite boundaries, or “pastoral on an almost cosmic scale.”¹⁷⁰ It seems to be the breaking point of the gaze, objectifying every single species that doesn't have an Apollo program – one giant leap only for mankind – but also illustrating that there is only so much left to interfere with unless we have time to spill over onto other worlds. That never happens in Miyazaki's fiction;¹⁷¹ the planet we live on can look very different in his work, but space travel never seems to have been very successful. The cultural construction of cosmic isolation that is usually associated with the Blue Marble is indeed realized as the damaged rocket falters, sinking back down under the pull of gravity. “[F]issures in the earth, [and] plummeting spacecraft” are signs of the aesthetics of destruction, and it is a fairly satisfying scenario in that respect. Panic in the streets is rendered moot by blinding death and fire-feeding winds like those of Dresden or Hiroshima, before the world bathes in the less realistic, more purely sensuous glow of lava. However, the pilots of the dokuga are irrelevant; there is no morally crude fantasy of revenge against aggressors, a contrast against the old tradition.¹⁷²

The final shot in the prelude is more mysterious at first sight. The camera pans across a brooding ocean, to a few shafts of light piercing otherwise total cloud cover. If the sequence has followed the fate of a single city, this is where it sank into the sea, recalling the image of a naturally submerged Japan in *Nihon Chinbotsu / Japan Sinks* (Moritani Shirou, 1973), a major title of Japanese apocalyptic cinema. However, while the ocean is natural and sublime in its power, *Conan's* apocalypse is not explained as a natural disaster, nor as a crisis due to pollution or other forms of environmental degradation, other than war. It is interesting in this context that the weapons are explicitly contrasted against nuclear arms in the narration above. Magnetism is not associated with horrible burns or lingering radiation in popular culture, hence the chief instrument of the holocaust in *Conan* is signalled as paradoxically clean.

Science fiction and ecocriticism share the problem that science can change quickly. A major work of ecocriticism from before its consolidation is Joseph Meeker's *The Comedy of Survival*, now considered outmoded in its understanding of evolutionary biology and ecology.¹⁷³ Writing much

170 Garrard, 160-161.

171 McCarthy, 76.

172 Sontag, *Against Interpretation*, 213, 215.

173 Joseph W. Meeker, *The Comedy of Survival: Studies in Literary Ecology*, New York: Scribner, 1974; Cohen, 7 of 31.

later, Henrik Wallgren based a part of his essay about possible responses to coming food shortages on the contemporary UN scenario of 13 billion humans by the year 2050. That figure is now 9.2 billion.¹⁷⁴ The scientific basis – if any – of old science fiction like *Conan* has often been similarly superseded by revised models and new data, resulting in a source of impractical messages that can be especially strong in the genre. In this case, the apocalypse does not darken the skies for more than a couple of days, and life is shown to be possible in a stable climate on a few tiny islands after the continents sink. Such a plot was unscientific even in the 1970s, and general acceptance of the 1980s theory of nuclear winter has made it seem ridiculously optimistic. Most of the rocket's passengers die without explanation after many years, but a real disaster of the same magnitude would have no human survivors, and would do more damage to nature.

The concluding rays of light over the ocean signal hope immediately after the apocalypse. That hope is vindicated in the opening credits sequence. The order of the sequences is different only in the first episode. The credits begin with a title screen in sepia which transitions to animation, showing birds flocking around dense green plant life at the tops of half-sunken ruined skyscrapers, standing obliquely in waves crashing at the camera. That life – not merely surviving where humans destroyed themselves but also appropriating excessive unnature for peaceful and beautiful natural purposes – is the emblematic image of nature's recovery. Realistically however, there would not be so much soil on those buildings.

While the prelude used slow, discordant tunes, the music of the credits is merry, with sing-along lyrics at the bottom of the screen, a common practice in children's anime. These lyrics are translated on page 60. They use the organic metaphor of waking up to describe the post-apocalyptic recovery of natural life, letting the prelude's aesthetics of destruction feed immediately into environmental triumph, a nihilistic epitaph for the billions who died. The song urges people to celebrate nature's quickening for love of the Earth, through chaotic physical exertion, song and dance: apocalypse is cathartic and necessary for a new world, in stark contrast to *Nausicaä*.¹⁷⁵ A school of fish pays no attention to Conan as he steers a small catboat over high waves on a sunny day, perhaps for no other reason than to amuse Lanna, the female lead who is of Conan's age. A tern named Tikki (*Teki*) who is Lanna's occasional animal companion flies alongside the boat. Later, the boy and girl hold hands against a soft sunset on top of the very same rocket that fell back to Earth in the prelude. Greenery now covers much of its fuselage. In this way, grim yet oddly sanitary apocalypse precedes joyous rebirth, and nature takes care of the ruins. Opening on the cold

174 Wallgren, 102; cf. United Nations (Department of Economic and Social Affairs, Population Division), *World Population Prospects: The 2006 Revision*, official site:

http://www.un.org/esa/population/publications/wpp2006/wpp2006_highlights.pdf, 2007, v.

175 Napier, 270-271.

metropolis every time strengthens the plot's many contrasts with that urban environment, setting the stage for a pastoral narrative.

The Rocket Tree of Nokosarejima

Conan is born 9 years after the apocalypse, on Nokosarejima (“left-over island”). The shots introducing this isolated island focus on gulls in the sky, crabs feeding on the beach, and diverse vegetation, including varied herbage between young trees. It's a fairly pristine temperate landscape, though a well-worn path ascends the tallest hill, where the rocket from the opening has penetrated the soil. Beside it, there's a little stone cottage. Inside, a nameless character whom Conan calls Ojii (a very familiar way to say “old man”) is writing in his diary. Ojii wonders if he and Conan are the only humans who survived, even though nature has recovered so beautifully. In another episode, we learn that Nokosarejima was dry and barren for days after the rocket crashed in 2008. The survivors nearly died of shock and thirst before potable water seeped into the cockpit below the ground, an event Ojii interpreted as a message from the rocket. He says that after not letting its passengers abandon the planet, the vehicle also wanted them to live. In Ojii's interpretation, peaceful technology has agency and benevolence, whereas nature remains largely passive and indifferent. Technology and nature fuse for human benefit when the rocket, rooted in the earth, starts to resemble an overgrown tree. This theme prefigures the robots of Laputa as Wells interprets them.¹⁷⁶ Soon after the crash on Nokosarejima, grass sprouted from the soil and the survivors wept for joy.

As Ojii reminisces in 2028, Conan bursts in with a half-eaten fish and hastily explains that a shark is back and has broken into the netted enclosure to steal fish. Hanajiro (“white nose”), as the shark is called, is cast as the alien, wild predator whose assault on unnatural amenities must be punished. Despite Ojii's words of caution, Conan grabs a barbed spear and dives into an undersea wonderland of harp-accompanied exotic fish and ruins. Hanajiro, whose musical cue is dark, attacks Conan after no more provocation than an extended tongue. Their battle strongly recalls *Jaws* as Hanajiro proves implausibly tough and vicious. In the long tradition of narratives where predators are evil and inferior, Conan single-handedly kills the aggressive shark and thereby overcomes his first challenge in the series. Just like *Jaws*, the struggle against Hanajiro constructs this part of nature in a far more negative way than did contemporary environmentalist discourse and science, but *Flipper* also begins by constructing nature as uncontrollably hostile, and features a shark attack without finally condemning nature.¹⁷⁷ Returning victorious, Conan encounters Tikki the tern who leads him to find Lanna – the female lead – washed up on the beach. Conan washes her dress by an improbably quaint waterfall on the little island, with pretty flowers in the foreground.

¹⁷⁶ Wells, “Hayao Miyazaki”, 24.

¹⁷⁷ Ingram, 93-94.

Whereas Hanajiro is individualized with a big white spot on the nose, Tikki looks identical to other terns, and isn't even slightly neotenized. It is only likened to people insofar as it communicates semi-intelligently with Lanna, whose growing powers of telepathy also extend to unfamiliar birds, and to some humans as well. Like traditional animal companions in children's animation, Tikki spends some time perched on Lanna's shoulder, almost as an extension of her character. However, the bird is also entirely absent for long periods of time and has good relations with other terns, which seems to indicate that Tikki is more of a friend than a pet. In its realistic appearance and independence of humans, Tikki is uncommonly natural for the generic role of an animal companion. The bird's telepathy, to which Conan is somewhat sensitive, also violates Manes's destructive taboo against a communicating natural subject. It is never represented as a voice, unlike human telepathy as it is portrayed in episode 19, or the talking animals of Disney. The conceit of psychic powers weakens the realism of this communication, but it does illustrate the idea that animals have thoughts and feelings, despite our still-prominent Cartesian way of thinking about them as automatons. Realistically, Lanna comments that the birds mostly think about fish, but at least they think for themselves. They are not Descartes's passive resources, the human puppets Berger criticizes, or enemies like Hanajiro.

Lanna tells the story of High Harbour from whence she came, an island where there were already villages before the apocalypse. She praises its open fields and meadows. A sequence from her memories emphasizes a traditional rural fantasy with neatly arranged flower gardens, an abundance of fruit in the trees and darling little cottages surrounded by golden wheat in flawless summer. There are no humans in sight; Lanna is referring to an environment. Details like the waterfall show that Nokosarejima itself has pastoral qualities, but the camera and soundtrack glamorize tame and less natural High Harbour as a more suitable post-apocalyptic retreat. Conan doesn't believe it at first. After hearing Lanna's story, he proudly demonstrates the fruit of his island: barely accessible little berries, as is to be expected in such a small, pristine ecosystem. He will be using versions of his barbed spear throughout the series, as his iconic weapon of choice over anything more advanced. Netted enclosure and stable residence aside, Conan is an idealized hunter-gatherer who constantly surprises civilized people with his enormous strength, lung capacity, optimism and vigour. The connotations of wilderness have made him a purely good person, barely tempered by Ojii's attempts at guidance. Specifically, he falls into the tradition of Rousseau's "noble savage" children, a concept Steven Pinker associates with the idea that nature is intrinsically good. Unfortunately, anthropology strongly indicates that the noble savage never existed.¹⁷⁸

178 Pinker, 6-8, 56-58.

Dysfunctional Industria

The most powerful faction in the world of *Conan* is the nation of Industria, where most of the human population and advanced technological artefacts are concentrated. Industria's power is based on the castle-like Triangle Tower (*Sankakutou*) surrounded by a working-class shantytown in a rocky desert. The high visibility of the white Tower in that lifeless wasteland is one of countless details connecting Industria to a clinical, overly technological alienation from nature. Giving his impression of the country in episode 6, Conan complains that it doesn't have trees or grass, only stone and iron. He condemns living at such a distance from non-human life.

The Tower, central as it is to the narrative, has had siblings in most of Miyazaki's other works, including the castle of Cagliostro itself, Nausicaä's castle, the flying Laputa, and the enormous bathhouse in *Spirited Away*. In *Conan*, the Tower stands atop a diverse subterranean network terminating in a bunker. Like the famous Biosphere 2 experiment,¹⁷⁹ this bunker was designed as an ecosystem in its own right, here intended to weather the apocalypse, which is one reason why the apocalypse was allowed to occur. Also like Biosphere 2, the bunker failed dramatically. Of its original population of 50,000, only a small fraction survived, as we learn in episode 12. Tens of thousands of graves, and dead trees which reappear in Lanna's nightmares, now dominate the site. Nonetheless, the survivors were able to overpower survivors elsewhere, constructing a mighty class society nominally led by gentle old scientists. The real power lies with an executive officer who seems to have developed delusions of grandeur in – and implicitly because of – the morbidly inauthentic environment of the bunker.

Industrians mine plastic from the melted ruins of the old world and convert it into loaves of bread. This totally implausible form of recycling reduces pollution, a deeply ambivalent instance of Napier's “what could be”. Industria's bread looks normal and is never conclusively identified as having a smell, taste or nutritional value inferior to those of bread produced by traditional means, though it is implied. In episode 5, Conan is fed into the enormous, fully automated factory that handles the conversion of plastic, recalling *Modern Times* (Charles Chaplin, 1936) and similar visual critiques of automation. The arcane Industrian machines, lacking even living supervisors, characterize the faction as dangerously alien. The industrial process not only depends on electrical energy which Industria abuses for war, it is also implied to be too easy. A High Harbour baker comments that his manual way with real wheat is much more work, but he is happy to do it. The implicit message is that nature and a strong work ethic go hand in hand.

The old reactor powering the Triangle Tower cannot run much longer, so it has become necessary for Industria to re-establish contact with an artificial satellite. The satellite would gather

179 Garrard, 179-181.

natural solar power and beam it back to a rectenna array on the Tower. The only person who knows how to re-establish contact is Briac Roa (surname modified to *Rao*), a morally dissenting scientist who knows that the corrupt executive officer currently ruling Industria would use the sustainable power of the satellite to perpetuate a reign of terror. Solar energy thus takes the role of a more formidable force than nuclear energy, but as with any powerful technology in Conan, it can be put to villainous use. Ecocritic William Howarth contends that science fiction “views technology as either alien or brethren”.¹⁸⁰ Ojii's rocket fortunately failed to obey him and is sacralized as akin to Wright's world trees, while the satellite's seemingly more natural solar power can both save and destroy. In *Conan*, as in Miyazaki's oeuvre in general, technology is typically alien *and* brethren.

Roa is Lanna's grandfather, so Industrians chased her from High Harbour to find and persuade him. The Industrians cause Ojii's death, sending Conan on a quest covering much of the known world to gain friends, save Lanna and contribute to a rejuvenation of civilization. His first stop is called Orenoshima (literally “my island”) according to Jimsy, a less nobly savage little misogynist who quickly becomes Conan's best friend. Jimsy's development is fascinating from an ecocritical perspective. There are many other people on Orenoshima, but Jimsy lives apart from them, in a hut made of leaves, near some crumbling ruins in a jungle. He is a skilled hunter who loves to eat lizards and other natural prey, but he also feeds and kills rats, bartering them and other goods for Industria's tobacco. When he doesn't get the amount he wants, he openly steals more. When he hears that Lanna can talk to birds, he surmises only that it must make hunting birds easier. Even more than Conan, Jimsy starts as a creature of instinct and wilderness. Though he may be “essentially” good like the two protagonists, he shows little empathy or intellect, practising only the crudest forms of agriculture to meet unambitious short-term goals. Over the course of the narrative, this stereotypical primitive is socialized as a farmer. This is made possible when he arrives at High Harbour in the middle of the series, along with Conan and Lanna.

Functional High Harbour

On arrival, the children walk from the beach, hearing birdsong, to see the central village of Moto. Reaching sunlight beyond a shaded forest path, they find *Conan's* central iteration of the world tree. This particular giant is surrounded by a wide variety of “pretty” (*kirei*) small flowers, described in dialogue as having a pleasing smell. In one shot, the camera looks up from among them, objectifying them but from a very humble elevation. Nature would not realistically produce such a juxtaposition of a single tree and meadow. It is implied to be active pastureland, though it lacks any sign of animal waste or enclosure. The children play and relax in this glamorized landscape, joyfully retreating from their high-tech adventure with the Industrians. As they look out over a

¹⁸⁰ Howarth, 78.

valley from the branches of the great tree, they see the houses of Moto on the shore of a calm lake below through eyeline matches, with a craggy mountain on the other side of the lake. Beauty and sublimity are thus juxtaposed again, while the human characters achieve a superior perspective for the television viewer, looking down from the welcoming tree at a wide open, even concave landscape, a type theorized to invite domination in Hollywood's Western genre.¹⁸¹ The vista does evoke 19th-century landscape painting, but the vantage point in *Conan* is the world tree, not the iconically isolating helicopter of Alaimo's monster movies, and the chief object of the human gaze is a village. There are several establishing shots showing entire islands in the series, privileging the viewer with a far greater sense of neat containment and omniscience, but without tying us in through point-of-view shots. Letting the characters hear the birds, physically feel the world tree as they climb it and call our attention to the smell of the place in dialogue, Miyazaki arguably achieves a vicarious plurality of senses.

High Harbour is almost completely saccharine. Napier's observation of a strong and independent nature in Miyazaki's work does not apply here. Instead, even the sublime mountains overlooking the village of Moto eventually aid its people in a war against Industria, subordinating everything to sympathetic humans. The people of Moto are thoroughly healthy and happy, totally unlike Industrians. The artificiality of their agricultural landscape doesn't bother anybody, and almost none of the realistic ecological weaknesses of such a system are in evidence. For example, there are no scarecrows in the fields, as if natural animals would not exploit a concentration of nutrition intended for humans. There are also no fields visibly lying in fallow, and none planted with legumes or other traditional means of maintaining soil fertility. Realistically, such intense agriculture could only be explained with access to large amounts of fertilizer, but there is not quite enough space for animal husbandry or other apparent sources of fertilizer to achieve a sustainable relationship. There are rows of trees and hedges planted to diminish the force of the wind, helping to prevent a loss of topsoil and other natural risks, but a real agricultural society would still suffer an ecological crisis under the same circumstances.¹⁸²

Perhaps this comparison to real conditions is a bit excessive, and there are potential contradictions in some ambiguous shots. Nonetheless, the unexplained fertility of High Harbour seems to legitimize manual domestication as the best way to deal with nature, understood here as a passive set of reliable, inherently sustainable resources, void of organisms that would abuse a system arranged for human convenience, except for the occasional shark. There is apparently no

181 Ingram, 34.

182 Hæggström & Hæggström, 67-69. I'm assuming the climate is broadly central or northern European in character, as indicated by the flora. I imagine it would be possible to combine all of the potential sources of fertilizer on the island to achieve quite high productivity at the cost of very intense labour and poor health, but nothing indicates that the people are actually doing so.

extensive terrestrial wilderness in an ideal society, and it always stays the same. Pleased to see Moto again in episode 13, Lanna declares that nothing at all has changed. The word *moto* itself, not found in the novel, can refer to an original or previous state in Japanese, signifying a pastoral retreat. Episode 19 contains a brief pre-apocalyptic rural scene that is every bit as saccharine and anti-modern as High Harbour. The protagonist of that scene grows up to be an Industrian, forgetting the wonders of “nature” until she gets to spend some time in Moto. Her stay there returns her insight, the central pastoral pattern. In a wider sense, the viewer is invited to retreat into the televised nature of *Conan* and then return to real life with insights that – unfortunately – contradict modern environmentalism. As the grandfather of ecocriticism once simplified the problem, “The pastoral image of a domestic and tamed landscape swept clean of dangers and discomforts, inviting though it may seem, in fact represents ecological disruption which is harmful to nature and ultimately to people.”¹⁸³

Adding nuance in episodes 17 and 20, a citizen of Moto does point out that it took a lot of very hard work to learn farming and to eke out a living after the apocalypse, with malnutrition in the first five years. The necessity of hard work in creating and maintaining the lifestyle of High Harbour is a significant point of realism, but scenes of hard work are themselves glamorized. The farm hands sweat *and* smile as they bring in the harvest in episode 20, and there are no scenes of less immediately rewarding work in other seasons. Adding further nuance, Napier's observation that *Mononoke* “is too sophisticated to offer only a simple antiprogress/antimodernity message” of “industrial equals evil”¹⁸⁴ can apply here as well, since not all labour is manual on High Harbour. A friendly village uses wind power to simplify a variety of proto-industrial mills. Their technology is only on the level of the European early 18th century, with a sustainable source of energy, but the central idea of effective machines as an alternative to hard work is still presented as a good thing, in contrast to such otherwise closely related early science fiction as William Morris's *News from Nowhere* (1890).¹⁸⁵ That's probably the biggest difference between the central society of High Harbour, apocalyptically reset to the threshold of modernity, and vintage Romantic fantasy.¹⁸⁶

Jimsy's Happy Pigs

At first, Jimsy hunts the animals of High Harbour. He is amazed to see the size of a collared pig, but its owner prevents him from hurting it. On seeing chickens, Jimsy runs after them as well, surprised that domesticated birds cannot fly away. Lanna tells him they are edible, but more useful for giving

183 Meeker, 189.

184 Napier, 246.

185 Gifford, 36-37.

186 Oddly enough, High Harbour even has some Victorian fashions, thereby prefiguring *Akage no An / Anne of Green Gables* (Takahata Isao, Nippon Animation, Fuji TV, 1979), which is set in late Victorian Canada, and for which Miyazaki did layouts and other tasks on the first 15 episodes after finishing *Conan*.

eggs every day, another shocking revelation. The same night he is treated to a sumptuous feast for bringing Lana back, and he eats until it hurts. The concept of division of labour is explained to him in episode 14. Jimsy also learns that, realistically, even children work on the island, and there is not enough meat for daily consumption, so he makes himself a “professional” hunter.

The scene of Jimsy's great hunt prefigures the younger sister's chase in *Totoro*. Failing to catch some cute little rodents, Jimsy finds a huge mammalian Hanajiro instead, a giant pig like the boars in *Mononoke*. After it has fallen into a ravine while chasing Jimsy, he lands on top of it, the way the older sister lands on Totoro in the later film. The parallel is morbid, because the pig is dead. Its huge flayed bulk of homogeneous meat, looking very little like a real corpse, is easily roasted and joyously consumed. The only drawback is that it belonged to someone else, an idea Jimsy hasn't quite grasped in his state of nature. When caught, he initially contends that claims of ownership are irrelevant, but he is berated. In episode 15, he has learned his lesson and actually defends a goat kid as being somebody else's property, despite a new acquaintance offering to kill the kid so that Jimsy can eat it.

Jimsy gradually acquires risky cultural attitudes by accepting the tenet that animals can only be protected through human ownership. In episode 16, he has reached another level of socialization, raising pigs instead of hunting them. He names one Umasou, literally “delicious-looking”. His behaviour and the choice of name indicates that Jimsy now functions like John Berger's idea of peasants, whose fondness for their livestock co-exists harmoniously with instrumental use of the same animals for meat and other products. Baker and Jonathan Burt are among the scholars who criticize that ideal exploitative relationship.¹⁸⁷ In Berger's popular but ultimately impractical paradigm, Jimsy has gone from savagery to civilized life without losing the ostensible nobility of honesty about the fact that he will eat Umasou. The narrative therefore lets him exploit without shame. Current environmental theorists are likely to react more critically if they take the narrative seriously, but Miyazaki plays it for laughs and cuteness. In episode 17, Jimsy addresses Umasou as people normally do their pets, indicating that he is no longer concerned with the pig's instrumental value. He never kills Umasou in the series; instead she grows up to have lots of piglets in episode 26's denouement. Exploitation is kept from view. A pet dog is shown before and after dying in the apocalypse, but being anthropogenic, its metonymic signification of the natural cost of the war is weak.

Piglets in *Conan*, including the young Umasou, are clean and neotenized with excessively rounded forms and stubby limbs. They even conform to the cartoon tradition of having a cute corkscrew tail. They are not always obedient but unrealistically sympathetic to humans, reacting in

¹⁸⁷ Berger, 5, 26; cf. Baker, 12; Burt, 26.

tandem: they jump for joy upon seeing the fiery destruction of an enemy battleship in episode 18 and a ceremonious wedding in episode 26, events that would hardly make sense to pigs. In reality, the principal reason for the domestication of pigs, aside from their meat, is their capacity to eat leftovers from human consumption, transforming such waste into the fat and muscles that we consume as pork after killing the animals. It is our domestication of pigs, not nature, that has made them “piggish”, i.e. dirty, fat and lazy. These anthropogenic features have conveniently been misinterpreted as natural in order to facilitate human exploitation of the animals.¹⁸⁸ In this long and dominant tradition, piglets in *Conan* combine stylized, harmless infantile cuteness with harmonious service and even joyful sympathy for humans, while concealing the rural reality of being bred for docility, consuming waste and ending up split open on the butcher's block for our pleasure and nutrition. It is a clearly escapist fantasy, triggering parental instincts and faking inter-species solidarity to obfuscate a potentially objectionable relationship with nature, but as with High Harbour in general, the depiction of pigs is not completely saccharine. In episode 16 they are actually shown feeding on brown slop and living in very confined enclosures, as is the real tradition. Raising animals on pasture, as pigs and goats seem generally to be raised in *Conan*, is also less environmentally destructive than modern factory methods,¹⁸⁹ so at least some environmentalists would see little to object to.

Communion and Colonization

In episode 2, Conan makes a boat and braves weeks of overcast skies and dense cyclones on what is later said to be a chronically stormy part of the ocean since the apocalypse. That is not the only disastrous long-term environmental consequence of the last war. Very odd behaviour among isopods, moths and gulls foreshadows delayed aftershocks. There are no clouds and no wind at all before the first such disaster in episode 10. Animals in *Conan* apparently have some preternatural way of foreseeing disaster here, but foresight is not an advantage for them. After a night of agitated swarming, the moths die before the quake even happens, and the isopods congregate on the very piece of land that sinks into the ocean. Their deaths serve no apparent purpose, so even though nature is constructed as having inscrutable internal connections, it is not wise, or at least not optimized for self-preservation, which is an unusual fragment of realism to preserve in the otherwise mystical context. Some formalists contend that most films “tend to subordinate nature to the centrality of their human dramas, thereby promoting an ideology of anthropocentric mastery and possession of the land.”¹⁹⁰ The fact that even non-living nature pauses in anticipation in *Conan* can

188 Soper, 87-88.

189 Nierenberg, 36.

190 Ingram, 33. Similar vague interconnectedness is quite common in Japan, occurring for instance in the otherwise more realistic apocalyptic anime *Hadashi no Gen / Barefoot Gen* (Masaki Mori, 1983), where ants seem to have

be viewed as such a case of the pathetic fallacy, although animist traditions may certainly have contributed more in the production. No matter what the reason for the unrealistic foreshadowing, to let an imagined physical reality hinge on dramaturgy in that way emphasizes human concerns and conceals nature's independence.

Looking at a recent fissure in the earth in episode 11, Roa says the crack is still alive, indicating that his psychic powers permit him to share nature's holistic early warning system. Lanna and Conan later feel a similar communion, permitting the trope of environmental disaster to be used politically within the series. Roa and Conan are able to sway Industrians away from their self-confident dogma towards a more harmonious way of living, i.e. High Harbour's way, by warning them of new disasters. However, the earthquakes themselves cannot be prevented, so it is necessary to live with the consequences of having injured the Earth so badly in the first place. Also, Roa sustains debilitating injuries through torture before all surviving Industrians believe him, so apocalyptic warnings are quite realistically problematic.

One of Stephen D. O'Leary's central contentions is that the apocalyptic functions as a theodicy, "a mythical and rhetorical solution to the problem of evil",¹⁹¹ but the cause of the 2008 apocalypse is not explicit. The white-coated scientists who once ruled Industria are gentle and remorseful, not apparently evil. In their presence, Lanna tells the tortured Roa – who personally helped develop the weapons of mass destruction – that his debt is paid. It is a gesture of reintegration and comic apocalypticism, but the old scientists still choose to die with the Tower as it sinks in one of the earthquakes. The men do not seem to believe that a science like theirs, which contributed to the apocalypse, can improve High Harbour. Intellectualism and especially natural science are denigrated in this conclusion. In episode 23, Roa estimates that "tens of thousands" of species have been lost in the apocalypse, an unrealistically small number for such a disaster, and one that is hard to reconcile with the self-destructive hysteria of the animals in episode 10. No specific examples of reduced biodiversity are proven correct. Instead, a woman who thinks dogs have become extinct actually meets one, and no ecosystem shown in the series seems to have a truncated food chain. Nature seems both prone to self-destruction and very resilient, a noteworthy contradiction.

When a tsunami hits High Harbour, its people are able to surround and disarm the invading Industrian army, which eventually falls in love with the idyll. The soldiers achieve a pastoral relocation, in line with Garrard's observation that since the Romantic period, the pastoral has been able to challenge modernity. The aftershocks thus protect good High Harbour and will later punish

had a premonition of the nuclear bombing of Hiroshima. Some animals may actually be able to sense infrasounds which indicate a disaster is coming, but that is not a plausible explanation for the behaviour of so many species so long before the quake in *Conan*, nor does it account for the weather.

191 O'Leary, 14.

bad *Industria*, adding another shade of Aristotelian comedy to the apocalypticism.¹⁹² *Industria* sinks into the sea only after its executive officer gets the electrical power necessary to activate one last *dokuga* like those in the prelude, a gigantic air- and spaceship with the power to destroy the world all over again. A new apocalypse is averted through force as Conan and his friends cripple the *dokuga*, sending it into the natural sea.

Before the Triangle Tower sinks, Briac Roa shows the children a “park” inside it. It starts as a featureless dark hall, but at the touch of a remote control Roa creates holographic images of nature, essentially the same idyllic temperate landscape as on High Harbour but with more of an Alpine inflection. A cottage is added, chirping birds, strolling people, and finally a kiosk selling ice cream. It's convincing until a small holographic child drops a ball and runs through Lanna to retrieve it. The heroine recoils in terror at the experience of such an unnatural simulacrum. Roa explains that the park shows the height of 21st-century science, founded on the ideal of creating everything for humans. Sad music plays over a projection of a winter landscape – i.e. a painting of a photorealistic illusion of nature – as Roa declares the ideal itself to have been a foolish illusion. The idea of using technology to create an environment, replacing nature, is thereby portrayed as the fundamental reason for the apocalypse. The “technological sublimity of simulation, in which nature is no more than a cultural construct” is still a relevant and objectionable scenario for our future.¹⁹³ *Conan's* rejection of it might therefore have been a surprisingly good match for some profound environmentalist theories, if it had been consistent in the series.

With his dying breath in episode 2, Ojii explicitly likens Conan to the trees that sprouted on Nokosarejima, defying the end of the old world to build a new one. It seems as if nature is on Conan's side whatever he does, a *carte blanche* akin to that invoked rhetorically by countless groups who endorse their own political interests as the only natural thing to do.¹⁹⁴ Roa echoes the same sentiments in episode 23. He dies as the last of the “unnatural” scientists of the old world before the festivities of the denouement, although High Harbour does retain a medical doctor. About a year after Roa's death, Conan, Lanna, Jimsy and a group of other colonists set sail at High Harbour to return to Nokosarejima, where the story began. Jimsy brings Umasou and all of her piglets, while Conan has promised to introduce wheat to his island, and to cultivate splendid fields that will “not lose” to those of High Harbour. The protagonist has developed a taste for the rewards of intense agriculture and is no longer satisfied with the bitter berries of wilderness.

There is no trace of the chronic storms that complicated Conan's first journey on his way back. It seems as if the long-term effects of the apocalypse have quieted down, and the colonists

192 Ibid, 201.

193 Garrard, 179.

194 Ingram, 26.

discover that Nokosarejima has risen dramatically from the sea, still topped by the old rocket and sprawling with pristine vegetation. The rocket tree is now the sole remaining artefact of science fiction in the known world, above the surface of the sea. There is no sign that humans would have starved if Nokosarejima had not been colonized, nor is there any indication that people are attempting to limit the rate of population growth to remain within the ecological carrying capacity of the two available fertile islands. Instead, many young children feature prominently in the denouement. It may be a traditional fallacy of Western criticism to privilege the end of a narrative as the source of its “message”, but the implicit message in this case is clear and disturbing: apocalypse is mostly for the better, science should be dismantled in shame, and the proper way to deal with a reborn wilderness is to introduce anthropogenic species and extensive farming. In the eyes of a modern ecocritic, Conan's society is heading for crisis.

Analysis 2: Self-Consciously Sweet *Cagliostro*

Lupin III: Castle of Cagliostro was only Miyazaki's first feature film as director if we ignore the fact that *Conan's* first few episodes were edited together into a movie released three months earlier.¹⁹⁵ He co-wrote *Cagliostro*, significantly inspired by several European historical sources, novels and films. Miyazaki was also limited by the established conventions of the sprawling *Lupin III* franchise. At that point it already included the original manga as well as two TV series and a previous theatrical feature called *Rupan Sansei: Mamoo kara no Chousen / Lupin III: Mystery of Mamo* (Yoshikawa Souji, 1978). Nonetheless, *Cagliostro* subverts the franchise, however briefly.¹⁹⁶ It has had prolific releases in the West, which is perhaps the main reason why it overshadows *Conan* as Miyazaki's first personal work in many places, including Sweden, the USA and the UK.

Lupin III stories take place somewhere past the midpoint of the 20th century. Truly modern real-world settings are scarce in Miyazaki's oeuvre,¹⁹⁷ and *Cagliostro's* proximity to real modernity with its real problems makes the absence of environmental issues in it quite peculiar. As we have seen, both a historical and a threatened, narrowly averted present-day apocalypse are present in *Conan*, and they are both repeated in *Nausicaä* and *Castle in the Sky* as well. Among Miyazaki's early works, *Cagliostro* is the sole exception to the apocalyptic theme. This is especially striking because *Mystery of Mamo* does have a strong apocalyptic theme, though not in an environmentalist mode. There is also no wilderness or pollution of note in *Cagliostro*, and no invocation of the Earth. Instead of systemic problems there is manageable evil on an individual basis.¹⁹⁸ In these aspects, the film prefigures Miyazaki's work in cinema from *Totoro* onwards, until *Mononoke* reintroduced the darker themes.

The film will be treated briefly here because it has a single predominant construction of nature, signalled when Lupin looks out at pastureland and says "Peaceful, isn't it?" after 15 seconds of uneventful silence, a bold piece of timing in the "crime caper"¹⁹⁹ genre. *Cagliostro* is a very good example of pastoral cinema, specifically in the pre-Romantic mode where nature is consistently glamorized but progress and modernity are not confronted. This is almost inherently an escapist proposition, but its execution is consistently light-hearted and so obviously stylized that the film does not invite harsh criticism. As Helen McCarthy puts it,

¹⁹⁵ Clements & McCarthy, 130.

¹⁹⁶ McCarthy, 52-54, 69.

¹⁹⁷ Napier, 153-154.

¹⁹⁸ McCarthy, 68. *Conan* has some manageable evil on an individual basis in the form of the executive officer in Industria, but other problems are clearly more realistically systemic, especially the apocalyptic war with its unidentified pilots.

¹⁹⁹ Clements & McCarthy, 56.

The story takes place in the never-never land that is the Japanese dream of Europe, a rustic paradise of crumbling yet infinitely sophisticated cities and castles; [...]; lakes, mountains and high flower-strewn meadows; [...]. There is a Japanese phrase that sums up this yearning for the beautiful, mysterious fantasy elsewhere – *akogare no Paris*, the Paris of our dreams.²⁰⁰

In terms of natural imagery, this romantic orientation reaches its peak when Lupin and the young woman he has rescued from the clutches of an evil count stand side by side in gentle grass, watching the count's Disneyland-like castle and the wide expanse of grassy foothills and snowy Alps behind it, under a pastel sky. Every element of the environment has been stylized to reflect the happy end of the human drama. In Western culture, the Alps are an “archetypal locus of the European sublime”,²⁰¹ but from Lupin and the camera's vantage point in this scene, they appear lower and therefore smaller than the castle, merely pretty in a world of restored order and spectacle. Some radical environmentalists would connect this unrealistically tidy “tourist gaze” – here a truly exoticizing Japanese gaze – to irrational human fears of inevitable material exchange with nature.²⁰² However, what may appear to be scattered dandelion seeds in a gentle breeze are actually Interpol's paratroopers descending on the castle in the distance, a significant detail. This visual metaphor – helpful, violent humans represented as pretty seeds without agency – constitutes a humorous, reflective exaggeration of the trite tourist impulse.

Lupin achieves “retreat and return” in its simplest sense. At the height of his hectic youth, he tried to rob the count of Cagliostro. Shot while trying to escape, he managed to crawl into a rural garden where he was nursed back to health. A reliable dog who saw him then remembers him and greets him when, once more, he is shot trying to escape from the count of Cagliostro. Again, he is nursed back to health in a rural setting, where the people are as kind as before. Rural nature is thereby constructed as a good place for occasional retreat, but Lupin is driven to return to the city. The very last shot of the film neatly concludes that movement, tilting up from an agricultural landscape to a coastal city, its highways busy with traffic. Lupin and his friends and enemies chase one another into it, and the credits roll. Nature is ultimately a sweet but distant dream, a lifestyle choice among many that the franchise-bound hero cannot make. However, there is pain in Lupin's features when he decides to return to his old life, which does indicate that modernity would be open to confrontation for someone else. Miyazaki did not choose a similar return for his protagonists once he had reached the position of sole writer on his own, more original projects. The first of those is *Nausicaä*.

200 McCarthy, 65.

201 Garrard, 64.

202 Ingram, 27-28. See also Harris, 199-200.

Analysis 3: Multivalent *Nausicaä*

Due to a large number of differences, the film version of *Nausicaä* should be considered quite independent of the manga. Nonetheless, many critics – including Mayumi's team – erroneously view the film as a reduced, more limited version of the same story.²⁰³ In view of that popular misconception I will note some of the differences in the analysis of the film here, with extended commentary on the merits of the manga in Appendix 2, starting on page 61. I have an English-language edition of the manga, so I've decided to use its transcriptions of original terms except where otherwise noted. Both versions are post-apocalyptic, but their setting postdates their creation by more than a thousand years, instead of *Conan*'s 50. The manga's introduction works for both:

In a few short centuries, industrial civilization had spread from the western fringes of Eurasia to sprawl across the face of the planet. Plundering the soil of its riches, fouling the air, and remolding lifeforms at will, this gargantuan industrial society had already peaked a thousand years after its foundation: ahead lay abrupt and violent decline. The cities burned, welling up as clouds of poison in the war remembered as the Seven Days of Fire. The complex and sophisticated technological superstructure was lost; almost all the surface of the Earth was transformed into a sterile wasteland. Industrial civilization was never rebuilt as mankind lived on through the long twilight years...²⁰⁴

No specific date is defined, and as in *Conan*, there are no reliable indicators as to where on Earth the narrative takes place, except a broadly temperate climate. Some states use scale armour and a feudal system while others are closer to the technology and politics of World War I. Degraded science and artefacts from before the apocalypse keep some aircraft and other high technology functional after many centuries.

In *Nausicaä*, the apocalypse and the corrupt modernity that preceded it are not clean as in *Conan*. There are entire lakes full of powerful acid in the wastelands around the Valley of Wind, superficially a peaceful green oasis and first introduced as a relaxing occasional retreat for an old traveller. The consequences of pollution include a slow, incurable petrifying disease, common among the people of the Valley. Industrial waste, debris from urban holocausts and the fallout of the weapons themselves are all conflated into an unseen, omnipresent, physically invasive threat, recalling Rachel Carson's introductory fable. There is too little arable land to move elsewhere, so the people must contain their sorrow, but the situation is otherwise resonant with toxic discourse as a genre: “Disenchantment from the illusion of the green oasis is accompanied or precipitated by totalizing images of a world without refuge from toxic penetration.”²⁰⁵ In addition to this direct effect of the apocalyptic war, a diverse new ecosystem has become dominant on the planet. I will be referring to it by its Japanese name, *fukai*, a neologism constructed from 腐 (rot, decay, souring) and 海 (sea).

203 McCarthy, 72; cf. Mayumi et al., 3-4.

204 Miyazaki, vol. I-III, 5.

205 Buell, *Writing for an Endangered World*, 38.

In both versions of the story, the public believes that the fukai is natural and intrinsically toxic. It is popularly explained as a divine punishment for the sins of the past, a vengeance of gods or the personified Earth. Wild fukai, which is the only form known to the public, literally produces a poisonous miasma, recalling real-world postwar fears of a lingering “radioactive miasma from nuclear weapons”,²⁰⁶ embodied with similar melancholy in films like *On the Beach* (Stanley Kramer, 1959). The mix of spores and particles is sometimes visible as a fog, which seems to explain the character for “sea” in the name, but the fukai is actually a sublime forest with its own animals. Its growth recalls the oxygenic revolution in Earth's real primordial history. Long before the inception of mammals, life radically altered the atmosphere and made us possible: oxygen “is the toxic waste of the first polluters.”²⁰⁷ Wright supposes that pollution has spontaneously caused the fukai through natural selection,²⁰⁸ a symbolically appealing theory, although the film does not confirm it and the manga contradicts it. Such drastic evolution over a mere millennium would not be remotely realistic.

A prevailing wind from the ocean keeps the miasma out of the Valley – survival by chance rather than subordination²⁰⁹ – but mortality is rising. The fukai encroaches upon humankind's fading civilizations, seemingly adding its pollution to that of the earth. The interesting thing about this fiction is the way that the fukai symbolically invokes wilderness while also connecting the vengeance of an oppositional wild nature with apocalyptic toxic discourse. The fukai certainly looks different from any real natural life, but its alien appearance and poisonous aura serve mainly to embody and refine the original symbolism of the wild, conceived as a dangerous contrast to the known world of Neolithic civilization.²¹⁰ Alien means undomesticated, a fresh start for the relationship between humankind and nature, though the stakes are certainly higher.

In the film, a woman named Kushana leads a military operation to annex the Valley of Wind and recover a “God Warrior”, a weapon from the Seven Days of Fire. God Warriors, in the form of 100-foot giants, have both flesh and machine parts. They are world-destroying half-technological human analogues. Apocalypse seems to have been a logical conclusion to the tragedy of industrial modernity, as in *Conan*, but the God Warriors and the magnified temporal scale give *Nausicaä* even more of a fantasy flavour. The idea of semi-organic humanoids as realistically preferable to space-capable moth-shaped bombers is so wildly implausible, and so rich in mythic resonance, that the apocalypse of the past is rendered curiously escapist. By contrast, the inescapable, multi-

206 Garrard, 12.

207 Frederick Turner, “Cultivating the American Garden”, *The Ecocriticism Reader: Landmarks in Literary Ecology*, Cheryll Glotfelty and Harold Fromm (eds.), Athens: University of Georgia Press, 1996, 43.

208 Wright, 4 of 12.

209 Clements & McCarthy, 270.

210 Garrard, 60-61.

generational pain and death of pollution in *Nausicaä* is not escapist, although the heroine herself is not directly affected by it in the film as she is in the manga.

The Ohmu

The film opens in a village recently destroyed by the fukai, which portrays the new wilderness as hostile from the start. Thereafter, Nausicaä – the young heroine – enters the story riding a wind upon a small, bird-like glider. She lands at the edge of the fukai and walks in among its trees, spending about 4 minutes of screen time and apparently several hours alone in there without harm, because of her gas mask. Even the spiritual shades of meaning from the New Worlds seem to be engaged in this contemplative walk through the wilderness, which is much more elaborate in the film version than in the manga. With the aid of novel music and pale greenish blues on the palette, Nausicaä's surroundings are portrayed as alien, diverse, independent of humans and very beautiful. Most of the animals are modelled on insects rather than mammals or other more familiar real forms, and produce a natural-seeming backdrop of noises. The girl collects a luminous spore in a test tube and moves on to a sublime hollow. Shafts of light pierce it from above, dwarfing the figure of the girl. These scenes endorse the sublime, a type of focus theorized to have contributed to neglect and fear of ecologically important features, such as wetlands, while helping to preserve others.²¹¹

Nausicaä realizes that she is standing where an Ohmu recently chewed through the forest. Ohmu are physically vast but otherwise resemble the tiny isopods who died needlessly in *Conan*. Their size contrasts against their form, combining sublime individuality with a shape many viewers will associate with inexhaustible, minuscule life near the root of ecological processes. With that combination of features, the Ohmu seem to embody nature. They function as telepathic guardians of the fukai, feeling the pain of its other creatures and rushing to their aid, at risk to themselves, again a little like *Conan*'s swarming isopods. Several times in the history of *Nausicaä*'s world, humans have irritated the fukai so much that Ohmu have burst out from it in large numbers, rushed as far as they could get and then died exhausted in human-held lands. Spores carried by the Ohmu would then take root in their bodies, leading to a massive expansion of the fukai as the only possible consequence of human aggression. This almost happens in the film and does happen in the manga. Here, Napier's observation of a strong and independent nature in Miyazaki's work is entirely supported.

It is relevant to gaze theory that all Ohmu have 14 unblinking eyes, each one larger than a human, arranged and protruding from the impenetrable shell in such a way that the creatures can see in most directions at once. However, each eye is merely a rounded structure of uniform colour, shaded like a translucent gem. There is no visible pupil, cellular texture or other intuitive

²¹¹ Ibid, 43; cf. Ingram, 35.

resemblance to an appropriately scaled natural eye. Furthermore, all the eyes of an Ohmu change colour as a direct reflection of its mood, which means that Ohmu cannot hide their emotions, effectively empowering human observers without objectifying them in turn. Adding to this, Nausicaä finds a shell from which a mature Ohmu recently moulted, and uses gunpowder to remove a transparent cupola over one of its eye sockets. By unapologetically cutting out the former “eye” of a sublime beast in this way, she appears to deny the animal its subjectivity on a symbolic level. She does it because the people of her valley can use the cupola as a window. In this way it appears that even the heroine is glad to exploit threatening nature in symbolically emphatic ways to further human industry. This interpretation is entirely consistent with psychoanalytical gaze theory, where Nausicaä's action would probably be labelled a figurative castration as well. However, Nausicaä is actually full of empathy. She seems to objectify nothing living. She does kill a few human soldiers in retaliation for her father's murder, but regrets that deeply. She can communicate with anything, demonstrating Wells's observation of politically relevant openness in Miyazaki's protagonists.

Two Revelations

In the bowels of her father's castle, Nausicaä has secretly planted a variety of systematically collected spores from the fukai. By giving these plants soil and water of uncommon purity, from a well deep below the castle, she has made them grow without producing a miasma. After this experiment in natural science, she logically induces that it is the soil of the post-apocalyptic world, not the fukai itself, that is toxic; the fukai is merely redistributing old pollution. Human action in the past – including the viewer's present – is therefore at the root of all of the frightening environmental crises of the future, arguably the narrative's most basic message. Note also a theme from *Conan*: epiphany and purity flow from deep within the Earth, both in Nausicaä's castle and in Ojii's rocket. Nausicaä cuts off the flow of water when she has to leave the castle, so the plants there will die. This is the most damage she ever does to non-human life. The worst thing she does to wild fukai is to temporarily stun a raging Ohmu and step on a giant beetle; she immediately apologizes to the latter.

Gunshots end Nausicaä's period of reflection in the fukai at the start of the film; human conflict interrupts communion with wilderness. The man who fired did so thinking that a flying insect had stolen a human baby. The saved creature is actually a genetically engineered mammal with green gem-shaded eyes as pupilless as those of the Ohmu, though it is not a creature of the fukai. It is frightened, so when Nausicaä gives it her hand it bites her finger as hard as it can. After this realistic nod to psychology, Nausicaä's calm empathy overpowers the creature, which starts to lick the wound it made. It becomes her animal companion, named Teto. Cavallaro wishfully

describes it as “eminently non-fluffy, non-Disneyesque”.²¹² A “cute squirrel-like pet” is unfortunately a much better description.²¹³ Though it is perhaps merely young rather than neotenized in a strict sense, Teto is still adorable, unable to communicate, and completely loyal in the film. Much more than Tikki, it is relegated to the marginal status of a visually objectified accessory.²¹⁴

Osmond identifies “pastoral ideals” in the film version of the Valley of Wind,²¹⁵ which is as intensely agricultural as High Harbour, though apparently more diverse and fully or nearly vegetarian, a positive scenario for many environmentalists. The people forage for bitter but nutritious nuts – recalling Nokosarejima – while also cultivating grapes and unidentifiable other crops on the many fields. The presence of grapes adds a touch of classical Mediterranean pastoral, including Theocritus's Sicily. The only apparent domesticated animal is a beast of burden, barely shown in the film. The peace of the Valley does not charm the invading soldiers however, and the idyll is acutely threatened by Kushana on an ecological level as well. The entire population is mobilized to find and burn spores of the fukai, inadvertently carried by enemy aircraft. The spores function as deadly metaphorical weeds of pollution, and do indeed settle in the Valley. Leaves rain ominously from a great dying tree as the peasants make the difficult choice of burning the Valley's largest forest to save the rest. In the manga, only the oldest tree – a world tree – has to burn. The continuity and sacredness of world tree symbolism is clearly threatened in either version of this ominous event; something is amiss in nature when even the smallest wild seed threatens the meagre, managed ecosystem of the Valley. Agriculture itself is challenged, a faint anti-pastoral impulse. By bringing pollution to the Valley in a military action, Kushana presents a “threat of hegemonic oppression”, another major feature of Buell's toxic discourse.²¹⁶ This level of correspondence indicates that *Nausicaä* is in tune with popular environmentalist perspectives on pollution.

In the middle of the film, Nausicaä drops through quicksand to a sublime cavern under the fukai. She meditates on the sand and realizes that its grains are actually petrified pieces of wood, deposited here after having rendered the poisons of the soil chemically inert. There is no need for masks in the cavern. This is the second great surprise of the fukai: like idealized wilderness, it purifies the earth, though nothing actually lives in the pure land when Nausicaä finds it. Such an

212 Cavallaro, 56. Teto is indeed “non-Disneyesque” in the limited sense of being “unzanified” (Grant, 167).

213 Schodt, 280.

214 This is fully corrected in the manga, where Teto temporarily abandons Nausicaä, snarls, attacks a human, eats a bug, then slowly gets sick and dies, all signs that it leads a life – and has a mind – of its own. Its realistic death, in particular, recalls Baker's recommendation to show what is normally hidden, in this case that even beloved animals are subject to mortality.

215 Osmond, 9 of 18.

216 Buell, *Writing for an Endangered World*, 41.

evolutionary course as a result of natural selection seems entirely unrealistic, but is not explained in the film as it is in the manga.

A Messiah on Wheat

The Kushana of the film has been crippled by insects and hates the fukai unconditionally. She dreams of using the God Warrior to restore the old nature by destroying the new wilderness. The conflict between Kushana's aggressive, selective environmentalism and Nausicaä's all-embracing, pacifist alternative is the central dramatic impetus of the film. The revival of the God Warrior is such a terrible prospect that Kushana's enemies in another nation resort to tricking the fukai. They lure out insects, destroying their own occupied city to liberate it and thereby proving that deceiving the wilderness has negative consequences. In the end they provoke a stampede out of the fukai, towards the God Warrior in the Valley. Just as in *Conan*, all winds mysteriously stop before disaster strikes, a theme subordinating nature to drama. The immature God Warrior fires a couple of cataclysmic beams, but violence is not a functional option, as it was in *Conan*; the giant disintegrates and dies, untouched. Human infighting and aggression against the wilderness have thus produced an acute apocalyptic threat against a pastoral oasis already under the spell of invasive pollution from a different anthropogenic disaster. With the tropes converging in this way for the finale, Nausicaä lets herself be trampled to death by Ohmu before they reach the Valley.

Earlier in the film, Nausicaä communes with one of the Ohmu. It wraps a mass of thin yellow tentacles around her, and the next shot closes in on one of its eyes, letting it fill the screen. This camera movement into the giant eye conveys a gaze penetrating Nausicaä's mind, but because the eye is so little like a real one, there is no intuitive sense of menace. In a scene from her memories, triggered by the gaze, Nausicaä stands in a great field of golden grass under a blue sky, white clouds drifting by, and looks up at a world tree covering the screen in an eyeline match. This vision apparently convinces the Ohmu that Nausicaä will not harm the fukai. When she is knocked unconscious a little later, she recalls another episode, a memory similarly dominated by the golden colour of the field where it begins. The closing credits of *Conan* show a similar, cyclically animated walk under a lane of trees between two fields of grass in a monochromatic, golden world. All of these golden grasses appear at least symbolically connected to wheat. On High Harbour, wheat stood for the best in "nature": a warm colour, moving only gently in the breeze, bountifully stemming from the Earth, easily managed and harmless. The soldiers of Industria actually fired at it while attempting to hit Conan's allies, and tried to levy a tithe on it to feed Industria. At the end of *Nausicaä*, the Ohmu extend their psychically attuned yellow tentacles to the dead girl's body, lifting it far above the ground. The girl is revived, gets up and walks as if on a golden field of wheat in a breeze. The wind does return, the sky is blue again – like the eyes of the pacified Ohmu – and one

onlooker describes the golden field of tentacles as a *kusahara*, literally a meadow. A prophecy repeated in various forms since the start of the film conclusively identifies Nausicaä as a messianic figure because of this walk on a golden field.

In reality, wheat was among the very first crops ever domesticated, as part of the origins of food production.²¹⁷ Its entire family of “golden” grasses is highly anthropogenic and occupies vast tracts of land. The meaning of golden grass sealing the mystical communion of human and wilderness is therefore symptomatic, again undermining the consistency of the ideological content. Grass aside, many have criticized Nausicaä's temporary sacrifice and its effect of sudden salvation in the film, some even seeing the ending as encouraging inaction in the face of environmental crisis.²¹⁸ Certainly, Nausicaä's death seems to have very little to do with realistically productive, hands-on environmentalism. Nonetheless, her unconditional respect for living nature may be seen to illustrate the point of holistic environmentalists like Evernden, that a fundamental philosophical reorientation is necessary for any real change to occur. When Nausicaä stands to face the Ohmu, she relinquishes the old hope of humans having the upper hand: “The final apocalyptic destruction is averted by humanity's reinscription into the natural community.”²¹⁹ Unfortunately, the density of fantasy and religious symbolism in *Nausicaä* would make it difficult to convey that serious point by showing the film. As Buell phrases the problem of science fiction, “Even texts with a serious investment in environmental concerns can get seduced by schlock effect.”²²⁰ He cites Frank Herbert's *Dune*,²²¹ an extraterrestrial ecological epic usually mentioned as an influence on *Nausicaä*,²²² as a prime example of such failure. The level of unrealistic “schlock” is certainly comparable, especially in the example of the God Warriors. Another unfortunate trope of fantasy in the film is its conservative monarchism.²²³ Also, cutting out the eye of an Ohmu and being resurrected on wheat, Nausicaä symbolically communicates a sense that major human impositions can be legitimate, and perhaps sacred.

Buell's ultimate criterion for works of science fiction as “serious works of environmental representation” is ecological limits; he praises examples where “remaking the world is seen as pathological, [...] as futile”,²²⁴ praise that would certainly apply to the portrayal of Kushana's ambition. Having learned her lesson, Kushana withdraws in the epilogue, restoring stability to the pastoral Valley. Napier believes that Nausicaä appears likely to find a scientific solution to the

217 Diamond, *Guns, Germs and Steel*, 97, 100.

218 McCarthy, 90.

219 Napier, 271.

220 Buell, *The Future of Environmental Criticism*, 57.

221 Frank Herbert (1965), *Dune*, London: Gollancz, 2001.

222 For example: Osmond, 5, 7, 17 of 18; McCarthy, 75-76; Clements & McCarthy, 270; Ajanović, 262.

223 Napier, 259.

224 Buell, *The Future of Environmental Criticism*, 60.

problem of pollution as well, the most persistent of three apocalyptic vectors in the film: poison, technological holocaust, and the Ohmu.²²⁵ Children replant the burned forest under the end credits. Finally, the camera returns to the cavern where Nausicaä intuited the cleansing function of the new wilderness. In the sand where she dropped her headgear, a single seed of a pre-apocalyptic plant has begun to sprout. I don't agree with Napier that a scientific solution to the problem of pollution seems likely by the end – and it would be unrealistic – but the children joyfully at work and the familiar green plant below the fukai seem to suggest a future for humans and old nature. It may be the “viable symbiosis” dreamt of in toxic discourse.²²⁶

225 Napier, 259.

226 Buell, *Writing for an Endangered World*, 45-46.

Concluding Discussion

I have not exhausted the titles analysed here, but I may be able to shed some light on continuity in Miyazaki's most current film. The background of this essay's cover image is from *Howl's Moving Castle*. The wizard Howl's private meadow has only grass and a variety of flowers in ecologically implausible harmony, admired by the protagonist. Howl confesses to having used magic in its cultivation, yet the only complication in its glamorization is a temporary enemy intrusion, a reiteration of Industria's battleship at High Harbour. The theme of hostile humans threatening “properly” subjugated nature is thus repeated from *Conan*. Howl's picturesque mountain meadow also recalls the eternal Alpine wonderland of *Cagliostro*, and the park in *Conan's* Triangle Tower.

That holographic park is cleverly used to illustrate attitudes responsible for an apocalypse, but Howl's unnatural meadow is simply celebrated. Reiterations like that appear stale to the point of self-parody. From the many realistic environments and issues of *Totoro* and *Mononoke*, *Howl* indicates that Miyazaki has returned to some of the more problematic traditions he started with. Birds, such as Tikki, are associated almost only with good things in Miyazaki's earlier work; Lanna leaves her body and flies with Tikki to find Conan in the last episode, and Nausicaä's winged glider identifies her as the bird-like messiah of legend. When Howl transforms into a bird it is to wage war, and it nearly drives him mad. Since stereotypical representations are always objectionable, it is ultimately hard to find fault with the sum of Miyazaki's many changes, and details add nuance as in *Conan*. For instance, a less anthropogenic lakeshore competes with Howl's meadow. That lakeshore is relaxing enough in fair weather when the protagonist is happy, but she finds it drenched in rain when she tries to retreat there later on. As in reality, nature can be pleasing but does not exist to serve human wishes, although it seems that in Miyazaki's narrative universe, human emotions are still allowed to dominate the weather.

To conclude the ideological readings, it is clear that neither the TV series nor either one of the two early films examined here can be wholeheartedly recommended as a relaxing, didactic supplement to well-informed environmentalist agendas. Their ideological content is too problematic, especially that of *Conan*, which I contend is another title “without which the rest of Miyazaki's work could not be fully understood”, as McCarthy writes of *Nausicaä*.²²⁷ Though it would make poor propaganda, Miyazaki's early work contains many scenes that could be used to start critical discussions in educational contexts. I recommend the superficial idyll of High Harbour, the Triangle Tower's neatly alienated reflection of modern society, the beginning and end of Lupin's retreat, the wild fukai and Nausicaä's walk on wheat as examples with which to explore the complicated traditions examined throughout this essay.

²²⁷ McCarthy, 92.

Summary

Miyazaki Hayao is a very popular filmmaker in many parts of the world, which is especially significant because of his reputation for good environmentalist messages along with his broad appeal, including very young audiences. To call attention to distorting and destructive cultural traditions affecting humankind's natural environment, I have placed Miyazaki's first three challenges as a director – in television and film – under scrutiny within the theoretical framework of ecocriticism. The aim has been twofold: to find out how well Miyazaki's early work actually corresponds to modern environmentalism and, secondly, to find prominent environmental themes which may prefigure and thereby shed light on other titles in his oeuvre.

David Ingram's *Green Screen*, an ecocritical overview of Hollywood's environmentalist cinema, has been the chief methodological influence on this essay, and Greg Garrard's *Ecocriticism* has been my most central guide to theories underpinning the “environmentally oriented” study of the arts. Garrard presents his overview of ecocritical insights as a series of broad cultural tensions and traditions, viewed as rhetorical tropes which can be invoked to give meaning to nature in narratives. Ecocritics hold that such cultural constructions are based on a physical reality which is always relevant and which must itself be understood through interdisciplinary efforts. Distortions and absences of that reality can be hindrances to a cultural reorientation viewed as necessary in order to halt environmental degradation, in much the same way as gender stereotypes have been perceived as obstacles in the path of equality.

Previous academic work on Miyazaki has generally not focused on ways to present nature. Published studies which do go into detail have tended to foreground Miyazaki's biography and stated intentions, or to look at rather narrow aspects, such as correspondence with the religion of Shintou which would not be accessible to Western audiences. To contribute, I have chosen to look at the contents of Miyazaki's work, and to focus on shared cultural traditions, namely the subset of Garrard's tropes which are most relevant to the TV series and films in question: pollution, pastoral, wilderness, apocalypse, animals and the Earth.

Conan, The Boy in Future has been neglected by scholars for a variety of reasons, though it is a good source of themes and motifs repeated in Miyazaki's more famous work. The “world tree” motif represents a prominent recurring theme; it is a single giant tree found in a variety of religious and secular traditions to symbolize benevolent interconnectedness in nature. Portentously, the main world tree in *Conan* stands in an ecologically implausible meadow, surrounded by pretty flowers for a scenic effect that is clearly subordinate to domesticating aesthetics. The central thematic development in the series is a Romantic pastoral movement, from urban apocalypse back to manual farm labour. A joyous rebirth of nature is cheerfully subverted to unnatural uses, in a tradition

known to have had devastating effects in reality. Some animals are glamorized, rendered in the super-cute style of neoteny which masks the brutal realities of rural existence at the threshold to modernity. Other animals round out a diverse gallery, from a shark in the role of an impotent enemy of humankind, to a communicating bird which thinks for itself as a free and valued friend.

Conan himself is an idealized noble savage entrusted to remould civilization after an apocalypse that is eventually blamed on the idea of creating an environment, yet the narrative actually endorses that impulse upon close inspection. Urban, illusionistic science is condemned, but the mode of apocalypticism is otherwise comic, suggesting hope while invoking the boundaries of Earth as an iconically isolated Blue Marble in the void of space. The natural environment as a whole is internally connected and capable of foresight but – inconsistently – unable to preserve life in new disasters.

Lupin III: Castle of Cagliostro is simpler, stylizing nature as a pretty, stable and relaxing temporary contrast to urban life with great elegance. Despite the relatively modern setting, it is as if environmental problems do not exist. Indeed, if nature were stable as the pastoral genre insists, it wouldn't need protection.

By contrast, *Nausicaä of the Valley of the Wind* is deeply concerned with nature and human attitudes toward it. A fantasy invocation of the trope of wilderness threatens a far future civilization, slowly dying from a heritage of pollution and war. The young heroine and her cute pet discover that the new and alien wilderness, however dangerous, literally cleanses the earth, as in idealistic environmentalism. Nausicaä's chief opponent seeks to destroy that wilderness in order to bring back a more familiar and manageable form of nature, but that ambition proves to be foolish. To avert a disaster, Nausicaä has to prove her universal empathy by sacrificing her own life, thereby achieving a philosophical reorientation which is glamorized by sudden resurrection and peace. The density of the fantasy elements in the film appealed to a real apocalyptic cult and complicates the ideological consistency of the narrative. Symbolically cutting out the subjectivity of an animal symbolizing nature, and walking home on a field of unnature after saving her barely pastoral home, Nausicaä is a complex, multivalent figure.

Considering Miyazaki's long career, it should not be surprising that his first productions as a director do not always correspond to mainline modern ideological hopes, though there is a certain amount of objectionable continuity from those productions even in his most recent film. Ideological analysis indicates that the titles studied here probably would not be effective long-term propaganda for interests seeking to preserve nature, but they can be recommended for discussions of problematic cultural traditions. This essay's attempt to explain some of those traditions may be of service.

References

Japanese and Chinese order are used for names of those origins, listing the family name first.

TV Series and Films

Mirai Shounen Conan

Weekly TV series, first aired from April 4 to October 31, 1978, on the NHK network

Original title: 未来少年コナン

English-language release: *Conan, The Boy in Future*²²⁸

Running time: 26 episodes of 29 minutes each

Planning and production: Nippon Animation, Japan

Original story: Alexander Key (*The Incredible Tide*)

Script: Nakano Kenshou (episodes 1, 3, 5-8, 12-14, 23-26), Kurumi Tetsu (2-4) and Yoshikawa Souji (9-11, 15-22). Some generally reliable on-line sources, but not the anime itself nor any other Japanese sources I've been able to check, credit Miyazaki Hayao with some part of the teleplay for episodes 3-4, 8, 12, 15 and 17.²²⁹

Storyboards: Miyazaki Hayao (episodes 1-4, 8, 12, 15-19, 22-26), Hayakawa Keiji (3-4, 8, 12, 15, 19), Okuda Seiji (4-5), Takahata Isao (7, 9-10, 13, 20), Ishiguro Noboru (11), Tomino Yoshiyuki (14, 21) and Suzuki Takayoshi (17)

Series director: Miyazaki Hayao

Episode directors: Miyazaki Hayao (episodes 1-2, 16, 18-19, 22-26), Takahata Isao (9-10), Hayakawa Keiji (3-7, 11-15, 17, 20-21)

Chief animation director: Ootsuka Yasuo

Character design: Miyazaki Hayao and Ootsuka Yasuo

Mechanical and scene design: Miyazaki Hayao

Music: Ikebe Shinichirou

Producer: Nakajima Junzou

Rupan Sansei: Kariosutoro no Shiro

Feature film, first released 15 December, 1979

Original title: ルパン三世 カリオストロの城

English-language release: *Lupin III: Castle of Cagliostro*

228 This flawed English translation must be regarded as official. Sources of it include multiple Korean and Japanese DVD releases (without translation of the series itself), and the websites of Nippon Animation (<http://www.nipponanimation.com/catalogue/019/index.html>) and Animax Asia (<http://www.animax-asia.com/synopsis/default.asp?pid=87>). The Animax network is airing an English dub in non-Western markets, including India. Fan translations and English-language fandom in general tend to prefer *Future Boy Conan*, a word-by-word – and hence flawed – literal translation.

229 Anime News Network (<http://www.animenewsnetwork.com/encyclopedia/anime.php?id=899>) and Miyazaki's premier Western fansite Nausicaa.net (<http://www.nausicaa.net/miyazaki/conan/credits.html>). Note also this uncredited assertion in the Frequently Asked Questions section of Nausicaa.net's *Conan* pages: “Miyazaki said he didn't like the book very much. When the project was brought to him, he made sure that he could change the story however he wanted.” (<http://www.nausicaa.net/miyazaki/conan/faq.html#book>)

Running time: 1 hour, 40 minutes
Production: Studio Telecom and Tokyo Movie Shinsha, Japan
Original characters:²³⁰ Monkey Punch (pen name of Katou Kazuhiko)
Script: Miyazaki Hayao and Yamazaki Haruya
Screenplay: Ootsuka Yasuo
Director and storyboard artist: Miyazaki Hayao
Music: Oono Yuuji
Character design: Miyazaki Hayao and Ootsuka Yasuo
Art director: Kobayashi Shichiro
Animation director: Ootsuka Yasuo
Producer: Katayama Tetsuo

Kaze no Tani no Naushika

Feature film, first released 11 March, 1984
Original title: 風の谷のナウシカ
First English-language release: *Warriors of the Wind* (1 hour, 35 minutes)
Swedish release: *Vindens krigare* (re-dubbed from *Warriors of the Wind*)
Current release: *Nausicaä of the Valley of the Wind* (uncut)
Running time: 1 hour, 56 minutes
Production: Topcraft, Japan
Screenplay: Itou Kazunori (first draft) and Miyazaki Hayao
Director: Miyazaki Hayao
Music: Joe Hisaishi (Hisaishi Jou)
Art director: Nakamura Mitsuki
Animation director: Komatsubara Kazuo
Producer: Takahata Isao

Others

Akage no An / Anne of Green Gables, Takahata Isao, Nippon Animation, Fuji TV, Japan, 1979.
Bambi, David Hand, USA, 1942.
Flipper, James B. Clark, USA, 1963.
Hadashi no Gen / Barefoot Gen, Masaki Mori, Japan, 1983.
Hauru no Ugoku Shiro / Howl's Moving Castle, Miyazaki Hayao, Japan, 2004.
Jaws, Steven Spielberg, USA, 1975.
Metropolis, Fritz Lang, Germany, 1927.
Modern Times, Charles Chaplin, USA, 1936.

²³⁰ Maurice Leblanc, author of *The Countess of Cagliostro* (1924) and other novels about the “original” Arsène Lupin, is uncredited. See McCarthy, 52-53.

Mononoke Hime / Princess Mononoke, Miyazaki Hayao, Japan, 1997.
Nihon Chinbotsu / Japan Sinks, Moritani Shirou, Japan, 1973.
On the Beach, Stanley Kramer, USA, 1959.
Panda Kopanda / Panda! Go Panda!, Takahata Isao, Japan, 1972.
Rupan Sansei: Mamoo kara no Chousen / Lupin III: Mystery of Mamo, Yoshikawa Souji, Japan, 1978.
Sen to Chihiro no Kamikakushi / Spirited Away, Miyazaki Hayao, Japan, 2001.
Tenkuu no Shiro: Rapyuta / Castle in the Sky, Miyazaki Hayao, Japan, 1986.
Tonari no Totoro / My Neighbour Totoro, Miyazaki Hayao, Japan, 1988.
Umi ga Kikoeru / Ocean Waves, Mochizuki Tomomichi, Japan, 1993.
White Wilderness, James Algar, USA, 1958.

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Appendix 1: Lyrics from the Opening of *Conan*

Below is a transcription and translation of the song played to the opening credits of *Conan, The Boy in Future*. It is a duet sung by Kaneda Naozumi (♂) and Yamaji Yuuko (♀). The introduction of Yamaji's voice (*Oyoge nami...*) coincides exactly with the first shot featuring only Lanna, which seems to suggest that the lines of the two singers correspond to and describe the thoughts of the two principal characters.

Japanese	Transliteration	My translation
Title: 「今地球がめざめる」	“ <i>Ima chikyuu ga mezameru</i> ”	“Now the Earth Awakens”
うみは あおくねむり	<i>Umi wa aoku nemuri</i>	The sea sleeps in blue,
だいちに いのちめばえ	<i>daichi ni inochi mebae</i>	life is budding on the land,
そしてそらが そしてそらが	<i>soshite sora ga, soshite sora ga</i>	and the sky, and the sky,
あしたを ゆめみて	<i>ashita wo yume mite</i>	is dreaming of tomorrow.
ほら うまれかわった ちきゅうが	<i>hora, umarekawatta chikyuu ga</i>	Look, the reborn Earth,
めざめのあさを むかえる	<i>mezame no asa wo mukaeru</i>	welcomes the morning of awakening.
およげなみけたて はしれつちをけり	<i>Oyoge nami ketate, hashire tsuchi wo keru</i>	Swim and break the waves, run and kick up dirt,
こんなにちきゅうが すきだから	<i>konna ni chikyuu ga suki dakara</i>	because you love the Earth so much,
こんなによあけが うつくしいから	<i>konna ni yoake ga utsukushii kara</i>	because the daybreak is so beautiful.
うたえこえあわせ おどれかたをくみ	<i>Utaekoe awase, odore kata wo kumi</i>	Let your voices join in song, dancing shoulder to shoulder,
こんなにちきゅうが すきだから	<i>konna ni chikyuu ga suki dakara</i>	because you love the Earth so much,
こんなによあけが うつくしいから	<i>konna ni yoake ga utsukushii kara</i>	because the daybreak is so beautiful.

Appendix 2: Extended Commentary on the Manga

Many commentators have mentioned the *Nausicaä* manga's cohesion, scope and detailed complexity. It is laid out and formatted oddly, relying heavily on storytelling rather than the features of its medium.²³¹ Andrew Osmond contends that it “resembles nothing so much as a detailed storyboard for a live-action film.”²³² With this peculiar style in mind, I do not feel that the application of ecocriticism with the methods of film studies would be cause for great methodological concern, but the manga is far too complex for exhaustive analysis here.

The heroine does not die in the manga version of *Nausicaä*, avoiding the much-criticized *deus ex machina* of her resurrection as a saviour in the film, although the scene of her reinvigoration on a golden field remains, diminished, in a different context. Like most manga, *Nausicaä* was produced and printed in greyscale, so its images don't convey the splendour of post-apocalyptic nature quite so well as the film, recalling the advantage of motion pictures in engaging “sensuous elaboration”. The Valley of Wind is not sovereign but a mere vassal of Kushana's king. Kushana is not traumatized by the fukai and does not invade the Valley, which plays a much smaller part in the central narrative. As Osmond has observed, this political arrangement undermines the pastoral utopian idealism of the film, although traces of it still remain.²³³ The plot is more grandiose and the amount of arable land in the known world is cut in half. Nausicaä's psychic powers are greatly expanded. On the manga's scale of action, Buell's warnings about the trappings of science fiction hiding the message seem generally more acute, but the resolution of the manga includes a lot more diplomacy and realistic hardship than the film, possibly cancelling that effect.

One of the human empires in the manga uses the motif of eyes very extensively in their symbols of authority, clearly with an awareness of the gaze as an imposition and source of power. With the greater visual detail of the manga's designs, there are also eyes visible on the tentacles of the Ohmu,²³⁴ creating a more intense game of looking and not looking, symbolically won by the Ohmu when the gaze-obsessed human empire is destroyed. Telepathic communication with Ohmu is represented with words, making it more similar to “intelligent” human communication but also recalling the banal talking animals of Disney comics.

The film's first scene, where the fukai has just destroyed a village, is absent from the manga. The fukai is therefore more positive from the start. It is described in formal ecological terms, including the words “ecological” and “climax forest”.²³⁵ There are several diagrammatic

231 Schodt, 278.

232 Osmond, 2 of 18.

233 Ibid, 9 of 18.

234 Miyazaki, vol. I, 124.

235 Ibid, 89.

representations of its growth, clearly mirroring an old but real ecological model for the development of biological communities, closely related to what Garrard calls pastoral ecology. A “climax” formation is the end result in that model, a stable product of gradual succession, inevitable and permanent in the absence of rare and anthropogenic “disturbances”. It was already very controversial when *Nausicaä* was made, having been consistently challenged starting in 1973.²³⁶ However, there is an explanation for it in the fictional context. In the first volume, humans are shown growing dormant Ohmu in vats, which is how they get the babies which can then be tortured to lure other Ohmu. The film does not provide the source of its tortured Ohmu. This is an important change because, in the manga, Ohmu come across as subject to science, not so indomitably wild as in the film.²³⁷ In the second volume, it is revealed that scientists have modified and dispersed a type of giant fungus from the fukai in such a way that its miasma is strong enough to kill other creatures of the fukai, again undermining the sacred oneness of the wilderness as seen in the film.

The third volume reveals that a heavily modified mould is unique in Nausicaä's telepathic experience because of its limited emotional spectrum; it knows only “hatred and fear.”²³⁸ Thus, while the fukai is subject to science, the results of manipulating it may be intrinsically unstable, unlike Teto and other manipulated life-forms that are not compatible with the fukai. This makes it appear, unrealistically, that not all life is made of the same stuff. To stop the exponentially growing manipulated mould, countless Ohmu migrate to be consumed where it congregates. Consumption among creatures of the fukai is mutual and restores oneness, undoing human manipulation. Observing this solution, Nausicaä realizes that revenge on humans was never a priority.²³⁹ This gives the wilderness a more modern environmentalist inflection than in the film: the fukai can be manipulated in a variety of ways, it has no malevolence and it is not a true rival of civilization, but any manipulation of it will hurt humankind in some way, sooner or later.

At the end of the third volume, Nausicaä sees the place where the fukai was born, though she isn't physically present. It takes about a thousand years for the forest to cleanse an area completely, and when that happens, the petrified forest collapses and pre-apocalyptic species move back in. Ordinary-looking moss, grass, flowers and trees are all shown, their seeds perhaps carried by the birds who are seen migrating over the miasma. As in the corresponding place beneath the forest in the film, the life-forms of the fukai cannot grow in the pure land. Nausicaä imagines starting an agrarian society there, like that of High Harbour, but she concludes that military aggressors would reintroduce unsustainable practices if the land became widely known before a

236 Worster, *Nature's Economy*, 202, 391.

237 Cf. McKibben, 194.

238 Miyazaki, vol. III, 61.

239 Ibid, 142.

fundamental change of attitudes could occur, so she abandons the idea.²⁴⁰ She seems to feel that continuing to live near the expanding fukai will have a didactic effect, again strengthening the degree of correspondence between fukai and wilderness as a modern popular environmentalist construction of nature.

Only in the manga, a society known as “forest people” lives inside the fukai. They do not use fire or agriculture, instead humbly begging the fukai for everything they need. They are kind and extremely competent in everything they do, while also looking young and beautiful under their bulky masks. One drawback of their lifestyle is that if the forest people leave the fukai, they lose power,²⁴¹ implying a supernatural aspect of appreciating the wilderness. The forest people's numbers and military strength are insignificant and their food is realistically quite unattractive. Aside from a few such hardships and some superstitions, the forest people are portrayed as perfect, optimistically representing the possibility of a challenging but sustainable and fulfilling life in profound natural harmony, without sacrificing intellect. A positive construction of nature is a prerequisite for such an ideal.²⁴² The ideal is radically different from life on High Harbour, but realistically not a viable option for the entire species.

The forest people know about the pure land and have sent scouts there, but the scouts did not come back. The reason for their death is the ultimate revelation in the manga: All humans, and all other plants and animals presently at large in the world, including the fukai, have been created or altered through genetic engineering. McKibben, fearing the same development in reality, calls it “the second death of nature: the imposition of our artificial world in place of the broken natural one.”²⁴³ With this information, the boundaries between human, animal and technology in *Nausicaä* fade. The fukai's conformity to antiquated ecological ideas can now be seen as a credible shortcut in its intradiegetic design, no longer as a fallacious pastoral ecology. The fukai is fulfilling the purpose of human creators; the way it purifies the planet is not the result of natural selection. Realizing this, Nausicaä wisely feels that its “very existence runs contrary to the laws of nature!”, but she quickly asserts that the fukai is still sacred.²⁴⁴

The modifications made to pre-apocalyptic life-forms like humans include a degree of resistance to the miasma – perhaps with altered homeostatic points of equilibrium – and the ability to breathe impoverished air. The modifications mean that “normal” air and water, such as those of the pure land, are now toxic to all humans. This is quite realistically necessary to keep people alive in the poisoned world, further underlining the film's relatively fantastic mood where people can live

240 Ibid, 238.

241 Ibid, vol. IV, 175.

242 Ingram, 45.

243 McKibben, 190.

244 Miyazaki, vol. IV, 180.

without hints at such modification. Nausicaä helps build an Archimedes' screw at the end of the film, bringing up pure water that would have been dangerous in the manga. Osmond concludes that “Extinction is predestined: even the pastoral utopia [Nausicaä] envisioned [...] is a cruel cheat, an alien world her people will not survive.”²⁴⁵

Considering all of this, we see that the locus of the pastoral moves twice, from the Valley of Wind and other lands doomed to fall under the fukai – making them unstable – to the forest people and their existence in the fukai itself, until the fukai is revealed to be unstable as well, then finally to the pure land. In the last revelation, the pastoral mode breaks down because the pure land is more deadly than the unstable fukai. Nausicaä learns something everywhere, and what she ultimately returns to is unknowable because the brief epilogue provides several versions of her legend.²⁴⁶ Along the way, two places marked with many signs of the pastoral are revealed as something insidious: the tomb of a moribund apocalyptic cult and a brainwashing high-tech trap.²⁴⁷ In this way, the pastoral mode is much more efficiently challenged in the manga than it is in the film. The trope of wilderness is also clearly challenged in the last revelation because it proves that nothing is pristine, albeit in a more extreme sense than what McKibben showed in reality. By asserting that the fukai is still sacred even with anthropogenic genes, Nausicaä avoids the trap of revering a type and degree of nature that doesn't exist. Her criteria for reverence are different, as explored in the finale.

Resolution

God Warriors are highly intelligent in the manga and were created to arbitrate during the massive ecological crisis at the global pre-apocalyptic population peak, so humans would not need to solve their own problems. Another kind of artificial god, which I will call the Crypt, describes that peak as follows: “It was a world in which tens of billions of human beings would do *anything* to survive. Poisoned air. Punishing sunlight. Parched earth. New illnesses coming into being every day.”²⁴⁸ While exaggerated faith in technology is thereby recognized – comically – as a reason for the Seven Days of Fire, a population running into the tens of billions would be unsustainable. It is no longer expected to happen in reality.²⁴⁹ A peaceful solution to such overpopulation is implausible and the artificial gods do not repent, resulting in an inappropriately tragic apocalypticism. There is only a small chance that the Crypt, as we might call the entity who described the old world, may have been lying. Nausicaä believes that it does lie about the future of her species.

245 Osmond, 12 of 18.

246 Miyazaki, vol. IV, 271.

247 Ibid, vol. II, 232-245; vol. IV, 140-170.

248 Ibid, vol. IV, 247. Italics in the original.

249 United Nations (Department of Economic and Social Affairs, Population Division), *World Population to 2300*, official site: www.un.org/esa/population/publications/longrange2/WorldPop2300final.pdf, 2004.

The Crypt claims to have preserved unmodified pre-apocalyptic life-forms in order to restore biodiversity after the fukai has completed its work. When threatened, the Crypt also claims that without such a restoration of genes, humankind is doomed to disappear along with the fukai. However, Nausicaä is convinced that the Crypt is planning to exterminate her species and replace it with a more heavily modified new humankind that would be totally peaceful and incapable of sorrow, so Nausicaä destroys the Crypt and its version of humankind. Her reasons, couched in religious terminology, are not clear. She believes that evolution has already and necessarily surpassed the carefully laid plans of the humans who created the fukai. In particular, she feels that the spiritual depth of the Ohmu was not planned. If she is right, humankind and the fukai will both adapt and survive the final purification, because they both possess a mysterious essence of nature, destined to outwit manipulation and suffer through crisis. As she puts it, invoking a personification of the Earth, “That is for this planet to decide.” The Crypt replies, “That is nihilism!!”²⁵⁰

My interpretation is very speculative here, due to the ambiguity of the material, but it seems that Nausicaä is not a nihilist, since she believes that certain courses of action are always intrinsically wrong. In her ethical system, genetic manipulation is wrong, though its results should only be destroyed if they lack an undefined mystical kernel related to chaos and a full range of emotions. James Lovelock, whose theory of high-level self-organizing ecology stabilizing its own environment is noted as an influence on Nausicaä,²⁵¹ pointed out that oxygen was not just a poison to the old lifeforms it drove towards extinction, it is also a poison to the new and more energetic forms it made possible. Breathing the highly reactive oxygen we need is part of what makes us grow old and die the way we do.²⁵² Nausicaä seems to hope for a similarly nuanced tragedy of natural survival, in keeping with what she perceives to be the essence of life. However, a readjustment to clean air and water through spontaneous mutations, in the few thousand years before the fukai is gone, seems implausible. Miyazaki does not verify the wisdom of Nausicaä's fatalistic decision to trust “this planet”; there is little apart from the words of that teenager to indicate that her species will change fast enough. Instead, the blood of the Crypt that planned to release a new humankind is revealed to be an even richer blue colour than that of Ohmu blood,²⁵³ a substance charged with meaning throughout the narrative. It corresponds to the prophecy of the “blue-clad one”, i.e. Nausicaä, whose dress is dyed in it, and it saves Nausicaä's life when a frightened insect tries to eat her until it tastes the blood of the Ohmu in her clothes.²⁵⁴ The Crypt and the Ohmu seem closely related, so perhaps Nausicaä is wrong and there is no firm ground for ethics.

250 Miyazaki, vol. IV, 249.

251 Osmond, 7 of 18.

252 Worster, *Nature's Economy*, 383.

253 Miyazaki, vol. IV, 268.

254 Ibid, vol. II, 44.

That would be nihilism, a conceptual implosion without stereotypical cultural constructions, waiting passively for nature to reassert itself; not necessarily a productive message. Indeed, Osmond sees a “temporal bias”,²⁵⁵ which in human ecology implies a failure to think sustainably. On the other hand, the fact that the blood of the Crypt has an even richer colour may suggest a phobia of natural impurity, rather than or as well as kinship with the great animals.

By way of a brief summary, the pastoral concept of nature as reinvigorating stability is disabled when every place is revealed to be either unstable or deadly, the concept of wilderness as the “nonhuman Other” is weakened when everything is revealed to be anthropogenic, and apocalypticism is rendered highly ambiguous because it seems impossible to say whether Nausicaä is right. Osmond puts it well:

It is an ending totally unexpected for fans of the film, and indeed the main difference between the two Nauasicaas [sic] is that the manga is not a fantasy of return, to the valley or anywhere else. The past is dead, the future wiped blank, unknowable. The only time is now.²⁵⁶

What remains appears to be a vague supernatural moralism entrusting fate to a personified Earth, instead of encouraging action. In conclusion, the manga has many fine nuances, but from a crassly propagandistic perspective it still suffers from the problem Buell saw in *Dune*: Densely layered, uninformative mysticism is prioritized over the mundane realities of environmental degradation and how to make ourselves stop.

255 Osmond, 13 of 18.

256 Ibid, 15 of 18.