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**National College of Art & Design
Faculty of Fine Art: Sculpture Department**

**Mariko Mori
and the
Cybernetic Eden at the
End of Time**

by

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Contents

	<u>Page</u>
List of Plates	2
Introduction	4
Chapter 1: Cyborgs	7
Chapter 2: Pre Millennial Tension	24
Chapter 3: Transcendence	40
Conclusion	55
Bibliography	58

List of Plates

	<u>Page</u>
1. Subway	8
Fuji super gloss (duraflex) print, wood, brushed aluminium frame 68.6cm x 1.02m x 5cm, 1994	
2. Warrior	8
Fuji super gloss (duraflex) print, wood, brushed aluminium frame Three panels, dimensions unknown	
3. Empty Dream	12
Cibachrome print, aluminium, wood, smoked aluminium frame 2.74m x 7.32m x 7.62cm, five panels, each 1.22m wide	
4. Beginning of the End (Paris)	13
(Detail) Crystal print, wood, pewter frame 1m x 5m x 7.5cm, 1996 4(a) (Tokyo) (Detail) Crystal print, wood, pewter frame 1m x 5m x 7.62cm, 1995 4(b) (Body Capsule) Plexiglas 91cm x 2.13m x 1.52m, 1995	
5. Entropy of Love	14
Colour photograph on glass 3.05m x 6.1m x 2.16cm, five panels, each 1.22m wide, 1996	
6. Play with Me	18
Fuji super gloss (duraflex) print, wood, pewter frame 3.05m x 3.66m x 7.62cm, 1994	
7. Tea Ceremony III	19
Cibachrome print, aluminium, wood, smoked chrome aluminium frame 1.22m x 1.52m x 5cm, 1995	
8. Birth of a Star	20
Duratrans print, acrylic, lightbox, and audio CD 1.83m x 1.22m, 1995	
9. Last Departure	25
Cibachrome print, aluminium, wood, smoked chrome aluminium frame 2.13m x 3.66m x 7.62m, 1996	
10. Miko no Inori	26
Video stills, 1996	
11. Kumano	29
(Detail) Colour photograph on glass 3.05m x 6.1m x 2.16cm, five panels, each 1.22m wide, 1996-98 (<i>Dream Temple</i> in background)	
12. Kumano (Álaya)	35
Video stills	
13. Kannon sculptures, Sanjusangen-do Temple, Kyoto, Japan	43
Partial view of the 1001 statues, laquer and gold leaf over wood Average height 170cm, 12 th -13 th century [Sawa, 1976, p.55]	

14. Burning Desire	44
Colour photograph on glass	
3.05m x 6.1m x 2.16cm, five panels, each 1.22m wide, 1996-98	
15. Mirror of Water	46
Colour photograph on glass	
3.05m x 6.1m x 2.16cm, five panels, each 1.22m wide, 1996-98	
16. Pure Land	47
Colour photograph on glass	
3.05m x 6.1m x 2.16cm, five panels, each 1.22m wide, 1996-98	
17. The Paradise of Amithaba	49
Copy of central section of wall-painting, Cave 172, Tunhuang,	
T'ang Dynasty, late eighth century [Sullivan, 1961, pl. 72].	
18. Nirvana	50
3-D video installation with projector, laserdisk player, screen, and glasses	
Variable dimensions, 1996-97	
19. Kichijōten, Goddess of Wealth & Beauty	51
Wood, painted, Joruri-ji, Kyoto	
Kamakura period (dated 1212) [Yashiro, 1982, p.102]	

Introduction

Since the beginning of this century many observers became convinced that technology was following an exponential law of expansion. People like Korzybski, Fuller and Toffler all gave examples of this exponential expansion of technology, and stated that there would be more basic breakthroughs in scientific theory and technological applications in each generation than in any previous generation. In 1974, statistician George Anderla estimated how much information humanity had accumulated between the invention of the first tools in Africa around 4,000,000 BC and the beginning of the Christian calendar in 1 AD.¹ Taking this four million years worth of information as his basic binary unit, he then calculated how long it took to double that amount of binary units of information. By his calculations it took 1500 years, by which time the centre of power and information had shifted north, from Rome to the great Italian city-states, centres of commerce, learning and art, ruled by bankers like the Medici family. It took only another 250 years for humanity's store of information to double again to four units. At this time, in 1750, the centre of information and power had moved northwest to England, and Julien de La Mettrie published the first book giving a completely mechanistic and materialistic account of human life and behaviour. In 1765 James Watt invented his steam engine and the Industrial Revolution began, in 1776 the American Revolution began and was followed by the French Revolution in 1789, the United Irish uprising of 1798, and the Mexican Revolution in 1810. The ideas of democracy and the free market began to gain ground.

By 1900 information had doubled again, in only 150 years, to a total of eight of Anderla's units. In that year Max Planck published his first paper on quantum mechanics, beginning the process that would lead science in this century to abandon Aristotelian logic to evolve a non-Aristotelian, relativistic direction. At this time in the new Industrial civilisations (the Second Wave in Alvin Tofflers terminology) the ruling class was living maybe 100 times better than the ruling class of ancient Rome, the middle classes were living better than ever before, and the idea formulated by the most radical 18th century thinkers – that the lower classes had the right to a decent life, continued to reassert itself in the forms of democratic and totalitarian socialism. In the USA life expectancy rose dramatically to 47 years, meaning that for the first time in history a new-born human had a good chance of living longer than thirty years. By 1950 information had doubled again and this acceleration factor became more and more

obvious to more and more observers. In the previous fifty years fascism had risen and fallen, the first nuclear weapons were detonated, the first programmable computer was built and communism continued to rise and by 1950 controlled one fourth of the earth. In 1950 the first Xerox machine and Japanese tape recorder came on the market, and in the US there were over 100 television stations in 38 of its states. Life expectancy in the industrial world had risen to 60 years. The centre of information and power moved decisively westward to the USA with the collapse of the British Empire.

It took only the ten years to 1960 for information to double again, electronic computers became more accessible to research scientists and the first US communication satellite was put into orbit. Mathematician Stanley Ulam observed the information explosion in mathematics, noting that around 200,000 new theorems were being published every year and that no human mind could keep up with all this. It was estimated that the last person to know all mathematics was Alexander Ostrowski, who died in 1915. By 1967 information doubled again, and the US was two years away from landing a man on the moon. Two years earlier John S. Bell had published a theorem, which showed that particles could influence each other even though there was no mechanical Newtonian or Einsteinian cause and effect relationship between them. A worldwide youth revolution emerged, a rebellion against war, racism, sexism, environmental damage, and the power wielding Elite. Information doubled again in 1973, and it became increasingly difficult to keep track of this information explosion. In the years since then we have seen, amongst many other events, the fall of communism in Eastern Europe and Russia, the rise in personal computer ownership, the rapid growth of the internet, the transformation of the workplace from manufacturing to service industries, the mapping of the human genome and the discovery of ten billion new galaxies – the missing eighty percent of the universe. At this time more scientists are alive than in all previous history added together.

It is in this context that Mariko Mori's work can be placed. In her work from 1994 to 1998, a very short period of time, she deals with this rapid acceleration towards what many believe will be a total transformation of human relations, in the next millennium. She represents this millennium madness metaphorically through the synthesis of the images and signs of technology, religion, consumerist society, science fiction and ritual practices. Mori's photographs and videos lead us through our fears for, and attractions to, technology and the future, to a new relation between the spiritual and technological.

Ultimately this will lead us to a technologically mediated critical mass of human enlightenment which will precipitate the creation of a heaven on earth.

It seems to many that breakthrough is imminent.

¹ Robert Anton Wilson, Cosmic Trigger II: Down to Earth, Tempe, New Falcon Publications, 1996, p.57.

Chapter 1: Cyborgs

As a former fashion model Mariko Mori had often used her own image in her work, but in her photographic and video pieces from 1994 on, a new element is introduced. This is the transformation of Mori into a form that is at once familiar, alien and futuristic: a cyborg - a cybernetic organism, a hybrid of machine and organism. The image of the cyborg in Mori's work becomes the only constant as she metamorphoses through an array of different identities; a blue haired Manga¹ warrior forlornly waiting at the video shop; an alien visitor on a subway train; an android pop star; an O.L. or 'office-lady,' serving green tea in the street; a series of replicated mermaids on an artificial beach. The representation of these different identities has invited comparison between Mori's work and that of Cindy Sherman. Both appear in the post-modern role of the medium through which various social and cultural trends are raised. Sherman's work suggests that female subjectivity resides in disguise and displacement, using the self portrait to investigate the foundational otherness of women within Western representational forms. The contradictory notion that women are unrepresentable and yet everywhere imaged is the basis for photographs of herself disguised as film stars, young starlets, housewives, and lost teenagers. In her film stills, of 1977-80, this multitude of identities pointed to the instability of female subjectivity, and the fact that our culture's perpetual flood of image making renders the fixing of that subjectivity difficult. The reality that Sherman's photographs reproduce seems anonymous, ubiquitous, and finally empty. If Sherman chose to use the contemporary figures of femininity within the framing device of the film still to expose the ideological operations of society in its construction of the feminine, then Mori chooses the cyborg to project her narrative into a near future where, like much 'sociological' science fiction², this displacement in time serves to reveal patriarchal practices divorced from the hidden, naturalised discourses of the present.

Subway (1994)(Pl.1.) recalls Sherman's untitled film stills most vividly, looking like a low budget science fiction movie with its use of a tacky futuristic costume and simple camera distortions to suggest the extraordinary. Shot through a wide-angle lens, the structure of the carriage warps to accommodate the visitation of Mori dressed in the traditional aluminium and PVC suit of the alien visitor or our future cybernetic selves. Mori appears in the carriage unnoticed by her fellow passengers, as she looks at her surroundings she presses buttons on the panel on her left forearm. This action and the microphone headset she wears suggest that she is 'linked in' to a 'command and



1. Subway



2. Warrior



control' centre somewhere that is directing her actions. Whether sent back from the future or transported, in *Star Trek* fashion, to the surface from an orbiting spacecraft, she takes on the role of a mobile sense organ, a prosthetic of some far away controlling force, or less pessimistically it may be that her interface and integration with technology increases human capacities. As such, one reading of this picture is tantalised by the promise of the extension of human capabilities, while expressing some of the fear that our own technology will one day dominate us, or at the very least, be employed by others to create previously unimaginable dominations.

The figure of the cyborg within science fiction discourses has become an important site for the exploration of our contradictory hopes and fears for technology, representing as it does the intersection of human and machine. In a sense the cyborg has always been with us throughout history, as over hundreds of thousands of years the body, with the aid of various tools, has multiplied its strength and increased its capacities to extend itself in space and over time. The agricultural revolution extended the arm with the tool, and the industrial revolution augmented with machinery the power and dexterity of the human body as a whole. The post-industrial revolution promises the extension of our minds by information technologies and our bodies by biological technologies.

While every motorist experiences their cyborg nature in the extension of their capacities by their interface with the automobile, the most familiar form of the cyborg within popular culture appears in science fiction. These are the type of ultimate warrior, eulogies to invulnerability, that are represented in Hollywood science fiction films like *Robocop*, *The Terminator*, and its 1994 sequel *T2: Judgement Day*. In *Warrior* (1994)(Pl.2.), Mori poses in the typical stance of just such a heroine (or hero), posed to strike at some unseen attacker, legs akimbo as she raises her weapon, ready to fire. Dressed in figure hugging black vinyl, shiny black helmet, and equipped with a hefty gun, she appears among the shimmering video arcade screens as the fantasy of the adolescent game players made flesh. In the two *Terminator* films Arnold Schwarzenegger effortlessly plays a model T800 Terminator robot made up of an android endoskeleton covered in living flesh. In the first film this cyborg's mission is to travel back in time to kill the woman who will give birth to the future saviour of humanity from their machine overlords. In the second film a re-programmed T800 travels back to protect this now twelve year old saviour from the more advanced and near indestructible T1000, also sent back from the future. In both films, regardless of his

mission, the Schwarzenegger character (and the T1000 cyborg) are representative of a future dystopia, produced by the runaway pace of technological advancement. Such visions of the cyborg embody both the human desire for an invulnerable, immortal body and the technophobic fear of humanity's extinction at the 'hands' of its own creation.

The progressive extension of the human body through tools and technology logically culminates in the very immateriality of the human body itself. Here technology serves fundamentally as a prosthesis of the human body, a prosthesis that ultimately displaces the body, creating instead a simulation of it, and preserving that simulated body over time. For Freud this progress of technology represented the fulfilment of a deeply held psychic wish that man could become a kind of prosthetic God, with an immortal, invulnerable body, the possibility of such a body being our greatest technological illusion. This desire for the impregnability of the body is expressed unmistakably in the scenarios composed for countless films, video games, and in the hopes for virtual reality.

The cyborg is a contested location, the celebrations of invulnerability are not the only model for a cyborg existence. Donna Haraway, in her seminal essay "A Cyborg Manifesto,"³ articulated the possibility of a socialist-feminist cyborg, describing what she sees as an actually existing hybrid subjectivity, and paradoxically, also viewing the cyborg as an image of a possible world, an unfixed but utopian vision of what that hybrid subjectivity might be. Instead of invulnerable 'Men of Steel' these cyborgs are semipermeable constructions, hybrid, almost makeshift attempts at counter-rationality, constructed from whatever comes to hand. The picture of cyborg social relations which she outlines is fractured and unstable and lacking in any fixed guarantees. It stresses the understanding that technology is not in essence good or evil, but that its manipulation by us and against us can be. A cyborg identity will either mean liberation or domination, a bifurcation of roles that is expressed in Mori's work as being between commodified characters or transcendent messiah figures.

One of the intended aims of Haraway's work is to help women overcome their culturally induced technophobia. Pointing out that in the technologically mediated everyday life of late capitalism nature is not immune to the infections of technology, and that technology is part of nature conceived as everyday social relations. With this in

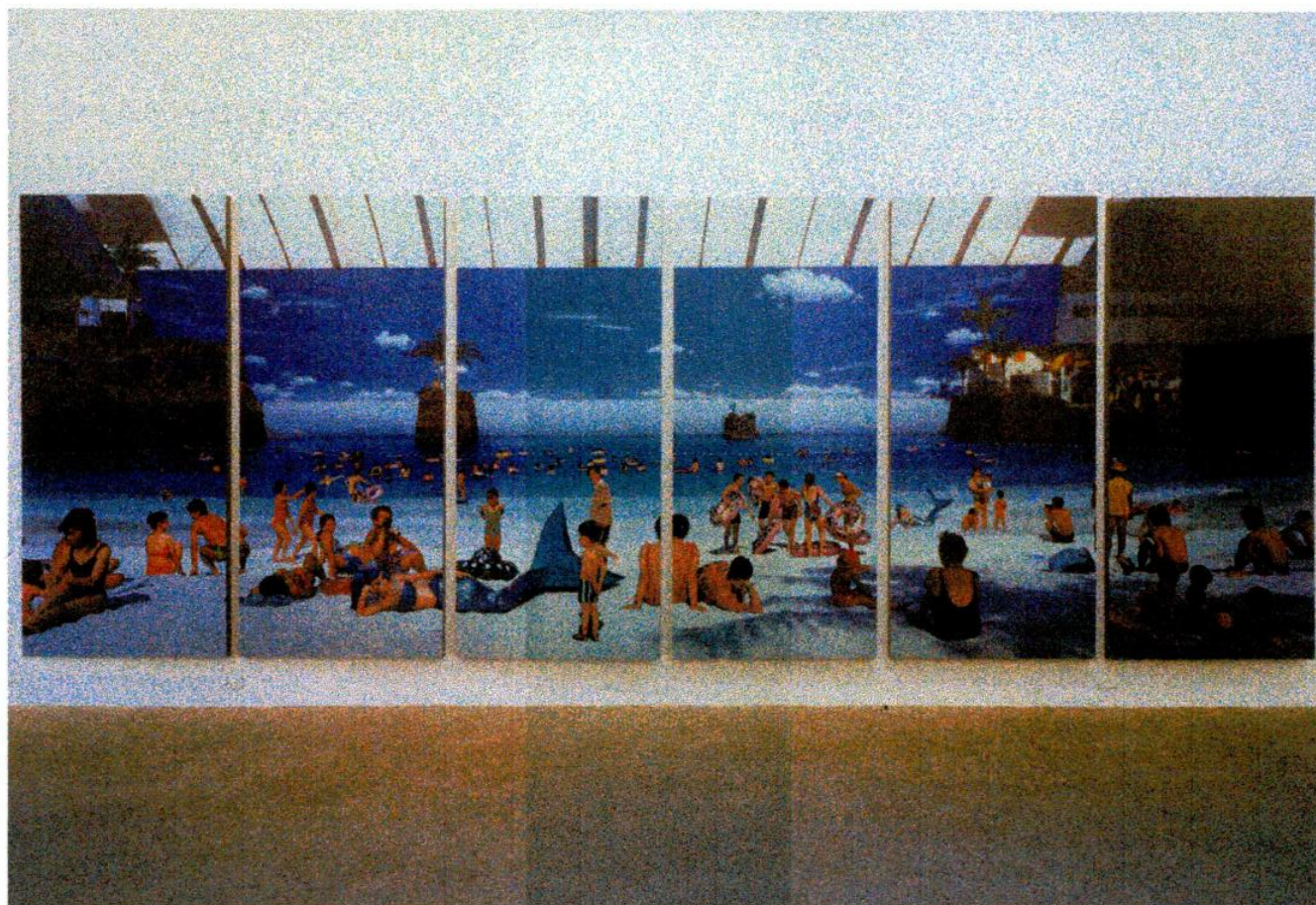
mind what is needed is a techno-realism to supplant a phobic naturalism, so that we start using technologies before technology starts using us. She says:

It's like refusing to leave in the hands of hostile social formations tools that we need for reinventing our own lives...I know that there's a lot going on in technoscience discourses and practices that's not about the devil, that's a source of remarkable pleasure, that promises interesting kinds of human relationships, not just contestatory, not always oppositional, but something often more creative and playful and positive than that. And I want myself and others to learn how to describe those possibilities. And even technoscience worlds are full of resources for contesting inequality and arbitrary authority.⁴

To overcome their technophobia, she gets readers excited about specific areas of science that have heavily involved women, like primatology; by frequently citing utopian science fiction narratives by women like Joanna Russ and Octavia Butler that offer empowering visions of a new relation to gender, race, nature, and technology, and by imaginatively demonstrating, in the *Cyborg Manifesto*, that we are already cyborgs, already creatures that are both human and technological.

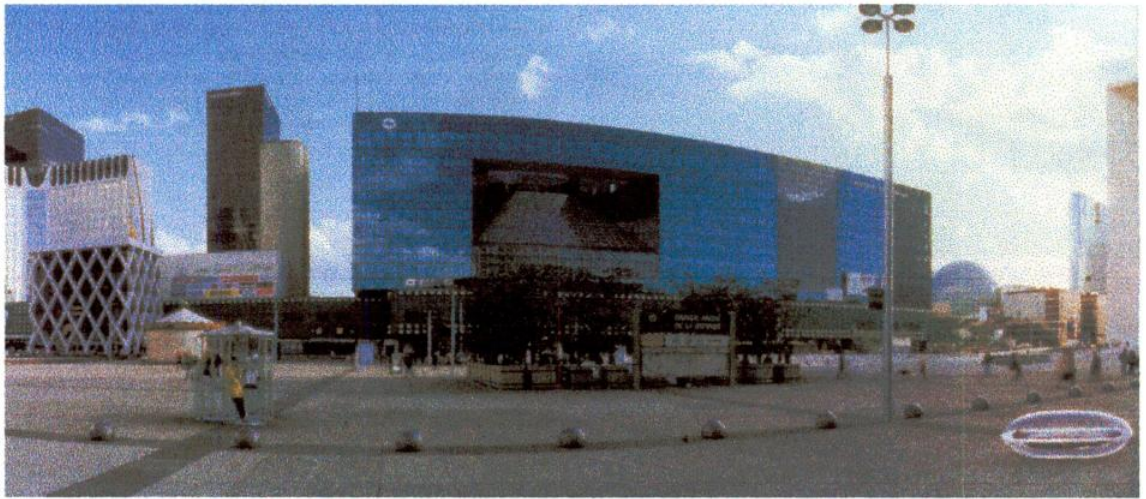
This intersection of our experience of the natural combined with the artifice of technology is most dramatically represented in Mori's photograph, *Empty Dream* (1995)(Pl.3.). Here the setting is the world's largest indoor water-park, Ocean Dome in the Miyazaki prefecture of Japan. It is a gigantic man-made beach complete with cliffs, islands, palm trees and a mural of a blue sky with fluffy clouds to reproduce the view of a horizon. Mori appears in the picture as a blue haired mermaid with shiny blue plastic scales and tail fin, replicated four times and placed around the scene. The beach is full of people sitting on the white sands, 'sun-bathing', or swimming in the sky-blue water through the machine-generated waves. The growth and popularity of such artificially constructed spaces and theme parks was noted in a 1996 report in *The Economist*, where it was suggested that Asia may like theme parks that offer reproductions of the natural world because of the potential disappearance of the real thing.⁵

Cautionary tales about the disappearance of the natural world, caused by the toxicity of our technology and rapacity of our civilisation are a common currency within science fiction narratives. The alien Klaatu, in the film *The Day the Earth Stood Still* (1952), arrives on Earth to warn its inhabitants to turn their backs on war and violence, or suffer destruction. Released seven years after the first detonation of an atomic bomb, during the early years of Cold War nuclear paranoia, it reflected the fear that civilisation has run amok and is about to destroy itself – a theme that has influenced science fiction to the present (along with Orwellian fears of state or corporate totalitarianism). Another



3. Empty Dream





4. Beginning of the End, Paris

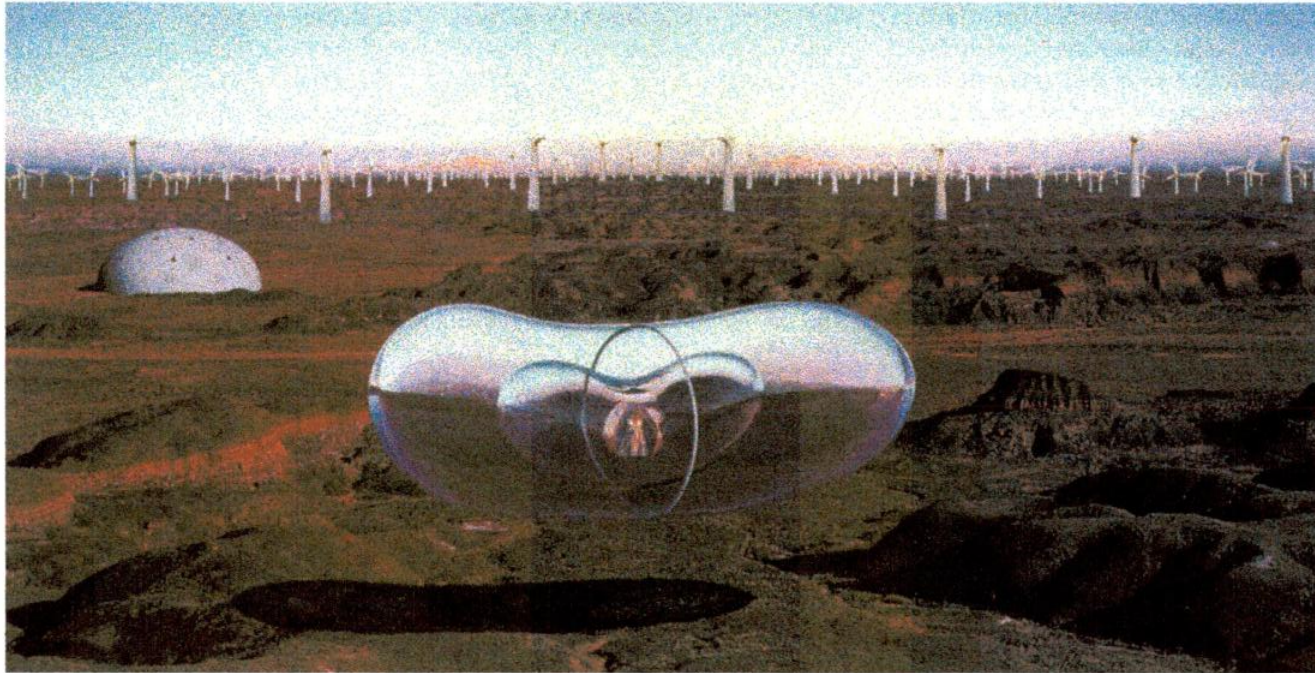


4(a). Beginning of the End, Tokyo



4(b). Beginning of the End, Body Capsule





5. Entropy of Love



Small, smooth, light-colored rock formation, possibly a fossil or mineral specimen, resting on a dark, textured surface.

reading of *Subway* belongs within the science fiction tradition of the alien messiah descending to earth to admonish humanity for its evil ways in the hope that we might be saved from self-destruction. Like Klaatu, the character in *Subway* is dressed in a silver suit, and stands in the carriage looking disapprovingly around her, an alien explorer or anthropologist suddenly immersed in a dangerous primitive world. Subways have come to be a literal underworld of modern society, with their shifting populations of (real or imagined) beggars, muggers and rapists. Couple this with the intense alienation between passengers, and the subway becomes a concentration of some of the worst aspects of the city and civilisation. Mori's alien visitation to the subway parallels many science fiction tales where everyday life is the point of first contact, allowing the explorer to experience our flaws at first hand.

Both *Beginning of the End* (1995)(Pl.4.) and *Entropy of Love* (1996)(Pl.5) further illustrate this type of alien visitation. *Beginning of the End* is Mori's project to link five locations from the east and west, Tokyo, Times Square in New York, Piccadilly Circus and Docklands in London, La Défense in Paris, and Beijing. These are chosen as representative of the past, present, and future. This work documents a public performance where Mori takes the role of an alien visitor encased in a transparent ovoid body capsule, where she lies for one hour, in these places, and the scene is photographed with a 360° camera. Photographed in early morning only handfuls of people can be seen, dwarfed by the surrounding buildings and the sweeping open spaces of these public squares. The quiet, meditative, melancholy quality of the sleeping alien is in sharp contrast to the effects of a major international city starting its day, leaving the sense that we have lost our way, and that for us this really is the beginning of the end. In *Entropy of Love* Mori eschews the urban backdrop of her previous work, using an image primarily shot in Arizona's Painted Desert to create a post-apocalyptic scene. In the foreground hovers what Mori has described as a 'love shelter,' a large transparent paraboloid bubble, with two similar bubbles within, the central one occupied by Mori and her sister dressed in futuristic costumes. Cables come from the wall of the bubble, like umbilical cords, and link into them, making them one with their craft and with each other. The background is a composite of several different elements, primarily the desert, to which is added the turbines of a wind farm in California and the Biosphere Dome in Tucson, Arizona. The transparent craft arrives over the desolation of the desert, where wind powered turbines stretch off to the horizon, and the only sign of habitation is the

squashed white dome of the Biosphere complex. The entropy of love referred to in the title is perhaps a decline of the care for the Earth resulting in an ecological disaster.

Like Mori's use of the Biosphere in her work, frequently in science fiction a remnant of the natural world is preserved under glass, within some controlled environment, as a reminder of all that has been lost, now sustained by the very technologies whose global application led to its near extinction. In the film *Silent Running* (1972) all that remains of Earth's vegetation is deposited in a huge hemispherical hothouse, left to drift off into space with its human and robot gardeners. The authorities who constructed this marvel show a remarkable lack of vision in economics when they order the jettisoning of all the plant life, missing out on the potential for turning the last vestiges of the natural world into a commodity to be consumed. The fear of the potential disappearance of the natural world creates a crisis of supply and demand leading to a need for commodities such as the 'beach' in the Ocean Dome. The film *Blade Runner* (1982) alludes more subtly to the slow extinction of nature, and the attendant commodification of what remains. with two casual comments where we learn that an owl is 'of course' artificial and that an exotic dancer owns a 'replicant' snake, as a real snake is prohibitively expensive.

Science fiction films have a continuing affinity for the dystopian rather than the utopian, with fantasies of ecological collapse, societal regression and totalitarian empires of the future. According to Fredric Jameson, this romance with the apocalypse and Armageddon results from the atrophy of utopian imagination, in other words, the cultural incapacity to imagine the future.⁶ Peter Lunenfeld has argued that our visual culture is trapped in a perpetual present, revisiting its past while waiting for inspiration it doesn't fully expect to come. He blames this inability to imagine beyond the present moment on what he sees as two almost perfect visual systems, the graphical user interface (GUI) of Macintosh computers and Microsoft Windows, and the movie *Blade Runner*. Lunenfeld comments, "*Blade Runner* is so *gesamt*, so complete in its conception, execution and integration, that other filmmakers have either eschewed competing or failed miserably in the attempt...[it] truncated the possibilities for cinematic visions of the future."⁷ Tokyo is virtually interchangeable with the future as presented in *Blade Runner*, with its skyscrapers, glaring neon, high-tech gloss and conspicuous consumerism. The economically booming Tokyo of the Late 70s and early 80s was undoubtedly an influence on the blending of East and West in *Blade Runner's* vision of the Los Angeles of 2017.

It is no surprise then to find its influence in Mori's photographs which have an urban setting: *Subway*, *Play With Me* (Pl.6.), *Love Hotel*, *Tea Ceremony III* (Pl.7.), *Empty Dream*, and *Last Departure* (Pl.9.), all taken in Japan. In *Tea Ceremony*, *Play With Me*, *Love Hotel*, and *Empty Dream* Mori's cyborg alter-egos perform the tasks of android servant, playmate, prostitute and mythological fantasy figure made flesh respectively. They are reminiscent of *Blade Runner*'s female 'replicants' created to perform the role of pleasure android. This concern with the commodification of the body runs through these works and constitutes a critique of consumerism and the status of women in Japanese society. These scenes of a pre-millennial Japan in decline are comparable to the didactic social criticism of Victorian painters like Augustus Egg *et cetera* and the earlier social commentaries by Hogarth. *Play with Me* and *Love Hotel* in particular could be scenes within a larger series of pictures depicting the downfall of the central character, 'The Cyborgs Progress' perhaps? However, this didacticism is tempered with Mori's irony, playfulness and humour about the subject. While Cindy Sherman emphasises a critical agenda, downplaying her role as a Barbie doll, Mori revels in this play-acting, critical of, but simultaneously attracted to the enticements of consumerism.

The seductions of commodity culture are expressed in the format and scale Mori works in. Fuji Super Gloss and Cibachrome prints are framed under thick sheets of glass, enriching the colours to give them a luscious depth, and providing a perfectly smooth, cool surface, that seductively tempts one to stroke it. Pictures like *Empty Dream*, *Entropy of Love* and *Last Departure* with their large scale allude to Landscape and Panoramic painting, both genres being involved in the pleasures of nature. The Panorama especially is a form of spectacle, bringing views of nature to a general populace who may be unable to partake of them.

Mori rapidly cycles through different identities, immersing herself in a fetishistic embrace with the plastic, the popular and the technological. The cyborg pop singer of *Birth of a Star* (1995) (Pl.8.) blends styles from the previous four decades – the white go-go boots of the 1960s, the 1970s *Barbarella*-style Perspex necklace and bangles and the spiked purple hair of punk rock, a printed tartan pattern plastic skirt, and the headphones and microphones of the 1980s restyled in retro-sixties colourful plastic. The result is the creation of a perfectly realised musical 'product,' primed for certain success with all targeted demographic groups, embodying both a nostalgia for the past while being unquestionably a creature of the present and future. In *Play with me*, Mori is



6. Play with Me

10-10-10





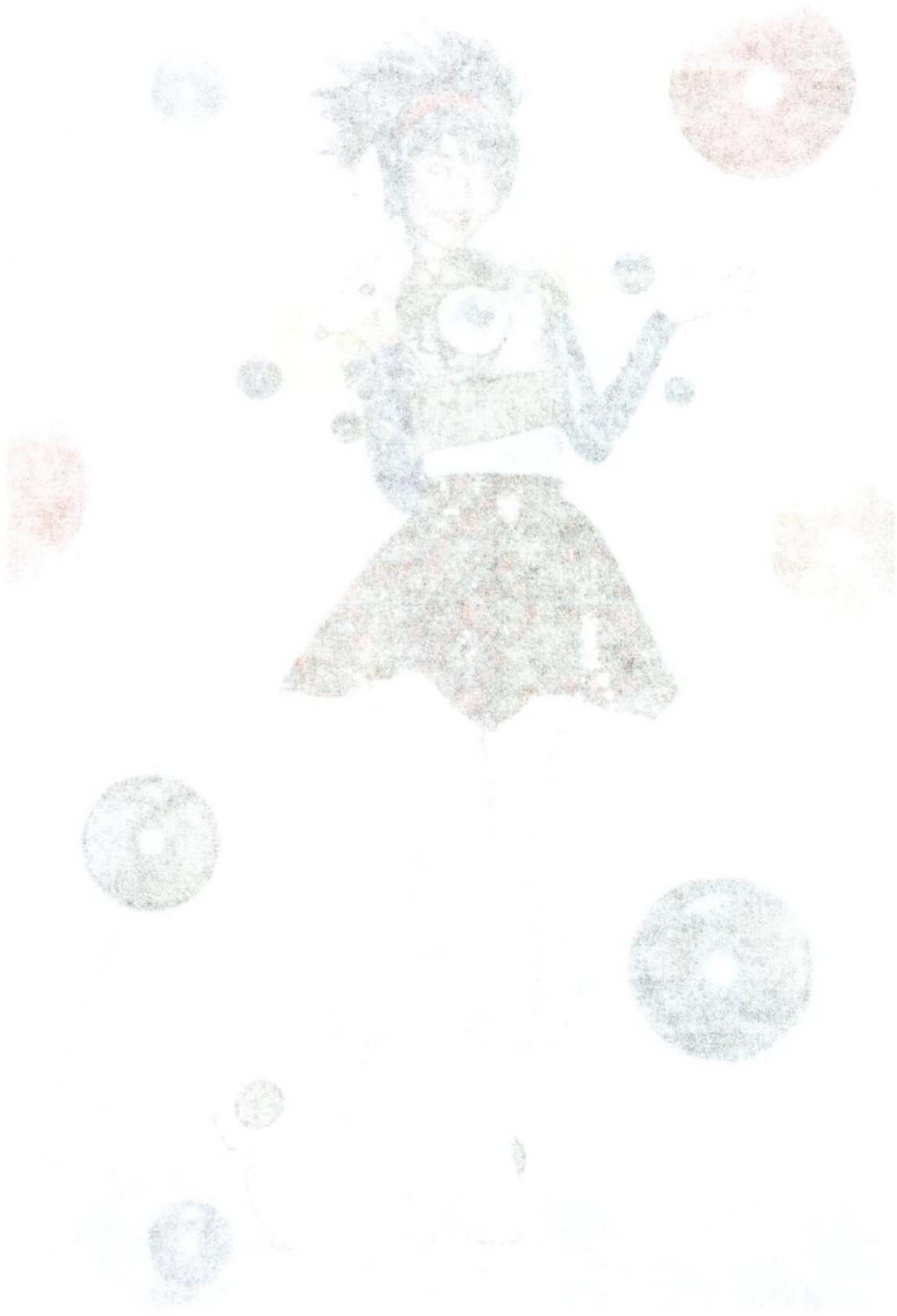
7. Tea Ceremony III

A. J. and C. J. (continued)





8. Birth of a Star



10-10-10-10-10

dressed as a character from a video game, with long blue hair and wearing a skin-tight black vinyl bodysuit with metallic blue body armour over it. She stands in the doorway to video game shop, beside an arcade machine, and all around her are colourful posters for games and more direct entreaties for consumers to part with their Yen. Despite Mori's invitation to play, she remains ignored by passers-by and the shop customers. Her shiny black rubber bodysuit and the smooth plastic contours of her breastplate make associations with the fetishistic response to the new, shiny properties of the automobile and other consumer products. The production of such associations is indicative of the semiotic jumble we find ourselves in at the end of the 20th Century, where, as here for example, the seductive attributes of the automobile and the female form are transposed in a perpetual circular dialogue. This entwining of nature and technology increasingly leads us to a point where the binary opposition between them can not be maintained.

In many technophobic narratives nature becomes a rhetorical figure for that which is outside contrivance, artifice and technology. Films such as *Logans Run* (1976) and George Lucas's *THX 1138* (1970) involve the central character escaping from the totalitarian technological city into nature and liberty.⁸ Such tales must establish a strong opposition between liberty and equality that permits no intermediation if their rhetorical strategy of the desirability of escape from 'technologically constructed equality' to 'natural individual liberty' is to function. This placement of liberty and equality in opposition is born of the conservative fear that technology, as the figure for artificial construction, represents the possibility that such discursive values as 'nature' might merely be metaphors devised to endorse inequality by positing a specious basis of authority for social institutions.

In Mori's city-based pictures, 'nature' does not encroach upon the urban, and the passers-by and her cyborgs are completely dislocated from nature while in the embrace of the city. Even the most ubiquitous aspect of the natural world, the sky, is absent, or one step removed from these pictures. *Subway* is shot deep under the city where no light can reach. The interior of the carriage and the platform outside are illuminated with florescent lights. In *Warrior*, and *Play With Me* the light is provided by florescent tubes, neon and the glittering video game screens. In *Empty Dream* we are treated to filtered sunlight through the roof and a *trompe l'œil* mural of a bright blue sky. Solely *Tea Ceremony* provides the real thing, but only as a reflection in the dark, semi-silvered windows of the façades of the encircling skyscrapers. It is an interesting parallel that the

sky is also absent from *Blade Runner* too, until the moment when humane values are reasserted. As the replicant Roy Batty approaches death and realises the preciousness of all life, he forgives his hunter, Deckard, and spares his life. As Roy dies he releases the white dove he has been holding which flies up into the blue sky.

With the emergence of the cyberpunk school of science fiction in the early 80s, particularly William Gibson's novel, *Neuromancer* (1984), the notion of a virtual reality world 'inside' a network of computers became the dominant model for the creation of artificial nature, created electronically and not fixed to any one location. Unlike the biologically engineered animals, and fabricated Eden of the off-world colonies in *Blade Runner*, or the autonomous nature preserve drifting through space of *Silent Running*, the virtual world, like the artificial world of Empty Dream, or the computer generated composite world of Entropy of Love, all represent different aspects of the godhood pledged as the outcome of technological progress.

The holistic solution of the prosthetic God promised by the culmination of technological progress has a strong appeal for people who want to resolve a sense of loss or absence in their lives. The challenge is to make headway in contesting that kind of popular appeal for completion that authority promises to people through science. Succeeding in this project may rely on how there can be a popular, playful, and serious imaginative relation to science that propounds human *limits* and *dislocations* – the fact that human beings are mortal, rather than indulging in Faustian evasions. These holistic transcendentalist moves promise a way out of history, a way of becoming a god, a way of denying mortality, having the appeal of bridging all the parts and promising an ultimate oneness. They promise what they cannot, of course, deliver, or only pretend to deliver at the cost of deathly practices, almost a worship of death. This is a kind of partiality which Haraway talks of and it is resolutely antitranscendentalist and antimonotheist, fully committed to the fact that we don't live after we die. Any transcendentalist move is deadly; producing death through the fear of it. But she does perceive that the faith in holistic solutions is breaking down,

What's also clear from popular culture is that large numbers of people are at least aware of the crisis we're facing, a crisis of historical consciousness where the master narratives will no longer soothe as they have for a couple of thousand years, in Christian culture at any rate.⁹

The imagery of the hybrid cyborg expresses a crucial topic in relation to the changes being wrought on society by technology. That taking responsibility for the social relations of science and technology means refusing a technophobic metaphysics, which demonises technology, and so means accepting the task of reconstructing the boundaries of daily life, in relation to technology and in connection with others. The information revolution can be designated as the chief capitalist revolution of our times. Science and technology are possible means of great human satisfaction, as well as an array of multiple dominations, and Haraway asserts that cyborg imagery can suggest a way out of the dualistic thinking in which we have explained our bodies and our tools to ourselves. A project that has started as "the cybernetic countercultures of the nineties are...being formed around the folklore of technology – mythical feats of survivalism and resistance in a data-rich world of virtual environments and posthuman bodies"¹⁰

¹ 'Manga' is a Japanese genre of cartoons, comic books, and animated films, typically having a science fiction or fantasy theme.

² Science Fiction can be split into two traditions, (i) 'Hard' science fiction, which uses science and technology as a prop for stories of adventure and heroism, and is conservative in character, reproducing present social relations in a future setting, and (ii) 'Soft', or sociological science fiction, in the tradition of Mary Shelley, and later H.G. Wells, which uses science as a means to criticise contemporary realities by displacing its narrative in time or space to free itself of the assumptions of common sense thinking.

³ Donna Haraway, "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century" in, *Simians, Cyborgs, and Women: The Reinvention of Nature*, London, Free Association Books, 1991.

⁴ Constance Penley & Andrew Ross, *Technoculture*, 1991, p8.

⁵ Quoted by Dominic Molon, "Countdown to Ecstasy", *Mariko Mori*, MCA Chicago & Serpentine Gallery London, 1998, p.10.

⁶ Fredric Jameson, "Progress vs. Utopia; or can we imagine the future?", *Science Fiction Studies*, Vol.4, No.2, 1977.

⁷ Peter Lunenfeld, "Permanent Present", *ART/TEXT*, No.63, 1998.

⁸ In the original release of *Blade Runner* (1982), the final scene is of the central character, Deckard (who may or may not be an artificial life form, a replicant), driving through the countryside with his lover, Rachael (who is a replicant), after escaping from the authorities in the city. In *The Terminator*, Sarah Connor flees to the mountains after defeating the cyborg sent to kill her. That the mountains she flees to are across the border in Mexico, relatively technologically backward compared to the U.S., further reinforces nature as the opposite of technology.

⁹ Constance Penley & Andrew Ross, *Technoculture*, 1991, p16.

¹⁰ Andrew Ross quoted by Kathleen Woodward, "From virtual cyborgs to biological time bombs: Technocriticism and the material body," in Gretchen Bender & Timothy Drucker (Eds.), *Culture on the Brink: Ideologies of Technology*, Seattle, Bay Press, 1994, pp48-49

Chapter 2: Pre Millennial Tension

[I try] to bring something stable from the past
and make it stable for the future.¹

- Mariko Mori

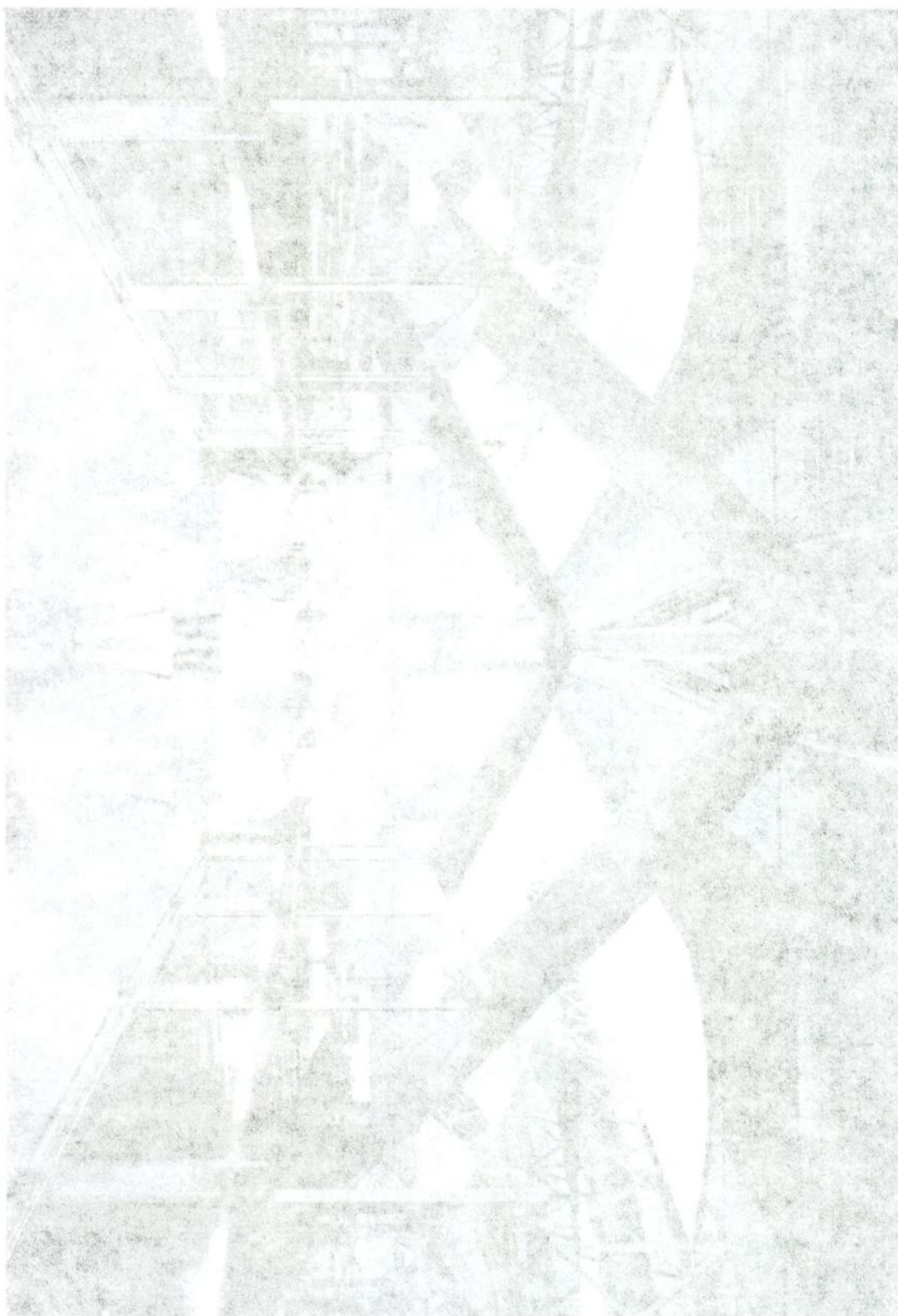
Religion and ritual behaviour were believed to be typical traits of primitive societies by the rationalist philosophers of the eighteenth and nineteenth centuries. With the advance of civilisation, it was thought, such primitive behaviour would disappear, however exactly the opposite is true. The mass migrations from the countryside to the cities during the industrial revolution severed people's traditional bonds to nature, family and social groups. The resulting experience of alienation in both the economic and social spheres precipitated the growth of secular religions and new ritual practices to provide a sense of stability and equilibrium to these displaced millions.

The primary function of ritual is to ease the transition from an old state to a new one, serving as an adaptive technique of individuals and social groups faced with a situation of crisis. Rituals are conjunctive, they aim to bring together that which is opposed or split. At the beginning of many primitive rituals there is a situation of disjunction between, for example, the sacred and profane or the living and the dead. The aim of the ritual is to transcend these oppositions to unify the two categories. Change brings with it fear and uncertainty as an old paradigm ends and a new one has not yet fully established itself. Ritual can be seen as a stabilising influence and survival technique during such times of crisis, and as such contemporary ritualism can be viewed in the "wider framework of human evolution and interpret it as an existential need rather than a cultural choice."²

A futuristic priestess stands in a terminal of Osaka's Kansai International Airport in Mori's interrelated photograph, *Last Departure* (Pl.9.), and video, *Miko no Inori* ("The Shaman-Girls Prayer"), of 1996 (Pl.10). In the video this shaman-girl manipulates a crystal ball through a series of ritual like movements, to a haunting soundtrack of a song in Japanese. She appears again in the photograph, this time in triplicate, flanked by a ghostly duplicate on either side. The crystal ball hovers in front of the central figure at the height of her stomach, and a pair of eyes appear in the crystal staring out at the viewer. It can be recalled that in the photographs *The Beginning of the End* (1995) and *Entropy of Love* (1996) the viewer is once again confronted by the appearance of the futuristic and/or the alien. With *The Beginning of the End*, *Entropy of Love*, *Last*



9. Last Departure



2000-10-10



10. Miko no Inori



Departure, and *Miko no Inori* Mori initiates a refinement into her playful critiques and satires of consumerism and the status of women in Japanese society which is to include a concern with the spiritual. Retaining the images of the cyborg and the high-tech urban backdrop, she introduces to this the traditional shaman.

The crystal ball is a familiar tool of the stereotypical clairvoyant or fortune-teller in the West, a surviving remnant of Europe's prehistoric shamanic traditions. Traditionally the ball is stared at fixedly as a means of inducing an autohypnotic trance and, it is believed, precognitive visions. This technique, known as "scrying" (from *descry*), is also applied to any reflective surface as a method of divination. It can be found in various different forms, such as the use of a mirror or a pool of water, in many disparate cultures throughout history. Most notably, in relation to Mori's work, the practice can be found in the divinatory methods of Tibetan Buddhists. They use the reflective surface of a mirror or even a thumbnail, but their most effective method utilises lakes and other bodies of water. In central Tibet there are lakes which are famed for the visions seen there. The practice of seeking such a vision involves making offerings to the spirit protector of that locale, asking for their assistance in granting a vision. The most renowned of these lakes is Lhamo Lhatso, where in the spring of 1935, Tibetan Regent Reting Rinpoche sought a vision to help locate the reincarnation of the Dalai Lama. He saw

a great three-storied monastery, capped by gold and jade rooftops.... A white road led east from the monastery to a house before a small hill, its roof strikingly fringed in turquoise-coloured tiles, a brown and white spotted dog in the courtyard.³

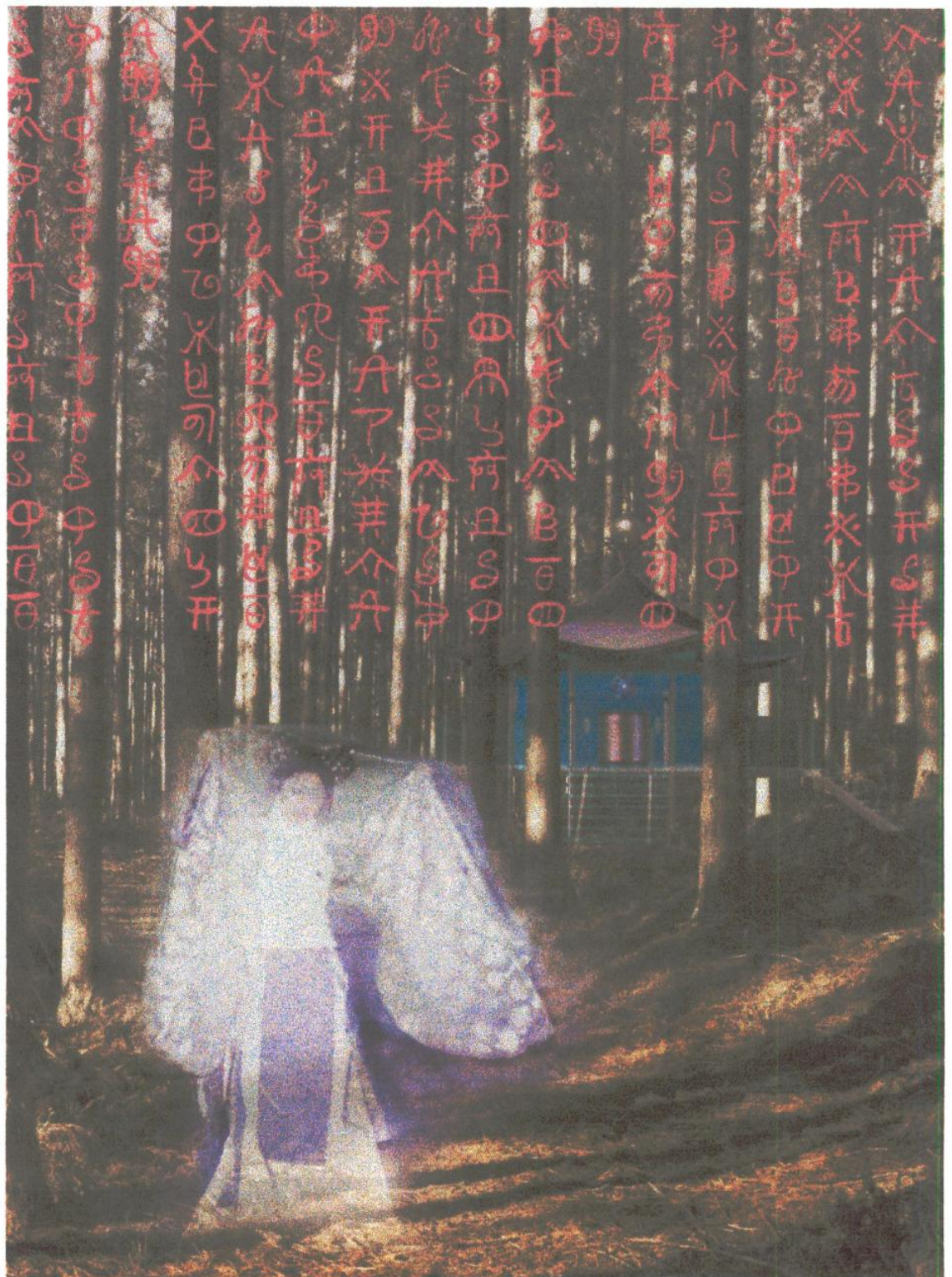
A modern variation on this practice can be found in the method of TV magick (The archaic spelling, magick, is to distinguish the practice of ceremonial magick from that of stage magic) used by members of Thee Temple ov Psychic Youth (TOPY). TOPY is a loosely knit occult organisation based on the complementary notions that magick is a technology and technology is magick, a philosophy that characterises the movement that has become known as 'Technopaganism'. TOPY members convert the cathode-ray tube into a contemporary speculum by tuning it to an empty channel, sitting close to the screen and staring at the flickering light to induce a trance state.

Last Departure shows a panoramic view of a deserted check-in area of the Kansai airport, as seen from a glass-partitioned corridor. The white haired, silver-eyed shaman-

girl is dressed in a white plastic sculpted collar, dress and boots with black rubber leggings. At her stomach a crystal ball floats between her hands. Within the crystal is the image of two eyes, suggesting the use of the crystal as a medium for communication with whatever deity this priestess is allied to. On each side of her are two transparent replicas of herself, both in the same pose as the central figure but without a crystal ball between their hands. The photograph catches these clones as they are fading from this earthly plane, soon to be followed by the currently corporeal central figure, as the title of the work, *Last Departure*, suggests. The relocation of a sacred ritual space to the high-tech environment of a modern airport creates a synergistic binding of spiritual transcendence with the twentieth century promise of escape that air travel has symbolised. Here technology becomes the site for the spiritual instead of the natural world, and a part-human cyborg becomes a bodhisattva pledged to deliver us into Nirvana. In this context it seems plausible that such a bodhisattva, created through technology rather than the traditional means of meditation, could be cloned to accelerate humanity's journey to transcendence. Mori herself has stated that, "our cyborg pop idols have to be kitsch, because they have to be reproducible."⁴ Perhaps this extends to her cyborg-religious icons too as representatives of a third millennial techno-religion.

The planting of the spiritual in our secular, technological society, appears dramatically in the use of modern technology in technopagan rituals. TOPY are only one group of a growing movement of 'chaos magicians' and technopagans who use whatever is to hand in their ritual practice. "Using popular media is an important aspect of chaos magic," says a practitioner, "most Pagans would get online and say, Let's get together somewhere and do a ritual. Chaos magicians would say, Let's do the ritual online."⁵ The forum for discussion and practice of technopaganism are the special-interest electronic BBSs (Bulletin Boards) given over to neopagan and New Age concerns. Discussion groups on widely dispersed BBSs are linked together into a communal conference. Julian Dibbell suggests that the virtual spaces of BBSs are,

showing signs of becoming the new temples of the information age....Throughout history, spirituality has been a site specific affair....So what's become of the sacred in a time when instantaneous communication makes a joke of the very notion of geography? It turns node specific, that's what. Nodes are the electronic network's version of places – any spot where two or more lines of communication intersect.⁶



11. Kumano (detail)



Fig. 1. Swans in the lake.

The spaces Mori constructs are both there and not there, time is simultaneously occurring, in *Kumano* (Pl.11.) and *Kumano (Álaya)* (Pl.12.) past, present and future are enfolded in a contiguous narrative space. The *Dream Temple* (Pl.11.) that appears is created by abstract mathematical fields inside a computer, although to the eye it appears as a tactile space. While the airport in *Last Departure & Miko no Inori* is a fixed place, it could also be anywhere in the world. In the service of their primary functions it is ensured that all airports are essentially the same. Made from the same basic elements, check-in desks, departure lounges, arrivals gates, the ceiling hung television screens displaying flight information, are all instantly familiar to the international air traveller. The airport is analogous to a node of an electronic network. Within the airport many lines of communication intersect, it is the site for transmission and reception, and is an element in a much larger network, that like electronic communications, has condensed our ideas of the world's geography and physical distance, contributing to the creation of the 'global village.' The ubiquity of the form and functions of the airport around the world, and its aspect as an interstitial space between two points gives it the quality of a non-place, a virtual place. It is a place travelled through, not to, and as such only the most tenuous physical connections are made with it.

In *Miko no Inori* Mori's cyber-priestess fondles and caresses her crystal ball as she "prays for the future and invokes greater harmony".⁷ Throughout the piece a mantra is being sung and the shaman-girl is enclosed in a clear bubble – a visible 3-Dimensional version of the traditional shamanic circle in which a ritual would take place. She begins with the ball at her stomach and rolls it round in her hands, moving it from her stomach to her chest. All the while she tenderly rolls the ball in her hands, at one point she looks lovingly at the crystal ball, brings the ball up to touch her cheek and smiles. The artist has said that this priestess "is a woman in contact with spirits, who receives them".⁸ The medium of reception in this case is the crystal ball, in which resides the spirit that receives the shaman-girl's affection.

The futuristic site of this prayer and the loving relationship between the cyborg-priestess and her crystal ball conjures up both the kind of hyper-fetishism that characterises consumerism and what Mark Dery has called the "theology of the ejector seat".⁹ This is the belief that all the world's problems will be solved by technology, and that the Buddhist Nirvana, Judeo-Christian Heaven or Garden of Eden awaits us in the next

millennium, as we transcend the flawed corporeal world and enter a technologically mediated world. Leo Marx identified this current as "the rhetoric of the technological sublime" - hymns to progress that "rise forth on a tide of exuberant self-regard, sweeping over all misgivings, problems and contradictions."¹⁰

The tender affection shown in *Miko no Inori* by the shaman girl towards her crystal ball shows a relationship to objects characteristic of consumerist capitalism. While the fetishisation of objects is not limited to consumerist culture, capitalism has created an unprecedented level of fetishism, where even a mass-produced product, one of millions, is imbued with a sacred aura and desirability. The high production values of Mori's work imitate the codes and methods of capitalist production, enacting a modern form of primitive sympathetic magic. Her colourful, glossy photographs are slickly styled fashion shoots, which reproduce perfectly in magazines. On the gallery wall these large photographs take on the scale of the advertising hoarding, but at a sharper resolution than the billboard these images resemble a still moment on the cinema screen. The use of science fiction themes reinforces this comparison, science fiction being a reliable box-office winner since *Star Wars* in 1977, and spiritual and Buddhist themes are also popular in film (*Kundun* (1998), *Seven Years in Tibet* (1997)). Perhaps most importantly the more ephemeral products of the entertainment industry, as opposed to manufacturing, are becoming increasingly crucial economically, accumulating massive revenues.¹¹ Mori's maintenance of a materialistic, high finish, high technology process even when dealing with spiritual concerns goes some way to reconciling the dualistic thinking of spirit and matter as oppositional. This is an attempt to find a way beyond a technophobic relation to the spiritual, which serves only to alienate us from our tools.

The Temple of Psychic Youth can be considered part of the subcultural current of Technopaganism, which has emerged over the last two decades from this century's revived neo-Pagan tradition in the West - a restoration of the magic, myths, and gods of Europe's pre-Christian people. Technopagans, are participants in a small but vital subculture of digital savants who keep one foot in the emerging technological world and one foot in the world of Paganism. Those involved come from a predominantly white, middle-class background. Many are involved in technical fields, as computer programmers, and network engineers. According to Margot Adler's 1985 revision of her study of American Paganism, *Drawing Down The Moon*, this affinity with technological

fields can in part be accounted for by the fact that the computer industry provides jobs for the type of intelligent, iconoclastic and experimental people that Paganism attracts.¹² Interestingly it is the grand exception to the 85-percent-male, 15-percent-female demographics of the online world. It is one virtual community where rough parity - both in number and in power - exists between the sexes. Because technopaganism is often goddess-based, where every incarnation of the divine can be symbolized by female personae, women are attracted to a religion where they can express their latent sense of potency without feeling they have to be crypto-male.

Superficially it does seem that so called technopagans embody quite a contradiction, being Dionysian nature worshippers who embrace the Apollonian artifice of logical machines. This apparent contradiction is refuted by the often-quoted technopagan maxim contributed by Arthur C. Clarke, science-fiction novelist and science writer, stating that, "Any sufficiently advanced technology is indistinguishable from magic."¹³ They see magic as a science of the imagination, the art of engineering consciousness and discovering the virtual forces that connect body and mind with the physical world. Mark Pesce, a San Francisco based technopagan sees witchcraft as applied cybernetics. He says, "It's understanding how the information flow works in human beings and in the world around them, and then learning enough about that flow that you can start to move in it, and move it as well."¹⁴

We are moving from a reassuringly solid and perceptible world of the mechanical to a unsettlingly wraithlike world of information technologies, a world controlled by circuitry too small to see and computer code too intricate to fully comprehend. Technopagans theorize that the old occult 'technologies of consciousness' can provide the tools and tactics needed to negotiate the confusing digital environment that we increasingly find ourselves immersed in. They also wish to honour technology as part of the circle of human life, a life that for Pagans is already divine. Pagans refuse to erect barriers between the sacred and the profane; their religion is one that celebrates the entire spectrum of experience. Theirs is a world where everything is connected, where the cosmos is a vast and resonating web of living and symbolic correspondences between humans the earth and heaven, a concept encapsulated in the ancient Egyptian notion: "As above, so below".

Technopaganism is an amalgam of the transcendentalist impulses of the 1960s counterculture, the millenarian mysticism of the New Age movement of the 70s, the apolitical stance of the human potential movement and the infomania of the 90s. Both neopaganism and the nascent New Age entered the mainstream through the counterculture's flirtation with Eastern mysticism and the occult – astrology, the tarot, witchcraft, and ceremonial magick. The 60s counterculture and the 70s New Agers both advocated a return to nature, seeing technology as irreconcilably part of the social and environmental problems that society faces. However, 60s counterculture wasn't as divorced from technological society as it liked to think – LSD came from Sandoz Laboratories, and Timothy Leary's proclamation that societal change could come from a synthesised chemical sprang from a faith in technology that believes that there is a technological solution to every human problem.

The beliefs and values that have grown out of the many strands of computer culture can be typically characterised by an optimistic faith in technology and a desire to pursue personal development. These movements are disillusioned with political strategies and instead place their faith in a hazily defined program for personal and social change, most typically based around the metaphor of Indras Net, or the interconnectedness of the Internet. In both these spheres actions have a ripple effect, radiating out from its source and changing the whole system, however slightly. Mark Dery has suggested that this faith in the ripple effect resembles Freud's 'omnipotence of thoughts'.¹⁵ This primitive mode of thought assumes a magical correspondence between consciousness and the external physical world, allowing the external world to be altered by thought.

These movements are often apolitical, a stance that is undoubtedly a product of people living in a world that moves too fast for government and conventional politics to keep up with. Many technopagans, as libertines, are certainly liberal and leftist, but have no wish to take part in the politically correct neopuritanism of the left. Instead they wish to affirm the right to freedom and pleasure, feeling that the Right and Left make common cause in their cultural conservatism. They castigate the morally priggish and self righteous left/liberal elements for their puritanical mistrust of money and their anti-technological bias that renders them increasingly powerless in an increasingly technologically based culture.

While the deadly earnestness of leftist politics has been a millstone around its neck, the response of groups such as technopagans has been to rely on the belief that the universe is unfolding just as it should, that mankind is being inescapably drawn towards a teleological endpoint, which on arrival will throw humanity into a timeless, harmonious afterlife. This myth is not dissimilar to science fiction tales of technologically superior alien saviours, fables that are based on the premise that advanced technology produces not only miraculous wonders but moral redemption as well. This all amounts to what sounds suspiciously like born-again Christianity's 'rapture' in which the faithful are drawn up from this earthly plane into heaven. Millenarian prophecies such as this (and those that have gone before it) promise that this techno-mystical apotheosis in the near future diverts public discourse from the political and socio-economic miseries of the present.

Psychologically, technopaganism represents an attempt to come to existential terms with the philosophical changes wrought by twentieth-century science. Philosophically it bespeaks a popular desire to contest the scientific authorities whose 'objective' consensus is the final, irrefutable verdict, in our culture, on what is true and what is not, despite the fact that most of us must accept such pronouncements on faith. Finally, it evidences a widespread yearning to find a place for the sacred in our ever more secular, technological society.

From the Enlightenment to the present, instrumental reason, armed with scientific method, has systematically dismantled much of the spiritual worldview, replacing it with the cosmology of science. With rationalism and materialism encroaching on all sides, those who feel impoverished by a withering away of the spiritual have adopted the strategy, consciously or not, of legitimating spiritual beliefs in scientific terms. The growing tendency to conceive of computer mediated interaction in spiritual as well as spatial terms revives the Teilhard de Chardinian dream of reconciling metaphysics and materialism in a science "tinged with mysticism and charged with faith."¹⁶ It is paralleled, among technopagans and New Age technophiles, by the practice of couching metaphysical convictions in scientific terms, and of seeking plug-in solutions to spiritual needs.



12. Kumano (Alaya)
video stills



New Age discourse in particular is woven from scientific-sounding theories of auras, etheric energies, vibrational fields, and biomagnetism. In the wake of seventies New Age classic, Fritjof Capra's *The Tao of Physics*, which draws connections between the new physics and Eastern mysticism, the language of physics and the theoretical musings of physicists have been used to buttress New Age thought. In fact the New Age dreams of self-actualisation have increasingly become tethered to transformational technologies such as mind-machines (to induce trance states), smart drugs (like Piracetam, Vasopressin and other central nervous system stimulants) and other tools for the expansion of consciousness. Such tools are an information age upgrade of the flickering firelight of the campfire and the ritual drumming used in primitive cultures to induce shamanic trances. Goggles fitted with flashing lights provide the firelight and synthesised sounds create the drumming.

In video projection, *Kumano (Álaya)* of 1997-98 (Pl.12.), Mori creates a catalogue of Japanese ritual from the past to her imagined future. Mori takes on the guise of five different characters; she appears as the Shinto spirit of the forest; a Shinto priestess wearing an elaborate ceremonial costume; a woman wearing red and yellow robes looking out a window at a modern city; a plastic-clad woman (who also appears in the photograph *Mirror of Water*) performing a futuristic tea ceremony; and finally a woman in traditional Japanese dress performing a tea ceremony in her home. Both the Shinto spirit of the forest and priestess also appear in the photograph *Kumano* (1997-98)(Pl.11.), along with the dream temple from the video *Kumano (Álaya)*. The priestess performs carefully choreographed ceremonial movements, offering a moonlight dance up to the Nachi waterfall, a most sacred site for Shinto worshippers.¹⁷ During the dance the camera cuts rapidly between different viewpoints of the dance and this is further interspersed by images of silver glyphs on a white background. A single pinging bass note accompanies each appearance of these characters. These glyphs are made up of Izumo characters, the first ancient characters in Japan, dating to the Yayoi period over 2000 years ago. The text is an invocation to the spirits of nature to heal the human spirit, and is seen in its entirety in the photograph *Kumano*. The cuts to the Izumo text consist of just one character briefly displayed or a series of these characters flashed onto the screen, almost subliminally, too quickly to accurately discern their shape. The combination of the priestesses movements, rapid changes of viewpoint, the music and singing, and the bright flashing of the Izumo glyphs conspire to create an environment

not unlike that of the shamanic ritual. Here however, as in technopagan rituals, technology is applied to create the conditions for the attainment of the trance states mentioned above.

New Age and neopagan attempts to validate their beliefs through the use of the tools, terms and conceptual models appropriated from the scientific and technological communities are perhaps misguided. Such a strategy may reaffirm the cultural superiority of empirical science and inductive reasoning as the arbiters of what is admitted into the mainstream and what is banished to the fringes. The New Age/neopagan redirection of science to wholly unscientific ends is an attempt to make their beliefs relevant to a technological society, and heal the split between religion and science. However, for technopagans, who reject the anti-technology bias traditionally associated with such beliefs, their relationship with technology has less to do with a desire for legitimisation and more to do with William Gibson's maxim that the street finds its own uses for things. They wilfully 'misuse' scientific concepts and digital technology in the service of the spiritual, the intuitive and the irrational, constituting a modern form of *bricolage*.

Structural anthropologist Claude Levi-Strauss in his study of primitive, pre-literate societies first formulated the concept of *bricolage*. In *The Savage Mind*, Levi-Strauss shows how the magical modes utilised by primitive peoples (superstition, sorcery, myth) can be seen as implicitly coherent, though explicitly bewildering systems of connection between things which perfectly equip their users to 'think' their own world. These magical systems of connection have a common feature: they are capable of infinite extension because basic elements can be used in a variety of improvised combinations to generate new meanings within them.

Bricolage is based upon 'the logic of the concrete' as Levi-Strauss terms it, a primitive or wild science that respects and makes use of the data of the senses. Cartesian scientific method involves the division of any problem into as many parts as are required to solve it. By examining the parts one arrives at an understanding of the whole. In contrast to this, wild science and thinking aims to reach a general understanding of a problem by the shortest possible means, through metaphorical thinking that establishes links between observable sense data. Where Cartesian logic is disjunctive, the overriding concern of the

bricoleur is to formulate a total understanding of the world through vast conceptual networks of interconnection.

In *Subculture: The Meaning of Style* Dick Hebdidge applies this anthropological term to technologically advanced cultures, describing how individuals manipulate disparate cultural phenomena to explain their world to themselves.¹⁸ This is the essence of the street finding its own use for things, technopagan eclecticism as a form of cultural 'poaching'. Culture critic Constance Penley defines poaching as the unsanctioned, idiosyncratic interpretation of books, TV shows, and other cultural texts taking away only those things that seem useful or pleasurable to the reader.¹⁹ Technopagans poach technologies, scientific concepts and mysticism, incorporating them into what forms a very pragmatic spirituality that involves the immediate experience of life which lends itself more to computer culture than most belief systems.

Technopaganism is concomitant with science's own demolition of traditional notions of universal truth and objective reality, a process hastened along by Godel's incompleteness theorem. This cornerstone of modern mathematics asserts that there exist meaningful mathematical statements that are neither provable nor disprovable, now or ever, because the very nature of logic renders them incapable of resolution. Godel has shown that the fundamental logical notion of 'truth' has no rational definition. What's worse, Heisenberg's uncertainty principle, a precept of quantum mechanics, leads to the inescapable conclusion that the very act of observation affects the state of the phenomenon being observed, an axiom that plays havoc with the notion of objective truth. The age of absolutes, if it ever really existed, is now passé. Einstein's work buried for once and for all the concepts of absolute space and time, while Heisenberg shot down the belief in absolutely precise measurement. Godel, of course, stamped paid to the quaint and curious ideas of absolute proof and truth.

Philosophical upheavals such as these, from within and without the scientific community, have radically revised the rationalist/materialist worldview, giving way to a quantum physics which often borders on metaphysics. Technopagans place their faith in the liquid indeterminacy of such a reality, hopeful that it might at least accommodate, and one day even validate, their cosmology.

¹ Mori quoted in Carol S. Eliel, in MCA CHICAGO & SERPENTINE GALLERY LONDON, Mariko Mori, London, 1998, p.29.

² Günter Berghaus, "Ritual and Crisis: Survival Techniques of Humans and Other Animals," Performance Research, Vol.3 No.3 Winter 1998, p.65.

³ John F. Avendon, "In Exile From The Land of Snows", quoted by Jay L. Goldberg, "Mirrors in The Sky; Tibetan Methods of Divination", The World Atlas of Divination, London, Headline Book Publishing, 1994, p.169.

⁴ Quoted by Barry Schwabsky in 'Costume Drama', World Art, No.14, 1997, p.20.

⁵ Tyagi Nagasiva quoted by Erik Davis "Technopagans", Wired Archive.

⁶ Julian Dibbell, "Cool Technology: Toys for the Mind", Spin, May 1991, p.50. Quoted by Mark Dery, Escape Velocity: Cyberculture at the end of the Century, Hodder & Stoughton, London, 1996, p.51.

⁷ Mariko Mori, interviewed by Demetrio Paparoni in "Mariko Mori", Tema Celeste, No. 65, October/December 1997, p.100.

⁸ Ibid., p. 100.

⁹ Dery, 1996, p.9.

¹⁰ Ibid., p.10.

¹¹ According to the December 12th 1993 edition of the New York Times, American films produce the second largest trade surplus, after airplane sales, of any American industry. (Dery, 1996, p.4)

¹² Davis, "Technopagans", Wired Archive.

¹³ Dery, 1996, p.50.

¹⁴ Quoted by Erik Davis in "Technopagans", Wired Archive.

¹⁵ Dery, 1996, p.27.

¹⁶ Dery, 1996, p.57.

¹⁷ Shinto is the indigenous religion of Japan. During the Heian period the Kumano Road was built so that worshippers could visit the Nachi waterfall.

¹⁸ Hebdige, 1993, pp.103-106.

¹⁹ Constance Penley, "Introduction", in Constance Penley, Elisabeth Lyon, Lynn Spigel, and Janet Bergstrom (Eds.), Close Encounters: Film, Feminism, and Science Fiction, Minneapolis, University of Minnesota Press, 1991, p.x.

Chapter 3: Transcendence

It has been suggested, by Robert Fouser, that with works like *Love Hotel*, *Tea Ceremony*, and *Play with Me*, Mori has created a visual *mappo*, the Buddhist word for a period of moral decline preceding the emergence of the future Buddha.¹ Fouser also posits that the cycle of alienation and fantasy in which consumerism is the would-be guarantor of nirvana, is analogous to the Buddhist cycle of birth, death, and rebirth; both leading to the kind of suffering from which few escape. In an interview in a Japanese newspaper Mori stated that, "We've fallen into a fin-de-siècle period of crisis in which people believe only the things they see right in front of them."² A crisis precipitated by the economic recession of the early 1990s in Japan, the bursting of a bubble of economic expansion that had continued since the 60s. Japan endured its last severe economic depression in the years following the Second World War.³ The country's young people of this time who were brought up in conditions of appalling poverty responded admirably by becoming the backbone of a disciplined workforce that was to become the foundation for one of the most successful economies in the world. There is a feeling in Japan today that, unwittingly, that same generation created a malaise amongst today's Japanese youth by spoiling them, because they did not want to see their children undergo the same hardships that they experienced. Many of today's Japanese youth are seen as workshy, selfish, lazy, and easily bored by anything that disagrees with them, and with Japan currently in recession, this indolent state of mind has led to some painful side effects among today's youth. There is a general trend among university students to 'drop-out', and, more worryingly, there is the rise of the phenomenon known as *Otaku* or 'freak'. *Otaku* refers to ostensibly conformist kids given to violence and anti-social behaviour, running from sniffing paint thinners, shoplifting, and arson to assault, kidnap, rape, and murder. High school girls are turning to prostitution in order to finance their lifestyle, waiting to be picked up in 'image clubs' before retiring with their client to a love hotel; a dark image of moral decline in contemporary Japan that Mori reproduced in her 1994 photograph, *Love Hotel*.

Buddhism can be characterised as a doctrine of psychotherapy rather than metaphysics, concerning itself exclusively with the suffering and frustrations of human beings instead of trying to satisfy human curiosity about the nature of the divine or the origin of the world. After the Buddha's death, Buddhism developed into two main schools, the Hinayana and the Mahayana. Mahayana Buddhism spread to Nepal, Tibet, China, and Japan and eventually became the more important of the two schools. With a flexible

attitude Mahayana Buddhism developed highly sophisticated philosophies over centuries of contact with different cultures. However, despite the high intellectual level of their philosophies the Mahayana school never loses itself in abstract speculative thought, seeing the intellect merely as a means to clear the way for the direct mystical experience or 'awakening'. The essence of this awakening is the collapse of intellectual distinctions and opposites to reach a world of 'acintya', the unthinkable, where reality appears as an undifferentiated 'suchness'. The Buddha achieved 'awakening' while deep in meditation under the Bodhi Tree, the Tree of Enlightenment, and this image of the Buddha in a meditative state is a significant religious image for the East. The Avatamsaka School of Mahayana Buddhism is considered by many to be the culmination of Buddhist thought and is based on the *sutra*⁴ of the same name. It was the *Avatamsaka-sutra*, more than anything else, that attracted Chinese and Japanese minds to the Mahayana school as it spread across Asia. The central theme of the *Avatamsaka-sutra* is the unity and inter-relation of all things and events; a conception that is the essence of the eastern worldview and is also a basic element of the world view emerging from modern physics.

Quantum physics has brought about a move away from the mechanistic, deterministic and reductionist Cartesian/Newtonian worldview. In quantum mechanics since the 1920s non-local effects – correlations without connections – have seemed by many physicists to be the only explanation of some of the behaviour of sub-atomic systems that did not contradict Special Relativity. In 1965 Bells Theorem was published, mathematically proving the existence of non-local effects. It asserts that: If some sort of objective universe exists in some sense, and if the equations of quantum mechanics have a similarity of structure (isomorphism) to that universe, then some form of non-local correlation exists between any two particles that once came into contact.

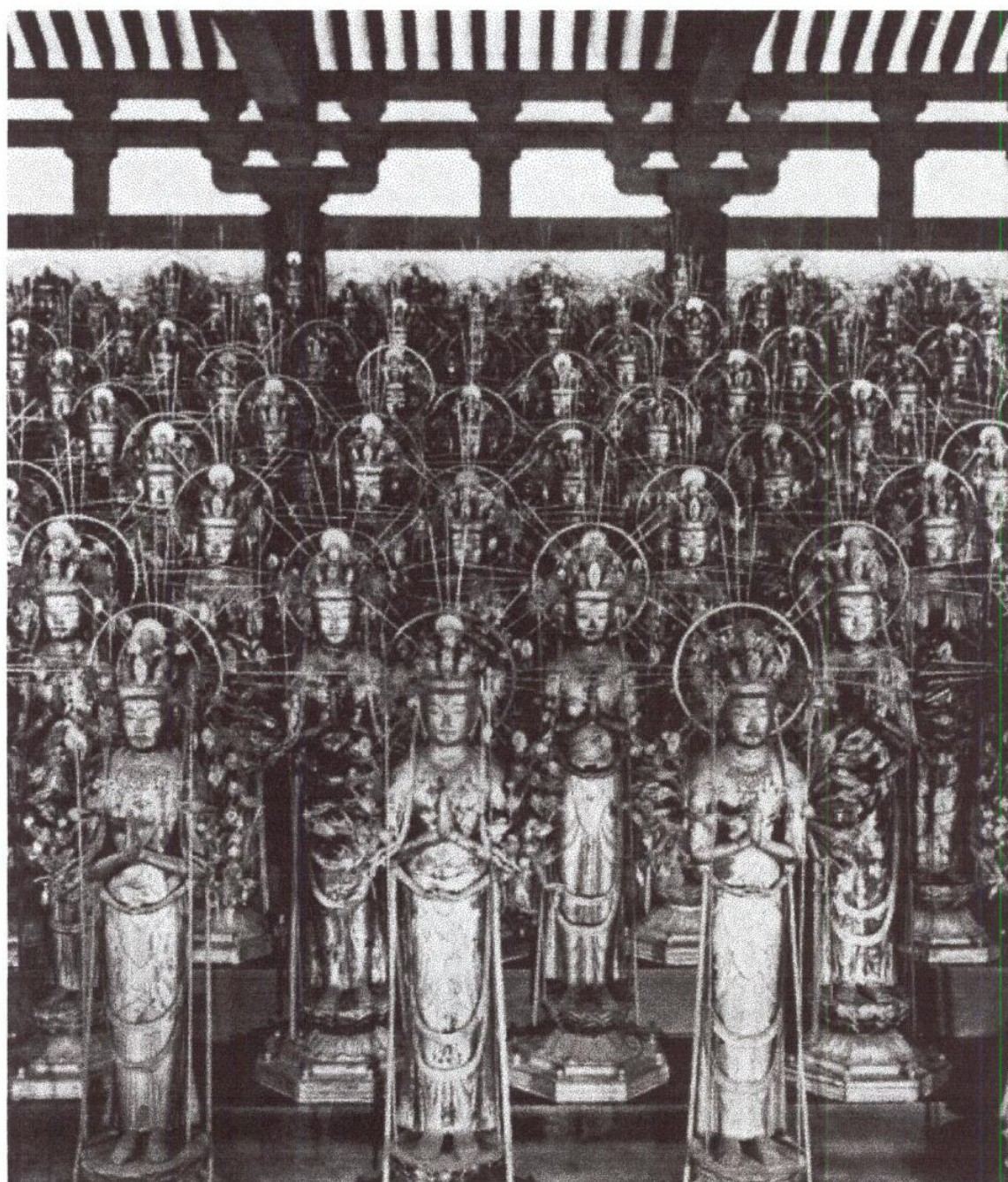
Such non-local effects would be part of the 'implicate order' proposed by Dr. David Bohm. Dr. Bohm posits an explicate or unfolded order which makes up the four-dimensional continuum known to post-Einsteinian science. This order, the visible universe, he names explicate or unfolded because it occupies space-time – every part has a specific location. He next posits an implicate or enfolded order which both permeates and transcends the four-dimensional explicate Einsteinian universe. He calls this order explicate or unfolded because it does not occupy specific space-time. No part of it has a specific location, its explicate results are both 'here' in space and also

somewhere and *everywhere* else; they can be found both 'here' in time and also *anytime* and *everytime* else. Dr. Bohm's model seems to undermine the traditional dualism of 'consciousness' and 'matter.' In his implicate order information cannot have a locality, but permeates and/or transcends all localities, a concept that sounds a lot like the unity and inter-relation of all things and events of the *Avatamsaka-sutra*.

The cyber-shaman girl of *Miko no Inori*, reappears in *Link of the Moon*, and *Last Departure* with replicated doubles; five aspects of Mori in *Link of the Moon*, and two apparitions on either side of her in *Last Departure*. Mori says that, in *Miko no Inori*, "The girl with the crystal sphere, who we see in this video, prays for the future and invokes greater harmony"⁵, and in *Last Departure* the now triplicate Mori is cast in the role of a Bodhisattva, who seems poised to deliver us into nirvana. The ideal of the Bodhisattva is one of the characteristic developments of Mahayana Buddhism. A Bodhisattva is a highly evolved human being on the way to becoming a Buddha, who is not seeking enlightenment for themselves alone, but has vowed to help all other beings achieve Buddhahood before he/she enters into nirvana. The replication of her character is a signal of the practices of production in capitalist societies, here re-appropriated to the ends of human evolution. It is also a foreshadow of her interest in using Shinto and Buddhist symbols and imagery in her later work. The replication of a 'god' in Buddhist iconography is exemplified in the *Kannon* sculptures inside the *Sanjusangen-do Temple* in Kyoto, Japan (Pl.13.). *Kannon* is the Buddha of mercy, and inside this Temple there are 1001 wood-carved sculptures of *Kannon*, covered in gold leaf. Each sculpture is in the form of a man or a woman, with thirty-three arms representing the thirty-three aspects that *Kannon* can take as the occasion demands.

Mori's intention for the Nirvana installation as a whole was to create a meditative environment that would provide the audience with a sense of tranquillity and transcendence. This meditative function is juxtaposed with her use of modern technological means to achieve this state of stillness, in an effort to fuse religion and science through art. This blend of the seemingly dichotomous is typical of Mori's work, and is founded on an enlightenment that involves, in her work and statements, a heightened awareness of the connectivity between all things in the universe.

The *Nirvana* installation consists of five parts; the four large photographic works, *Entropy of Love*, *Burning Desire*, *Mirror of Water*, *Pure Land*, and the 3-D video



13. Kannon Sculptures, Sanjusangen-do Temple
Kyoto, Japan

WILLIAM H. HARRIS
JANUARY 1891
THE UNIVERSITY OF CHICAGO
CHICAGO, ILL.
TO THE PRESIDENT OF THE UNIVERSITY
OF CHICAGO
AND THE FACULTY
OF THE UNIVERSITY
OF CHICAGO
I HEREBY
RECOMMEND
THE
ADMISSION
OF
THE
FOLLOWING
PERSONS
TO
THE
UNIVERSITY
OF CHICAGO
IN
THE
MONTH
OF
JANUARY
1891
WILLIAM H. HARRIS
PROFESSOR OF
HISTORY
AND
POLITICAL
ECONOMY
UNIVERSITY OF CHICAGO
CHICAGO, ILL.



14. Burning Desire

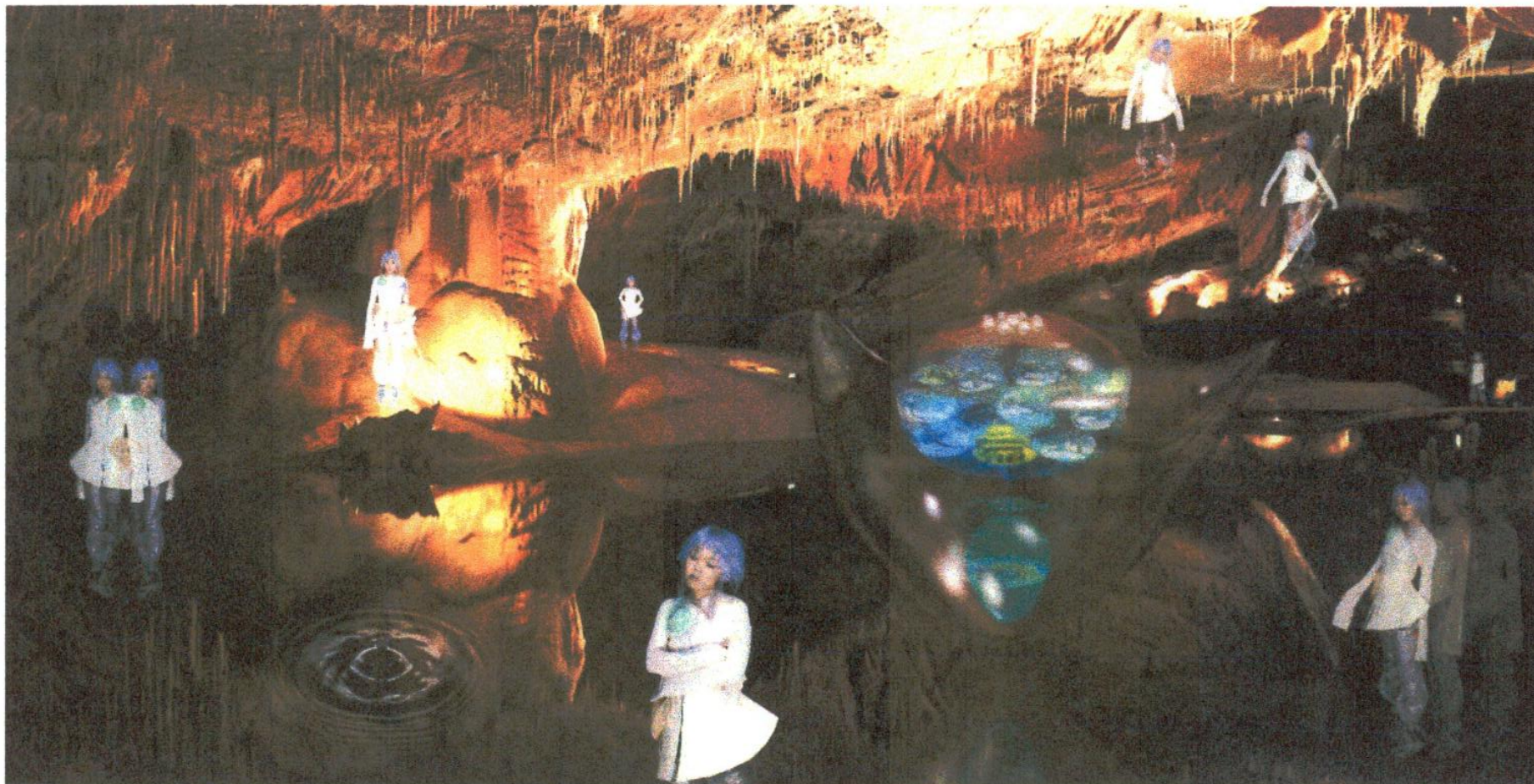


Page 11 of 11

Nirvana (all 1996-98). It is based around the five elements of nature according to Buddhist thought – earth, fire, wind, water and empty space. No single piece of the installation relates to one specific element, rather each contains multiple references, for example, *Entropy of Love* combines earth (the desert), wind (the wind farm) and empty space (the desolate aspect of the desert). The scene in *Burning Desire* (Pl.14.) was photographed in the Gobi desert, in an exceptionally craggy point in the terrain, where according to Buddhist legend a monk rested on his journey from China to India to acquire a holy text. Mori plays the part of all five figures, the four lower figures are engulfed in flames, wearing identical clothes and Tibetan inspired monk's hats, and they hover just above the ground. They all represent practitioners following the Buddhist path to enlightenment. The central figure, levitating high above the other four figures within a rainbow-coloured halo, shows Mori making the hand gestures and holding the symbols of the Bodhisattva of compassion.

Mirror of Water (Pl.15.) was shot in a cave in France, formed by the flow of water over millions of years. The character in this piece also appears in the video *Kumano*, performing a futuristic version of a traditional Japanese tea ceremony within the 'UFO tea-house' that appears here in the right half of the picture. This translucent, computer generated craft houses a variety of rooms within it, including an egg shaped 'tea ceremony room of the future' in its lower area. The 'UFO tea-house' appears briefly in the sky at the start of *Kumano*, pivoting in time to the music and then fading from view just before the camera pulls down to the forest floor and we encounter the Shinto spirit of the forest. Its appearance establishing a link between these past and future traditions. The figure in *Mirror of Water* is depicted within the scene eleven times, standing or levitating at different points inside the cave. This repetition is influenced by historical eastern art forms where several different aspects of the scene are shown simultaneously within the picture plane. Here it represents that the self is part of a continuous chain of life, death, dissolution and rebirth, and that human consciousness follows this endless flow just as the cave is continuously shaped by the flow of water through it.

The title of *Pure Land* (Pl.16.) refers both to a particular state of rebirth in the Buddhist cycle that ends in nirvana, and to the Pure Land School of Mahayana Buddhism. At the root of this school is the doctrine that the original nature of all human beings is that of a Buddha, and that in order to enter into nirvana, the 'pure land,' all that one has to do is to have faith in one's original Buddha nature. Alternatively an appeal can be made to



15. Mirror of Water

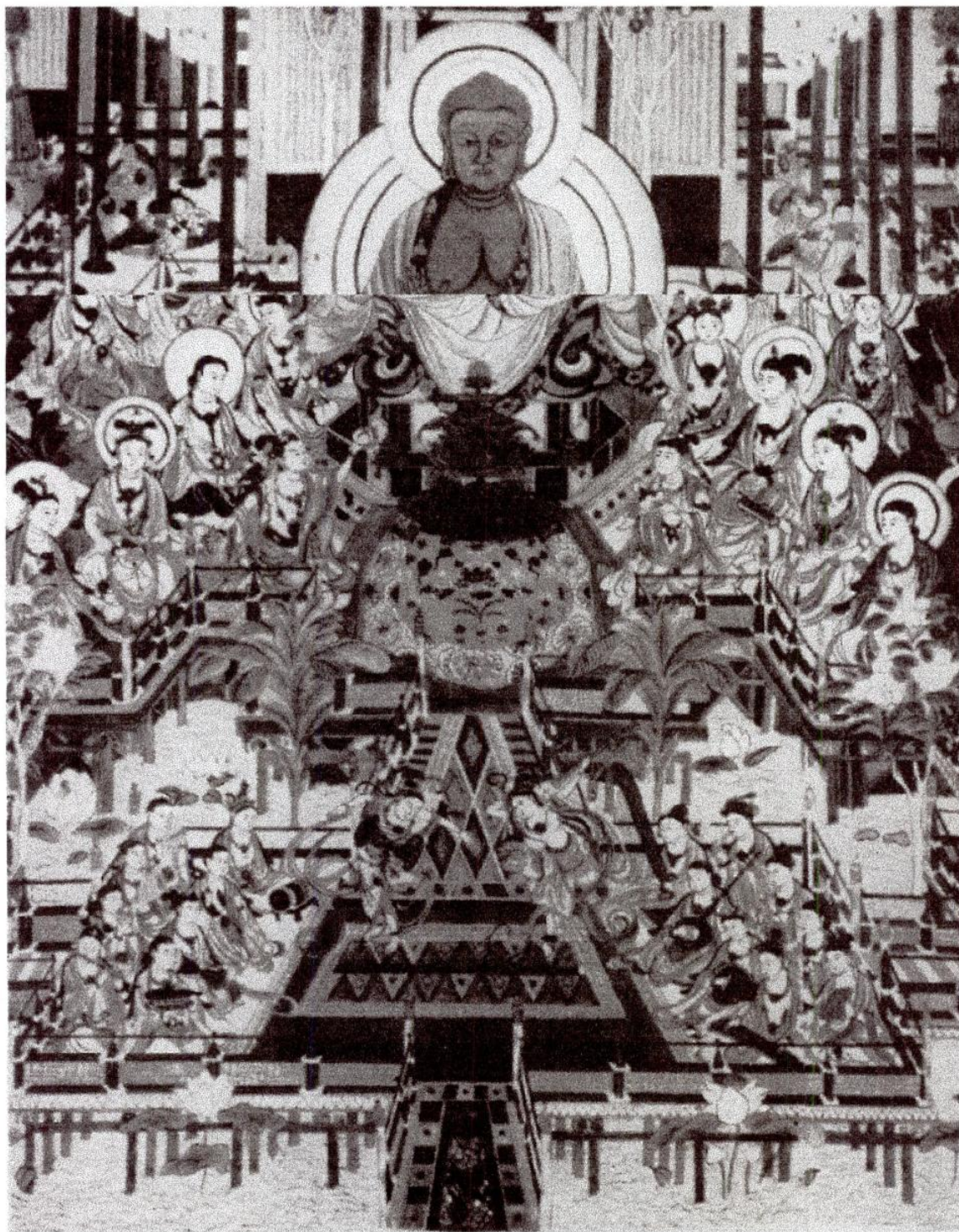


16. Pure Land

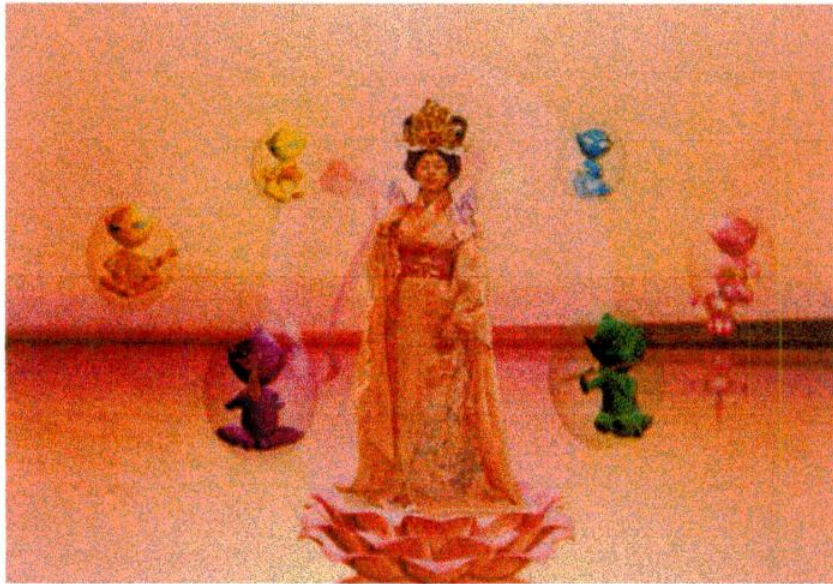


the Buddha of compassion, *Amida* (or *Amitabha*), who if called upon for assistance with the words '*namu Amida butsu*,' will eventually ensure that you enter nirvana. The paradise of the Pure Land is marked by its sensuous, pleasure loving aspects, which are depicted in a Chinese wall-painting created during the Tang Dynasty (second half of the eighth century)(Pl.17.). The wall-painting pictures dancers with flowing scarves encircled by court musicians playing various instruments. Mori transforms this vision of the Amithabha's paradise, as she surrounds herself with cartoonish, elf like alien musicians, called *tunes*, who play ancient instruments that are still used in Shinto and Buddhist ceremonies in Japan today. Pure Land is set in the Dead Sea, the lowest point on the earth where the high salinity of the water cannot support life. That salt is used for purification in Shinto traditions may be related to Mori's choice of this as a location. On the shore in the background is a colourful plantlike, plastic structure similar in shape to a Tibetan *stupa* (a Buddhist shrine), but also resembling a composite garish alien structure, cartoon robot, and a kitsch table lamp. The lotus blossom that Mori floats above is equally kitsch, made as it is from shiny, pellucid acrylic petals ranging in colour from yellow to red, that as one critic noted look "like one of those crap Stevie Wonder album covers."⁶ The flower of the lotus symbolises enlightenment, a symbol of the purity and perfection that grows out of the soil but is not defiled by it, just as Buddha was born to the world but lives above it.

The 3D video, *Nirvana* (Pl.18.), illustrates the same scene as Pure Land. Mori's elaborate dress is inspired by a late twelfth century wood carving of the goddess of wealth and beauty, *Kichijōten* (Pl.19.), she is joined by the now computer animated court of *tunes*. In her hand she holds a *hōju*, a crystal in the form of a lotus bud, which is frequently held in Buddha images. Like the figures in the Tang Dynasty wall-painting, she performs a dance that she combines with *mudra* – traditional hand positions in Buddhist iconography that are employed to evoke particular states of mind. Mori holds the *hōju* crystal but it also at times hovers above the palm of her hand, moving from one hand to the other in a wide arc that takes it towards the viewer and back away again, an exciting spectacle in this 'technicolor' 3D video. The most pleasurable point of this simulated 3D spectacle occurs when Mori's character 'lifts off' away from the lotus blossom into the air, settling into a horizontal 'flying' position not unlike the comic book character *Superman*. With a sweeping movement of her right arm the goddess *Kichijōten* scatters delicate flower petals on the wind, and they float, tumbling over and over, towards the viewer. That the form and motion of these



17. The Paradise of Amithaba

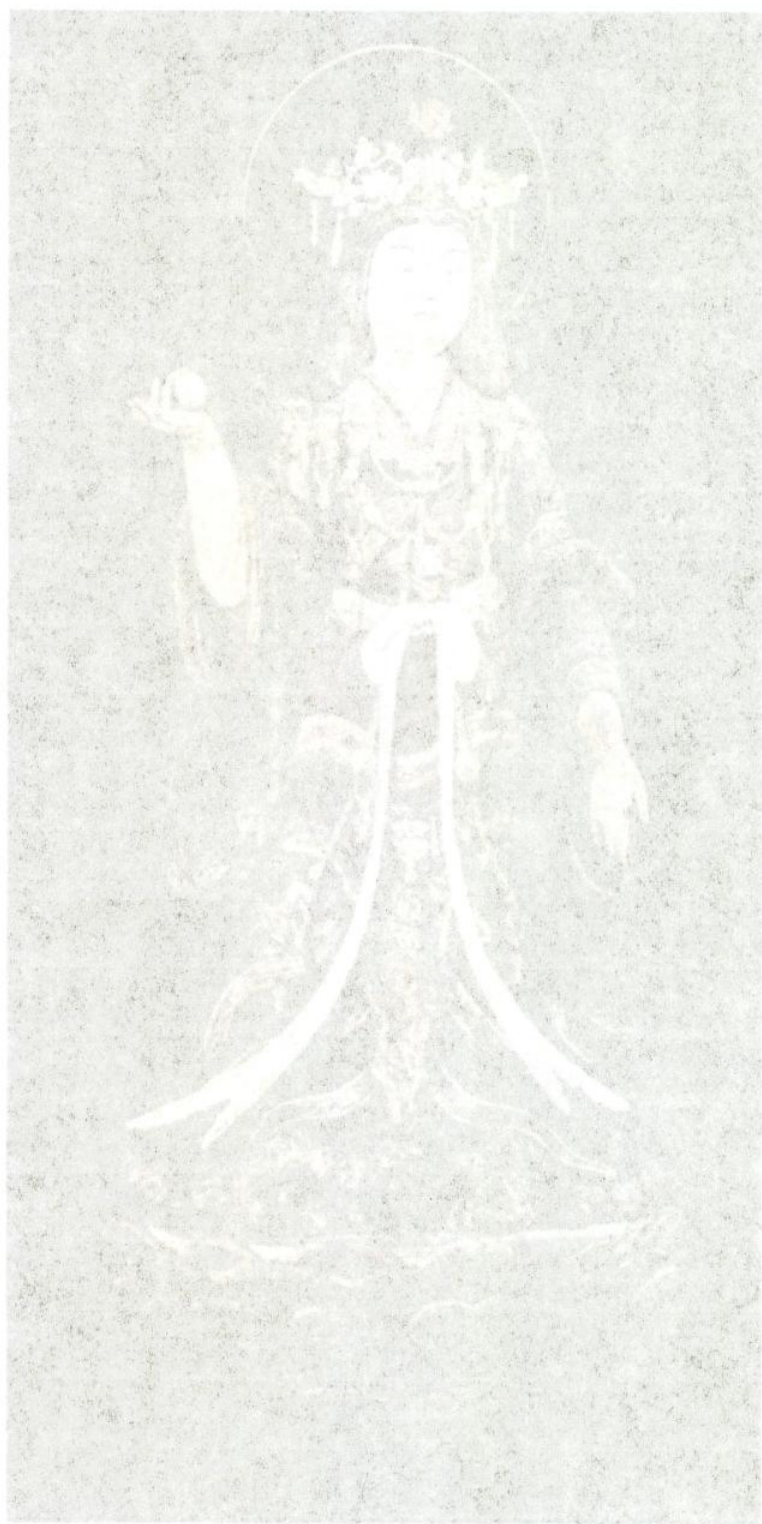


18. Nirvana





19. Kichijoten, Goddess of Wealth & Beauty



10. Standing figure of a Bodhisattva, 10th century, China.

candyfloss coloured petals are computer generated only seems to enhance the beauty of this scene, as these mathematically constructed, perfect petals turn and glide towards and 'past' us. As the video progresses the *tunes* fly towards the viewer and disappear out of sight beyond the screen. *Kichijōten* fades from view and the whole scene dissolves and transforms itself into a swirling 'galaxy' of lights and eventually the video ends in pure whiteness – representing *Sunyata*, 'Emptiness' or 'the Void,' the ultimate reality which gives birth to all forms in the phenomenal world.

The *hōju* crystal and the lotus blossom appear combined in Mori's *Enlightenment Capsule* project (1996-98). Here a colourful acrylic lotus blossom is contained inside the tear drop shape of the *hōju* crystal. At the top of the capsule is a fibre-optic lamp, the Himawari, which channels sunlight in from outside, separating out the infrared and ultraviolet rays, to transmit a purified light into the capsule. Mori's wish is to construct a full size version in which a person could sit on the lotus blossom platform, that would levitate upwards by the use of an electromagnetic field, in an attempt to induce a technologically mediated enlightenment.

For Mori aspects of traditional forms and thinking are important, but she also sees the primacy of popular culture as an influential force in contemporary life. Feeling that religious imagery has been eclipsed by pop imagery, becoming an international language, she utilises popular forms to evoke the spiritual. She sees popular culture as a liberating force from the bonds of history and tradition, contributing to progress and development of new ideas and new modes of thought, as well as providing some respite from everyday life. That perceived liberation from history and tradition is concordant with Toffler's observations of the different perceptions of time between different 'waves' of civilisation. Toffler theorises the first wave of civilisation to be agrarianism, the second, industrialism, and the third, post- industrialism. Each of these has different interests and need different resources, therefore viewing reality from different perspectives. He says,

Even their conceptions of time, and of history, differ. We live in an accelerating, almost real-time environment, and it's hard to comprehend the attitudes of the Serbs, say, or the Jews and the Arabs still fighting about wars that took place a thousand years ago.⁷

Japanese pop culture is a hybrid combining Western influences with Japanese elements. The reverse is also true regarding Western popular culture, as Mori points out, "In art in the '60s and '70s, the West adopted many Eastern philosophies," and in the everyday

sphere, "You see futons or sushi more in New York than in Tokyo. The cultures are connected."⁸ She is particularly interested in this circulation, exchange and process of globalisation taking place in pop culture, and that in a world of proliferating interconnections the notion of cultural oppositions and conflicts are becoming increasingly outmoded.

Not satisfied with her work being simply a reflection of or influenced by popular culture, she desires to go beyond this to create something new that will itself enter into popular culture and be influential. Believing that popular culture is "supporting our culture, it carries a lot of peoples humanity and also a dream," she sees it as providing models of what could be, creating the desire for it by "symbolis[ing] our consciousness, our expectations in life."⁹ For Mori the successful entry of a product, vision or dream into popular culture signals that it has fulfilled a consumer need.

Technology is also seen by Mori as an influential and predominately positive force, providing a form in which dreams, fantasies and visions of the future can be realised, becoming more and more real, helping to advance their attainment within culture. The shift in her work from the urban environments of *Tea Ceremony* and *Subway* etc. to the natural and otherworldly settings of *Nirvana*, *Kumano* etc. is not a rejection of technology but a search for balance. Mori states that,

My hope is in new ideas and new thinking. Not to go against technology or science, but I am trying to find a way to use these correctly. That's really the reason my work shifted from the urban to the natural. Because we always have culture and nature, and to look at culture, sometimes we have to look at nature, and to look at nature sometimes we have to look at culture.¹⁰

Believing that technology effects dramatic changes upon history, lifestyles, thought, philosophy and consciousness, Mori sees that new, ever more available technologies like Virtual Reality will completely transform our experience of the world. She says,

Our consciousness will be changing in terms of reality, in terms of the material. We are always somehow obsessed by the material, but in Virtual Reality there is only illusion and image collected in your memory as experiences. Things like this will really change and shift what we do, develop our concept of space and time and consciousness and make us more aware of the essence of life. My hope for technology, cyberspace for example, is that it will bring up questions of the space that actually exists, space that exists conceptually, and also inner-world space, mind space.¹¹

What many people see as the symptoms of *breakdown* - increasingly complex technologies, globalization, *et cetera* - Mori sees instead as signs of *breakthrough*. The mathematical odds of breakthrough are, at least, on Mori's

side. Nobel prize winner, Dr. Ilya Prigogine's work deals with the process of the emergence of negative entropy (coherent order) from stochastic processes. Dr. Prigogine has demonstrated mathematically that organised systems exist in a dynamic tension between chaos and information (disorder and order).¹² The more complex the system the greater its instability. Instability is vital to evolution, for example, insect societies are highly stable and have not evolved for several million years. 'Hot societies' (in Levi-Strauss's terminology) like ours are highly unstable and are in continuous evolution. Prigogine uses the concept of the '*dissipative structure*' to demonstrate the evolutionary value of instability. A dissipative structure is highly complex and therefore highly unstable, and is mathematically more likely to change – to evolve. All dissipative structures are teetering, perpetually, between entropy (self-destruction) and re-organisation on a higher level of information (coherent order). Prigogine's math shows that the more complex structures, such as our information-rich and increasingly global human society, are much more likely to 'dissipate' into higher coherence than disorder.

¹ Robert Fouser in, "Mariko Mori: Avatar of a Feminine God," *Art/Text*, No.60, 1998, p.35.

² Quoted by Robert Fouser in, "Mariko Mori: Avatar of a Feminine God," *Art/Text*, No.60, 1998, p.35.

³ The source for much of this account of the rise and decline of Japan's economy is, Paul Hullah, "East Side Story", *The Face*, Nov. 1998, pp154-160.

⁴ a Buddhist scripture.

⁵ Mariko Mori, interviewed by Demetrio Paparoni in "Mariko Mori", *Tema Celeste*, No. 65, October/December 1997, p.100.

⁶ Adrian Searle, "Barbie finds Nirvana", *The Guardian*, July 14th, 1998.

⁷ Quoted by Peter Schwartz, in "Shock Wave (Anti) Warrior", *Wired Archive*.

⁸ Quoted by Barry Schwabsky, in "Costume Drama", *World Art*, p.20

⁹ Quoted by Margery King in MCA CHICAGO & SERPENTINE GALLERY LONDON, *Mariko Mori*, London, 1998, p.36

¹⁰ *Ibid.*, p.38

¹¹ *Ibid.*, p.39

¹² Robert Anton Wilson, *Prometheus Rising*, 1994, p.235.

Conclusion

Mori's works articulate our contradictory hopes and fears for technology, that find their most common expression in science fiction narratives. Here nature and technology are often in conflict, nature is the figure for 'common sense' humane values and technology is a threat to that 'natural' world and the supposedly natural order of established social frameworks. With these established frameworks perceived as natural, the potential changes to social relations precipitated by technology are seen as unnatural. The careless application of technology on a global scale is seen as encroaching upon the natural world. This has led to the fear that we may be facing nature's final disappearance, and its transformation into a commodified simulation to be bought and sold. If the natural world can be so easily commodified, it seems likely that the human body itself is vulnerable to the unwanted enhancements of technology to increase its commodity value; that the body might be re-cast into a form dictated by technological society, fixed within specific social roles like Mori's cyborgs in pieces like *Tea Ceremony* and *Play with Me*. Paradoxically, technology is also viewed as a chance for liberation from the mortal body. Technological progress promises to culminate with the creation of an immortal, invulnerable body, so that humanity becomes a 'prosthetic god'. Alternatively, at some point in the future, technology will have the means to create a technologically mediated Garden of Eden, here on the surface of the earth or simulated within a vast computer.

The placing of technology and nature in opposition has often led to a choice between one and the other. Movements formed in opposition to dominant social structures, seeing technology as complicit in maintaining the *status quo*, form an anti-technological bias, often positing holistic alternative such as a return to nature. Donna Haraway's assertion that we are all cyborgs, already hybrid creatures formed in the overlap of technology, society and nature, is an important exit point away from the dualistic thinking that often leads to a technophobic relation to technology and science. Mori's cyborgs embody both the fear of our commodification and control by outside agencies (*Play with Me*), and later with the construction of a new identity related to the spiritual and technological (*Last Departure*). This move, from the fear of technology using us, to a position where we begin to use technology for ourselves, is vitally important to our freedoms.

With the fundamental changes in scientific views of the world this century, we have slowly begun to move out of an Aristotelian civilisation (dogmatic, monistic, authoritarian) to a non-Aristotelian civilisation (relativistic, pluralistic, libertarian). The notion of an objective reality has broken down, and the universal truths promised by technological progress or a return to nature, while very appealing, is dangerous. Instead the cyborg provides the possibility for a new identity better suited to our rapidly evolving world. The hybrid nature of the cyborg and its ability to take on different identities as the occasion demands makes it perfectly adaptable to the challenges of the present and future.

The challenges of the present are faced up to by divergent groups of spiritual cyborgs, who employ ritual practices in order to understand the transitions from old to new orders. These spiritual cyborgs, technopagans and chaos magicians, use whatever tools come to hand, in a form of *bricolage*, to understand the changes being wrought on society by technological advances. While ritual is a stabilising influence in times of crisis, these technopagans like Mori's cyborgs, choose to create a spiritual space within technological society and not in isolation from it. Like Haraway they are seeking to create a relation to technology that is not technophobic, but instead embraces its possibilities for good or ill rather than retreating from it totally. In Mori's work the spiritual element of ritual is combined with the technological cyborg and satires on consumerism. The relationships between these three elements are ambivalent. A cyborg status confers both the possibilities of domination and liberation. The spirituality she represents promises enlightenment, but also entrapment in the fetishistic distractions of consumerism. The enticements of popular culture are mocked while still holding a powerful attraction. This ambivalence is perhaps the best approach in a world where all previously established categories have broken apart, and all models and theories are subject to continuous revision. Simply categorising materialism or technology as undesirable or harmful precludes the possibility that they might be used to our advantage.

The *Nirvana* installation, and Mori's statements about it, represent the apotheosis of her ambivalent relation to the categories of technology, religion, and popular culture. Finally she herself has become a god and has created the technologically mediated Eden that technological progress promises. The critical agenda of her earlier work seems to melt away, just as all intellectual distinctions disappear with the advent of

Enlightenment. Here everything is interconnected and interdependent, influenced by the teachings of Buddhism and the discoveries of quantum physicists. The imagery of the Nirvana installation is an undifferentiated fusion of spiritual, technological and pop cultural forms, all seen as positive and contributing to the future enlightenment of humanity.

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