

Contemporary Cinema

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Contemporary Cinema is a series of edited volumes and single-authored texts focusing on the latest in film culture, theory, reception and interpretation. There is a concentration on films released in the past fifteen years, and the aim is to reflect important current issues while pointing to others that to date have not been given sufficient attention.

Eco Media

Sean Cubitt



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and in the future. To that extent democratic rather than individualist, consideration as proposed by *Princess Mononoke* proposes that understanding the richness of the world requires responding to it with grace and tact. These are the virtues of the world left by the gods at the end of the film, surely not an ethics without guilt, but also a kind of innocence.

The Blue Planet

Virtual Nature and Natural Virtue

SEA. Bottomless. Symbol of infinity. Inspires deep thoughts. At the seaside one should always have a telescope. When contemplating the sea, always exclaim 'Water, water everywhere!' Flaubert, Dictionary of Received Ideas (1976: 325).

Innocence and Wonder

Growing up in a small market town in rural Lincolnshire among the exposed eastern flatlands of England, Saturday afternoons had a special aura. We Catholics would, at a certain age, be expected at confession, sometime between 2.00 and 4.00 o'clock. In the beeswax-scented church we would huddle in our balaclavas by the stained deal confessional, rehearsing the self-accusations that alone would guarantee that our innocence would be washed in the blood of the lamb, sanctioned by ritual, sacralised and sacrificed the following day when, queuing for communion, we would provide our elders with the spectacle of holy simplicity on which the artifice of faith depends.

But at just those hours, between 2.00 and 4.00 of a Saturday afternoon, the children's matinees would run at the Starlight Picturedrome between the church and the level crossing, a pebble-dashed building with some cheap stucco ornaments in the Deco style which now seem poor and jejune but then, and even today in certain evening lights, evoked the mystery and delight, the delirium of *Captain Video*, *The Phantom Empire*, *First Spaceship on Venus*, all the terrific zooming through galaxies and thundering through caverns that a small boy could inhabit in the 1950s.

So we would quietly elbow and nudge our way as close to the dread door of the confessional as decency and the long-confessing elderly ladies would allow, then slow just enough to recite to the hidden priest in tones that we believed betokened suitable respect the trivial tale of venial sins to the tobacco-stained soutane glimpsed through the raffa grill. The form of words once told, we could sprint to the nearest pew, hurl ourselves to bruised, short-trousered knees and hurtle through the rosary at speeds that would baffle a Pentium processor. The task of Our Fathers and Hail Marys rendered to the satisfaction of all the saints in heaven, we could tiptoe to the huge door with its circle of roped iron in place of a handle, hauling it open and dragging it shut with quiet respect for those whose faith we shared, before turning to the sudden light, free to fly like birds scattering shoppers and ducks, dodging

cars and bicycles, to arrive glowing with sacramental cleanliness and perspiration at the glass box office window. On the screen unfolded adventures which, I now know, were already fifteen or more years old, coming from years before my birth, before my conception, before original sin. In the Picturedrome's enfolding dark I discovered that innocence which my Church had taught me to prize, but which it had stolen away in the moment that it named it.

For the rest of the week, in the playground and in our ink-stained exercise books, those pictures were re-enacted, and the space between Our Lady of Good Counsel RC Primary School's cheap late Victorian gothic and the twenties instrumentalist architecture of the Sharp's Seeds warehouse would ring with the catchphrases of our celluloid heroes. 'Shazam!' and you would run at full tilt, one fist extended in front of your face, one trailed behind in the imaginary wind; 'Ride like the wind!' and in the immemorial pantomime of a broken trot, one hand holding invisible reins, the other slapping your hip, you rode down the mesas of unknown California. When my father died and the adult world came with its puberty and jobs, the school film club was even more a haven, a still exhalation of that disappearing innocence. Now *Lord Jim* and Michael Caine enacted the rites of cinematic faith, the call of the screen always an invitation to an act of worship. A certain fullness of experience, a certain loss of care, an obliteration of the days: a religion. The experience of cinema was always of enchantment.

Even when, as an undergraduate, I spent long hours at the Arts Cinema with Makaveyev and Has, Godard and Fellini, Faraldo's *Themroc* and Kosintsev's *Lear*, the arty self-consciousness of student life never really damaged the absorption of self into the passing images. To me cinema has always been timeless. Even after thirty years of study, I love more than any others those films that promote, in however complex a way, the state of grace which I can no longer demand from a religion to which, however, I owe in all gratitude my guiltless lack of faith.

There are always two pasts that any narration of media history must address: the time of history and the time of biography. For each of us, as Paddy Scannell eloquently argues (Scannell 1996), the intensity of those early experiences will continue to guide our deeply personal involvement in media institutions. For me that first production of guiltless innocence, forever bound in with the confessional construction of innocent guile, still guides me through the now less intimately welcoming foyers towards the catechism of the frame. Nowadays, when we saunter out no longer blinded by the afternoon sun to talk of shots and ideology, I recognise the sociological and technical constructions of innocence, not least the innocence of children. I only claim that I was and remain affected by that imaginary purity, perhaps more so than the regretful adults who watched us parade towards the

Eucharist on Sunday morning. I want to confess, as if back in the deal box in the Catholic nave, that I am still embraced by that innocence, which is not regressive but marginalised, which cinema at its most sublime can still evoke. In thrall to the most totalitarian of effects extravaganzas, if I were capable of speech, I would be able to shout out in the piping voice of my childhood, 'I am innocent'.

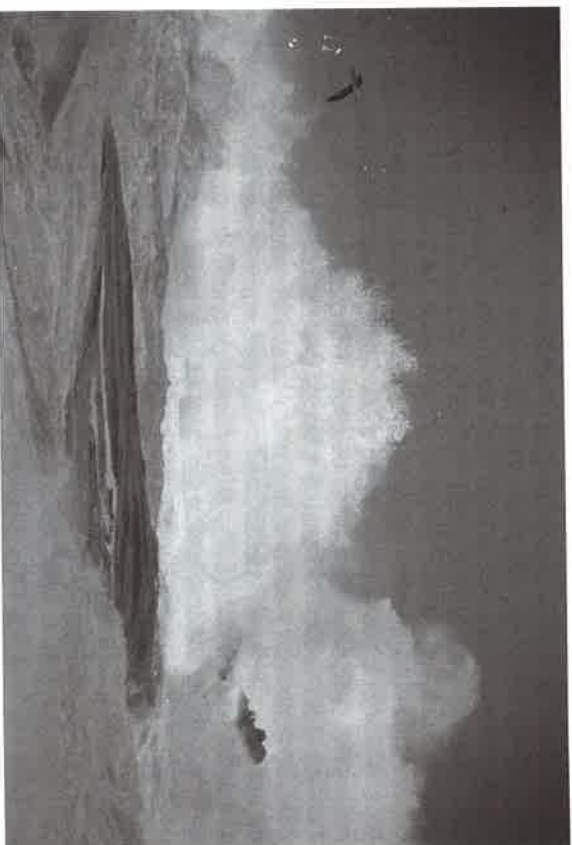
If I say that this innocence is not regressive, it is because it is strictly speaking timeless rather than nostalgic. Like the sacraments of childhood, it is a gateway to a world without time. I have been lucky. The contemporary cinema of North America is more and more devoted to just this achievement of innocence. Of course, to achieve purity in an age like ours, and to achieve it among haggard and jaded adults, is like a victory: it cannot be achieved without those atrocities, news of which is carefully kept from the monuments and celebrations. If Jean Baudrillard were right, I would say that what we have is the simulation of innocence, but that would not be true, because the effect of which I speak, while it is technologically achieved, is not itself technological but experiential and affective, and there is no unreality in the world of affects. This innocence of the movies is as real and as true as any innocence ever was, but that is not very much. Innocence was always an artifice, biographically and ideologically. It has a history, especially in the 19th century Romantic cult of childhood (on whose 'impossibility' see Rose 1984). Indeed, it is in that cult that we find the first descriptions of the technical device used to achieve that filmic state of grace: the sublime.

Beauty is ephemeral by its nature it cloaks what changes: a lover, a landscape, a work of art. Beauty is our highest expression of what it is to be mortal. But innocence and the sublime transcend this terminal horizon to speak to us not of the afterlife but of a life unbounded by the horizon of death, and perhaps without the stain of birth: a timeless time of the infinite. In my green youth, it was the fabulous world of outer space that called to me through the glittering screen. Today it is as likely to be the spectacle of the ocean, which from the earliest films of the Lumières showed its intense affinity with the cinema. Perpetually changing, forever the same, light moving on water is, like cinema, a contradictory delight and, unlike anything else we watch on screen, never resolutely lost in time. Natural history documentary, and the documentary as an element in fiction, comes closest to absolute spectacle in the image of Ocean, and it is there that beauty and the sublime meet in a moment of innocence. This sublime and innocent effect, incongruously and unconsciously evoked in Lyotard's essay on 'Acinema' in the figure of the child playing with matches (Lyotard 1978), belong to a different order of time from narration, dependent on time's passing and its loss. Mesmerising, it is the time of the fetish.

Perhaps it is unnecessary to rehearse the Freudian theory of the fetish: the deliberate construction of a psyche innocent of sexual difference through the displacement of anxiety attached to the sight of genital difference onto some accidentally proximate object (Freud 1977). I do not claim that waves and water are necessarily sexual: on the contrary – they may obtain their energy from displaced sexual anxiety, but the recirculation of that energy is as specifically asexual as it is immortal. Sexuality, like mortality, is a temporal phenomenon, structured by the yes and the no. Always negotiated, it has its narratives, its direction through time, its goals and its regrets. But the sublime knows nothing of that, denies and annihilates it in the vast emptiness of obscene completion. The sublime, it must be said, is a property of the mind, not of the world: it is a surrender to the otherness of the world, and even more to an invisible abstraction of worldness or of deity that exceeds not only human comprehension – and therefore communication – but the world itself. In this philosophical definition, the sublime is quite distinct from the cinema of special effects. Such effects lie athwart the linear dimensions of narrative, providing the monotony of story with a release into another vector; and on occasion the spectacle of the film has ambitions to exceed the dimensions of the cinematic, the medium demonstrating its own power to exceed mediation itself. On those occasions, cinema communicates not the sublime – which is by definition incommunicable – but the idea of sublimity. In such films death serves the function of terminal communication, what cannot be spoken. This cinematic sublime constructs an apparatus for the imitation of that zero degree of speech, and so constructs, as an object of awe, an event that contradicts its own existence. But there is another mode of apprehension that permits a shock of non-recognition, and yet refuses the blandishments of a pseudo-religious surrender to the absolute. The phenomenologist Maurice Merleau-Ponty refers to it as 'being filled with wonder', explaining 'that in order to see the world and grasp it as paradoxical, we must break with our familiar acceptance of it and, also, from the fact that from this break we can learn nothing but the unmotivated upsurge of the world' (Merleau-Ponty 1962: xv). The phenomenological method of bracketing off our familiar, socialised representations and expectations in order to see the world with fresh eyes is distinguished from the sublime in two ways. Firstly, it proposes that once the blinkers of habit are removed, the world can and indeed must be perceived, because humans and their world are of one stuff. And secondly, it suggests that the world, and implicitly human apprehension of it, is without ulterior or external force, lacking in goals or motives and instead can be experienced as a constant welling up into existence. This sense of wonder is not only communicable: it is of its nature a communication, based on removing the blockages that otherwise prevent the world from experiencing humans, as much as humans experiencing nature. Against the sublime's pretence of a timeless, universal and to that extent unnatural order bordering and

potentially overmastering our own, although forever alien to it, wonder poses laying bare the flesh, the eyes, the nose and ears to experience the world anew. That, initially, is the meaning of innocence.

Watching Waves



Black browed albatross flying over crashing waves (Diomedea melanophrys) Falklands Is. Production still from *The Blue Planet*. Photograph © Ben Osborne/naturepl.com

It is this innocence that in the first instance, shapes the television persona of David Attenborough: schoolboy enthusiasm in a seventy-year-old man. Perhaps uniquely among senior television personalities, Attenborough seems universally popular, the best director general the BBC never had. In a career spanning decades, including the blockbuster TV documentary (including *Civilisation* and *The Ascent of Man* as well as his own *Life On Earth*), Attenborough has collected nothing but accolades (see Cubitt 1997). His personality as much as his voiceover dominates the reception of *The Blue Planet*, 2002's eight-part 'natural history of the oceans', just as his presence on screen must have helped Discovery Channel make their investment in an extremely expensive series. The surprise success of television series on sell-through DVD must have been a bonus, but the BBC's unusual license-free funding structure is very probably responsible for the existence of the series at all: very few large-scale documentaries, and those usually with far clearer human interest angles, get made in purely commercial television

circles. Even so, the series required a partner, both financially and politically. The BBC's license fee is voted on by the British parliament, and the corporation's balance between ratings success and public interest programming is under constant scrutiny from left and right. Partnerships with overseas companies guarantee not only a pre-sale but presence in the crowded international markets for television programming where most television series will find their eventual profits. As much as the networks of scientists, conservationists and researchers involved in production, this infrastructure of distribution is critical to the very existence of series of this order, a genre which the BBC has very nearly made synonymous with itself. The structures of international broadcasting, what Peter Watkins (2001) calls the universal clock, is clearly visible in the episodic structure, where individual stories never extend over the 12 minute mark, at which the standard four minute advertising break is usually placed. Though the BBC does not carry advertising, many of the broadcasters it sells on to do, and their revenue stream has to take precedence over the aesthetics and even the science of *The Blue Planet* (we will see an example of a different episodic structure in Chapter 6). These distributive structures underlie and shape the series and its delivery to audiences. To a great extent, the success of TV material on DVD must be attributable to the desire to watch through without the interruption of commercial breaks, so much so that ordinary viewers will part with substantial sums for box sets (not just academics who can recoup the cost in tax, research budgets and kudos).

Equally significant is the distribution of knowledge through this exercise in the popular communication of science. The programme must equilibrate the public service ethos of informing and educating with the requirements of entertainment. In order to acquire sales, hold audiences and build a viable vehicle for promoting both scientific knowledge and broadly ecological themes, the series foregrounds its spectacular cinematography, marked by technical expertise, grandeur and rarity. Scale is important: the series opens with a sequence on blue whales. Rarity, like the bizarre brine lake of episode 2, and the sense of epic sweep secured in time-lapse sequences likewise feed into spectacle. In addition, the series topic has a special place in the history of cinematography. Since the Lumières first photographed boys diving into the sea, audiences have delighted in the play of light moving on water (Coe 1981: 71; Slide 1982: 65, 67). With the same meditative absorption with which we gaze onto the sea itself, we gaze into its picture on screen, the two processes bound by the abstraction they bring to viewers, the infantile pleasure in the sheer movement of light. It was just such absorbed distraction that early censure of cinema singled out for blame (Craty 1999), and that maritime science cannot but evoke, but which it must subsume into focused attention.

At another level, the experience of watching waves, or the strange and to that extent magical world of the sea, belongs with Benjamin's observation that 'nature is Messianic by reason of its eternal and total passing away' (Benjamin 1979:156). If Adorno was right in locating this as an early draft of the *Theses on the Philosophy of History*, then the sense of the Messiah here evoked is that eternally-present moment in history at which the Messiah might arrive, and which therefore sanctifies the present instant with the possibility that in it all history might be at once fulfilled and ended, 'time filled by the presence of the now', a 'leap in the open air of history', 'enough to blast open the continuum of history' (Benjamin 1969: 261-2) and, for Benjamin, therefore also fundamentally revolutionary. I cannot claim that being mesmerised by the ebb and flow of light on a TV screen is in some way a radical political action; but there is undoubtedly a utopian quality to it, a surrender to pleasure, to the infinite, and to infinite change, that provides not only respite from labour and a chance to recuperate, but a distant whiff of another life, unconstrained by the endless round of work and attention. Unlike Messianic time, the ocean's restlessness is a perpetual disappearance, a model for the disappearance of history (or in Marx's terms prehistory) in the emergence of the realm of freedom. This distant utopian gleam is reprised in the freedom of fish and birds, and perhaps most of all in their streamlined shapes, the perfection of their adaptation to their environments, and their ability to move in three dimensions. Like God's winged angels, these finned and feathered creatures appear as messengers of another and better mode of being.

This innocent utopia of the wild seas has a particular temporality. We consider recordings to be records of the past, but the experience of watching water is of a now that extends indefinitely. The precise configuration of light in the frames that pass by is irreplaceable, but another, infinitely or infinitesimally different, will always supersede it, so that its timelessness is not that of the philosophical absolute but of an endlessly differentiating repetition. I believe this is what allows the image of light on water to approximate to Charles Sanders Peirce's description of 'Firstness', 'Feeling, the consciousness which can be included with an instant of time, passive consciousness of quality without recognition or analysis' (Peirce 1991: 185). In Peirce's scheme, firstness names the perception of a phenomenon before its source is separated out as an object ('secondness') and named ('thirdness'). This moment of pure perception without objectivisation or significance can be, as it is here, intensely pleasurable. In this context, it suggests the sea is intrinsically valuable because it is beautiful. A utopia notably lacking in human beings or warnings about pollution – that task is reserved for the tail-gunning documentary 'Deep Trouble' presented by series director Martha Holmes, who does an excellent job of arguing for the unequal distribution of blame, with the fads of the wealthy the most dangerous to aquatic life. But such is not Attenborough's line. There is

little mention of rarity and none of endangered status. This utopianism depends instead on recognising the elegance of the whole system as well as its mysteries, in short the beauty of the seas. Distinctions between one environment and another in the episode titles ('Tidal Seas', 'Coral Seas' and so forth) scarcely impinge on the message of the introductory episode: that all of these ecosystems interact between themselves and with the terrestrial and meteorological environments to boot. Only missing is the human, except for the familiar screen presence and insightful science of Attenborough himself, whose sheer seniority if nothing else allows him to speak, not for the oceans which are presumed to speak for themselves, but for the scientific community that seeks to understand them.

The Blue Planet, as Robert Frost had it of poetry, begins in delight and ends in wisdom, but is that wisdom, deprived of political analysis, merely a beatifically meditative state? Or is it the necessary Temporary Autonomous Zone which we need, argues Hakim Bey, because without some experience of liberation, the struggle to achieve it would be abstract and empty? A case can certainly be made that *The Blue Planet* is a work of art, where art is a work of delight and wisdom which attains a certain autonomy from human or indeed any other interests. In this sense it is no criticism to say that the series lacks ethics: unlike ethics, aesthetics is not bound to answer the question 'for whom?'. Similarly science, where it is a disinterested pursuit of knowledge, can seek knowledge for its own sake as art can aspire to art for art's sake. Yet it is also the case that the beautiful, contra some environmentalist thinkers (Leopold 2001 for example), is beautiful to the extent that it can be discussed. The old adage '*de gustibus non est disputandum*' holds good only because it is impossible to persuade people to change their idiosyncratic tastes: every taste can be argued. Only the sublime is beyond discussion. Beauty and ugliness exist along a continuum. Where we place a particular species on that continuum is a matter of taste. What these programmes raise is the system's beauty rather than that of its individual denizens, and the quality singled out for marvel is the creativity of the system: not just what it has produced, but the power of invention that slots life into every available and many apparently unavailable niches. Marvelling at the ecosystem, enjoying the beauty or ugliness of its denizens, these are on the one hand sheerly scientific pleasures, but they are also, where marine biology is prepared to make its case, the elements of wonder as a secular virtue, a delight in the water because it is lovely, and in its inhabitants as something more than dinner.

Truth and Style

It is always possible to raise the Madagascar periwinkle argument for preserving biodiversity. That small plant yields vincristine and vinblastene, widely used in the treatment of leukaemia. It gives its

name to the argument that we never know which unassuming scrap of life might yield some vital service to humanity. But it is not an argument raised in the series whose ultimate beneficiaries are not, or not exclusively human. This beauty is presented, it may well be, as grounds for a subsequent persuasion, which could stretch from recommending a career in marine biology to a commitment to veganism. Its celebration of creativity is, however, also systemic, neither individuated by species nor personalised as the property of a single fish or mollusc. Creativity inheres in a system which both promotes creativity and evolves through the creative processes it enables and nurtures. Both considered and considerate, *The Blue Planet* exhibits a kind of structured respect for that subjectless creativity, without requiring that it be like, in some sense yet to be fathomed, the life of the mind or like art. Without the anthropomorphisms that create the comedy in Besson's *Atlantis*, like Besson's film *The Blue Planet* rejoices in sheer movement. But Attenborough clearly enjoys not only the obviously aesthetic moments – a dolphin pod leaping into the sun – but also the scientific first and the technically challenging; deep sea mitochondria or the nocturnal ejaculations of a coral reef. Given the complexity of any ecosystem, and the near impossibility therefore of photographing it qua system, such moments stand metonymically for the principle that 'everything connects with everything else' (Commoner 1971: 33).

The theme of nature's endless creativity and the mesmerising firstness of the waves should not, however, diminish the sense that nature too has a history. If, in a phrase Stephen Jay Gould attributes to Dave Ramp, "To a first approximation all species are extinct" (Gould 1989: 216), absolute conservation is not an option, indeed Edward O. Wilson estimates the extinction rate of species at about one species per million per year (Wilson 2002: 99). Change is the rule, not the absolute homeostasis of the perpetually self-identical which Hegel derided as the night in which all cows are black (Hegel 1977: 9). Commenting on the mystical Oneness ascribed to nature by new age ecologists in the light of this adage, Murray Bookchin argues that humanity's separation from nature, far from unique, is typical of evolutionary history:

We must see that *every* process is also a form of alienation, in the sense that differentiation involves separation from older forms of being as well as the absorption of what is negated into the new, such that the whole is the richly varied fulfilment of its latent potentialities (Bookchin 1996: 76)

Bookchin's idiosyncratic reading of natural creativity – a belief that life-forms are self-directed and participate in their own evolution – embraces the Hegelian process of subsumption (*Aufhebung*) in which time is the dialectical process of overcoming and assimilating

oppositions. Explicitly rejecting negative readings of Hegel, Bookchin wants to regard evolution as a process of increasing complexity and order driven through moments of differentiation and its overcoming. Unlike the poststructural theory of difference, Bookchin reads difference as a positively productive process. To make an analogy, the structural analysis of images isolates the vanishing point as the origin of perspective in painting and cinematography; Bookchin's philosophy would read the same point as the alienating moment of differentiation from which the ordered complexity of the image evolves. Rather than a gap or lack, for Bookchin differentiation is a process of emergence and branching paths of opportunity and development. It is in this sense that the firstness I have tried to identify in *The Blue Planet* might be understood: as a principle of perpetual flowering, a welling out of unnamed and as yet unrealised potentialities, rather than as a record of disappearance. Likewise the sense of the present tense of these images derives not from a timeless nature apart from human understanding but from the meaning of the present as that unique moment in which the future is perpetually springing into existence. And finally, this is the logic of the theme of ignorance that runs through the series – ignorance of the vastest ecosystem on the planet. At any moment, and at several during the shooting of the series, new phenomena and new species are emerging into the light of knowledge, and the future contains millions of unknown species. This articulation of science not as a body of knowledge but as a process of discovery is key to the portrayal of science as joyful, synthesising the BBC's remit, to inform, educate and entertain.

Yet the very virtuosity of the series' production raises a curious dilemma. To define a pristine nature, to communicate its privilege over the ordinarily political, and to place it in a public realm where its virtues can be implicitly contrasted with the viciousness of the forces that endanger it, the series uses high end technologies. In Episode 2, devoted to 'The Deep', Attenborough's commentary emphasises the absence of light at depths below 800 metres, demonstrated in one sequence by turning off the headlights of the camera submersible to observe bioluminescence, and in another with reference to the especially strong filtering out of red light, demonstrating the camouflage benefits of deep red colouring, and the predatory power of illuminating and seeing in the red end of the spectrum. Both sequences demand complex lighting and grading to allow viewers to see both the emitted light and the outlines of the creatures that make them. A female angler fish, whose bright lure is featured in one of *Finding Nemo*'s more memorable sequences, must be lit only parsimoniously if the relative brightness of the lure is to be apparent. While some of this can be achieved in camera, more must be the result of pushing different areas of the image during the digital grading process in post-production.



Nature as special effect – Female Anglerfish - Deep sea species from Atlantic Ocean {Caulophryne sp.}. Production still from *The Blue Planet*. Photograph © David Shale / naturepl.com

Meanwhile, given that we are told that only five submersibles are capable of reaching the depths navigated by Alvin, we are treated to a shot of Alvin descending into a deep trench below the abyssal plain. Whether this is shot from a second, invisible and uncommented submersible, a reconstruction at shallower depth or a digital effect or composite, it is deeply evocative of the intense technologisation required to secure pictures from 'The Deep' oceans. Scientific realism is often a matter of readjusting the unobservable so that it can be observed. The human eye cannot see in the majority of the electromagnetic spectrum: instruments observe on our behalf, and false-colour algorithms allow us to see the phenomena they gather reduced to the red, green and blue that we can perceive. And if, as becomes apparent from the accompanying 'Making Waves' documentary, the whale carcass so darkly populated by hagfish was towed and sunk so that they could be filmed, surely this has the validity of scientific experimentation, if it brings the bonus of filmed footage of a previously unfilmed sleeper shark? The unaided human cannot swim much below ten or twenty metres. Whatever there is to discover of nature, as knowledge or beauty, will have to be gathered with the aid of technology.

The relation is reciprocal. The newer digital technologies seem to draw inspiration from these weirdly glittering deep sea jellies, so evocative of the spinning spacecraft of Spielberg's *Close Encounters*, not to mention the angler fish in *Nemo*. Attenborough's commentary singles out 'another twilight monster, Phynyma, the inspiration for the *Alien* movies', a conscious evocation of the special effects of blockbuster cinema to counterbalance the spectacle of such unexpected species. The soundtrack meanwhile evokes nothing so much as Louis and Bebe Barron's score for *Forbidden Planet*, entirely electronic. Though the series uses dolphin clicks and whale song as occasional accompaniments, for the most part the sounds of underwater species are not strongly signalled. In 'The Deep', the challenge is the greater since, presumably, the immense water pressure would allow only subsonics, and large numbers of the species shown are soft-bodied and would make little if any noise.

Television, perhaps because of its origins in radio, is unfriendly towards silence, perhaps even more so than cinema, where music may have been introduced to drown out the chatter of the projector and the hiss of the old arc lamps. Nor is the sound of the submersible's motors, of aqualungs and the technical chat of the scientists and camera operators sufficient to accompany the images. Yet in other episodes, George Fenton's score is for the most part orchestral in tone, and the sound effects most commonly of water itself, with occasional great swishes and swooshings for the passage of shoals. For the section of episode three devoted to comb jellies' nightly forays to the near-surface waters in search of inchling fish spawn, some of the same electronic

themes re-emerge, but now accompanied by a melodic use of long, complex chords. Elsewhere in the same episode, an ornamental but fearsome swimming crab is introduced with music from the Peking Opera. But in 'The Deep', the sounds associated with the most alien species, the jellies and arthropods, evoke extraterrestrial scenarios, with more recognisable sounds like electric guitar reserved for relatively comprehensible if still bizarre predators like the fangtooth and the hairy angler, for whose hunting, however, Fenton also deploys, humorously, stock musical phrases – tiptoes in the dark, menace of the haunted house. Calling up memories of the genres most associated with special effects – science fiction and horror – sets up a zonal boundary between 'The Deep's and the shallows, a transition vividly caught in the move from distant electronic cries and reverberations to a lilting four-note theme accompanying the journey of firefly squid toward the surface in a sequence which ends with a majestic brass fanfare as the sun rises. The closer the series approaches to the familiar world of air, the more natural its sounds become, both in instrumentation and in direct sound recording of birds and marine mammals. The further it strays into domains where humans can only survive protected by advanced technologies, the stranger both sounds and musical elements become.

The editing too rejoices at significant moments in its artifice. Many of the sequences are necessarily brief, given the circumstances of finding and recording creatures in the vast expanses of the open sea. Some sequences are compiled to communicate a topic, such as the understated crossfades between miscellaneous grazers and predators heading for shallow waters in what is described as a convoy in the voice-over. At precisely this moment, a downward pan across the body of a predator is used as a wipe to reveal a shoal of squid rising to the surface. Elsewhere the rising moon serves the same purpose. A more telling example comes in the fade in 'The Deep' episode introducing the descent to the abyssal plain. Viewed in slow-motion, the scale of the ocean floor changes, from the backdrop to a tiny CGI submersible to a close-up inspection of its component sand and rock. Given the cloudiness and darkness of underwater shooting, photography alone is incapable of conveying the three-dimensional scale of the undersea environment, and the programme makers have to use some form of artifice. Graphs, maps, even Earth-observation satellite images are all more obviously mediated constructions. The decision to go with CGI would then appear to be grounded in a desire for immediacy, a paradox in that immediacy as affect can only be achieved through the most highly mediated technologies. As Bazin observed half a century ago, 'realism in art can only be achieved one way – through artifice' (Bazin 1971: 26). The hallmark techniques of Bazinian realism – the long take and especially deep focus – require advanced technological devices and technical skills. At a certain point, Bazin admits, pursued for its own sake the artifice takes over from the mission to reveal reality. The

Blue Planet, at moments like these, hovers on that borderline, not so much because of an intoxication with the possibilities of the medium as because the vocation towards communicating marine biology and the ordinary techniques of scientific observation meet in indirect observation and the trope of analogy that is so frequently deployed in the voice-over, in the score, and now in the communication of unphotographable scale.

Analogy is not fiction but rhetoric. For the opening sequence exploring the wreck of the *Titanic*, James Cameron secured the services of two of the five deep-sea capable submersibles, the Russian *Mir-1* and *Mir-2*. The remote-operated vehicle (ROV) Snoop Dog belongs to the *Mirs*, and the footage gathered aboard the wreck comes from dives made, with Cameron aboard, in September of 1995. Reverse angles of the ROV are model shots: even though both *Mirs* possessed one, the danger of placing two in enclosed spaces was too great. Similarly, shots of one or other submersible in proximity to the ship are location footage, but wide angles containing both are model shots, also required because Cameron's dives coincided with Hurricane Luis, which along with the rest of the season's hurricanes had stirred up even the silt on 'The Deep' sea bed. To recognise the fineness of the distinction, it is worth recalling that Cameron planned his dives using the same model that would be used in the effects shots, and that the model in turn derived from extensive video footage of the wreck secured during earlier dives. According to Paula Parisi, 'Dive time was so precious Cameron would often make the split-second decision to shoot the rehearsal move, putting him in the unusual position of shooting film the first time he laid eyes on something – the realm of the documentarian, not the feature filmmaker' (Parisi 1988: 67). Despite the intercutting of these shots with narrative dialogue scenes, there is a claim to be made that the model shots are true analogies of the location shots. But the analogies operate to tie the wreck to the fictional narrative that they introduce, the love triangle of Rose, Cal and Jack, adding to the ship's fictive geometry of gender and class the dimension of time, loss and healing. In *Titanic*, the rhetorical trope functions in relation to fiction.

In the BBC series, however, it works in relation to the popular communication of science. The analogical structure of the 'convoy' of deep sea denizens towards the night-time surface is conducted through montage, the individual creatures standing for a mass migration across the oceans by definition impossible to capture except *pars pro toto*. Indeed the whole series operates on a montage aesthetic, collecting details, no one of which contains the whole, until they add up to more than the sum of their parts. The anomaly of the CGI shots, however, is that they represent one of the rare instances in which human activity figures in the series, other than in the generic 'science', 'scientists', or 'we', denoting the human species. Thus where the Cameron sequence serves

to humanise a deep sea phenomenon – the rattails winding through a sunken bedroom, for example – the CGI shot of the submersible in 'The Deep' episode serves to dehumanise and alienate the abyss. To return to Bookchin's argument about the necessary function of alienation, of making other, in the dialectic of evolution, the purpose of the shot, and particularly the shot transition is to establish the gulf that divides human and natural, but in order to pose the otherness of the natural as that which must be overcome in a new knowledge of nature which will renew the nature of knowledge.

Marine Ethics

This dialectical vision, while it may or may not be good science, opens a gateway through the aporias of environmental ethics. Among the contributors to Pojman's important anthology on the subject, Holmes Rolston III analyses four possible structures in which nature comes to have value. Anthropocentric ethics are grounded in human self-interest. Anthropogenic ethics stress human interest (without the 'self'), the value placed by humans on non-human life, exemplified by political or financial contributions to preserving Antarctica, a place few of us will ever visit for ourselves, but which most of us believe should remain untouched wilderness. Non-anthropogenic ethics stress the similarities between human and non-human, values shared across sentient species like a wolf's care for her cubs. The strongest ecological claim is for the intrinsic value of nature, a value not grounded in consciousness, as for example the way a plant values sunlight. In many respects, *The Blue Planet* embraces this last option. Its paens to the sulphide and hydroxide-loving ecologies of the ocean floor, for example, suggest that the miracle of their existence is of value in and of itself. But in addition, the programme alerts viewers to the possibility of other undiscovered phyla lurking in the unexplored nine-tenths of the ocean depths, suggesting that knowledge too is a virtue, and that knowledge of the natural world is likewise a good, regardless of its potential service to humans. The ethical dialectic is then between the unknown ecosystem which is a good in itself regardless of our knowledge, and knowledge which is also a good, regardless of its instrumental uses for human self-interest. The little CGI submersible then articulates a complex negotiation between alien and self, the unknown and knowledge. A virtual token of the tiny proportion of the sea that has been explored, it also signals the vast and precious mysteries that surround us, and the tact and caution required in exploring further.

Scientific realism is not the same as photographic realism, though photography is one of its instruments. Biologists are if anything more likely than physicists or chemists to embrace the elegance of systems rather than the potency of objects. As J Baird Callicott observes, here agreeing with Rolston, 'The ontological primacy of objects and the ontological subordination of relationships characteristic of a classical

Western science is, in fact, reversed in ecology' (Callicott 2001: 131). The challenges this raises for television are considerable, and the montage aesthetic adopted by *The Blue Planet* is remarkably good at overcoming it. At the same time, in order to capture and hold viewers long enough for such complex conceptualisations to be communicated, the show must attract visually and aurally. Here the dialectical vision Bookchin brings to bear is again useful. An aesthetic based exclusively on the intrinsic value of the natural world would have to portray it as innocent – innocent of human interests and human knowledge. An anthropocentric aesthetic would have to argue the case for the instrumental value of knowledge, in the development of new exploratory technologies and new pharmaceuticals or feed stocks.

But the series' negotiation between intrinsic and anthropogenic values avoids, for the most part, the sublime, unquestionable and unarguable, in favour of wonder and the beautiful. Its portrayal of nature is of an innocent world, a world of intrinsic values like food and reproduction, whose beauty arises from its interconnected and systemic order. But it is beautiful rather than sublime to the extent that nature arises as knowledge and therefore as something which is also simultaneously deeply, indeed intrinsically human. Montage, including composite cinematographic and CGI images, can only produce a virtual image of the unimaginably complex and vast processes of the oceans. Yet this virtual nature is a remarkable solution to the question of natural virtue. Imaging technologies capable of transcending their human origins allow the natural to remake what it is to be human. Human, natural and technological are three moments of a single process, for if we cannot know, we cannot care, and if we cannot recognise nature as at once ecologically bound to our own survival as a species and as an utterly distinct and to a great extent unknown category of existence, there can be no way of mediating the needs of these two torn halves of an integral world.

The gulf that opens up before us when we try to contemplate the natural world is not an artefact of the European Enlightenment as such. If anything the obverse is the case: scientific rationalism is a response to the *fait accompli* of nature's estrangement. Perhaps indeed for the feudal peasantry and the learned doctors who extrapolated from their practical knowledge, or for other peoples equally bound to the land, some closer implication in natural process was the norm. We must envy and learn from them all we can – but we cannot return to their estate. Still less can the globalising humanity of the 21st century, these teeming billions, acquaint themselves with the ocean, the very emblem of unnamed and unexplored wilderness. As we will see in the next chapter, ignorance of the oceans has become a signal political failure. Knowledge of them is therefore vital. But there are few who understand the waters, and none who know the depths of the sea, so inimical to our species. There is

little choice but to treat 'The Deep' as a world apart. In that sense, the abyssal ocean gives us a model of scientific exploration, an exploration whose end is wonder and the startling paradox of a world so intimately bound into our own and yet so unutterably strange.

More than that, however, is the lesson to be learned from how that exploration is undertaken, by which instruments, under what conditions, shaped by which discourses. On the one hand, we must first, with Merleau-Ponty, throw off expectations in order to see at all the remarkable variety and complexity of oceanic ecosystems; and with Peirce rejoice in the first sensuous embrace of the world. But if there is to be a relation, then we must also allow Bookchin's argument: the estrangement between humans and deep ocean has to be accepted and embraced too, because without it there can be no relation. That that relation is technological of necessity is of the essence: *techné* proves itself again the mediator, not only in the form of *Gandhi's magnet*, but in the domain of the popular communication of science on TV. Writing some years ago the late Alex Wilson noted that

Usually animals are the observed. The fact that they can observe us as well has lost all significance in everyday life ... But on video and film we can make them return our look (something Disney is famous for) as if they could speak to us. Thus in some contemporary explorations of nature, it is not so much yet another frontier that is charted and explored as it is the memory of an archaic habitat – a time and place where we could communicate with animals (Wilson 1991: 152)

In *The Blue Planet* however it is neither the archaic habitat of *Princess Mononoke* nor the unreturnable, subjectless gaze of Berger and Lipitt, but the necessity of inventing a mode of looking that encourages the world's unmotivated upsurge to well up into us, clasp itself to us, merge with the salt water in our veins. At last the reluctance of the series to prize the individual or even the species above the ecosystem as a whole becomes plain: the ocean as a whole looks back, feels us as surely as we feel it. The construction of technology as the pariah that embodies all the most evil elements of the polis and turns them against nature is not an alternative politics: it is the same politics as that which enslaves technology as well as nature and turns both to the purposes of greed and power beyond all pleasure – sure signs, right enough, of the old alpha male enacting his purely and merely natural functions beyond the bounds of reason. What the amazing, awesome, marvellous, wonderful sights and sounds of *The Blue Planet* indicates throughout is that *techné* is the only route through which we now can sense the world, most especially that part of the world's conversations which are not conducted in wavelengths we can hear, see or otherwise apprehend.

It is only in the age of scientific apparatuses, including movie and video cameras and microphones, that systems theory has been thinkable for humans. The formalisation of early biologists' intuition of an interwoven elaboration of life had to wait for statistical scientists working on telephone exchange design at Bell Labs. As massively parallel computing borrows from neuroscience, so too does biology borrow from communications concepts and techniques that have become central to the elaboration of an ethics worthy of the sea. If the core of such ethics is wonder, its corollaries are connectivity on the one hand – the imbrication of the human in the stories of the sea – and on the other the sheer autonomy of this complex environment. The intrinsic value thesis proposes axiomatically that nature has rights. To recognise the rights of nature is to recognise concomitantly its obligations. The question then is one of responsibility. What this analysis of *The Blue Planet* suggests is that there are at least two partners who bear responsibility for the larger ecosystem, three if we include the technological mediations between human and natural as equal partner in the construction of knowledge and care. To a great extent it can be argued that nature supplies its part of the bargain autonomously, digesting waste, producing natural capital. Yet if nature has natural virtue, and therefore obligations, according to traditional moral philosophy, it must also have the ability to refuse its obligations. Which brings us to the question of freedom.

Nature and Destruction

The Perfect Storm and Whale

so few
have the
in their e

Charles Olson, *Maximus Poems*. Lett

Give Me Liberty Or...

Freedom is a tainted word. It has been rolled so often round the mouth of politicians that you no longer want to feel it in your own. And for all the hypocritical saliva that sticks to it, freedom returns with a vengeance, as a fundamental question in the study of ecology and media. Against the fragility of the biosphere and of any individual, the immense forces of nature, from asteroids to earthquakes, present a spectacle of awe and terror. Either it will be possible to survive forces and events or it will not. If it is not, then we must face our own annihilation or that of our children or our grandchildren or children, and very possibly of the entire lifeworld. On the other hand, the available definitions of freedom are chilling in their implications. For Hegel, in the bowels of the dialectic, freedom and nothingness are synonymous: 'The supreme form of Nothing as a separate principle would be Freedom; but Freedom is negativity in that stage, which sinks self-absorbed to supreme intensity, and is itself an affirmation and even absolute affirmation' (Hegel 1975: 128). Freedom, at a moment in Hegel's logic, is the negativity of negation, the read of all processes to abolish their predecessors, overcome and subvert them. Such a force cannot stop at overwhelming its opposite however must even negate itself, in an abyssal inward spiral of self-annihilation. It is this absolute destruction which, dialectically, returns as its obverse the endlessly affirmative upwelling of the new. But however positive one tries to spin the negativity of freedom, this essence of freedom is unmistakably the most intense form of nothingness, an-nihilation very opposite of being. Freedom and destruction are one and the same.

A hundred and fifty years or so after Hegel, we find a similarly distant conception of Freedom in Jean-Luc Nancy: 'freedom', he argues, is something, is the very thing that prevents itself from being found (Nancy 1993: 12), and he goes on to propose that the freedom of being as a philosophical category, is 'the infinite inessentiality of its being finite, which delivers it to the singularity wherein it is "itself"' (14). Turning Hegel back on himself, Nancy asks what freedom might be if it were something (rather than the Hegelean nothing). It would, it