

16. Frederic Raphael, *Eyes Wide Open: A Memoir of Stanley Kubrick* (New York: Ballantine, 1999), p. 160. Subsequent quotations are from this edition, and page numbers are indicated in the text.
17. Frederic Raphael further discusses the film (indicating his contempt for Cruise and Kidman, whom he describes as 'coldly calculating') in 'The Pumpkinification of Stanley K.', in Geoffrey Cocks, James Diedrick and Glenn Perusek, *Depth of Field: Stanley Kubrick* (Madison: University of Wisconsin Press, 1961), pp. 62–73.
18. Carl Schorske, *Fin-de-Siècle Vienna: Politics and Culture* (New York: Vintage, 1981), p. 223.
19. For additional discussion of this topic, see Peter Lowenberg, 'Freud, Schnitzler, and *Eyes Wide Shut*', in Cocks et al., *Depth of Field*, pp. 255–79.
20. Michel Chion, *Eyes Wide Shut*, trans. Trista Selous (London: BFI, 2002), pp. 70–6. All further references are to this edition, and page numbers are indicated in the text.
21. Christian Appelt, 'The Craft of Seeing', in Reichmann and Flagge (eds), *Stanley Kubrick*, p. 261.
22. N. C. Menon, 'Kubrick's *Eyes Wide Shut* slights Hinduism, feel US Indians', *The Hindustan Times* (26 July 1999), <[www.media-watch.org/articles/0799/220.html](http://www.media-watch.org/articles/0799/220.html)>
23. Tim Kreider, 'Introducing Sociology: A Review of *Eyes Wide Shut*', in Cocks et al., *Depth of Field*, pp. 280–97.
24. Celestino Deleyto, '1999, A Closet Odyssey: Sexual Discourses in *Eyes Wide Shut*', <[www.atlantisjournal.org/HTML%20Files/Tables%20of%20contents/28.1%20\(2006\).htm](http://www.atlantisjournal.org/HTML%20Files/Tables%20of%20contents/28.1%20(2006).htm)>

## Part Six

# EPILOGUE

### I. Afterthoughts

In the absence of a grand synthesis or a key to Kubrick's work, which I believe would be impossible, it may be useful to offer some remarks on the themes that have emerged from this study. From the beginning I've emphasised that Kubrick's position as an author is paradoxical and almost unique. For most of his career he seemed both inside and outside the American film industry. In some ways he might be compared to Martin Scorsese or Woody Allen, who made their home in New York rather than Hollywood; but Kubrick, after shooting three early pictures in California, moved much further than Scorsese and Allen from the centres of US entertainment and managed to keep a greater control as producer. Even though his career was enabled by historical conditions – the breakdown of the classic studio system, the advent of 'art' cinema, the rise in foreign productions of American movies and so forth – his position in history is unusual. He can't be placed among the classic auteurs, or among the New York television directors who entered movies in the 1950s and 1960s or among the directors of the 'New Hollywood'. Part of the aura surrounding his name and much of the argument I've made for his late-modernist attributes derives from his special status and apparently aloof individuality, coupled with the sense that nothing in his films (with the exception of *Spartacus*) happened unless he allowed it to happen.

Unlike many directors, Kubrick never suffered the experience of having his projects re-cut, re-shot, or abandoned by the organisations that financed and distributed them. *Dr. Strangelove*, 2001 and *The Shining* were slightly revised after their premieres, but Kubrick did the revisions. He left no 'director's cuts' or alternative versions to signify a conflict between the artist and the money men. By the end of his career, the US movie industry was moving into the digital era and being absorbed into home entertainment, but Kubrick

continued to make personal films in his own style, eschewing the tight framing and skitish editing typical of movies in the age of Avid technology. Although his films were sometimes strikingly different from one another and derived from a variety of literary sources, his career as a whole was unified by his stylistic, emotional and intellectual concerns, and in qualitative terms the level of his achievement was remarkably consistent – more like a writer or painter than a movie director.

Almost from the beginning, Kubrick was a total film-maker who combined the sensibility of a literary intellectual with the technical expertise of a photographer/editor and the instincts of a showman. The strength of his work came from his ability to link together these and other apparently irreconcilable oppositions. He had a sensitive understanding that movies are a medium of light and sound, but at the same time, his films were characterised by novelistic or theatrical word-play. He disavowed the old Hollywood codes of lighting to such a degree that even *2001* and *Barry Lyndon* owe something to his early experience as a street photographer; and yet his visual 'realism' was counterbalanced by his interest in myth, fairy tales and the Freudian unconscious. A dialectic or tension between the rational and irrational can be seen everywhere in his work, so that he usually leaves the impression of a fastidious, highly controlled or 'cool' technician dealing with absurd, violent or sexually 'hot' material. As one instance, consider the characteristic 'tunnel' shots that I and other critics have noticed in his films, some of which are vividly spectacular (Davy's nightmare in *Killer's Kiss*; Colonel Dax's walk down the trench in *Paths of Glory*; the B-52 hurtling between mountains in *Dr. Strangelove*; Bowman's journey through the star gate in *2001*; Danny Torrance's exploration of the hotel hallways in *The Shining*); and others fairly simple or ordinary (a car moving down a foggy road at the beginning of *Lolita*; a nurse rolling dinner down a hospital corridor in *A Clockwork Orange*; Lord Bullingdon advancing uneasily along the entrance to a men's drinking and gambling room in *Barry Lyndon*; Sergeant Hartman reviewing a line of recruits in *Full Metal Jacket*; Bill and Alice Harford hurriedly walking along their apartment hallway as they prepare to leave for a party in *Eyes Wide Shut*). Most of these shots involve a camera with a wide-angle lens moving forward or backward along a corridor of some kind; but Kubrick seems less interested in the specific technique than in the quality of the image itself, which can be achieved by various means. He creates the sensation of a series of lines sharply converging towards a distant horizon and of a steady, smooth, fairly rapid movement towards or away from a vanishing point, which is sometimes obscured by fog, smoke or a turning hallway. The image is orderly in its composition, pleurably dynamic in its streamlined movement and almost phallic in its energy; but at the same time, either overtly or very subtly, it generates a feeling of anxiety, as if we were moving forward or backward through a demonic space that might burst open into something threatening or unknown.

This orderly presentation of a strange, unnerving energy is typical of Kubrick's work, but in intellectual terms his career involves not so much a coherent world view as a trajectory, an interaction of his social, technological and aesthetic interests with historical forces. At

the deepest level, one key to his art can be found in the emotional qualities of his films, which I've argued are strongly marked with grotesque effects. He makes toilet jokes; he uses actors who have eccentric faces and performing styles; he puts masks on the players or encourages them to behave like caricatures; and he repeatedly blurs the distinction between the animate and inanimate by showing us mannequins, dolls, figures in wheelchairs or computers that seem alive. Running beneath all these things is an anxiety about the body – its secretions, its orifices, its inevitable decay and death – mingled with a derisive sense of humour, so that the audience is caught somewhere between shock and laughter. Beginning with *Lolita*, the films also tend to swerve unpredictably between different modes or tonal qualities, creating a grotesque clash between acting styles or between realism and black comedy. Kubrick is essentially a satirist whose subject is human folly or barbarism; in the interest of satire, he's drawn to a family of 'estranging' effects – the grotesquely misshapen, the uncanny, the fantastic, the Kafkaesque – and he repeatedly conjoins methodical orderliness and horrific absurdity.

Kubrick's treatment of male sexuality, one of his leading subjects, is nearly always inflected with darkly psychoanalytic themes, but like Freud he was capable of hard-won respect for marriage. His attitude towards science and machines is equally complex, and it interacts in interesting ways with the social and sexual implications of his films. One of the cinema's foremost technicians and engineers, Kubrick was well grounded in physics and mathematics and obviously attracted to a kind of speculative, scientific futurism. In *2001*, he suggests that humanity may be evolving towards pure machine intelligence, leaving behind its grotesque organic shell and finding a kind of immortality; but in *A Clockwork Orange* he offers a nightmare view of a 'mechanical', reified society in which sexuality becomes a reflex and art a commodified stimulus. As his career progresses, his romantic identification with the criminal as a kind of artist or elite outsider (as evidenced in *The Killing*, *Lolita* and *A Clockwork Orange*) is increasingly shadowed by his social pessimism, and partly for this reason it's difficult to say exactly what political position his films occupy. His career began with a photograph of a news vendor mourning the death of F. D. R., a hero to his family and to most New Yorkers in the 1940s, but the image was despairing, marking the end of an era and the beginning of what would become a Cold War. Kubrick's subsequent films, made in the period of the Cuban missile crisis, the Vietnam War and the increasingly reactionary drift in US politics, convey liberal, libertarian, anarchic and, in some respects, conservative attitudes; the conservative impulses, however, might be said to dominate in the sense that there is very little room in his work for utopian idealism. The exception to the rule might be in certain of his uses of myth or fairy tale, as in *2001* or in the boy's victory over a menacing adult in *The Shining*, but I would hesitate to call either film optimistic.

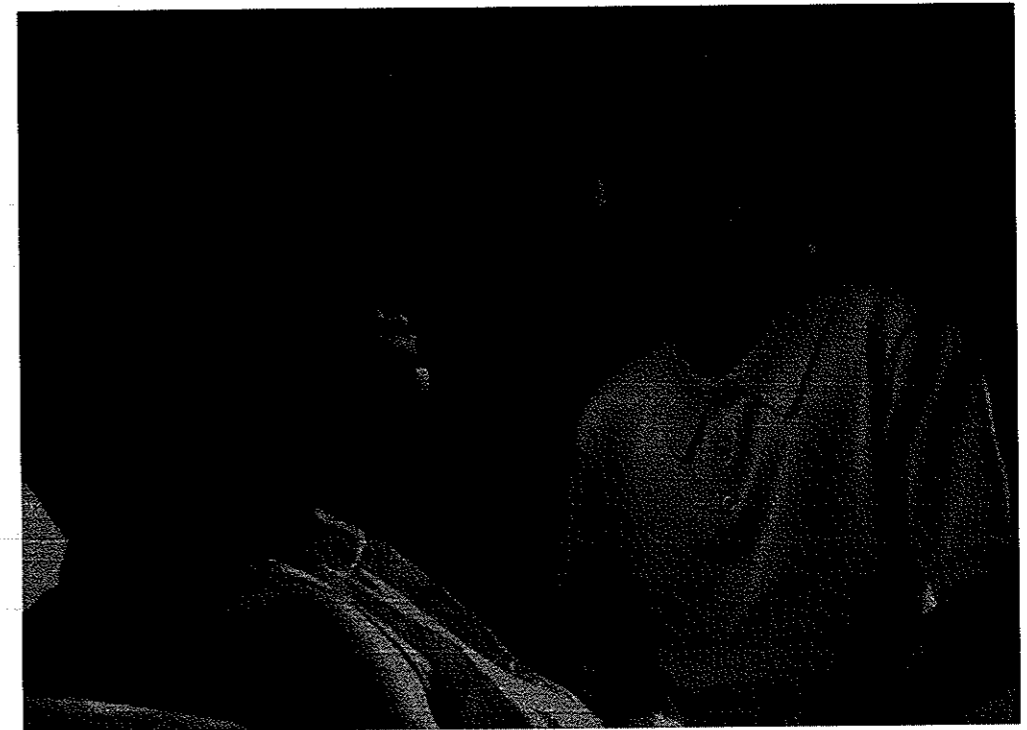
All these issues seem to me to coalesce in one of Kubrick's most ambitious projects, *A. I. Artificial Intelligence*, which was brought to the screen by Steven Spielberg a couple of years after Kubrick's death. In lieu of any further summary and as a way of achieving some

sort of closure, I now want to offer a fairly wide-ranging meditation on that film, in the process moving beyond the subject of Kubrick as auteur. My discussion takes a different form than previous chapters on individual pictures, but it engages with some of the same topics. Like the book as a whole, it begins by emphasising the theme of death – the death of both an individual and a period in film history – as well as the problem of emotional affect.

## II. Love and Death in *A. I. Artificial Intelligence*

At the end of the Steven Spielberg/Stanley Kubrick production of *A. I. Artificial Intelligence* (2001), a blond, innocent-looking boy, played by the remarkable child actor Haley Joel Osment, goes to bed with his beautiful, dark-haired mother, played by the equally remarkable Frances O'Connor. The two are alone in what looks like a California-modern house located somewhere beyond the city. Significantly absent are the boy's father and brother, who, much earlier in the film, caused the boy to be sent away from home. The day is fading, suffusing the room with earthen colours. 'I really ought to be tucking *you* in,' the mother says as her son covers her with a bedspread. 'How strange, I can hardly keep my eyes open ... Such a beautiful day!' In close-up, she gazes adoringly at the boy. 'I love you, David,' she says. 'I *do* love you. I have *always* loved you.' A reverse-angle shows the boy smiling through tears and embracing her. On the soundtrack, a voice-of-god narrator tells us that this 'was the everlasting moment [David] had been waiting for, and the moment had passed, for Monica was sleeping'. Dissolve to an overhead shot of the boy crawling into bed, where he lies on his back next to his mother, who is posed almost like a stone figure atop a catafalque. The boy blissfully closes his eyes, the room grows dark, a John Williams piano score reminiscent of Schubert rises on the soundtrack and the camera begins craning back and away. The narrator speaks again, as if reading the last lines from a child's bedtime story: 'So David went to sleep. And for the first time in his life, he went to that place where dreams are born.' The camera continues craning back, moving out of the bedroom window, and we see that the sleeping couple is being watched over by a robotic teddy bear at the foot of the bed, who moves his furry arms and head in benediction. Outside, blue night has fallen and, as the camera cranes up and away, the lights in the house go out one by one.

Several intelligent critics and not a few friends whose opinions I value have said that they dislike this scene and the movie as a whole, finding in it a sentimentality they associate with Spielberg and a pseudo-profundity they associate with Kubrick.<sup>1</sup> Even when they express admiration for one or both directors, they complain that the teddy bear is no E. T. and the bedtime-story narration no substitute for the cinematic razzle-dazzle of 2001. I've heard reports of audiences laughing at the end of *A. I.*, and I once encountered a couple on an elevator who had just returned from the film and were grumbling about the time they had wasted. As for me, I've watched it five times, and on each occasion I've been moved to copious tears. I should perhaps note that as I grow older I seem to shed tears more easily in the movies, even when I know my emotional buttons are being pushed; then, too, the last scene in *A. I.* probably has a personal resonance for me, because my mother



died when I was about the age that the boy appears to be in the story. At any rate, David's cry of 'Mommy! Where are you?' at a point near the end, when he returns home after a millennium of longing, is voiced in a tone of such desperate excitement and anxiety that it wrenches my heart. In the concluding shot-reverse shot, when he hears his mother's declaration of love and embraces her, I weep – and I feel in tune with the film, because tears are one of its most important motifs. To those who are unmoved, I can only say, in the words of William Butler Yeats, who is quoted twice in *A. I.*, 'the world's more full of weeping than you can understand'.

But would laughter or at least a wry smile be totally inappropriate? Despite all the fairy-tale sweetness, David is experiencing a kind of Freudian wet dream. The film is fully aware of this implication; it tells a straightforward Oedipal story containing several overt references to Freud – as in an earlier scene when David surprises his mother in the bathroom, where she is sitting on a toilet reading a book entitled *Freud and Women* (a volume Frances O'Connor chose for the shot). Throughout, the Disneyish atmosphere is inflected by an art-cinema irony. As in Kubrick's *The Shining*, we get Freud with revisionist vengeance: Father isn't simply an imaginary danger but a real one – a deadly threat who needs to be expunged so that the son can fulfil his romance with Mother. The closing moments of the film also seem to confirm Freud's ideas about Thanatos, neatly linking the fairy tale's drive

towards closure with the human death drive, or with what Freud called the 'conservative' instincts, through which we strive to return to 'an old state of things, an initial state from which the living entity has departed and to which it is striving to return'.<sup>2</sup> To make things more complicated, another irony runs deeper, threatening to undercut even Freud. As everyone who is familiar with *A. I.* knows, the story takes place in the far distant future, thus producing the sense of 'cognitive estrangement' that Darko Suvin and other theorists have equated with literary science fiction.<sup>3</sup> David isn't a 'real' boy but a 'mecha' – a computerised replicant, operating with relative autonomy, who is programmed by a scientist and an army of corporate technicians to feel love for his organic 'mother' and to want, like some futuristic Pinocchio, to become truly human. Hard-wired to experience Oedipal desire, he can weep and feel joy or fear, but he can't pee and can't eat spinach or any other kind of food. He has lived on the earth for thousands of years and will never grow older. He can dream, but in one sense he dreams of electric sheep. As for the mother he loves with single-minded obsession, she herself in the final scene is a kind of simulacrum or reconstruction with a limited memory, brought to life for a single day and awakened like Sleeping Beauty by virtue of a preserved lock of her hair, which was frozen for centuries at the bottom of the sea. Even the house is a simulacrum, fashioned by other robots on the basis of David's memory bank.

Perhaps the ultimate irony is that, while the scene concludes a film that poses the question of what it means to be human, while it effectively dramatises childhood trauma and loss, and while it stirs me profoundly, it also makes its own status as artifice quite evident. What am I crying about, except a fantasy staged by robots for the benefit of an artificial boy who was invented by a corporation; and what am I watching, except a movie manufactured by a horde of Hollywood technicians from another corporation? The credits at the end of *A. I.* list scores of technical specialists, headed by robot designer Stan Winston, effects supervisors Michael Lantieri, Dennis Muren and Scott Farrar, and digital experts from Industrial Light and Magic and Pacific Data Images. Because of these contributors, I sometimes find it difficult to trust the evidence I see on the screen. For example, the teddy bear gently moving his arms and head in the closing scene is not just a robotic 'super-toy', as the story would have it, but also a 'special effect' – a doll animated partly by robotics and partly by computer-generated imagery (CGI). It was never fully there in front of the camera, occupying what is sometimes called the 'pro-cinematic' space, even though it forms part of the *mise en scène* in such realistic fashion that it's almost indistinguishable from the real players.

*A. I.* was released in a year when Stephen Hawking told his fellow scientists that they should begin developing advanced forms of genetic engineering to compensate for 'Moore's Law', or the theory that computers will soon surpass human intelligence. That same year, children could purchase an electronic toy resembling a live insect; Sony Corporation announced SDR-4X, a humanoid robot with an extensive vocabulary who is designed to live with people in their homes; and a war in Afghanistan was fought with the assistance

of robotic aircraft called 'drones'. Meanwhile, Hollywood created a new category for the Academy Awards to honour feature-length animated films that use CGI, and digital animators around the world spoke repeatedly of their desire to achieve the 'holy grail' of computer-generated 'synthesians' who seamlessly interact with live players on the screen. No doubt *A. I.* is symptomatic of all these events, but it has a special relationship to computerised imagery, which is the most spectacular of a series of digital technologies that have changed the manufacture and look of contemporary movies. A non-photographic or semi-photographic special effect, CGI brings into question the status of visual evidence, apparently lending credence to Jean Baudrillard's theory of the simulacrum, and reinforcing fears, such as the ones expressed in a recent book by Paul Virillo, that under postmodernity the individual's relation to reality is collapsing.<sup>4</sup> One of the most intelligent writers on the subject, Sean Cubitt, doubts that CGI actually functions in this way, and I would agree;<sup>5</sup> nevertheless, as Cubitt notes, the digital has been charged in some quarters with being guilty of 'the murder of reality and of the human' (*Cubitt*, p. 125). How logical, then, that *A. I.* should make extensive use of CGI. The film is about the robotic post-human, and it uses a technique that's occasionally described as 'post-cinematic'. Am I weeping for the death of David's mother, for the death of humans, for the death of photography, or for the death of movies?

### *A. I.* and CGI

To answer the question above, which by no means exhausts my interest in *A. I.*, it may help to briefly consider another emotionally powerful and equally maternal scene from an older and ostensibly quite different Hollywood film. Three-quarters of the way through the Samuel Goldwyn/William Wyler production of *The Best Years of Our Lives* (1946), a World War II veteran named Homer prepares for bed, and in the process exposes his war wounds to the camera. Homer is a former enlisted man who has lost both of his hands and who skilfully manipulates a pair of mechanical hooks attached to his wrists. By day he's self-sufficient, lighting his own cigarettes, eating with a knife and fork and playing chopsticks on the piano. In the evening before going to bed, however, he needs his loving but inarticulate father to help him remove the hooks, and he feels helpless and unmanned. At one point, he invites his former high-school sweetheart, who still loves him, to visit his bedroom and see his condition. For me personally, this is one of the most poignant moments in the history of Hollywood, in part because of my knowledge that the sailor is played by Harold Russell, an amateur actor who had lost his hands in a training accident during the war. This fact was well known to the film's original audience. *Best Years* was a highly publicised feature, second only to *Gone with the Wind* (1939) in its initial box-office profits, and it won seven Academy Awards, two of which went to Russell. But the emotional efficacy of the scene also derives from the dignity and discretion with which it is staged by Wyler and photographed by Gregg Toland. The camera stands completely still, at a respectful middle distance, viewing the two actors on the same plane, without the elaborate deep-focus

perspective that was the hallmark of Toland's style. When Russell removes his hooks and puts on his pyjama top, Wyler doesn't try to analyse the action with shot-reverse shots or close-ups. Non-diegetic music can be heard throughout, but there is no dramatic lighting and no tricks of costume or special effects. In other words, although the film is obviously fictional, it wants the camera to bear witness to history. Nearly everything conspires to show us that the sailor has no hands.

I've often shown this scene in the classroom in conjunction with André Bazin's famous essay on the ontology of the photographic image, in which Bazin argues that photography has an 'objective' quality (today's film theorists tend to say 'indexical'), since 'between the originating subject and its reproduction there intervenes only the instrumentality of a nonliving agent'. For the first time in history, Bazin tells us, 'an image of the world is formed automatically, without the creative intervention of man [sic]'. The paradox of the situation, at least insofar as Bazin is concerned, is that the purely mechanical becomes the servant of the organic. Photography, he says, has the power to affect us 'like a phenomenon in nature, like a flower or a snowflake whose vegetable or earthly origins are an inseparable part of their beauty'.<sup>6</sup>

Bazin was a great admirer of *The Best Years of Our Lives*, which he praised in another essay for its self-effacing 'neutrality and transparency of style'.<sup>7</sup> From our current perspective it's possible to see both his arguments and Wyler's film as symptoms of an international movement towards humanist realism in the decade after the war – a phenomenon determined by the political and social temper of the times, and made possible by new forms of recording technology. But in a still larger context, as R. L. Rutsky has shown, theories about photography have long involved a distinction between the organic and the mechanical that has contradictory implications, sometimes reinforcing humanism and sometimes threatening it. Behind the invention of cinema, Rutsky notes, there is both a 'Mummy myth' of the kind postulated by Bazin, who sometimes speaks of photography as if it were a means of embalming time and forestalling death, and a 'Frankenstein myth' of the kind suggested by Lev Kuleshov, whose experiments with montage involved a sort of cutting and reassembling of the human body.<sup>8</sup> Thus, Susan Sontag can argue that photography is 'treacherous' because photographic images 'do not seem to be statements about the world so much as pieces of it'.<sup>9</sup> Even when bodily anxiety or a fear of violence against nature isn't present in theoretical writings, the photographic machine is often placed in contested relation to the human sensorium – in Dziga Vertov's manifestoes, for example, where we repeatedly encounter contrasts between the camera and the human eye: 'I am kino-eye, I am a mechanical eye. I, a machine, show you the world as only I can see it.' Along similar lines, early photographers such as Eadweard Muybridge and E. J. Marey, who were motivated less by the aesthetic desire for representation than by a technological/scientific urge, always treated photography as an extension and improvement of the eye, or as what Rutsky calls 'a kind of prosthesis' (p. 31).

The scene from *Best Years* is about prosthesis, and it uses sophisticated camera technology in an apparently artless way, giving us empirical evidence of a wounded human body.

Whenever I show it to contemporary students, however, they seem sceptical of the idea that photography has an indexical relation to the world, and they tend to doubt that the actor who plays the sailor in the film really has no hands. One reason for their scepticism, I suspect, is that they've never heard of Russell, and they've all seen Robert Zemeckis's *Forrest Gump* (1994), which contains several scenes involving a paraplegic Vietnam veteran acted by Gary Sinise, whose legs have been imperceptibly 'erased' by means of CGI. The effect in *Gump* is at least technically similar to an earlier Zemeckis film, *Death Becomes Her* (1992), in which digital imaging is used for comic and spectacular ends, enabling Meryl Streep's head to go spinning around on her neck and Goldie Hawn to carry on conversations after a gaping hole has been blown through her stomach. The major difference is that the trick with the wounded veteran in *Gump*, like the majority of trick shots in narrative movies since the beginning of cinema, is intended to be invisible. To find an example of an invisible trick prior to the digital age, we need only consider another moment in *The Best Years of Our Lives*. Just prior to the scene in which Homer invites his sweetheart up to his room, he looks at some old high-school photographs of himself, showing him passing a football and dribbling a basketball. If you study the photos, you'll notice that they've been doctored by the film-makers, who have pasted Harold Russell's head onto the bodies of young athletes.

*Best Years* relies upon our willingness to ignore such details in the interest of social realism. By contrast, the computer-enhanced scenes in a movie like *Death Becomes Her* feel more like a cartoon or a *trompe l'oeil*; and, as Sean Cubitt remarks, 'despite its name, *trompe l'oeil* wants not to trick, but to be discovered in the act of trickery' (p. 127). We can, in fact, make distinctions among degrees or kinds of disbelief that special effects elicit. Some want to be accepted as 'invisible' even though they look artificial to the knowing eye (matte printing, glass shots and process screens in classic Hollywood); some deliberately call attention to themselves as 'movie magic' (dream sequences, expressionist distortions of the visible world and cataclysms in action-adventure movies); and some are unnoticed or completely undetectable (the arched eyebrow that was 'painted' by computer onto the face of Jodie Foster for a close-up in Zemeckis's *Contact* [1997]).

Given the ubiquity and historical importance of special effects, my own students are inclined to accept Christian Metz's notion that all cinema is essentially a trick, beginning with the phenomenon of persistence of vision upon which the medium is founded.<sup>10</sup> They also tend to agree with Tom Gunning and André Gaudreault that cinematic spectatorship was originally founded on a kind of incredulity or sceptical wonder; hence, there was no radical difference between the way early viewers regarded the Lumières' train arriving at a station and the way they regarded Melies's magic act, since both experiences involved a sense of astonishment in the face of what was known to be a mechanical illusion.<sup>11</sup> In my own view, the situation is more complicated. The old theoretical distinction between movies as document and movies as magic makes sense as a description of two film-making practices, and the documentary practice isn't threatened by digital technology. In

fact, digital cameras have opened up vast new possibilities for film-makers who work in the tradition of neo-realism or documentary, and who want to explore the camera's ability to function more or less autonomously, recording accidents or contingency in everyday life. It should nevertheless be noted that, even when we're treated as incredulous spectators who are aware that some kind of visual trick has been projected onto the screen, CGI seems to undermine documentary authority in the entertainment film. It brings movies closer to the spirit of comic books and animation, it makes some tricks less easily detectable and it threatens a certain discourse about realism and humanism in the cinema. Perhaps it's no accident that CGI has often been used to show morphing androids and missing body parts, as if the world were coming apart before our eyes, or as if the mechanical were supplanting and not simply serving the organic.

*A. I.* is filled with such moments – for example, in the scene in which David's face melts after he eats spinach, or in the scenes of the 'Flesh Fair', in which CGI is used to show robots with their humanoid surfaces ripped away and their arms and legs torn asunder. (Spielberg hired actual amputees to perform in several shots at the Fair, but he also used a full range of technical tricks; at one point we see a robot played by an African-American amputee picking up a white mechanical hand from a junk pile of spare parts and inserting it onto the stump of his wrist.) One of the most spectacular of these effects occurs at the very beginning of the film, and is clearly designed to showcase CGI's ability to split actors apart and blur the distinctions between human and mechanical. Professor Hobby (William Hurt) calls a meeting of his corporation in order to demonstrate the strengths and limitations of their new 'artificial being' – an attractive and compliant robot 'secretary' named 'Sheila'. At the end of the demonstration, Hobby orders Sheila to 'open', whereupon her face slides apart, revealing an inner network of electronic wiring. As viewers of the film, we recognise that Sheila is played by a flesh-and-blood actor, and that CGI has been used to morph her face into a machine image; the illusion, however, is almost perfect, and is neatly capped when the mechanical face re-closes like a jewel box. Hobby remarks that this new model is only a toy, and goes on to explain his vision of creating 'a mecha of a qualitatively different order'. As he speaks, we see Sheila take out a compact and adjust her make-up. Dissolve to a scene that takes place twenty months later, in which Monica, the flesh-and-blood mother played by Frances O'Connor, takes out a compact and adjusts her own make-up.

In one sense the trick shot of Sheila's face isn't unusual, because movies have always enjoyed splitting actors apart. The first special effect is usually said to have been the Edison Company's *The Execution of Mary Queen of Scots* (1895), which employed a 'substitution shot' to show an actor being beheaded. (The camera was stopped, the actor playing Mary was replaced by a dummy and the camera was restarted to show the executioner chopping off the dummy's head.) Digital effects clearly have their own phenomenology and their favoured images, especially in scenes involving impossible 'camera movements,' morphing shapes and crowds of figures running across landscapes; they can also show us purely electronic, non-verisimilar images that are unlike anything we've seen before. In Hollywood,

however, they tend to be used for exactly the same purposes as older technology like matte shots, optical printers and rear or front projection – that is, to achieve magical transformations or to combine verisimilar images in order to produce a kind of invisible collage. In this sense, *A. I.* is typical of Hollywood. Even so, because *A. I.* is explicitly about the distinction between the 'real' and the 'artificial', and because it depicts a future in which humans are replaced by robots, it seems a particularly appropriate use of CGI. Indeed, the film as a whole can be understood as an allegory of cinema, involving a somewhat contradictory attitude towards the future of the medium.

Notice, moreover, that even though *A. I.* envisions the death of the human, it invites us to understand its creation in humanist terms, as a kind of dialogue between two auteurs about the relationship between the organic, the mechanical and the spiritual. In the history of Hollywood there have been several instances when two celebrated directors of different temperaments worked on the same picture – Murnau and Flaherty on *Tabu* (1931), Hawks and Wyler on *Come and Get It* (1936), Mamoulian and Preminger on *Laura* (1944) – but none is more interesting or well publicised than *A. I.*: on the one hand we have Kubrick, a symbol of mid-century cool, a devotee of black humour, a technophile influenced by street photography and Wellesian expressionism and an intellectual whose movie career was partly built on challenges to censorship; on the other hand we have Spielberg, a populist and postmodernist who alternates retro-styled adventure movies with liberal projects about Important Themes. Spielberg may have written and directed *A. I.*, but Kubrick conceived the idea and worked on it intermittently for over almost two decades before his death. Kubrick is therefore figured as the ghost in the machine and Spielberg as his eulogist. Some commentary on the two seems inevitable as a way of accounting for *A. I.*'s particular way of achieving closure and its unusual commentary on gods, humans and robots. It may also help to answer another of my questions: why am I crying in a movie for which Stanley Kubrick is at least partly responsible?

### Puppet Masters

*A. I.* originated shortly after the release of Kubrick's *2001*, a film that suggests that machines might someday achieve an *improvement* over humankind, and a film that has continuing relevance in a period when computer intelligence and biological engineering have brought us to the point where the definition of the human is no longer clear. Kubrick's outer-space epic had been inspired by a short story and *A. I.* began in much the same fashion, with Brian Aldiss's 'Super-Toys Last All Summer Long', which appeared in *Harper's Bazaar* in 1969. The Aldiss story depicts a future when two-thirds of the earth's population is starving, when birth-control laws are enacted to protect resources and when engineers and corporate executives live in luxurious but entirely artificial enclaves fitted with electronic windows that emit hyper-realistic scenes of sunlit gardens. Monica Swinton, the childless wife of the managing director of Synthank Corporation, has been provided with one of the company's most advanced products – a 'synthetic life form' named David, who looks and

behaves like a real boy, and whose best friend is an electronic teddy bear. Unfortunately, Monica can't develop a truly maternal attitude towards David. Her husband nevertheless announces a programme to market more such products, which he predicts will surpass the company's recent success with a line of miniature dinosaurs. Meanwhile, David uses crayons to compose a series of unfinished messages to Monica ('Dear Mummy, I love you and Daddy and the sun is shining –' 'Dear Mummy, I'm your little boy and not Teddy and I love you but Teddy –'.) At the end of the story, Monica discovers that she has won the parenthood lottery from the Ministry of Population and will be allowed to become pregnant. David, who will probably be abandoned, has a conversation with his teddy bear: 'I suppose Mummy and Daddy are real, aren't they?' 'You ask such silly questions,' the bear replies. 'Nobody knows what *real* really means.'

In the early 1990s, Kubrick collaborated with Aldiss in an attempt to turn this story into a film, and at various points he commissioned other writers, including Arthur Clarke, Ian Watson and Bob Shaw. He was never fully satisfied with the results, but three of his objectives remained constant. First, he wanted the story to be told from the point of view of robots, for whom it would elicit sympathy; as Aldiss remarked, 'Stanley embraces android technology and thinks it might eventually take over – and be an improvement over the human race.'<sup>12</sup> Second, he wanted to structure the story along the lines of Carlo Collodi's nineteenth-century fairy tale, *Pinocchio* (1883), which he would subject to what Roman Jakobson terms a 'metaphoric transformation'. Instead of a hand-carved Italian street urchin with an unusual nose, we would be given an industrially manufactured product resembling an innocent and rather suburban American boy; the boy's adventures, however, would be loosely based on those of Collodi's puppet. (Many of the characters and incidents in the completed film retain this quality: Professor Hobby, the Blue Fairy, Gigolo Joe, the Flesh Fair, the visit to Rouge City, the swarm of fish that convey David underwater, etc.) Finally, he wanted to unify Collodi's picaresque tale by treating the boy's adventures in Freudian terms, as an Oedipal quest.

Because he loved high-tech, and because he anticipated a lengthy production schedule, Kubrick actually tried to have a special-effects crew build a robot to play the role of David.<sup>13</sup> This proved unworkable, but a new idea occurred to him when he saw Spielberg's *Jurassic Park* (1993), in which ground-breaking CGI effects are used to create dinosaurs that move freely through a Bazinian *mise en scène*, looking rather like the ones made by the fictional Synthank in Aldiss's story. During the same period, computer animators were producing 'synthespians' or 'vactors' to play extras and stunt roles in live-action movies, and videogame developers were experimenting with characters that possessed Artificial Intelligence. The time was ripe for 'virtual humans', and Spielberg's film suggested how they might be created. As it happened, Kubrick and Spielberg had already developed a friendship and were in regular communication. Thus, when Kubrick grew more frustrated and uncertain about *A. I.*, he suggested that he might serve as producer and Spielberg as writer/director of the film. (When the film was eventually released, Kubrick was, in fact,

listed as producer. Spielberg wrote the screenplay from a ninety-page treatment prepared for Kubrick by Ian Watson; he also consulted some 600 drawings Kubrick had commissioned from Chris Baker, and he hired Baker to work on the Hollywood production.)

Critics tend to describe Kubrick as 'cold' and Spielberg as 'warm', but, as I've already tried to explain in regard to Kubrick, that claim seems oversimplified. It's better to say that Kubrick was a fastidious stylist who favoured slow, measured, sometimes over-the-top performances and crystal-clear imagery, whereas Spielberg is a flashy rhetorician, more inclined to sentiment, who works with dazzling speed and who produces fast-paced narratives with a somewhat garish and smoky look. (The garish atmosphere is exacerbated by his photographer on *A. I.*, Janusz Kaminski, who loves to show beams of light penetrating through studio fog.) In any case, the two figures converge in their love of movie magic, and Spielberg was good 'casting' for this film because he brought to *A. I.* a vast knowledge of digital technology, a gift for telling stories about suburban families, and a certain affinity with the Disney aspects of the story; indeed 'When You Wish upon a Star', the theme from Disney's *Pinocchio* (1940), had figured importantly in *Close Encounters of the Third Kind* (1977).

There is, in fact, a sort of lineal relationship between Collodi, Disney and Spielberg. Although the romantic movement taught us to think of children's stories as simple, unaffected and genuine, Collodi's fascinating, often dark narrative about a puppet who wants to become a boy belongs to a period when the Brothers Grimm, Hans Christian Andersen and Rudyard Kipling were bringing the European fairy and folk tale to the apex of literary respectability. As folklore historian Jack Zipes points out, this was also the time when modern nation-states were 'cultivating particular types of literature as commensurate expressions of national cultures'.<sup>14</sup> The nineteenth-century tales were derived from a much earlier oral tradition of *Zaubermärchen*, but they were addressed to the bourgeoisie and were part of a struggle for ideological hegemony. For similar reasons, the fairy tale figured importantly in early cinema, particularly in Méliès's *féeries* and in Porter's *Jack and the Beanstalk*. It remained for Disney in the late 1930s and early 1940s to appropriate the genre and turn it into a truly middle-class American form, or into what Zipes describes as a Horatio-Alger myth about patriarchy, perseverance, cleanliness, hard work and the rise to success. Disney's films were made by a Taylorised industry, but they celebrated the individual imagination and appeared to spring from Disney's own brow. The lovely princesses, handsome princes and cutely anthropomorphised animals were treated as Walt's puppets, even when they were drawn by a host of animators and supervised by gifted directors like Ben Sharpsteen, who was in charge of the adaptation of *Pinocchio*. But to expose Disney's ideological aims and modes of production, as several writers have done, is not to break his spell, for the classic Disney films are superbly crafted narratives, and like their sources they have a genius for tapping into elemental anxieties. The grinning witch addressing the camera in *Snow White* (1937), the death of the mother in *Bambi* (1942), the abandonment of the child in *Dumbo* (1940), the transformation of Lampwick in *Pinocchio* – these

events are burned into the screen memories of generations of children, and they can never be expunged by happy endings.

For his own part, Spielberg has repeatedly drawn upon the Disney films, evoking nostalgia for middle-class Americana and encouraging audiences to regress into childhood; it's as if the pop culture of the 1930s, 1940s and 1950s offers him a repository of 'authentic' materials, roughly analogous to what gothic architecture offered the English romantics during the industrial revolution. A talented director of stories about monstrous predators, he is also sharply attuned to the anxieties of childhood, which he treats in affecting and ultimately optimistic fashion. Thus, Spielberg's version of *A. I.* eschews the dark sexuality Kubrick had intended to convey through the Joe Gigolo character, and it frequently alludes in affectionate ways to classic Hollywood, reminding us not only of Sharpsteen's *Pinocchio* and *Dumbo*, but also of *The Wizard of Oz* (1939) and the Astaire/Kelly musicals. Everywhere it shows its indebtedness to comic books and animated films and, in line with contemporary practice for the Disney Company, it uses celebrity actors (Robin Williams, Ben Kingsley, Meryl Streep and Chris Rock) as voices for the CGI figures.

One is tempted to speculate about whether Spielberg could have experienced an anxiety of influence during the making of *A. I.*, or whether he and Kubrick, who were undoubtedly friends, were at any point engaged in a psychic contest with one another. I doubt this was the case and, even if it was, Spielberg seems to me to win the contest. Nevertheless, the last scene of *A. I.* isn't typical of Spielberg. Its particular mixture of sadness and intellectual irony feels less harmonious than dialectical, rather like a deconstruction of Spielberg's sentiment that somehow leaves all his emotional gestures in force. He, Kubrick, Aldiss and Ian Watson might be its authors, but none of them is its puppet master. To further account for the scene, we need to broaden our perspective, for *A. I.* is a film about the curious affinity between Artificial Intelligence and psychoanalysis, and it involves a good deal of metaphysical speculation about such big concepts as the self and God. The central themes of the film can be traced back to a long tradition of western philosophical idealism – to Plato, for example, who believed that human beings are puppets formed by a *демиург*; to Renaissance neo-Platonists like Marsilio Ficino, who argued that the visible world is a kind of machine that mediates between earth and heaven; and to romantic authors like Heinrich von Kleist, who proposed that theatrical marionettes have spirit or soul. This quasi-religious tradition, which provided a basis for most of western high art prior to the age of Enlightenment, is intriguingly discussed in Victoria Nelson's *The Secret Life of Puppets*, a book that was published in the same year as *A. I.*'s first screenings. Nelson points out that there has been a resurgence of Platonism in our own day, but this time in pop-culture genres like science fiction or fantasy, where it often takes a sublimated or displaced form, allowing 'the benign supernatural' to emerge from the shadows of modernism's fascination with 'the demonic grotesque'.<sup>15</sup> As I hope to show, *A. I.* contributes to exactly this phenomenon, and could be described as one of its most emotionally forceful manifestations.

### The Robot's Soul

Several viewers of *A. I.* have told me that they think the film should have ended earlier, at the point when David and Teddy travel far beneath the waters of global warming that engulf Manhattan, ultimately arriving at the remains of Coney Island. The old amusement park contains a kitschy theme park based on the characters and events in *Pinocchio*, and in its midst is a statue of the Blue Fairy. As soon as David arrives, however, a giant Ferris wheel pitches forward and crashes atop his amphibious helicopter, pinning it undersea. Mesmerised by the statue in front of him, David ignores his situation and begins to pray: 'Blue Fairy, please, please make me into a real boy!' As he incessantly repeats his prayer, the camera cranes backward, the image fades and the narrator tells us that David went on praying until the seas froze over.

This is certainly a more spectacular ending than the one we have, and more of a downer. For those of us who believe that David isn't really real, it sums up the film's 'Frankenstein' theme, showing how Professor Hobby's arrogance leads to the destruction of civilisation and the death of a pathetically artificial creature. It also seems to echo the closing of the first 'act' in *A. I.*'s narrative, when we see David abandoned at the bottom of his family swimming pool. The film might well have stopped at Coney Island, and for a moment it seems to; but then it starts up again, jumping 2,000 years into the future, where its third and final act brings other issues into focus. David has been engaged in an odyssey, albeit one in which he has never been distracted from a single, urgent goal; it seems appropriate, therefore, that he should be given a *nostos* in which, however briefly or ironically, he rejoins the woman he loves, banishes her suitors and reclaims his kingdom. The scene in which he and Monica sleep together is suffused with the gauzy, golden light of nostalgia, and is both triumphant and deeply sad. In some respects it may run counter to Stanley Kubrick's original intent, because one of its apparent aims is to suggest nostalgia not simply for childhood, but also for human imagination in a world of purely mechanical intelligence. It never quite achieves that aim, however, and as a result it has fascinating implications about Hollywood, about the machine as a bearer of life, and about the simulacrum as a mediator between matter and spirit.

The first of these implications is easy to explain, for what is David if not an emblem of Hollywood? He's an image of white male innocence and resourcefulness who touches my heart even when I know he's artificial; he's frozen in time and will never grow older; he's an illusion created by an actor, a director and a team of technical magicians; he's programmed to enact the Oedipal scenario; and, above all, he's a commodity – in this case a star personality or brand name, cleverly packaged by a corporation that plans to construct many more just like him. As Professor Hobby tells his staff at the beginning of the film, 'Ours will be a perfect child caught in a freeze frame . . . Our little mecha will not only open up a compelling market, it will fill a great human need.' And as the baffled mother says to her husband when he brings David home as a sort of toy or gift who can function as a substitute child, 'He's so real, but he's not. But outside he just *looks* so real!'



Despite the fact that he isn't 'acted' by robotics or CGI, David is also an emblem of advanced technology and of an anxiety over the human body that Scott Bukatman finds at the heart of most science fiction (such an anxiety is clearly present in Kubrick's *2001*). The body, Bukatman writes, 'has long been the repressed content of science fiction, as the genre obsessively substitutes the rational for the corporeal, and the technological for the organic'.<sup>16</sup> In one sense, Spielberg reverses the process. He chooses not to animate David and thereby completely displace the organic because the illusion of David's human presence needs to be complete if he is to convince either the audience or the live-action characters in the film. Unlike Kubrick, who consistently found ways to alienate the audience, Spielberg wants us to identify strongly with his leading characters, and he knows that computer animation has yet to reach the stage where it can create truly believable human figures in major speaking roles. The most elaborate attempt to do so is *Final Fantasy* (2001), a feature-length sci-fi adventure modelled on videogames, which was released in the United States at almost the same moment as *A. I.*, and which, for all its use of CGI, looks waxen and stilted, seldom rising even to the level of *trompe l'oeil*. More recently, Robert Zemeckis has put Tom Hanks and several other actors into motion-capture suits for the computer-animated *Polar Express* (2004), in which the figures on the screen look almost dead. Even so, contemporary animators continue to speak of photo-realism as an attainable goal, and they sound as if they were trying to produce exactly the same psychological effect that young David has on his mother. According to John Lasseter, the director of the Pixar/Walt Disney company's computer-animated *Toy Story* (1995), 'I'm interested in creating a film with characters that people obviously know don't exist. But then they look at it and say, "It seems so real. I know it doesn't – but wait . . . No, they can't be alive, no. Are they?"'<sup>17</sup>

The effect Lasseter describes is essentially that of good movie magic since the beginning of the medium, and also the effect of the commodity fetish, whose promise of 'real' gratification is always teasingly deferred. Where *A. I.* is concerned, however, both emotional identification with the leading character and engagement with movie magic are somewhat estranged, because David is explicitly shown as a machine and a commodity. The situation is similar to what we find in at least one version of the many scripts of *Blade Runner*, except that here the plot is reversed: the leading character is known to be artificial at the beginning and we're asked to accept him as human in the course of the story.<sup>18</sup> Haley Joel Osment's performance is especially interesting in this regard because *A. I.* requires him to start with a slightly digitalised or pantomimic style of acting, very similar to what the Russian futurists called 'bio-mechanics', and then to shift, at the moment when David's mother imprints his circuits with Oedipal desire, into an analogue, Stanislavskian style that reveals his 'inner' life. (Even in the final stage of his development, he never blinks his eyes.)

The important question posed by the last scene, in which the emotions expressed by Osment are particularly subtle and moving, is whether the film regards David's acquisition of so-called humanity as progress, regression or neither. This question isn't easily

resolved. *A. I.* often uses the keywords of romantic idealism ('God', 'love', 'spirit', 'dreams' and 'genius'), but it submits these words to a certain amount of irony or scientific scepticism. At the beginning of the film Professor Hobby, who is both a Dr Frankenstein and a surrogate movie director, boasts that he is about to achieve a great leap forward by creating a 'mecha with a mind . . . who will love its parents'. He wants to produce many copies of this mecha for the marketplace, but he describes them in the rhetoric of pure romanticism: 'Love will be the key by which they acquire a kind of subconscious never before achieved, an inner world of metaphor, of intuition, of self motivation, of dreams.' Hobby descends from a long line of scientist-as-*demiurge* characters who have populated western culture since the Renaissance (famous examples in the modern period include the puppet masters in E. T. A. Hoffmann's supernatural tales, the fictional Thomas Edison in Villiers de l'Isle-Adam's *L'Eve future* and Rotwang in Fritz Lang's *Metropolis*) and, like most of his ancestors, he is treated unsympathetically. Despite his godlike role ('Didn't God create Adam to love him?'), he fails to see what we eventually learn – that robots, who until now have served purely instrumental needs as secretaries, cooks, nannies, entertainers and sex workers, *already* have an ability to love and to act in self-motivated ways.

When Teddy (who insists he's 'not a toy') is forced by David's 'real-life' brother (who wears a mechanical brace on his legs) to make a choice between David and the brother, he suffers a psychological double bind that almost destroys his circuits; and when Gigolo Joe encounters David at the Flesh Fair, he deliberately chooses to befriend the boy and assist him. With the qualified exception of Monica, who suffers a crisis when she must abandon David, none of the humans in the film is as loving and sympathetic as the robots, and none is more inherently capable of feeling emotion. David may be different from other robots, but what makes him unusual isn't so much his ability to love as his ability to fill a prescribed role in the nuclear family. Unlike his fellow machines, he isn't created as a proletarian or a skilled worker in the service industries. Combining Agape and Eros, he both loves and is *in love* with Monica, and therefore aspires to *become* a particular kind of human. At this level he resembles the robot played by Robin Williams in a much less interesting film, *Bicentennial Man* (1999), who is possessed with a suicidal desire to become human, even to the point of experiencing mortality. We might say that his tragedy is that he wants to be something less than he is.

Like many humans, David has a fascination with magic and the supernatural, as when he encounters a kitschy statue of the Virgin Mary in Rouge City and wonders if she is the Blue Fairy. His friend Gigolo Joe explains that the statue is only a symbol of the humans' rather contemptible desire to know who made them. (One could also say that the statue, rather like a robot, is a simulacrum mediating between the divine and the earthly.) This issue never troubles David, who is concerned only with finding his mother and reclaiming her love. 'Mommy doesn't hate me, because I'm special and unique,' he says to Gigolo Joe. But when David travels to Manhattan and confronts his maker, he encounters a nightmarish form of mechanical reproduction in the service of serial commodities. Copies of

himself are suspended on hooks along the walls of Hobby's corporation. 'I thought I was one of a kind,' David says to Hobby. 'My son was one of a kind,' Hobby replies. 'You are the *first* of a kind.' Hobby is already packaging scores of boys who resemble his dead son, and he plans to market them under the brand-name of 'David'. His workshop also contains packages for a female product named 'Darlene'. We can only guess what her story might be like (the film is far too Freudian to know for sure), but David's seems to end in a murderous assault on his mechanical twin, a revolt against the patriarch, an attempted suicide and a futile prayer to the Blue Fairy. Only after he's discovered under the ice by a future generation of robots does he have a chance to become real. 'These robots were originals,' one of the futuristic mechas says to the others when they remove David from the ice. 'They knew living people!' In a final twist, humanism and 'spirit' survive. Like a precious archeological find or a rare zoo animal, the robot boy is given special care by robots of the future, who bring his organic mother to life for a single day and fulfil his greatest wish.

The final section of the film was undoubtedly a problem for Spielberg, because it posits a situation beyond human understanding. Kubrick faced similar difficulties in the last segment of *2001*, which he wisely chose to keep ambiguous and non-verbal; but *A. I.* is further complicated by the fact that we need to see events from the radically different perspectives of a futuristic intelligence and a human child. Unfortunately, Spielberg chose to represent the technically advanced androids with a rather conventional design that looks a bit like a CGI version of the 'Grey', a pop-culture figure who has influenced the look of space aliens in almost every sci-fi movie after *Close Encounters of the Third Kind*. It doesn't help that the chief robot speaks to David in the voice of Ben Kingsley, who sounds as if he were narrating *Masterpiece Theater*. But these faintly risible touches could have been intended as such, because the conversation between David and the robot of the future has been mediated or managed for the benefit of a human boy's comprehension. (A window behind the two when they talk seems almost like an HDTV screen showing an imaginary natural world.) Because David is so thoroughly programmed as a suburban boy, it makes sense that signs of gender, nationality and even Hollywood movies should be used in an attempt to communicate with him.

At the end, David becomes a paradoxical representative of humanity, which the film defines in Freudian terms. This move is typical of both Spielberg and Kubrick; of the two, however, Kubrick was the more deliberate and forthright in the way he deployed psychoanalytical themes. As we've seen, when he was working with Diane Johnson on the screenplay of *The Shining*, he became interested in Bruno Bettelheim's *The Uses of Enchantment*, which is filled with ahistorical, somewhat vulgarly psychoanalytical interpretations of literary fairy tales. Bettelheim was also an influence on the development of *A. I.*, and one wonders if either Kubrick or Spielberg read the following passage from another of Bettelheim's books, *Freud and Man's Soul* (1984), which insists that Freud's use of the term 'psyche' has something in common with the spiritual idea of 'soul' and ought to be translated as such:

Freud's atheism is well known – he went out of his way to assert it. There is nothing supernatural about his idea of the soul, and it has nothing to do with immortality; if anything endures after us, it is other people's memories of us – and what we create . . . It is intangible, but it nevertheless exercises a powerful influence on our lives. It is what makes us human; it is what is so essentially human about us that no other term could equally convey what Freud had in mind.<sup>19</sup>

Bettelheim is symptomatic of the way psychoanalysis (like art) became the last refuge of spirituality in an increasingly secularised and scientific age. But if memory is what makes us spiritual and human, how is it that machines can also be given memory, and why have computer engineers turned memory into the basis of what Sherry Turkle describes as the 'emergent' field of Artificial Intelligence? In a 1998 paper on 'Artificial Intelligence and Psychoanalysis', Turkle observes that the two intellectual domains in question would appear to be worlds apart:

Psychoanalysis looks for what is most human: the body, sexuality, what follows from being born of woman and raised in a family. Artificial intelligence looks deliberately for what is least specifically human: the foundation of its theoretical vision is the thesis that the essence of mental life is a set of principles that could be shared by people and machines.<sup>20</sup>

And yet, as Turkle goes on to demonstrate, the culture of psychoanalysis and the culture of computers also have a great deal in common: both make use of a 'biological aesthetic', both involve a fragmented or de-centred conception of the self, both theorise that repression and the unconscious are central to the workings of the mind and both dissolve the line between subjective and objective reflection. Turkle concludes that psychoanalysis and emergent A. I. can provide each other with 'sustaining myths', in the process overthrowing certain paradigms. The mind of the computer unsettles behaviourist psychology in much the same way as it unsettles complacent notions of the ego. 'Artificial intelligence,' Turkle remarks, 'is to be feared as are Freud and Derrida, not as are Skinner and Carnap' (p. 245).

In the concluding scenes of *A. I.*, the pure machine entities of the future seem to have evolved beyond the biological differences that constitute Freud's theory, and they inhabit a world so rational that it bears no signs of sex, capitalism, and nationality. Even so, they have memory, and an intense historical interest in David, which they express as a kind of nostalgia for humanist idealism. 'You are so important to us,' their representative says, 'you are unique . . . You are the enduring memory of the human race, the most lasting proof of their genius.' After downloading David's memory cells and viewing his life like a videotape running at fast speed, this same robot confesses, 'I often felt a sort of envy of human beings; of that thing they called spirit.' When the robots decide to grant David's wish by reuniting him briefly with his mother, they view the action from the vantage point of a

table-top TV screen, as if they were archivists looking down at an old movie that offers a key to the human psyche.

None of this irony detracts from the emotions represented in the last scene. David has brought his mother back from the dead in order to have a single moment when the two can express their love for one another and when David can reconcile himself with her death. During his adventures he has seen things she can barely understand and for the first time he possesses a knowledge superior to hers. Spielberg focuses our attention on the faces of the two actors, particularly on Haley Joel Osment. As the camera shows in empirical fashion, here is a real-life boy who has only just acquired his mature teeth, but whose weary smile reveals that death is the mother of beauty. What makes the scene distinctive, however, is that every emotion evoked by Osment and O'Connor is bracketed or qualified by the unusual fictional situation. The mother, the child and the house are too perfect, like idealised figures from Hollywood. Something uncanny inflects everything – a feeling of 'un-homeliness', as if we could sense ghostly futuristic robots designed by CGI somewhere off in the distance, looking down upon David and his mother, who are themselves artificial. The effect isn't so shocking as David's uncanny laughter during a family dinner at an earlier point in the film, but it asserts its presence like a chilling afterthought or an overlay to an otherwise touching reunion.

Freud's essay on the uncanny is based at least in part on his analysis of the animated dolls in E. T. A. Hoffmann's stories, and on 'the impression made by wax-work figures, ingeniously constructed dolls and automata'. One of its conclusions, implicitly evident in Kubrick's *The Shining* and *Eyes Wide Shut*, is that uncanny feelings are related to the primal fear of castration and death.<sup>21</sup> R. L. Rutsky notes that this fear can also be understood through Lacan's rewriting of Freud, as a threat to the 'phallus' or to the idea of Cartesian self-hood; thus, when technology appears animated or strangely 'undead', we tend to lose our faith in the 'authority of a unitary, living soul or spirit over the fragmentation and contingency of the object-world' (p. 39). Freud and Lacan seem to hover in the background of the last scene in *A. I.*, alongside those CGI robots – especially when the childlike automaton embraces his maternal 'bride' and goes to 'that place where dreams are born'. But they don't rule the story, which can also be viewed as another in the long history of tales about the way statues, dolls and robots fascinate us because they seem to embody spirit. Vast oppositions – grief and irony, sentiment and intellect, nostalgia and strangeness, humanism and anti-humanism, rationalism and idealism – are joined in the concluding scene. David is a child who overcomes the trauma of a dead parent, but at the same time a machine whose deepest 'human' tragedy is that he's created in our image, a projection of us. We witness a fundamental experience of love and death, and at the same time an Oedipal fantasy staged by machines for the benefit of a mechanically reproduced commodity from a dead American culture.

After my first viewing of this scene, I recalled a 1976 short story about robots by Peter Wollen, entitled 'Friendship's Death', which Wollen later turned into a movie. The story concerns a space alien named Friendship, who looks like a human being but is in fact a

robot equipped with 'artificial intelligence and a very sophisticated system of plastic surgery and prosthesis'. Friendship is sent by his programmers as an envoy to earth, where he hopes to have a conversation with Noam Chomsky at MIT. Unfortunately, an error in navigation causes him to land in Jordan during the 1970 war between the Jordanians and Palestinians. At the same moment all his communications with his home are cut off, thus giving him complete autonomy. In a conversation with a British journalist who is the only person to learn his true identity, Friendship says that during his short visit he has begun to see how human society is strongly marked by class division and class struggle. Lines of power have been drawn between the bourgeoisie and the proletariat, between industrial nations and the Third World, between men and women, and between humans and animals. The most basic division of all is that between the human and the non-human, although the definition of human seems to change over time and certain humanitarian principles have been extended to the whole of the organic world. The one thing that always seems to be walled off from the human, Friendship observes, is the machine, which is regarded as instrumental and not sentient. This seems unreasonable to Friendship, for have not many of Earth's philosophers likened human beings to machines? (The most important example, as Wollen knows, is Descartes.) Suddenly the reporter who narrates the story feels uneasy, because he begins to see the drift of the conversation: '[Friendship] could not possibly look at machines in the same way. He was one himself. Moreover, he had intelligence, privacy and autonomy; he felt, although he was not a human, he was clearly entitled to the same consideration.' When the reporter last sees Friendship, the robot is on his way to join the Palestinian militia and to die in struggle.<sup>22</sup>

Like Wollen, but in less political terms, Spielberg and Kubrick indicate that solidarity, love and even sex are grounded less in biology than in intelligence. More importantly, they reveal that the human/not-human distinction lies at the very bedrock of ideology. The last scene of *A. I.*, therefore, moves beyond irony to a place where rationality is troubled, where empathy and intelligence reinforce one another and where the 'oceanic' feeling Freud once ascribed to religious experience comes flooding back into force. It allows us to understand David's tragic condition on a level that both transcends and contains oppositions, so that we can share his grief and victory in a 'humane' fashion but in a much larger context than humanism normally allows. I weep for David as a boy *and* as a machine, even as I watch him living out a fantasy of modernity. In a hyper-modern America where, in the wake of September 11, 2001, there was much discussion of family and home, much sober reflection on the excesses of modern entertainment and much nostalgia for an older, supposedly more 'human' national life, such a scene is rare indeed, and affecting in more ways than one.

## Notes

1. Critical reaction to the film was mixed. One of the most lengthy and discerning reviews was Jonathan Rosenbaum, 'The Best of Both Worlds', *Chicago Reader* (13 July 2001), pp. 32–6, reprinted in Rosenbaum, *Essential Cinema: On the Necessity of Film Canons*, pp. 271–9. See also Geoffrey

- O'Brien, 'Very Special Effects', *The New York Review of Books* (9 August 2001), and Andrew Sarris, 'A. I.=(2001+E. T.)2', *The New York Observer* (25 June 2001), p. 1.
2. Sigmund Freud, 'Beyond the Pleasure Principle', in *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, trans. James Strachey (London: Hogarth Press, 1929), vol. 17, p. 38. For a fascinating discussion of the relation between narrative closure and the death drive in Hitchcock's *Psycho*, see Laura Mulvey, 'Death Drives', in Richard Allen and Sam Ishii-Gonzales (eds), *Hitchcock Past and Future* (New York: Routledge, 2004), pp. 231–42.
  3. Darko Suvin, *Metamorphoses of Science Fiction* (New Haven, CT: Yale University Press, 1979). See also Carl Freedman, *Critical Theory and Science Fiction* (Hanover, CT: Wesleyan University Press, 1999).
  4. Paul Virillo, *The Vision Machine*, trans. Julie Rose (London: BFI, 1994).
  5. Sean Cubitt, 'Introduction: *Le reel, c'est l'impossible*: The Sublime Time of Special Effects' in Sean Cubitt and John Caughie (eds), *Screen: Special Issue on FX, CGI, and the Question of Spectacle* vol. 40 no. 2 (Summer 1999), pp. 123–30. Page numbers hereafter noted in the text. See also Sean Cubitt, 'Phalke, Méliès, and Special Effects Today', *Wide Angle* vol. 21 no. 1 (January 1999), pp. 115–48.
  6. André Bazin, *What Is Cinema?*, trans. Hugh Gray (Berkeley: University of California Press, 1967), p. 13.
  7. André Bazin, 'William Wyler, or the Jansenist of Directing', trans. Alain Piette and Bert Cardullo, in Bazin, *Bazin at Work*, ed. Bert Cardullo (New York: Routledge, 1997), p. 12.
  8. R. L. Rutsky, *High Techne: Art and Technology from the Machine Aesthetic to the Posthuman* (Minneapolis: University of Minnesota Press, 1999), p. 34. Page numbers hereafter noted in the text.
  9. Susan Sontag, *On Photography* (New York: Farrar, Straus and Giroux, 1978), p. 4.
  10. Christian Metz, 'Trucage and the Film', *Critical Inquiry* (Summer 1977), pp. 657–75.
  11. Tom Gunning, 'An Aesthetic of Astonishment: Early Films and the (In)Credulous Spectator', in Leo Braudy and Marshall Cohen (eds), *Film Theory and Criticism*, 5th edn (New York: Oxford University Press, 1999), pp. 818–32; André Gaudreault, 'Theatricality, Narrativity and "Trickality": Reevaluating the Cinema of Georges Méliès', *Journal of Popular Film and Television* vol. 15 no. 3 (Autumn), pp. 110–19.
  12. Aldiss is quoted in the introduction to 'Super-Toys Last All Summer Long', which is reprinted in an extremely useful website devoted to Stanley Kubrick: <[www.visual-memory.co.uk/amk/doc/0068.html](http://www.visual-memory.co.uk/amk/doc/0068.html)>
  13. One of Kubrick's ideas was to have experimental director Chris Cunningham create the scenes involving the robot. Tests of these scenes were apparently made, but were judged unsatisfactory. (For an example of Cunningham's sexy and uncanny work with robotic figures, see his video of Bjork's 'All Is Full of Love'.)
  14. Jack Zipes, 'Breaking the Disney Spell', in Elizabeth Bell, Linda Haas and Laura Sells (eds), *From Mouse to Mermaid: The Politics of Film, Gender, and Culture* (Bloomington: Indiana University Press, 1995), p. 25. For a good discussion of the historical and literary context of Collodi's story, see Nicolas J. Perella, 'An Essay on *Pinocchio*', in Carlo Collodi, *The Adventures of Pinocchio, Story of a Puppet*, trans. Nicolas J. Perella (Berkeley: University of California Press, 1986), pp. 1–70.

15. Victoria Nelson, *The Secret Life of Puppets* (Cambridge, MA: Harvard University Press, 2001), p. xi. Nelson's fascinating book is strikingly relevant to *A. I.*, though she was not able to write about the film. Her thesis, which is elaborated through a rich and diverse exploration of western art and philosophy, is that the 'larger mainstream culture' of the twenty-first century 'subscribes to a non-rational, supernatural, quasi-religious view of the universe', and that our consumption of art forms of the fantastic is 'one way that we as nonbelievers allow ourselves, unconsciously, to believe' (p. vii).
16. Scott Bukatman, *Terminal Identity: The Virtual Subject in Post-Modern Science Fiction* (Durham, NC: Duke University Press, 1993), p. 19.
17. Lasseter is quoted in a website created by the PBS programme NOVA, which devoted one of its programmes to the history of special effects in Hollywood: <[www.pbs.org/cgi-bin/wgbh](http://www.pbs.org/cgi-bin/wgbh)>
18. For a discussion of the scripts of *Blade Runner* and the ambiguous effect of the film's ending, see William M. Kolb, 'Script to Screen: *Blade Runner* in Perspective', in Judith B. Kerman (ed.), *Retrofitting Blade Runner* (Bowling Green: Popular Press, 1991), pp. 132–53.
19. Bruno Bettelheim, *Freud and Man's Soul* (New York: Vintage Books, 1984), p. 77.
20. Sherry Turkle, 'Artificial Intelligence and Psychoanalysis: A New Alliance', *Daedalus* vol. 117 no. 1 (Winter 1998), p. 241. See also Sherry Turkle, *The Second Self: Computers and the Human Spirit* (New York: Simon & Schuster, 1984).
21. Sigmund Freud, 'The "Uncanny"', in *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, vol. 17, p. 226.
22. 'Friendship's Death', in Peter Wollen, *Readings and Writings: Semiotic Counter-Strategies* (London: Verso, 1982), pp. 140–52.